



PRIMARY CURRICULUM

Primary Language

Speaking and Listening Skills			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF Chpt. 110.2(b)(2)(A) Chpt. 110.2(b)(3)(C)	Understands ideas expressed by others and expresses own ideas logically in group and personal discussions	Show and tell, student presentations	
IMF	Ability to follow complex (3-5 step) directions		
IMF Chpt. 110.2 (b)(1)(B) Chpt. 110.2(b)(3)(C)	Listens and responds appropriately		
IMF Chpt. 110.2 (b)(1)(B) Chpt. 110.2(b)(3)(C)	Listens and is able to answer questions about information presented orally	Show and tell, student presentations, books read aloud to class	
IMF Chpt. 110.2(b)(12)(C)	Ability to make reasonable predictions about what will happen next in a story.		
Chpt. 110.2(b)(1)(f)	Identifies rhyming words and repeated sounds	Books read aloud to class	
Writing			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF Chpt 110.2 (b)(14)(E)	Developed pencil control	Metal insets	
IMF Chpt. 110.2(b)(18)(C)	Writes own name		
IMF Chpt. 110.2(b)(5)(C) Chpt. 110.2(b)(14)(B)	Writes with correct letter formation and spatial considerations (D'Nealian)		
IMF Chpt. 110.2 (b)(15)(C)	Writes simple compositions and creative stories	Journal, movable alphabet	
IMF Chpt. 110.2(b)(16)(A)	Identifies each part of speech in a sentence (e.g. noun, adjective, article, verb, adverb)	Parts of Speech work, Farm	
Reading			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF Chpt. 110.2(b)(7)(B)	Identifies phonetic sounds and names of letters	Sand paper letters, movable alphabet	
IMF	Builds and reads 3- letter phonetic words	Movable alphabet	

Chpt. 110.2(b)(7)(C)			
IMF	Builds and reads 4-letter phonetic words (blends)	Movable alphabet	
IMF	Builds and reads words containing phonograms	Movable alphabet	
IMF	Builds and reads “puzzle” words	Movable alphabet	
IMF	Reads phonetic and non-phonetic readers		
Chpt. 110.2 (b)(9)(B)	Establishes purposes for reading (to be informed, to follow directions, to be entertained)		
IMF Chpt 110.2(b)(8)(B)	Identifies characters in a story		

Research Skills

Standard(s)	Learning Outcome	Core Materials	Extension Materials
MSSA library	Developed basic dictionary skills (e.g. locating words)		
MSSA library	Ability to effectively use reference materials (dictionaries, atlas, field guide)		
MSSA library	Understands library etiquette		
MSSA library Chpt. 110.2(b)(5)(H)	Names the basic parts of a book		
MSSA library	Utilizes the Big 6 research model (Identify basic topic, locate sources, extracting information, synthesizing data)		
MSSA library	Ability to locate and use non-fiction books for research		

Primary Math

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF Chpt. 111.12(b)(1)(A)	Counts using one-to-one correspondence	Red and blue rods, manipulatives	
IMF Chpt. 111.12(b)(2)(A) Chpt. 111.12(b)(2)(B)	Understands sequencing and uses language such as before and after and first, second, third		
IMF Chpt. 111.12(b)(1)(C)	Recognizes written numerals 1-100	Sand paper numerals, spindle box, teen board, ten board, 100 board	
IMF Chpt. 111.12(b)(6)(B)	Counts to 1000 by units	Red and blue rods, spindle box, teen board, ten board, 100 board, bead chains	

IMF	Skip Counts by 2's, 5's, and 10's	Bead chains and cards	
IMF	Understands place value	Golden Bead work	
IMF	Understands concept of odd and even numbers	Cards and counters	
IMF	Recognizes quantities and numerals to 9,999	Golden beads and numeral cards	
IMF	Understands borrowing and regrouping	Exchange game with golden beads	
IMF Chpt. 111.12(b)(4)	Completes operations with whole numbers (e.g. addition, subtraction, multiplication, and division)	Colored beads, golden beads, manipulatives, stamp game, strip boards, snake game	
IMF	Completes addition and subtraction with borrowing and carrying	Golden beads, stamp game	
IMF	Completes multiplication with regrouping and division with a remainder	Golden beads, stamp game	
IMF Chpt. 111.12(b)(3)(A)	Introduction to fractions	Fraction skittles, fraction circles	
IMF Chpt. 111.12(b)(13)(B)	Solves simple word problems		
IMF	Introduced to value of money		
IMF Chpt. 111.12(b)(10)(A)	Introduced to measurement of length with a ruler		
IMF Chpt. 111.12(b)(10)(D)	Introduced to measurement of weight with a balance scale		
IMF Chpt. 111.12(b)(10)(E)	Introduced to measurement of temperature in Fahrenheit with a thermometer		
IMF Chpt. 111.12(b)(12)(A)(B)	Reads graphs and makes inferences from the information graphically displayed		

Primary Cultural

History and Geography			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF Chpt. 111.12(b)(11)(A)	Understands the concept of time	Hour glass, clock, calendar	
IMF Chpt. 111.12(b)(11)(A)	Tells time to the hour	Clock	
IMF	Tells time the half hour	Clock	

Chpt. 111.12(b)(11)(A)			
IMF Chpt. 111.12(b)(11)(C)	Names the days of the week, months of the year	Calendar	
IMF Chpt. 111.12(b)(11)(C) Chpt. 112.2(b)(5)(B)	Understands concept of a year and the seasons		
Chpt. 112.2(b)(7)(C)	Observes changes in the weather from day to day		
IMF	Understands the earth is divided into the realms of land, air, and water	Land, air, water exercise, Brown and Blue Globe, Colored Globe	
IMF	Recognizes that the earth is shaped like a sphere and a globe is a model of the earth	Globe	
IMF	Distinguishes between land masses and water	Brown and blue globe	
IMF	Identifies the continents	Colored globe, world map	
IMF	Understands the concept that a flat map represents the same land and water features as a globe	World map, colored globe	
IMF	Identifies the oceans	World map	
IMF	Verbally identifies the names of the countries of North America, South America, Europe and the states of the United States	North America map, United States map, South America map, Europe map	
IMF	Matches the pieces of the puzzle maps of N. America, S. America, Europe, Africa, Asia, and the US with the corresponding control map	Puzzle maps, control maps	
IMF	Identifies the written names of the countries of N. America, S. America, Africa, Europe, Asia, Australia, and the US and match the name tags to the country or state	Puzzle maps and tags	
IMF	Prepares written name tags to label the countries of N. America, S. America, Africa, Europe, Asia, Australia, and the states of the US when shown a given country or state on a map	Puzzle maps	
IMF	Makes own maps		
IMF Chpt. 113.2(b)(10)(A)	Matches countries of N. America, S. America, and Europe from the Puzzle Maps with their flags	Puzzle Maps, flags	
IMF	Identifies north, south, east, and west		
IMF	Identifies the north and south poles on the continent globe	Continent globe	
IMF	Identifies the following land and water forms;	Land and water forms	

Chpt. 113.2(b)(4)(A)	cape, bay, island, lake, isthmus, strait, gulf, and peninsula		
Science			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF Chpt. 112.2(b)(6)(A) Chpt. 112.2(b)(8)(A)	Distinguishes between living and non-living things	Living and Non-living classification exercise	
IMF Chpt. 112.2(b)(6)(A)	Distinguishes between plants and animals	Plant and animal classification exercise	
IMF Chpt. 112.2(b)(6)(A)	Describes the basic characteristics of plants and animals	Nomenclature cards	
	Identifies body parts of the human	Nomenclature cards	
IMF	Identifies classifications of animals (e.g. farm animals, forest animals, animals that live in the water, etc.)	Nomenclature cards	
IMF	Identifies the names for the young of familiar animals found within the families of mammals, fish, birds, reptiles, and amphibians	Nomenclature cards	
IMF	Explains how the young of familiar animals are born		
IMF	Identifies animals from around the world	Nomenclature cards	
IMF	Describes the basic characteristics that distinguish each of the five families of vertebrates (e.g. mammals, birds, reptiles, fish, and amphibians)	Nomenclature cards	
IMF	Identifies the difference between vertebrates and invertebrates	Vertebrate and Invertebrate classification exercise	
IMF Chpt. 112.2(b)(9)(A)	Understands the basic need of food for an animal to live		
IMF	Differentiates between omnivore, carnivore, and herbivore	Animal research	
IMF	Identifies animal homes (e.g. den, burrow, nests, hives)		
IMF	Understands that animals adapt to their environment (e.g. hibernation)		
IMF Chpt. 112.2(b)(6)(C)	Identifies the external parts of mammals, reptiles, amphibians, birds, and fish	Nomenclature cards	
IMF	Understands the function of the skeletal system in		

	vertebrates		
IMF	Identifies parts of the human skeleton	Nomenclature cards	
IMF	Identifies characteristics of plants	Puzzle, nomenclature cards	
IMF Chpt. 112.2(b)(6)(B)	Identifies parts of the plant	Puzzle, nomenclature cards	
IMF	Identifies parts of the flower	Puzzle, nomenclature cards	
IMF	Identifies parts of the leaf	Fruit and vegetable classification exercise	
IMF	Identifies the difference between a fruit and a vegetable	Simple science experiment	
IMF	Understands that plants need light, warmth, water, and minerals to grow and sustain life	Classroom recycling	
IMF	Differentiates between recyclable, biodegradable, and non-biodegradable materials		
IMF Chpt. 112.2(b)(2)(B)	Distinguishes between items that sink and float	Simple science experiment	
IMF Chpt. 112.2(b)(2)(B)	Identifies things as solids, liquids, or gases	Simple science experiment	
IMF Chpt. 112.2(b)(2)(B)	Describes characteristics of solids, liquids, and gases	Simple science experiment	
IMF Chpt. 112.2(b)(2)(B)	Differentiates between magnetic and non-magnetic	Simple science experiment	
IMF Chpt. 112.2(b)(5)(A)	Understands classification by physical characteristics (e.g. size, shape, color)	Classification exercise	
IMF	Identifies the planets and basic facts about them (e.g. moons, distance from sun, and atmosphere)	Solar system work	
IMF Chpt. 112.2(b)(2)(B)	Understands how objects balance on a simple scale	Simple science experiment	
IMF Chpt. 112.2(b)(4)(B)	Uses magnifying glass to investigate objects at a larger scale	Observation box	
IMF	Recognizes that feelings are a natural part of human behavior	Grace and Courtesy lessons	
IMF	Recognizes that feelings are shared by all people	Grace and Courtesy lessons	
IMF	Recognizes that we have to balance our individual needs and interests against those of others so as to be kind and fair	Grace and Courtesy lessons	
IMF	Recognizes that everyone has responsibilities in our classrooms, environments and communities	Grace and Courtesy lessons	

IMF	Demonstrates good health habits and person hygiene		
IMF	Understands the importance of regular dental and medical check-ups		
IMF	Recognizes that our life cycle is divided into significant stages and can identify those stages	Nomenclature cards	
IMF	Demonstrates the skill of giving others thanks and acts of kindness	Grace and Courtesy lessons	
IMF	Demonstrates a high degree of conflict resolution and friendship building	Grace and Courtesy lessons	
IMF	Classifies food into food groups	Food pyramid work	
IMF	Identifies components of a well-balanced and nutritious diet	Food pyramid work	

Primary Practical Life

Daily Living Skills			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF Chpt. 116.2(b)(1)(A)	Moves with purpose without knocking into furniture or other people	Walking on the line, concentration building exercises, Grace and Courtesy	
IMF	Cares for indoor environment	Table scrubbing, floor scrubbing, window washing, pushing in a chair, rolling a rug, polishing exercises, sweeping	
IMF	Takes care of personal needs (e.g. blows nose, washes hands, button and snap clothes, etc.)	Hand washing exercise, dressing frames	
IMF	Cares for indoor plants (watering, cutting, washing leaves)	Plant care exercise	
IMF	Cares for outdoor plants (planting, weeding, watering)	Gardening activities	
IMF	Demonstrates a sense of order (e.g. left to right progression, completion of activities, returning materials to the shelf)	Spooning, tonging, and pouring exercises	
IMF	Demonstrates and practices left to right progression	Wet and dry transfer, spooning, tonging, pouring exercises	
IMF	Demonstrates the ability to concentrate for a period of time	Wet and dry transfer, spooning, tonging, pouring exercises, table, floor, and object washing, window washing,	

		eye dropper	
IMF Chpt. 116.2(b)(1)(A)	Demonstrates control of movement	Wet and dry transfer, spooning, tonging, pouring exercises, table, floor, and object washing, window washing, perforating exercise, eye dropper, sewing	
IMF	Demonstrates eye-hand coordination	Wet and dry transfer, spooning, tonging, pouring exercises, table, floor, and object washing, window washing, perforating exercise, eye dropper, bead stringing, sewing	
IMF Chpt. 115.2(b)(9)(B)	Appropriately greets adults (shakes hand) and makes introductions	Grace and Courtesy lessons	
IMF Chpt. 110.2(b)(1)(B)	Interacts respectfully with peers and adults	Grace and Courtesy lessons	
Food Preparation			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Pours liquids without spilling	Pouring exercises, juice making	
IMF	Correctly sets a table place setting		
IMF	Practices table manners	Grace and Courtesy lessons	
IMF	Folds napkins, towels, etc.	Cloth folding exercise	
IMF	Uses knives and other small kitchen utensils with control	Vegetable peeling, slicing, cracker spreading	

Primary Sensorial

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF Chpt. 111.12(b)(10)(A)	Discriminates length	Red rods	
IMF	Discriminates width	Pink tower, brown stair, knobbed cylinder, knobless cylinder,	
IMF	Discriminates height	Pink tower, brown stair, knobbed cylinder, knobless cylinder	

IMF	Discriminates color tones	Color box I, II, and III	
IMF Chpt. 111.12(b)(8)(C)	Discriminates multiple dimensions	Geometric solids, mystery bag	
IMF Chpt. 111.12(b)(8)(C)	Identifies basic geometric shapes	Geometric cabinet	
IMF	Identifies types of triangles by their sides	Geometric cabinet	
IMF	Identifies types of triangles by their angles (e.g. right, scalene, obtuse, equilateral)	Geometric cabinet	
IMF	Identifies regular polygons through the decagon	Geometric cabinet	
IMF	Identifies all of the quadrilaterals	Geometric cabinet	
IMF	Differentiates between a circle, ellipse, and oval	Geometric cabinet	
IMF	Solves complex puzzles in three dimensions	Binomial and trinomial cubes	
IMF Chpt. 111.12(b)(9)(A) Chpt. 111.12(b)(9)(B)	Identifies geometric solids (e.g. cube, sphere, cylinder, pyramid, cone, rectangular prism, triangular prism, ovoid, and ellipsoid)	Geometric solids	
IMF Chpt. 111.12(b)(8)(B)	Identifies congruent shapes by matching	Constructive triangles	
IMF	Discriminates textures by touch	Rough and smooth boards, fabric box	
IMF Chpt. 111.12(b)(10)(D)	Discriminates weight by touch	Baric tablets	
IMF Chpt. 111.12(b)(10)(E)	Discriminates temperature by touch	Thermal tablets	
IMF Chpt. 111.12(b)(9)(C)	Explores plane figures	Constructive triangle boxes	
IMF	Identifies scents	Smelling bottles	
IMF	Discriminates intensity and nature of sounds	Sound cylinders	



LOWER ELEMENTARY CURRICULUM

Lower Elementary Language Arts

Listening Skills			
Standard(s)	Learning Outcome	Core Material	Extension Material
IMF	Follows 3-5 step oral commands without having to ask for a repeat of the commands.		
Chpt. 115.3(b)(9)(B)	Practices appropriate non-verbal active listening cues, including eye contact and head nodding.		
IMF	Practices appropriate grace and courtesy while listening. This includes not talking, not interrupting, and attending to the speaker.		
IMF	Responds appropriately with questions and/or comments appropriate to both the content and the mood.	Books, stories, narratives	
IMF	Formulates open-ended (who, what, when, where, why, how) questions to expand upon the content and to clarify.	Books	
IMF	Formulates closed-ended questions (answers are yes-no) to narrow the content and to clarify.	Books	
IMF	Summarizes the content using appropriate transitions (e.g., first...then....next....finally)	Books	
IMF	Correctly identifies the topic of the discussion.	Books	
IMF	Identifies whether stories are make-believe or real and can justify reasons.	Books	
IMF	Concludes how the speaker is feeling based on tone – happy, sad, angry, surprised, scared.	Books	
MSSA	Effectively uses a graphic organizer to record and organize notes from an oral source, including CDs, DVDs, or guest speakers	KWL, note cards	
Speaking (Oral) Competency			
Standard(s)	Learning Outcome	Core Material	Extension Material
IMF	Participates in group discussions.		
IMF	Recites short poems or rhymes from memory.	Poetry books, books on children’s theatre	

IMF	Reads aloud fluently from familiar text with appropriate phrasing and punctuation pauses.	Reader's Theatre scripts, chapter books, junior great books	Reader's Theatre
IMF	Tells stories in a logical sequence.	Stories	
IMF	Using a visual prompt, creates and recalls an appropriate descriptive story.	Laminated cards, wordless library books	Storytime Group game
MSSA	When speaking, uses appropriate volume, speed, and enunciation for the given group size.	Reader's theatre scripts, chapter books, junior great books	Reader's Theatre
IMF	Delivers well-organized oral reports with apparent beginnings, middles, and ends.	Informative textbooks	
MSSA	Practices positive presentation skills, including audience eye contact, non-distracting movement, and good posture.		
MSSA	Answers questions from the audience thoroughly and logically.		
MSSA	Uses visual aids (e.g., poster, diorama, notes) as a prop while still maintaining good eye contact and voice projection.	Presentation materials	
MSSA	Varies tone to convey different emotions, including happiness, sadness, anger, surprise, and fear.	Books, stories, narratives, reader's theatre	Day of drama
MSSA	Professionally makes introductions, describes purpose, and shares questions during interviews and oral surveys.	Survey form, open-ended graphic organizer, checksheet	

Reading

Standard(s)	Learning Outcome	Core Material	Extension Material
IMF	Decodes words in context and in isolation by knowing consonant digraphs (e.g., ch, tch, wh).	Moveable alphabet, spelling lists	
IMF	Decodes words in context and in isolation by knowing vowel digraphs and diphthongs (e.g., oo, ea, ou, ai).	Moveable alphabet, spelling lists	
IMF	Decodes words in context and in isolation by knowing consonant blends (e.g., bl, st, tr).	Moveable alphabet, spelling lists	
IMF	Decodes words using common syllabication patterns, including CVC, CV, silent "e".	Moveable alphabet, spelling lists	
IMF	Decodes words using common spelling patterns (e.g., -ight, -ant, -tion, -eigh, -ought).	Moveable alphabet, spelling lists	
IMF	Identifies and reads common abbreviations, including titles, addresses, and states (e.g., MT, Blvd., Dr.).	Variety of texts, abbreviation material	
IMF	Identifies and reads common contractions (e.g., it's, haven't, she'll).	Contraction materials	
IMF	Identifies and reads high frequency words from age-	Spelling lists	

	specific lists.		
IMF	Decodes words by applying common spelling rules, including dropping the silent “e” before adding endings, changing the final “y” to “i” before making the word plural, doubling final consonants when adding an ending.	Moveable alphabet, spelling material	
IMF	Breaks words into syllables .	Dictionary	
IMF	Breaks words into roots, prefixes, and suffixes to help determine meaning	Etymology material, variety of text	
IMF	Uses context to determine the meaning of unknown words.	SRAs, NPR, RAS, MSS	
IMF	Memorizes basic word pairs that cause confusion (e.g., lose/loose, accept/except, advice/advise).	Spelling lists	
IMF	Identifies and constructs both regular and irregular plural forms of common words (e.g., apples, mice, deer)	Moveable alphabet, spelling lists	
IMF	Identifies simple and continuous tenses (past, present, future) in a sentence.	Verb tense material	

Reading

Standard(s)	Learning Outcome	Core Material	Extension Material
	Identifies and constructs compound words.	Word study material	
	Given a word and its definition, identifies synonyms, antonyms, homophones, and homonyms.	Word study material, thesaurus	
	Can define and identify the different parts of speech: verb, noun, pronoun, adjective, article, adverb, conjunction, preposition, interjection.	Grammar boxes	Library word boxes, books and learning sheet
	Distinguishes between common and proper nouns.	Grammar material	
	Distinguishes between complete sentences and sentence fragments/phrases	Word study material	
	After reading a text, determines cause and effect.	SRA, NPR, RAS, MSS	
	After reading a text, predicts what may happen next.	SRA, NPR, RAS, MSS	
	After reading a text, makes logical inferences.	SRA, NPR, RAS, MSS	
	Differentiates between a fact and an opinion.	SRA, NPR, RAS, MSS	

	Given a non-fiction report/essay, defines and identifies the topic, the main idea, and supporting details.	SRA, NPR, RAS, MSS	
Literary Appreciation and Understanding			
Standard(s)	Learning Outcome	Core Material	Extension Material
IMF	Defines and identifies major genre, including biographies, reference, historic fiction, fantasy, mystery, non-fiction, and science fiction.	Bluebonnet Reading Program, Storymaps, Book reports	
IMF	Summarizes the plot of a story.	Bluebonnet Reading Program, storymaps, book reports	
IMF	Identifies the theme of a story.	Bluebonnet Reading Program, storymaps, Aesop's Fables, book reports	
IMF	Identifies the setting – both the time and place – of a story.	Bluebonnet Reading Program, storymaps, book reports	
IMF	Identifies major characters and their key traits and behaviors.	Bluebonnet Reading Program, storymaps, book reports	
IMF	Identifies minor characters and their key traits and behaviors.	Bluebonnet Reading Program, storymaps, book reports	
IMF	Identifies major character's feelings.	Character Analysis, book report, SRA, NPR, RAS, MSS	
IMF	Explains the main problem in a story and how it is resolved.	Bluebonnet Reading Program, storymaps, book report, SRA, NPR, RAS, MSS	
IMF	Identifies whether the story is written in first or third person.	Bluebonnet Reading Program, storymaps, book reports	
IMF	Identifies the climax of a story.	Bluebonnet Reading Program, storymaps, book reports, NPR, SRA, RAS, MSS	
IMF	Sequences chronologically the order of events in a story	CD illustrator (library), sequencing chart (library), NPR, SRA, RAS, MSS	
IMF	Predicts what will happen next in a story	Fishbone (cause and effect) diagrams, SRA, NPR, RAS, MSS	
IMF	Reads and identifies various forms of poetry, including acrostics, limericks, free verse, and haiku.	Library poetry books, library poetry posters	
Chpt 113.5(b)(13)(B)	Retells heroic deeds of characters from American folktales and legends (e.g., John Henry, Paul Bunyan, Pecos Bill).	Books and CDs	
IMF	Compares and contrasts shared literary themes among various cultures' and religion's fairy tales and myths (e.g., Cinderella, Little Red Riding Hood, Beauty and	Venn diagrams, DVDs, CDs, library books	

	the Beast).		
IMF	Compares and contrasts creation stories among various cultures and religions.	Library books	
IMF	Compares and contrasts literary elements among written literature and its media complement (e.g., DVD, abridged CD).	Venn diagrams Library books, DVDs, CDs	
IMF	Describes how illustrations complement a text and contributes original illustrations to a story.	Library books, CD illustrator, field guide paper, sequencing chart	
Effective Writing			
Standard(s)	Learning Outcome	Core Material	Extension Material
IMF	Follows basic rules of capitalization, including the start of a sentence, names, proper nouns, titles, days of the week, months, "I", letter salutations/closings, countries, languages, nationalities.	Word study material	
IMF	Uses the proper punctuation endings for the four types of sentences – declarative, interrogative, imperative, exclamatory.	Word study material	<u>Twenty Odd Ducks</u> book
IMF	Follows basic rules for commas, including: series of words/phrases, multiple adjectives before a noun, addresses and dates, and after letter salutations/closings	Word study material	<u>Eats, Shoots & Leaves</u> book
IMF	Uses common abbreviations appropriately, including titles and letter correspondence (e.g., Mrs, Dr., Blvd., P.S., etc., state abbreviations)	Word study material	
IMF	Follows basic rules for apostrophes, including contractions and possessives.	Word study material	<u>Girls Like Spaghetti</u> book
IMF	Uses appropriate indentation when writing a paragraph.		
IMF	Constructs a basic topic sentence for a paragraph.	Word study material	
IMF	Writes logical noun phrases and sentences.	Word study material	
IMF	Constructs descriptive captions for a variety of pictures, including landscapes, portraits, still life, and action photos.	Reference materials (library)	Laminated art cards
IMF	Locates and selects alternative words in a thesaurus.	Word study material	Chain links (library)
IMF	Effectively uses a graphic organizer as a pre-writing tool for creative writing.	Fishbone diagram, concept map	
IMF	Composes creative short stories that follow an	Writing prompts, picture prompts	

	organized sequence.		
IMF	Composes original poetry, including acrostics, limericks, free verse, and haiku, using sensory details	Promps	
IMF	Expresses personal thoughts and reflections in written form.	Journals	
IMF	Composes sequential book reports which cover literary elements of the book, including plot, characters, setting, and theme.	Various texts	
IMF	Writes appropriately formatted invitations to family, friends, and peers.	Word study material	
IMF	Writes appropriately formatted letters to friends and/or relatives.	Word study material	
IMF	Writes appropriately formatted thank you letters that express grace and courtesy	Word study material	

Handwriting

Standard(s)	Learning Outcome	Core Materials	Extension Material
IMF	Uses appropriate pencil grip and paper position when writing.	Appropriate writing utensil and paper	
IMF	Spaces letters appropriately within a word.	Appropriate writing utensil and paper	
IMF	Correctly spaces words within a sentence.	Appropriate writing utensil and paper	
IMF	Legibly and accurately forms D’Nealian lower case manuscript.	Appropriate writing utensil and paper	
IMF	Legibly and accurately forms D’Nealian upper case manuscript.	Appropriate writing utensil and paper	
IMF	Maintains the correct height for both lower and upper case D’Nealian manuscript.	Appropriate writing utensil and paper	
IMF	Legibly and accurately forms cursive lower case manuscript.	Appropriate writing utensil and paper	
IMF	Legibly and accurately forms cursive upper case manuscript.	Appropriate writing utensil and paper	
IMF	Maintains the correct height for both lower and upper case cursive manuscript.	Appropriate writing utensil and paper	

Lower Elementary Mathematics

Numbers, Number Sense, and Operations

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Counts from 1 to 1,000.	100 chain, ten boards and beads, hundred board	
Chpt 111.13(b)(5)(A)	Skip counts forward and backward, 2s through 10s, up to 1,000.	Bead chains, number rolls	
Chpt 111.13(b)(5)(B)	Defines and identifies odd and even numbers.	Cards and counters	
Chpt 111.15(b)(1)(A)	Uses place value to recognize, name, and write – in symbols and in words – quantities up to 999,999,999.	Large bead frame, golden mat, flat bead board, Multiplication checkerboard, Long division racks/tubes, Pegboard	<u>How Much is a Million</u> book
Chpt 111.15(b)(1)(B)	Using place value, compares and orders whole numbers up to 999,999,999 using $<$, $>$, and $=$.	Numeration material	
IMF	Defines and names ordinal numbers up to the 100 th level.	Numeration material	
IMF	Defines and symbolically represents mathematical vocabulary, including “less than,” “greater than,” “sum,” “difference,” “product,” “quotient,” “remainder” and “equal”.	Numeration material	
IMF	Understands the inverse relationship between addition/subtraction and multiplication/division.		
IMF	Converts between horizontal and vertical mathematical problems.	Large and small number cards, numeration material	
IMF	Understands and applies the commutative and associative properties of addition and multiplication.		
IMF	Understands and applies the distributive property of multiplication over addition and subtraction.		
Chpt 111.15(b)(3)(B)	Adds/Subtracts two 7-digit numbers with and without exchanges/borrowing.	Large bead frame	
IMF	Mentally adds/subtracts two 2-digit numbers.		
IMF	Memorizes and recites addition and subtraction facts 1 to 18.	Addition snake game, bead bars, addition and subtraction strip boards, addition and subtraction charts, negative snake game, flash cards	
IMF	Solves math problems which include both addition and subtraction.	Golden beads, bank game, stamp game, bead frames	
Chpt 111.15(b)(3)(A) Chpt 111.15(b)(2)(C) Chpt 111.15(b)(6)(B)	Using concrete materials, pictures, numbers, and/or symbols, models addition/subtractions and multiplication/division problems.	Concrete materials	

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Chpt 111.15(b)(4)(C) Chpt. 111.17(b)(10)(B)	Memorizes and recites multiplication facts up to 12 x 12.	Bead chains, bead bars, multiplication charts, flash cards	
Chpt 111.165(b)(4)(C)	Multiplies 7-digit numbers by 1-digit numbers.	Golden mat, large bead frame, flat bead frame, multiplication checkerboard	
IMF	Divides 7-digit numbers by 1-digit divisors with and without remainders.	Golden mat, long division racks/tubes	
IMF	Memorizes and recites basic division facts with divisors 1-9.	Division bead board, stamp game, flash cards	
IMF	Using “greater than”, “less than”, and “equal” signs, shows the relationship between multi-operation math statements (e.g., $3 \times 4 < 5 + 8$)	Numeration material	
Chpt 111.15(b)(5)(A) and (B) Chpt. 111.165(b)(5)(A)	Rounds to the nearest ten or hundred to estimate solutions to problems.	Bead chains	
Chpt 111.15(b)(1)(C)	Determines the value of a collection of coins (including half-dollar and silver dollar) and bills.	Money material	
Chpt 111.15(b)(2)(C)	Defines and uses fraction vocabulary, including “numerator”, “denominator”, “equivalent”,	Fraction material	
Chpt 111.15(b)(2)(A) and (D)	Using materials or pictures, shows fractions as parts of unit wholes.	Fraction material	
IMF	Expresses a fraction in its simplest form.	Fraction material	
IMF	Writes the equivalent fraction of a fraction given the numerator or denominator.	Fraction material	
IMF	Lists the first eight equivalent fractions of a given fraction with a denominator not greater than 12.	Fraction material, Mortenson material	
IMF	Compares and orders up to three fractions with denominators up to 12.	Fraction material, Mortenson material	
IMF	Adds and subtracts fractions with common denominators.	Fraction material	
IMF	Names the squares and cubes of the numbers 1-10.	Bead bars, Bead cabinet	
IMF	Matches key words in story problems to determine the correct operation (e.g., addition – more than, total, added to, increased by; subtraction – difference, less, decreased by, fewer than; equals – yields, is, sold for, gives.	Word problems	

Patterns, Functions, and Algebra

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt 111.15(b)(6)(C)	Identifies “fact families” in related multiplication and division sentences (e.g., 4×2 , 2×4 , $8 \div 4$, $8 \div 2$)	Bead bars	

IMF	Solves for an unknown (x) in basic math statements (e.g., $7 + x < 12$, $4 - ? = 1$).	Mortenson materials	
Chpt 111.15(b)(6)(A) and (16) (A)	Recognizes, describes, and extends various patterns – concrete materials, numbers, tables, or pictures (e.g., 3,6,9,12....)	Bead bars, bead chains, number rolls	
Chpt 111.15(b)(7)(A) and (B)	Creates tables to record, organize and analyze data to discover patterns and rules (e.g., all insects have six legs, all spiders have eight)	Various texts.	

Data Analysis and Probability

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt 111.15(b)(13)(A)	Collects and organizes data using observations, surveys, interviews, and experiments.	Checksheet, data chart, wall chart, weather watch (library)	
IMF	Identifies and understands the components of line and bar graphs, including titles, x and y axis, scales, axis titles, and data points.	Examples of graphs	
Chpt 111.15(b)(13)(B) Chpt. 112.5(b)(2)(C)	Reads and interprets picture graphs, bar graphs, pie charts (with fractions), and line graphs.	<u>Maps, Globes, and Graphs</u> workbook	
Chpt 111.15(b)(13)(A) Chpt 111.15(b)(13)(A) Chpt. 112.5(b)(2)(E)	Using gathered data, constructs picture graphs, bar graphs, pie charts (with fractions), and line graphs.	Graphing paper, <u>Maps, Globes, and Graphs</u> workbook	
Chpt 111.15(b)(13)(C)	Analyzes data to predict if an event is “more likely than”, “less likely than”, “equally likely”, “impossible”, or “certain” to occur.	Checksheet, data chart, wall chart	

Measurement

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt 111.15(b)(15)(A)	Defines, writes, and abbreviates standard metric measures, including meter, kilometer, centimeter, gram, kilogram, liter, milliliter	Measurement materials	
IMF	Defines, writes, and abbreviates standard English measures, including inch, foot, yard, cups, pints, quarts, gallons, ounces, and pounds.	Measurement materials	
Chpt 111.15(b)(11)(A)	Uses linear measurement tools, including rulers, yard sticks, and trundle wheels, to measure and solve word problems and to estimate/measure length.	Measurement materials	
IMF	Effectively uses both balance scales and bathroom scales to weigh and record a variety of weights and objects.	Measurement materials	
IMF	Applies weight and volume measurement to cooking	Measurement materials	

	and fool preparation projects.		
Chpt 111.14(b)(10)(A) Chpt 111.15(b)(12)(A)	Reads a thermometer in both Fahrenheit and Celsius scales and records temperature data using appropriate symbols and abbreviations (e.g., °, F, C).	Measurement materials	
Chpt 111.13(b)(7)(D), (E), (F), (G)	Compares and orders two or more objects according to temperature (e.g., hottest to coldest), weight/mass (heaviest/lightest), length (longest/shortest), and capacity (holds most/least)	Measurement materials, science experiments	
Chpt 111.14(b)(10)(B) Chpt 111.15(b)(12)(B)	Reads and writes times shown on analog and digital clocks using one minute increments.	Time materials	
Chpt 111.14(b)(10)(C)	Defines the relationship among seconds, minutes, hours, days, weeks, months, and years and approximates activities and their corresponding durations.	Time materials, holiday material, calendar material, seasons material	
IMF	Defines and converts from week to day, kilometer to meter, meter to centimeter, kilogram to gram, liter to milliliter.	Measurement material, calendar material	

Geometry

Standard(s)	Learning Outcome	Core Material	Extension Material
Chpt 111.13(b)(6)(A)	Identifies and names basic polygons, from 3 to 10-sided, and defines the prefix for each (e.g., tri = three, oct = eight)	Geometry cabinet	
IMF	Associates angles with rotation about a point and measures with a protractor.	Geometry cabinet, geometry nomenclature, geometry sticks	
IMF	Defines, identifies, and constructs acute, right, straight, obtuse, and congruent angles.	Geometry cabinet, geometry nomenclature	
MSSA, IMF	Defines, identifies, and constructs triangles by their sides (equilateral, scalene, isosceles)	Geometry cabinet, geometry nomenclature, geometry sticks, geometry triangles	
MSSA, IMF	Defines, identifies, and constructs triangles by their angles (right, acute, obtuse, oblique)	Geometry cabinet, geometry nomenclature, geometry sticks	
IMF	Defines, identifies, and constructs all quadrilaterals (parallelogram, rectangle, square, trapezoid, rhombus) and identifies sides, vertices, and angles.	Geometry cabinet, geometry nomenclature, geometry sticks, geometry triangles	
IMF	Defines, identifies, and constructs both regular and irregular polygons through the decagon.	Geometry cabinet, geometry nomenclature, geometry sticks	
Chpt 111.13(b)(6)(A)	Defines, identifies, constructs, and differentiates among a circle, ellipse, and an oval.	Geometry cabinet, geometry nomenclature	
Chpt 111.14(b)(7)(C) Chpt 111.13(b)(6)(D)	Breaks down/Builds up geometric shapes into a collection of other shapes (e.g., a square broken down	Constructive triangles	

	into two triangles, two squares make a rectangle).		
Chpt 111.14(b)(7)(B)	Defines and differentiates concretely and orally between 2-D and 3-D geometric shapes.	Geometry cabinet, geometry nomenclature, geometric solids	
Chpt 111.14(b)(7)(A)	Defines, identifies, and constructs polyhedra (prisms and pyramids) and defines and counts faces, vertices, and edges	Geometric solids, geometry nomenclature	
Chpt 111.13(b)(6)(B)	Defines, identifies, constructs, and differentiates among non-polyhedra solid figures (sphere, cylinder, cone, ovoid, ellipsoid).	Geometric solids, geometry nomenclature	
IMF, MSSA	Defines, identifies, and constructs the radius and diameter of a circle.	Geometry nomenclature	
IMF	Can measure the circumference of a circle		
Chpt 111.15(b)(11)(B)	Uses measurement tools to find the perimeter of a polygon.	Ruler, measurement tools	
Chpt 111.15(b)(9)(B) and (C)	Identifies and creates two-dimensional shapes with lines of symmetry.	Symmetry material	
IMF	Names angles formed by two straight lines cut by a transversal		
IMF	Defines and identifies complementary and supplementary angles		
IMF	Using a protractor and straightedge, constructs an angle of a given measure	Ruler, protractor	

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History			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt 113.5(b)(3)(A) and (C)	Using sensorial materials, understands and distinguishes among small and large durations of time (e.g., 1 minute, day, month, year, century).	Hourglasses, egg timers, digital and analog clocks, mechanical timers, calendars, BC/AD timeline	
Chpt 113.4(b)(2)(D)	Describes and uses a standard calendar.	Variety of calendars	
IMF	Records and graphs a history of the class's year, including daily temperature, weather, and birthdays.	Flip chart, graphing paper	
IMF	Explains and illustrates a day and a year in astronomical terms (e.g., day = 1 rotation of earth, year = one revolution around the sun).	Geography charts	
Chpt 113.5(b)(3)(B)	Sequences and presents own illustrated timeline of	Timeline materials	Timeliner software

	his/her life, including ages and events.		
Chpt 113.5(b)(3)(A) and (C)	Identifies and relates, in basic terms, geologic time periods: eon, era, period, epoch, age.	Timeline of life, dictionary	
Chpt 113.5(b)(3)(A) and (C)	Identifies and relates, in basic terms, common era (C.E) and before common era (B.C.E.)	BC/AD timeline	
IMF	Identifies, sequences, and briefly describes the geologic eras of the earth's history (e.g., Cenozoic, Mesozoic, Paleozoic, Precambrian).	Timeline of life, clock of eras, dictionary, library resources	
Chpt 113.5(b)(1)(A)	Explain, in basic terms, and links continental drift and human migration.	Tectonic plate material, timeline of humans	
IMF	Identifies, describes and illustrates major forms of life found in the following geologic time periods: Archeon Eon (formerly Archeozoic Era), Proterozoic Eon (formerly Proterozoic Era), Paleozoic Era, Mesozoic Era, Cenozoic Era.	Timeline of life, clock of eras	
IMF	Explains and gives examples of fossilization processes, including freezing, drying (mummification), tar/asphalt, amber, carbonization, and permineralization (most common)	Fossil examples	
IMF	Using models or pictures, identifies and briefly describes common fossils, including ammonites, brachiopods, crinoids, and trilobites.	Timeline of Life, Fossil materials, Library resources	Field guides

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History			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Describes how paleontology (study of fossils) helps scientists understand the history of the earth and life on earth.	Timeline of life, fossil examples	
IMF	Explains, in simple terms, and illustrates the evolution of early people as hunter-gatherers, tool makers (bone, flint, wood), fire starters, and cave painters.	Timeline of humans	
Chpt 113.5(b)(2)(A) and (B) Chpt. 113.4(b)(8)(A) and (B)	Identifies and describes, in simple terms, the fundamental needs of people – shelter/housing, clothing, transportation, defense, art/music, philosophy/religion, communication, food/nutrition.	Fundamental needs of humans, fundamental needs charts	
Chpt 113.4(b)(16)(A) and (B)	Describes, in basic terms, how science and technology	Fundamental needs of humans, library	

	have affected the fundamental needs of people over time.	resources	
Chpt. 113.5(b)(1)(A) Chpt. 113.4(b)(11)(A) and (C) Chpt. 113.4(b)(12)(A)	Describes, in basic terms, the history of government, rulers, and common citizens and their rights.		
Chpt 113.5(b)(1)(A)	Compares/Contrasts and gives examples of hunter-gatherer societies, farmers/horticultural societies, and pastoral/shepherd societies.		
Chpt 113.5(b)(1)(A) Chpt. 113.4(b)(7)(A)	Relates agriculture to permanent settlements.		
Chpt 113.5(b)(1)(A) Chpt. 113.4(b)(7)(A)	Relates settlement locations with water sources – lakes, oceans, rivers, streams – and gives examples.		
Chpt 113.3(b)(15)(A)	Describes how societal beliefs, customs, and traditions are passed to generations (e.g., storytelling).	Story of writing, stories on CD	
Chpt 113.5(b)(1)(C) Chpt 113.4(b)(4)(A) and (B) Chpt 113.4(b)(15)(A)	Researches and presents biographical studies of famous scientists, inventors, politicians, individualists, and philosophers in history (e.g., Pierre Charles- L’Enfant, Lewis and Clark, Cleopatra, Archimedes, George Washington).	Biographies, biography sheets (library)	
Chpt 113.4(b)(13)(D), IMF	Identifies how selected fictional characters in literature have created and built new communities (e.g., Robinson Crusoe, Island of the Blue Dolphins).	Storytime	
Chpt 113.4(b)(1)(A), IMF	Focusing on culture and geography, celebrates historical holidays and awareness events (e.g., Native American Heritage Month (Nov), Columbus Day (the discovery of America), Veteran’s Day (the story of the American soldier), Thanksgiving (the story of the pilgrims), a Colonial American Christmas (Dec), MLK Day (Jan), Black History Month (Feb), Abraham Lincoln’s birthday (Feb), George Washington’s birthday (Feb), Medieval Festival).	Holiday material, calendar	
Chpt 113.4(b)(15)(B), IMF	Explains, in basic terms, how new technology and invention have impacted communities around the world (e.g., pasteurization, vaccines).	Library resources	

Geography

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Verbally identifies the countries and their capital cities in North America, South America, and Europe.	Puzzle maps, outline maps, globes, pin maps	
IMF	Given the names of countries, verbally identifies their continent.	Puzzle maps, outline maps, globes, pin maps	

IMF	Verbally identifies all 50 states.	Puzzle maps, outline maps of the United States	
Chpt. 113.4(b)(6)(B)	Given an outline map and a list of the states, matches each state to its correct geographic location.	Puzzle maps, outline maps of the United States	
Chpt. 113.4(b)(6)(B)	Locates countries already studied on a globe, an atlas map, and a detailed wall map.	Globe, atlas	
Chpt. 113.4(b)(6)(A)	Identifies the major oceans on a map and a globe.	Ocean material, globe, map	
Chpt. 113.5(b)(5)(B) Chpt. 113.3(b)(4)(B)	Duplicates the furniture layout of the classroom, a specialist’s room, or the library as a simple scale model.		
IMF	Given a model layout, duplicates the layout on a separate board.		
IMF	Given a birds-eye photograph, replicates the layout on a model board.		
Chpt. 113.5(b)(5)(A)	Identifies the cardinal directions, north, south, east, and west, in the classroom and outside on the playground.	Puzzle maps, <u>Maps, Globes and Graphs</u> workbook	
Chpt. 113.5(b)(5)(A)	Given a starting point, identifies whether a second point is N, S, E, W, NE, NW, SE, SW.	Puzzle maps, <u>Maps, Globes and Graphs</u> workbook	
Chpt. 113.5(b)(5)(C)	Using a simple compass, identifies the directions NE, NW, SE, and SW.	Compass	
Chpt. 113.5(b)(5)(A)	Using a model layout, places items, on request, at correct corners (NE, NW, SE, SW), at intersections, adjacent to specified points, and at relative positions (e.g., “place the school NW of the red building).	The farm (used for grammar)	
Chpt. 113.5(b)(5)(C) Chpt. 113.4(b)(5)(A)	Identifies and uses symbols and a compass rose on atlas and individual maps.	Atlas, <u>Maps, Globes, and Graphs</u> workbook	
Chpt. 113.5(b)(5)(C) Chpt. 113.4(b)(5)(B)	Using a model layout, uses symbols and a map key to construct a basic map on grid paper.		
Chpt. 113.5(b)(5)(C)	Constructs maps which include a map key/legend with symbols, titles, and a compass rose.	Resource map	
Chpt. 113.4(b)(5)(C)	Defines and identifies examples of water forms (e.g., ocean, lake, river, tributary, river source, river mouth, cape, bay, strait, gulf) on both a detailed map and globe.	Water form material, <u>Maps, Globes, and Graphs</u> workbook	
Chpt. 113.5(b)(4)(A)	Identifies geological land forms on a 3-D model (e.g., mountain, mesa, foothill, valley, plateau, canyon, volcano, crater lake, palisade).	Imaginary island	
Chpt. 113.5(b)(4)(A)	Defines and identifies examples of land forms (e.g., continents, islands, archipelago, peninsula, delta, isthmus, cape) on both a detailed map and globe.	Land form material, <u>Maps, Globes, and Graphs</u> workbook	

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Chpt. 113.4(b)(6)(B)	Using an atlas and globe, identifies and names the major islands of the world (Australia, Greenland, New Guinea, Tasmania, Japan, Indonesia, Newfoundland, Iceland, Great Britain, Ireland, Madagascar, Cuba, Victoria).	Atlas, globe, islands of the world material, <u>Maps, Globes, and Graphs</u> workbook	
Chpt. 113.4(b)(6)(A)	Using an atlas and globe, identifies and names the major lakes of the world (Great Lakes, Salt Lake, Lake Victoria, Caspian Sea, Tanganyika,).	Atlas, globe, lakes of the world material, <u>Maps, Globes, and Graphs</u> workbook	
IMF	Using an atlas and globe, identifies and names the major deserts of the world (Sahara, Gobi, Kalahari, Arabian, Great Victoria, Atacama, Chihuahuan, Sonoran, Mojave, Great Basin Patagonian,).	Atlas, globe, deserts of the world material, biome material	
Chpt. 113.4(b)(6)(A)	Using an atlas and globe, identifies and names the major rivers of the world (Nile, Amazon, Mississippi, Yangtze, Missouri, Rio Grande, Congo, Danube, Ganges, Rhine, Volga, Euphrates, Tigris, Yukon, Indus).	Atlas, globe, Rivers of the World material, <u>Maps, Globes, and Graphs</u> workbook	
Chpt. 113.4(b)(6)(A)	Using an atlas and globe, identifies and names the major mountains of the world (Himalayas, Rocky, Atlas, Alps, Ural, Pyrenees, Andes, Appalachian).	Atlas, globe, mountains of the world material	
IMF	Using a chart, identifies and describes, in simple terms, what scientists believe to be true about the interior regions of the earth.	Parts of the earth material, library resources	
Chpt. 113.5(b)(4)(A), (B), and (C)	Gives examples of ways climate and environment affects people’s lives.	Biome material, library resources	
Chpt. 113.5(b)(4)(D) Chpt. 113.4(b)(8)(B) Chpt. 113.4(b)(7)(B)	Describes and illustrates the following characteristics of deserts: 1) climate and environment, 2) plants and animals, 3) clothing, 4) transportation, 5) housing and shelter, 6) children and their daily lives.	Biome material, library resources	
Chpt. 113.5(b)(4)(D) Chpt. 113.4(b)(8)(B) Chpt. 113.4(b)(7)(B)	Describes and illustrates the following characteristics of arctic regions: 1) climate and environment, 2) plants and animals, 3) clothing, 4) transportation, 5) housing and shelter, 6) children and their daily lives.	Biome material, library resources	
Chpt. 113.5(b)(4)(D) Chpt. 113.4(b)(8)(B) Chpt. 113.4(b)(7)(B)	Describes and illustrates the following characteristics of rainforests: 1) climate and environment, 2) plants and animals, 3) clothing, 4) transportation, 5) housing and shelter, 6) children and their daily lives.	Biome material, library resources	
Chpt. 113.5(b)(4)(D) Chpt. 113.4(b)(8)(B) Chpt. 113.4(b)(7)(B)	Describes and illustrates the following characteristics of temperate regions:1) climate and environment, 2) plants and animals, 3) clothing, 4) transportation, 5) housing and shelter, 6) children and their daily lives.	Biome material, library resources	
IMF	Defines and identifies flag terminology: canton, field,	Parts of the flag material	

	flagpole/mast, halyard, staff ornament/finial.		
IMF	Given a model or picture, identifies flags of major countries (e.g., United States, Canada, Mexico, Great Britain, Germany, France, Italy, Spain, Japan, China, Russia, Australia).	Examples of the flags, flags of the world	Library flag encyclopedias, field guides
IMF	Identifies and illustrates flags and symbols (e.g., state bird, flower) of countries and states researched.	State research	
IMF	Names and identifies on a U.S. map the five regions of the continental United States – west, mid-west, southwest, southeast, and northeast.	Resource map, atlas	
Chpt. 113.4(b)(8)(A)	For each U.S. region, explains, in basic terms, the states, the physical geography, major cities, major natural resources and industries, cultural heritage/traditions, food, and settled ethnic groups.		
Chpt 113.4(b)(1)(B)	Locates, identifies on a map and globe, and briefly describes (e.g., history, landmarks) Washington D.C.	Map, globe, library resources	
Chpt. 113.4(b)(6)(B) Chpt 113.4(b)(1)(B)	Locates, identifies on a map and globe, and describes, in simple terms (e.g., history, landmarks, geography, traditions), Texas.	Map, globe, library resources	
Chpt. 113.4(b)(6)(B) Chpt. 113.4(b)(6)(C) Chpt. 113.4(b)(7)(A) Chpt 113.4(b)(14)(A) and (B)	Investigates and orally presents country and state research which include geography, major cities, natural resources, industries, culture, art, literature, and daily life.	Country research, library resources	
IMF	Using an imaginary island, develops and presents coastal and geographic features.	Imaginary island	

Civics

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt 113.5(b)(6)(A)	Defines and outlines key characteristics of a good citizen (e.g., belief in truth, equality, responsibility for the common good, justice).		
Chpt 113.5(b)(6)(C)	Describes key actions good citizens take (e.g., voting, obeying laws, helping others)		
Chpt 113.5(b)(10)(B)	Researches and presents biographical studies of famous people who exemplified good citizenship (e.g., Rosa Parks, Jane Addams, Harriet Tubman).	Biographies, biography sheet (library)	
Chpt 113.5(b)(11)(A) and (B)	Explains and gives examples of individuals who have created positive change for society (e.g., Helen Keller, Gandhi, Cesar Chavez)	Biographies, biography sheet (library)	
Chpt 113.5(b)(11)(C)	Understands civic organizations/non-profits and actively participates in fundraising/service to help		

	these organizations.		
Chpt. 113.4(b)(12)(B)	Understand the role of public officials and identifies ways they are selected, including election and appointment to office.	Library sequencing chart	
Chpt 113.4(b)(12)(A)	Recognizes and names the current president and vice president of the United States, the governor of Texas, and the mayor of San Antonio.	President flashcards	
Chpt 113.4(b)(12)(A)	Researches and presents biographical studies of Presidents of the United States.	Biographies, biography sheet (library)	
Chpt. 113.4(b)(14)(B)	Identifies and describes the history, in basic terms, of national symbols, including the national bird, flower, flag, and seal.	U.S. research	Field guides
Chpt. 113.3(b)(13)(B)	Recites and explains, in basic terms, the Pledge of Allegiance.		
Chpt. 113.4(b)(14)(A)	Identifies and sings patriotic songs (e.g., America the Beautiful, National Anthem).		

Economics

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt 113.5(b)(6)(A)	Identifies and explains, in basic terms, ways of earning, spending, and saving money.		
National Standard 5	Describes and gives examples of historical methods of trading for goods and services.	Timeline of humans	
Chpt 113.3(b)(9)(A) and (B)	Given a specific job, brainstorms skills, knowledge, and requirements a worker needs to perform well.		
Chpt 113.5(b)(6)(B)	Analyzes a simple budget that allocates money for spending and saving.	Drink order balance sheet	
Chpt 113.5(b)(7)(A-C)	Defines and identifies examples of scarcity (e.g., drought, environment, resources) and the impact within and among communities.	<u>The Lorax</u> ,	
Chpt 113.5(b)(7)(D)	Relates, in basic terms, choice and the concept of free markets.		
Chpt 113.5(b)(8)(A)	Sequences the basic operations of a simple business (e.g., a lemonade stand, drink orders).		
Chpt 113.5(b)(10)(A) and (B)	Defines and understands basic economic vocabulary, including “supply”, “demand”, “producer”, “consumer”, “profit”, “cost”, “goods”, “services”, “entrepreneur”, “price”.		
Chpt 113.5(b)(8)(B)	Relates, in basic terms, supply and demand to selling price.		
Chpt 113.5(b)(8)(C)	Relates, in basic terms, the cost of making a product		

	and the selling price of a product to profits.		
Chpt 113.5(b)(8)(D)	Researches and presents biographical studies of famous entrepreneurs (e.g., Henry Ford, Milton Hershey, Bill Gates).	Biographies, biography sheet (library)	
Chpt 113.5(b)(10)(C)	Traces the development of a product from natural resource to finished product.	<u>Maps, Globes, and Graphs</u> workbook	“Fromto.....” library books.

Lower Elementary Science

Scientific Process			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 112.5(b)(4)(A)	Competently uses data collection/analysis tools, including calculators, microscopes, cameras, safety goggles, clocks, computers, thermometers, hand lenses, measuring sticks, balances (simple, beam, spring scale) , magnets, and compasses.	Science materials	
Chpt. 112.5(b)(4)(A)	Prepares drawings from a microscopic observation.	Microscope	
Chpt. 112.5(b)(4)(B)	Demonstrates that repeated investigations increase the reliability and validity of results.		
Chpt. 112.4(b)(2)(E)	Practices the scientific method – observation, questions, hypothesis, experiment, record/analyze data, conclude (accept/reject hypothesis).	Science experiments	
Chpt. 112.4(b)(2)(E)	Distinguishes between observations and inferences in science experiments or field investigations.		
Chpt. 112.4(b)(3)(C)	Explains a problem in his/her own words and identifies tasks and solutions related to the problem.		
Chpt. 112.4(b)(2)(F)	Communicates explanations of investigations and rationale for conclusions.		
Life Science			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 112.4(b)(5)(A)	Understands the basic and dynamic idea of classification (taxonomy) – broad/specific and similarities/differences.	Zoology charts	
IMF	Charts the top levels of the taxonomic classification system: kingdom, phylum, sub-phylum, and class.	Zoology charts	
Chpt. 112.5(b)(10)(B)	Cites specific characteristics which distinguish plants	Field guides, data charts, zoology charts,	

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	from animals and gives examples.	botany charts	
Chpt. 115.5(b)(4)(B) and (C) Chpt. 115.5(b)(3)(A)	Describes the function of organ systems in animals, including the digestive, circulatory, respiratory, skeletal, endocrine, and urinary.	Sequencing charts, field guides, parts of vertebrate and invertebrate	
Chpt. 112.5(b)(10)(B)	Cites specific characteristics which distinguish invertebrates from vertebrates and gives examples.	Vertebrate and invertebrate material	
Chpt. 112.5(b)(10)(B)	Describes characteristics and gives examples of invertebrates.	Field guide, data charts, zoology charts	
Chpt. 112.5(b)(10)(B)	Describes basic characteristics and examples of invertebrates in the three phylums/sub-phylums arthropods (including insects), mollusks, and crustaceans.	Wall chart, field guides, data charts, zoology charts, parts of the invertebrates	
IMF	Defines and gives examples of zoology vocabulary, including predator/prey, herbivore, omnivore, carnivore, diurnal/nocturnal, camouflage, habitat.	Field guide, dictionary, non-fiction glossary, Who Am I? cards, animal research cards	
Chpt. 112.5(b)(10)(B)	Compares and contrasts the basic characteristics of vertebrate classes – mammals, birds, amphibians, reptiles, fish.	Main characteristics of the five vertebrate classes	Wall charts, acrostic paper
Chpt. 112.5(b)(8)(C) and (D) Chpt. 112.4(b)(6)(D) Chpt. 112.4(b)(9)(A)	Defines, identifies, and compares physical adaptations that animals use to survive in specific biomes/habitats, to find food, and to defend themselves.	Animal research cards, Who Am I? cards	Animal adaptations (library), Fundamental needs of animals (library)
Chpt. 112.5(b)(8)(B) Chpt. 112.4(b)(9)(B) Chpt. 112.3(b)(7)(D)	Explains, constructs, and compares food chains of various biomes/habitats, including energy source, producers, consumers, scavengers/decomposers.	Animal research cards	Food chain (library)
Chpt. 112.5(b)(3)(D)	Explains and sequences the human relationship with animals, including hunter/gatherer, farmer (domestication of animals), pets, animal food products, animal by-products (e.g., wool, compost).	Fundamental needs of humans	Sequencing chart
IMF	Composes, illustrates, and shares descriptive animal stories.	Who Am I? cards	Fishbone diagram
Chpt. 112.5(b)(5)(A) and (B) Chpt. 112.4(b)(6)(A) and (B)	Understands the concepts of systems, including interdependence, wholes/parts, and shared purpose, and can cite real-world examples.	The great lessons and accompanying charts and experiments	
IMF	Explains how cells fit into living systems and are the basic structures of living things.	Microscope, the first and second great lesson	
IMF	Describes how microscopic life forms have adapted to their environment	Microscope, the first and second great lesson	
IMF	Defines and gives examples of common botany vocabulary, including deciduous, evergreen, hard wood, soft wood	Botany charts, Who Am I? cards	
Chpt. 112.5(b)(10)(A)	Describes characteristics and gives examples of	Botany charts, Who Am I? cards	

	plants.		
IMF	Identifies and illustrates classroom and garden plants.	Botany charts	Field guide books, fruit and vegetable research (library), herb research (library)
IMF	Identifies and describes common trees by their wood, shape, leaves, fruit, seed, and/or bark.	Botany charts, types of leaves	Tree research (library), Plant research (library), field guide books, botany posters
Chpt. 112.4(b)(6)(C)	Identifies and defines the functions for the parts of a tree, leaf, flower, plant, fruit, and seed.	Botany material (three part cards, nomenclature)	
IMF	Given a leaf, identifies the basic leaf shape.	Parts of the leaf, types of leaves	Tree research (library)
Chpt. 112.4(b)(6)(C)	Explains the process and requirements for photosynthesis and graphically illustrates the cycle.	Botany charts, botany experiments	
IMF	Explains pollination and the role of insects in the process.	Botany charts	Sequencing charts
IMF	Identifies and explains each of the basic needs of plants: light, warmth, water, and minerals.	Botany charts, botany experiments	
Chpt. 112.5(b)(10)(A) Chpt. 112.5(b)(9)(A) and (B) Chpt. 112.5(b)(2)(A)	Explains and demonstrates that plants adapt to their environment and grow in predictable patterns.	Botany experiments	
Chpt. 112.5(b)(11)(B)	Defines soil (type, texture, color) and explains the relationship between water and various soils (sand, loam, clay).		
Chpt. 112.5(b)(3)(D)	Explains and sequences the human relationship with plants, including uses for plants; edible plants; tree harvesting; plants used for clothing, dye, medicine, herbs/spices.	Botany charts	Sequencing charts
IMF	Composes, illustrates, and shares descriptive plant stories.	Who Am I? cards	Fishbone diagram
Chpt. 112.5(b)(8)(A)	Defines and identifies an ecosystem and its parts (atmosphere, soil, water, sun, living organisms).	Terrarium	
IMF	Defines, contrasts, and gives examples of bio-degradable, recyclable, and non-degradable items.	Wall chart, data chart	
IMF	Identifies and explains the major causes of water and air pollution and offers ideas to combat the problem.	Fishbone diagram	
Chpt. 112.3(b)(10)(C)	Explains “reduces, reuse, recycle” and identifies how organic (rocks, soil, water, leaves) and inorganic (plastic, aluminum) items can be recycled, reused, or reduced.	Recycling materials	
Chpt. 112.5(b)(3)(E)	Researches and presents the history of life science concepts and contributing scientists and philosophers	Various texts, biography sheets	

	(e.g., Luther Burbank, Carl Linnaeus, Jane Goodall, George Washington Carver)		
Outdoor Nature Trail			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Observes, identifies, and illustrates regional animals (invertebrates, mammals, reptiles, amphibians, birds).	Observation journal	
IMF	Using field guides, identifies common trees – both native and introduced -- around the school.	Field guides	library field guide books
IMF	Using leaf, bark rubbing, and measurement samples/approximations, identifies common trees, plants, cacti, vines, grasses, shrubs, and wildflowers around the school.	Nature objects	library plant, tree, and herb research
IMF	Gathers data (e.g., number of wildflowers, number of insects), prepares graphs, and presents findings.	Checksheets	
IMF	Uses maps and command cards to find objects.	Scavenger hunts, command cards, maps	
IMF	Creates basic maps of small areas for peers to follow.		
IMF	Creates command cards for peers to use on the trail (e.g., take 10 steps east, walk to the nearest oak tree...)		
IMF	Uses a compass to record cardinal directions for a nature route.	Compass	
IMF	Uses a GPS to record latitude and longitude directions.	GPS	
IMF	Observes and illustrates cloud patterns for identification.	Types of clouds material	
IMF	Uses a windsock to record wind patterns.	checksheets	
IMF	Uses nature observations to inspire sensory writing, including poetry, journaling, and short stories.		
IMF	Uses a trundle wheel to measure the length of nature trails.	Trundle wheel	
IMF	Observes an “adopted tree” from season to season and records and illustrates changes.		
Earth Science			
Standard(s)	Learning	Core	Extension

	Outcome	Materials	Materials
Chpt. 112.4(b)(10)(B)	Identifies fossil fuels (petroleum, coal, natural gas), how they are formed, and how they are used.		
Chpt. 112.5(b)(11)(A)	Defines and identifies samples of renewable, non-renewable, and inexhaustible resources.		
Chpt. 112.5(b)(11)(D)	Identifies the sun as a form of fuel and describes how it is captured and used.	Parts of the sun	
IMF	Describes ways to conserve natural resources.		
IMF	Explains, in simple terms, the “Big Bang” theory of cosmic creation	The great first lesson	
IMF	Explains, in simple terms, the role of gravity in the formation of the protogalactic nebula and the formation of the first stars.	Science experiments	
Chpt. 112.5(b)(3)(A)	Explains, in basic terms, how scientists believe stars are formed.	Science experiments	
IMF	Explains, in simple terms, the fundamentals of stellar nucleosynthesis.		
IMF	Explains, in simple terms, Kuiper’s cosmic cloud theory of the formation of the solar system.		
IMF	Explains, in simple terms, the life cycle of stars.	Life cycle sheets	
IMF	Relates, in simple terms, a star’s brightness to its size, distance, and temperature.		
Chpt 113.5(b)(13)(C)	Recounts well-known constellations and the myths/legends connected to them.	Field guide books, library books, Story of the Angle	Field guide books, library books
Chpt. 112.5(b)(11)(C)	Identifies, describes, and shares basic facts about each planet in our solar system.	Solar system cards	Planet research sheet (library), wall chart
IMF	Defines and differentiates among “orbit”, “rotation”, and “revolution”.	Dictionary and/or glossary	
IMF	Relates, in simple terms, our day/night cycle and the earth’s rotation.	Geography charts	
IMF	Relates, in simple terms, the four seasons, the earth/sun relationship, and the length of daylight.	Season material	
IMF	Defines and describes, in simple terms, the two solstices and the two equinoxes.	Season material, geography charts	
IMF	Defines and distinguishes between perihelion and aphelion on an elliptical orbit.		
IMF	Defines eclipse and explains, in basic terms, the cause of solar and lunar eclipses.	Phases of the moon, parts of the sun	

IMF	Summarizes, in basic terms, and can identify pictorially meteors, meteoroids, meteorites, comets, and asteroids.	Wall chart	
IMF	Identifies and describes, in basic terms, the interior structure of the earth (inner/outer core, mantle, outer mantle, crust).	Parts of the earth	Wall chart
IMF	Explains the causes, characteristics, and types of volcanoes and how they have affected the earth's surface.	Parts of the volcano	Wall chart
IMF	Understands that atmospheric gases (and eventually oceans) are derived from inside the earth through volcanic eruptions.	Parts of the atmosphere	
IMF	Describes, in basic terms, plate tectonics and continental drift.	Plate tectonic material	
Chpt. 112.5(b)(6)(B)	Explains the causes of earthquakes and their effect on the earth's surface.	Plate tectonic material	
Chpt. 112.5(b)(2)(A)	Defines and demonstrates the processes of weathering and erosion and how they continually break down/build up land.	Work of the Wind chart	
IMF	Explains, in simple terms, the hydraulic action of running water (streams) as the main type of water erosion.	Work of the Water chart	
IMF	Defines and differentiate among igneous, sedimentary, and metamorphic rocks.	Rock material	library wall charts
IMF	Describes, in basic terms, and graphically illustrates the rock cycle.	Rock material	
Chpt. 112.3(b)(10)(B)	Given samples, identifies samples as igneous, sedimentary, or metamorphic	Rock samples	rock research (library), rock samples
IMF	Explains how scientists use index fossils to determine the age of other fossils or layers of sedimentary rock.		
Chpt. 112.5(b)(2)(D)	Differentiates between a mineral and a rock and classifies samples accordingly.	Rock samples	mineral research (library), field guide books
Chpt. 112.4(b)(10)(A)	Describes, in basic terms, and graphically illustrates the water cycle.	Terrarium, water cycle material	library life cycle
IMF	Explains, in basic terms, the effect of temperature on air movement.	Science experiment	
IMF	Defines and differentiates between weather and climate.	Dictionary	
IMF	Defines and illustrates basic cloud types (e.g., cumulus, cirrus, stratus, nimbus), relates them to air mass stability, and predicts short-range weather from	Types of clouds material	

	them.		
IMF	Explains, in basic terms, the causes of ocean currents and their effects on local climate.		
IMF	Given a weather report and map, interprets basic weather symbols, including “sunny”, “rain”, “thunderstorms”, “snow”, “cloudy”, and “partly cloudy” and can insert onto maps.		
Chpt. 112.5(b)(3)(E)	Researches and presents the history of earth science concepts and contributing scientists and philosophers (e.g., Galileo, Copernicus, Thoreau)	Biographies	biography sheets (library)
Physical Science			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 112.5(b)(7)(B)	Defines and identifies items representing the three normal states of matter: solid, liquid, gas	Science experiment	
Chpt. 112.5(b)(7)(A) Chpt. 112.5(b)(3)(E) Chpt. 112.5(b)(1)(A)	Demonstrates that an object’s appearance can change while its material substance remains constant (e.g., ice, water, steam).	Science experiment	
Chpt. 112.5(b)(7)(A) Chpt. 112.5(b)(3)(E)	Demonstrates that liquids behave differently depending on the surface’s materials.		
Chpt. 112.5(b)(7)(A) Chpt. 112.5(b)(3)(E) Chpt. 112.5(b)(1)(A)	Demonstrates and records data showing matter changing forms when temperatures change.	Science experiment	
Chpt. 112.5(b)(7)(A) Chpt. 112.5(b)(3)(E) Chpt. 112.5(b)(1)(A)	Demonstrates, defines, and explains the distinction between evaporation and condensation.	Science experiment	
IMF	Explains, in simple terms, the basic structure of atoms and differentiates among protons, electrons, and neutrons.		
Chpt. 112.5(b)(7)(A) Chpt. 112.5(b)(3)(E) Chpt. 112.5(b)(1)(A)	Through measurement and observation, demonstrates that different temperatures cause materials to expand or contract.	Science experiment	
Chpt. 112.5(b)(7)(A) Chpt. 112.5(b)(1)(A)	Demonstrates that in physical change, matter changes in form but not in substance.	Science experiment	
Chpt. 112.5(b)(7)(A) Chpt. 112.5(b)(1)(A)	Demonstrates that in chemical change, matter changes in substance as well as form.	Science experiment	
IMF	Defines mixture as it pertains to chemistry and demonstrates its characteristics (e.g., iron filings, powdered sulfur).	Science experiment	
IMF	Defines compound as it pertains to chemistry and demonstrates its unique properties.	Science experiment	

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IMF	Defines and differentiates among chemical elements, molecules, and compounds.		
IMF	Researches specified common elements from the Periodic Table.	Periodic Table (library)	
Chpt. 112.5(b)(1)(A) Chpt. 112.5(b)(2)(B)	Demonstrates that density determines whether an object sinks or floats.(buoyancy).	Science experiment	
IMF	Explains the basic principles of fire and combustion.	Science experiment	
Chpt. 112.5(b)(1)(A)	Constructs a closed electrical circuit.	Science experiment	
Chpt. 112.5(b)(1)(A) Chpt. 112.5(b)(2)(B)	Define, distinguish, and demonstrate opaque, semi-opaque, and transparent.	Science experiment	
Chpt. 112.5(b)(1)(A) Chpt. 112.5(b)(2)(B) and (D)	Demonstrates and theorizes why an object’s shadow varies with its position in relation to a light source.	Science experiment	
IMF	Distinguishes between conductors and nonconductors.	Science experiment	
Chpt. 112.5(b)(1)(A) Chpt. 112.5(b)(2)(D)	Demonstrates that energy in the form of electromagnetism can create motion.		
Chpt. 112.5(b)(1)(A) Chpt. 112.5(b)(2)(D)	Demonstrates how both water and air pressure can make objects move.	Science experiment	
IMF	Identifies sound as a form of energy.	Science experiment	
Chpt. 112.5(b)(1)(A) Chpt. 112.5(b)(2)(D)	Demonstrates that sound waves travel through solids, liquids, and gases.	Science experiment	
IMF	Identifies light as a form of energy.	Science experiment	
Chpt. 112.5(b)(1)(A) Chpt. 112.5(b)(2)(A)	Demonstrates that light travels only in straight lines.	Science experiment	
Chpt. 112.5(b)(1)(A) Chpt. 112.5(b)(2)(B)	Demonstrates that objects become visible only when light is reflected from them.	Science experiment	
Chpt. 112.5(b)(1)(A) Chpt. 112.5(b)(2)(B)	Demonstrates that light bends when it passes from one medium to another.	Science experiment	
Chpt. 112.5(b)(1)(A) Chpt. 112.5(b)(2)(B)	Demonstrates that dark colors absorb more light energy than light colors.	Science experiment	
IMF	Explains why objects reflected in a mirror appear to be reversed.	Science experiment	
Chpt. 112.5(b)(1)(A) Chpt. 112.5(b)(2)(B) and (A)	Demonstrates that mirrors and other highly reflective materials absorb almost no light energy.	Science experiment	
Chpt. 112.5(b)(3)(E)	Researches and summarizes the history of lighting before the discovery of electric light.	Science experiment	

Chpt. 112.5(b)(3)(E)	Researches and summarizes the history of the electric light and its impact on society.	Science experiment	
Chpt. 112.5(b)(3)(E)	Researches and summarizes the history of flight and the development of the modern airplane.	Visual search, sequencing chart	
Chpt. 112.5(b)(3)(E)	Researches and presents the history of physical science concepts and contributing scientists and philosophers (e.g., Bohr, Hawking, Einstein, Newton, Curie, Edison)	Biographies, biography sheet	

Lower Elementary Practical Life

Gardens, Recycling, and Food			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 112.5(b)(1)(B)	Uses and conserves resources and disposes of recyclable materials properly.		
Chpt. 112.4(b)(7)(D)	Observes, measures, and records changes in weather, the night sky, and seasons.		
Chpt. 112.4(b)(4)(B)	Observes, measures, and compares classroom objects and pets using standard and non-standard measurement tools.		
IMF	Identifies, observes and cares for classroom pets.		
IMF	Identifies, observes and cares for classroom plants.		
IMF	Takes root cuttings from indoor plants.		
IMF	Determines the type and amount of fertilization needed for indoor plants.	Field guide books	
IMF	Determines the type and amount of light needed for indoor plants	Field guide books	
IMF	Participates in recycling and using compost.		
IMF	Constructs and operates a compost pile.		
IMF	Prepares the soil, plants, cares, weeds, and harvests easily-grown vegetables and herbs.		
IMF	Explains the dangers of food poisoning and ways to prevent it.		
IMF	Explains the role of cooking foods and boiling liquids to kill micro-organisms.		
IMF	Explains the rationale for washing fruits/vegetables carefully before eating.		
IMF	Explains the role of refrigeration in retarding food spoilage.		

IMF	Prepares snacks for classroom consumption using safe, neat, efficient, and hygienic practices.		
Daily Living Skills			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Maintains a clean and orderly work space, including desks, mats, and shared work spaces.		
IMF	Pushes in chairs.		
IMF	Knows the differences and uses of various cleaners.		
IMF	Cleans up spills using the appropriate equipment.		
IMF	Effectively uses a broom, dust pan, mop, sponge, cleaner, and cleaning rag.		
IMF	Folds linens and rolls mats neatly.		
IMF	Effectively uses and cleans a microwave.		
IMF	Correctly sets a table place setting.		
IMF	Can repeat parent's/guardian's phone numbers and home address.		
IMF	Politely answers the telephone using an appropriate greeting.		
IMF	Takes thorough, written phone messages.		
IMF	Makes introductions using conventional etiquette.		
IMF	Delivers a firm handshake with an appropriate greeting when meeting people.		
IMF	Follows basic rules of conversation, including not interrupting.		
IMF	Understands and practices social etiquette (e.g., covering mouth when yawning, no belching, sharing, not tattling, etc.).		
IMF	Practices proper deportment (standing, sitting, and walking appropriately and gracefully).		
IMF	Practices proper dining etiquette, including proper use of the napkin and utensils, appropriate conversation, and table manners.		
IMF	Threads a needle for sewing.		
IMF	Ties a knot.		
IMF	Reviews and checks daily planners and goals.		
Location of Materials and Etiquette			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 113.4(b)(11)(B)	Explains, in basic terms, the history of libraries and	Encyclopedias	

	the role of school and public libraries.		
MSSA	Practices proper grace and courtesy when using a book, avoiding dog-earing, defacing, spine abuse, page turning errors, and food/drink usage.	Storytime	
MSSA	Defines and identifies the parts of a book, including the front cover, back cover, inside title page, copyright page, dedication, spine, call number, barcode, publisher, chapter, table of contents, index, glossary, dust jacket, and captions.	library command cards library interactive worksheet	scavenger hunt independent study
MSSA, Chpt. 110.5(b)(26)(D)	Knows the role of an author, illustrator, and editor and locates the names on a book.	picture books	storytime
MSSA	Identifies various types of illustrations, including collage, prints, photographs, pastel, paint, and sketches.	storybooks	storytime
MSSA, IMF	Recognizes the works of classic children’s authors (e.g., Eric Carle, Jack Prelutsky, Beverly Cleary, Shel Silverstein, Paul Goble, Laura Ingalls Wilder)	children’s books author web sites teachingwithbooks.net	author studies author letters research project
MSSA	Understands how books are placed on bookcases, top-to-bottom, left-to-right, and can skim/scan call numbers efficiently.	Library books with various call numbers	Group lesson
MSSA	Understands and uses the Dewey Decimal system for non-fiction materials	Dewey basket command cards	Group game Scavenger hunt
MSSA	Reads fiction and biography call numbers by applying rules of alphabetization for up to three letters.	alphabetical work with dictionaries	

Lower Elementary Library Skills

Research Skills – Big 6 Research Model			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
MSSA	Given a task, selects the appropriate reference book to use – dictionary, thesaurus, or encyclopedia	reference books fan book materials library lesson sheets	
MSSA, Chpt. 110.5(b)(4)(C)	Understands how words are ordered in a dictionary, encyclopedia, and thesaurus.	reference books laminated prompt cards library lesson sheets fan book materials	
MSSA, Chpt. 110.5(b)(4)(C)	Defines, locates, and uses guide words in a dictionary, encyclopedia, and thesaurus.	library lesson sheet laminated prompt cards fan book materials	

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		reference books	
MSSA, Chpt. 110.5(b)(4)(A)	After locating entry words in a dictionary, finds syllabication, simple definitions, and parts of speech.	dictionary library game strips	
MSSA	Given a topic, locates the entry, the article, and the author in an encyclopedia using guide words or the index.	field guide paper laminated prompts	
MSSA, Chpt. 110.5(b)(4)(C)	Using a thesaurus, locates the entry, antonyms, synonyms, and homophones.	thesaurus paper strips library lesson sheet	
MSSA	Distinguishes among and knows how and when to use a table of contents, an index, and a glossary.	laminated cards non-fiction books	
Chpt. 110.5(b)(25)(A)	Given a topic, names other related key words that either broaden or narrows the topic.	keywords learning sheet	
MSSA, Chpt. 110.5(b)(26)(A)	Locates books in the library database using both visual search and typed keywords.	keywords learning sheet laminated command cards	
Chpt. 110.5(b)(26)(D), MSSA	Given a topic, generates both open and closed-ended questions for research.	KWL fishbone diagram	
Chpt. 110.5(b)(26)(B) and (C) Chpt. 110.5(b)(26)(D), MSSA Chpt. 110.5(b)(26)(E)	Using non-fiction books, utilizes headings, sub-headings, topic sentences, graphic aids, and captions to generate relevant questions.	datachart 1 and 2 field guide paper wall chart	
Chpt. 110.5(b)(27) and (28)	Synthesizes notes and answers from questions into various forms, including original paragraphs, reports, dioramas, sequencing charts, timelines, and bar graphs.	sequencing chart life cycle form timeline sheet graphing paper	
MSSA	Uses both self and peer editing to identify spelling, grammatical, and content errors.	peer editing forms	
Chpt 113.4(b)(3) (A) and (B)	Uses multiple sources of information, including digital, hardcover, oral (interviews, CDs, DVDs), and photographs.	library collection	

Lower Elementary Health

Food and Nutrition			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 115.5(b)(1)(C)	Recognizes that food contains nutrients necessary for life/growth/health and identifies basic nutrients (carbohydrates, proteins, fats, vitamins, minerals, water).		
Chpt. 115.5(b)(1)(D)	Classifies foods into the basic food groups: grains,		

	vegetables, fruits, fats/oils, milk/dairy, meat/beans/fish/nuts.		
Chpt. 115.5(b)(1)(D) Chpt. 115.4(b)(1)(D)	Identifies the components of a well-balanced and nutritious diet.		
IMF	Relates food processing, handling, and preparation methods to nutritional value.		
IMF	Explains why cleanliness is important in storing, preparing, and eating foods.		
IMF	Relates social and geographic variables to diet.		
Chpt. 115.4(b)(1)(D)	Describes the positive and negative effects of food on the body (e.g., calories, nutrients, obesity, cholesterol).		
Chpt. 115.4(b)(1)(D)	Explains concerns over processed foods (preservatives and additives).		
Chpt. 115.4(b)(1)(D)	Explain medical concerns over too much salt intake in diets.		
Chpt. 115.4(b)(1)(C) and (D)	Explain the medical concerns over animal fats on health.		
Chpt. 115.5(b)(7)(A)	Understands and identifies commercial food advertising techniques and their influence on eating habits.		
Chpt. 115.4(b)(1)(G)	Evaluate the results of good dietary and eating habits.		
IMF	Explains, in basic terms, portion control.		
IMF	Defines and understands calories and determines the appropriate calorie intake for him/herself.		

Community Life and Human Development

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 115.5(b)(1)(A) Chpt. 115.5(b)(1)(F) Chpt. 115.4(b)(1)(B)	Explains and demonstrates good personal hygiene and health habits (e.g., regular baths, brushing teeth, washing hands, cover mouth when sneezing, picking nose, exercise, sleep).		
Chpt. 115.4(b)(10)(B)	Identify basic feelings (joy, anger, sadness, fear) and recognize they are natural parts of human behavior shared by everyone.		
Chpt. 115.4(b)(7)(B)	Identifies common illnesses and their symptoms (e.g., cold, flu, strep throat, ear infection).		
Chpt. 115.4(b)(4)(A)	Recognizes that many diseases and illnesses are		

	caused by germs, bacteria, and viruses.		
Chpt. 115.5(b)(6)(D) and (B) Chpt. 115.5(b)(3)(A)	Explains how diseases and illnesses can be prevented or controlled.		
Chpt. 115.5(b)(8)(B)	Describes how weather and pollution affect a person’s health.		
Chpt. 115.5(b)(5)(A) and (B) Chpt. 115.5(b)(9)(E) Chpt. 115.5(b)(11)(D)	Identifies and explains the functions of doctors, nurses, dentists, and counselors.		
Chpt. 115.5(b)(3)(C)	Describes actions to take when ill.		
Chpt. 115.5(b)(1)(A)	Explains how personal health habits can affect others (e.g., smoking, not covering mouth when sneezing, attending school while contagious).		
Chpt. 115.5(b)(1)(F)	Defines, in basic terms, “preventative care” and recognizes the importance of regular medical and dental visits.		
Chpt. 115.5(b)(4)(A)	Identifies and explains, in basic terms, the stages of human development.		
IMF	Categorizes and gives examples of basic human needs: physical (e.g., food, water, oxygen); social (e.g., belonging, learning, play, spirituality); emotional (e.g., love, esteem, self-efficiency)		
Chpt. 115.5(b)(9)(A)-(D) Chpt. 115.5(b)(10)(C)	Resolves conflict with others in peaceful ways.	Talking stick, peace rose	
Chpt. 115.5(b)(10)(A) and (B)	Aspires toward a virtuous life by demonstrating honesty, kindness, respect, responsibility, gratitude, cooperation, friendliness, integrity, compassion, enthusiasm, and courtesy	<u>Book of Virtues</u> , <u>Aesop’s Fables</u> ,	
Chpt. 115.5(b)(1)(E)	Explains, in basic terms, “stress” and gives examples of stress reduction techniques (e.g., meditation, exercise, music).		

Safety

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 115.5(b)(6)(C)	Recognizes, names, and offers basic information about potentially dangerous substances.		
Chpt. 115.5(b)(2)(D)	Explains why medicines must follow specific pharmacist or doctor’s instructions.		
Chpt. 115.5(b)(2)(B) Chpt. 115.5(b)(2)(C)	Identifies products containing nicotine and explains the long-term health consequences of using nicotine (e.g., smoking, “dipping”).		

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Chpt. 115.5(b)(2)(B) Chpt. 115.5(b)(2)(C) Chpt. 115.5(b)(2)(D)	Identifies products containing alcohol and explains the long-term health and social consequences of using/overusing alcohol.		
Chpt. 115.5(b)(11)(E), 9)(F) Chpt. 115.5(b)(8)(A) and (B)	Appreciates the power of peer pressure and practices assertive communication and refusal skills.		
Chpt. 115.5(b)(2)(B) Chpt. 115.5(b)(2)(C)	Identifies products containing caffeine and explains the effects of caffeine.		
Chpt. 115.5(b)(11)(A-G)	Understands interpersonal skills critical to long-term health (e.g., goal-setting, critical thinking, decision-making, problem solving)		
Chpt. 115.5(b)(6)(C)	Names and identifies common plants/parts that are poisonous (e.g., daffodil bulbs, jasmine berries, oleander leaves).	Field guide books	
Chpt. 115.5(b)(6)(C)	Names and identifies common venomous animals in south Texas (e.g., scorpions, brown recluse spider, copperhead snake, coral snake)	Field guide books	
Chpt. 115.5(b)(2)(E)	Recognizes and gives examples of potentially dangerous situations (e.g., fire, lightening storm, power line down, high traffic areas)		
Chpt. 115.5(b)(6)(A)	Relates environmental protection with community and individual health (e.g., cleaner air/water, U/V rays)		
Chpt. 115.5(b)(2)(A)	Identifies safety rules at the school, in the home, and in the community.		
Chpt. 115.4(b)(7)(B)	Explains and gives examples of technological improvements that have improved health and safety (e.g., better sunblock, improved exercise equipment)		

Lower Elementary Visual Arts

Art Expression and Study			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 117.1(b)(1)(B) Chpt. 117.1(b)(3)(B)	Identifies and discusses the elements of color, texture, form, line, space, and value in artwork from many cultures, from many media, and across historical time periods.	Color Wheel(s), Art Notebooks	
Chpt. 117.1(b)(1)(B) Chpt. 117.1(b)(3)(B)	Identifies and discusses the principles of pattern, rhythm, emphasis, balance, proportion, and unity in artwork from many cultures, from many media, and across historical time periods.	Art Notebooks, Study of a Painting	

Lower Elementary

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Chpt. 117.1(b)(1)(B) Chpt. 117.1(b)(3)(B)	Groups significant works of art by a common element or visual characteristic.	“Mommy, It’s a Monet!” Cards, Study of a Painting	
Chpt. 117.1(b)(1)(B) Chpt. 117.1(b)(3)(B)	Identifies the elements of art and the principles of art in nature.	Art Notebooks, Study of a Painting	
Chpt. 117.1(b)(1)(A)	Uses knowledge of the five senses and life experiences as inspiration for expressing him/herself.	Five Senses Experiments	
IMF	Theorizes why different cultures in the past and present have used different materials for their artwork.	Fundamental Needs Cards, History Lessons	
Chpt. 117.1(b)(3)(A)	Uses artwork for documenting history, sharing traditions, and initiating storytelling/ story writing.	Writing Prompts	
Chpt. 117.1(b)(3)(C)	Studies and relates art to everyday life.	Examples of Art to Study	
Chpt. 117.1(b)(4)(A)	Constructively evaluates general intent and expressive quality in personal artwork.	Art Materials	
IMF	Researches and presents biographical studies of famous artists in history (e.g., Kahlo, DaVinci, Picasso, Rothko, Dali, Escher, Bearden).	Biography Work in Library, Study of an Artist	
IMF	Identifies, from famous portraits, what the sitter’s mood or personality may have been.	Study of a Painting/Artist	
IMF	Using a color wheel, identifies "warm" or "cool" groups, complementary colors, and opposite colors.	Art Notebooks, Color Wheel(s), Study of a Painting	

Art Application

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Distinguishes between 2-D and 3-D art.	Examples of Art	
IMF	Identifies specific pieces of art and music that elicit a similar emotional response.	Study of a Painting	
IMF	Defines, identifies, and uses primary, secondary, and tertiary colors in art.	Color Wheel(s), Art Notebooks, Art Materials	
Chpt. 117.1(b)(2)(C)	Creates artwork based on personal observation and experiences.	Art Materials	
Chpt. 117.1(b)(2)(A-C)	Produces drawings, painting, prints, construction, ceramics, and fiberart, using a wide variety of art materials.	Art Materials	
IMF	After identifying a given artwork’s theme, creates a work of art with similar subject matter, symbol, idea, and/or meaning.	Art Materials, Art Examples	
IMF	Discovers how artists use space within an artwork and creates an original artwork which effectively uses space.	Art Materials, Art Examples	
IMF	Creates original artwork using the elements of color, texture, form, line, space, and value.	Art Notebooks, Art Materials	

IMF	Creates original artwork using the principles of pattern, rhythm, emphasis, balance, proportion, and unity.	Art Notebooks, Art Materials	
IMF	Creates original artwork that reflects a variety of culture's traditions, celebrations, and history.	Art Materials	
IMF	Uses simplified forms, such as cones, spheres, and cubes, to begin drawing more complex forms	Geometric Solids, Art Materials	
IMF	Uses a visual arts form to help express an idea in a non-art subject (e.g., science project, poetry, a social studies project).	Art Materials	
IMF	Makes simple patterns by repeating dots, lines, shapes, and colors.	Study of an Artist, Study of a Painting, Art Materials	
IMF	Overlaps objects as a method to create a sense of depth in a work of art.		
IMF	Mixes primary colors to create secondary colors.	Color Wheel(s)	
IMF	Adds black and white to colors to alter the value.	Art Materials	

Lower Elementary Theatre

Researching, Planning and Preparing Dramatizations			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 117.7(b)(4)(A)	Identifies theatre and storytelling forms from different cultures.		Storytime
Chpt. 117.7(b)(5)(B)	Uses theatre vocabulary, including plot (beginning, middle, and end), scene, sets, conflict, script, and audience, to describe theatrical experiences.	Read play scripts	Performance in play
National Standard 4.1	Identifies who, what, where, when, and why (the Five Ws) in a theatrical experience.	Fishbone Diagram	
Chpt. 117.4(b)(4)(B)	Identifies universal characters in stories and plays from different periods and places.	Read play scripts	Play performance
Chpt. 117.3(b)(3)(A-B)	Identifies various types of theatre elements, including costuming, sound, make up, set construction, direction, production, scene design, lighting, and stage management.	Read play scripts	Play performance
Chpt. 117.3(b)(3)(C)	Helps in planning dramatic events (e.g., designs sets or costumes, helps write scripts, selects music).	Scripts, designs	Create dramatic event
Creative Expression and Performance			
Standard(s)	Learning	Core	Extension

Lower Elementary

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	Outcome	Materials	Materials
IMF	Retell familiar stories, sequencing story points and identifying character, setting, and conflict.	Literary elements sheet	
Chpt. 117.3(b)(2)(B)	Participates in storytelling.	Storybooks from library	
Chpt. 117.3(b)(2)(C)	Dramatizes literary selections using puppetry.	Create scripts and puppets	
National Standard 4.2	Varies pitch, tone, volume, and tempo of voice to dramatize different characters.	Play performance	
Chpt. 117.10(b)(1)(D)	Participates in role-play and recreating dialogue.	Readers' Theatre	
Chpt. 117.3(b)(3)(D)	Practices grace and courtesy with others while preparing and performing dramatic events.	Attendance at MSSA productions	

Evaluation of Theatre Arts

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 117.3(b)(5)(A) and (1)(A)	Responds to a live performance with appropriate audience behavior	Attendance at MSSA productions	Field trips, guest speakers
Chpt. 117.3(b)(5)(B)	Identifies the theme, or moral, of a theatrical production.	Library DVDs	Literary elements lesson (library)
Chpt. 117.3(b)(4)(B)	Identifies historical and cultural influences in both live and recorded theatrical productions.	Library DVDs	
Chpt. 117.3(b)(2)(D)	Compares and contrasts dramatic productions with real life experiences and scenarios.	Venn Diagram	
Chpt. 117.3(b)(5)(D)	Compares and contrasts amateur and professional careers in theatre.	Guest speakers	

Lower Elementary Physical Education

Lower Elementary			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
116.3 1.1 A-H	<ul style="list-style-type: none"> • demonstrate an awareness of personal and general space while moving at different directions and levels such as high, medium, and low; • demonstrate proper foot patterns in hopping, jumping, skipping, leaping, galloping, and sliding; • demonstrate control in balancing and traveling activities; • demonstrate the ability to work with a partner such as leading and following; 		

	<ul style="list-style-type: none"> • clap in time to a simple rhythmic beat; • create and imitate movement in response to selected rhythms; • jump a long rope; and • demonstrate on cue key elements in overhand throw, underhand throw, and catch. 		
1.2 A&B	<ul style="list-style-type: none"> • recognize that motor skill development requires correct practice; and • demonstrate a base of support and explain how it affects balance. 		
1.3 A-D	<ul style="list-style-type: none"> • describe and select physical activities that provide opportunities for enjoyment and challenge; • participate in moderate to vigorous physical activities on a daily basis that cause increased heart rate, breathing rate, and perspiration; • participate in appropriate exercises for flexibility in shoulders, legs, and trunk; and • lift and support his/her own weight in selected activities that develop muscular strength and endurance of the arms, shoulders, abdomen, back, and legs such as hanging, hopping, and jumping. 		
1.4 A-E	<ul style="list-style-type: none"> • distinguish between active and inactive lifestyles; • describe the location and function of the heart; • describe how muscles and bones work together to produce movement; • describe food as a source of energy; and • explain the negative effects of smoking, lack of sleep, and poor dietary habits on physical performance and on the body. 		
1.5 A-E	<ul style="list-style-type: none"> • use equipment and space safely and properly; • describe the importance of protective equipment in preventing injury such as helmets, elbow/knee pads, wrist guards, proper shoes, and clothing; • describe how to protect himself/herself from harmful effects of the sun; • list water safety rules and demonstrate simple extension rescue; and • describe and demonstrate appropriate reactions to emergency situations common to physical activity settings such as universal safety precautions, and calling 911. 		

1.6 A-B	<ul style="list-style-type: none"> • demonstrate starting and stopping signals; and • explain boundaries and rules for simple games. 		
1.7 A-C	<ul style="list-style-type: none"> • follow directions and apply safe movement practices; • interact, cooperate, and respect others; and • resolve conflicts in socially acceptable ways such as talking and asking the teacher for help. 		
116.4 2.1 A-N	<ul style="list-style-type: none"> • travel independently in a large group while safely and quickly changing speed and direction; • demonstrate skills of chasing, fleeing, and dodging to avoid or catch others; • combine shapes, levels, and pathways into simple sequences; • demonstrate mature form in walking, hopping, and skipping; • demonstrate balance in symmetrical and non-symmetrical shapes from different basis of support; • demonstrate a variety of relationships in dynamic movement situations such as under, over, behind, next to, through, right, left, up, or down; • demonstrate simple stunts that exhibit personal agility such as jumping-one and two foot takeoffs and landing with good control; • demonstrate smooth transition from one body part to the next in rolling activities such as side roll, log roll, balance/curl, and roll/balance in a new position; • demonstrate control weight transfers such as feet to hands with controlled landing and feet to back; • demonstrate the ability to mirror a partner; • walk in time to a 4/4 underlying beat; • perform rhythmical sequences such as simple folk, creative, and ribbon routines; • jump a self-turned rope repeatedly; and • demonstrate on cue key elements of hand dribble, foot dribble, kick and strike such as striking balloon or ball with hand. 		
2.2 A&B	<ul style="list-style-type: none"> • recognize that attention to the feeling of movement is important in motor skill development; and • identify similar movement concepts and terms in a variety of skills such as straddle position, ready 		

<p>2.3 A-D</p>	<p>position, and bending knees to absorb force.</p> <ul style="list-style-type: none"> • describe and select physical activities that provide opportunities for enjoyment and challenge; • participate in moderate to vigorous physical activities on a daily basis that cause increased heart rate, breathing rate, and perspiration; • participate in appropriate exercises for flexibility in shoulders, legs, and trunk; and • lift and support his/her weight in selected activities that develop muscular strength and endurance of the arms, shoulders, abdomen, back, and legs such as hanging, hopping, and jumping. 		
<p>2.4 A-F</p>	<ul style="list-style-type: none"> • identify how regular physical activity strengthens the heart, lungs, and muscular system; • describe how the blood carries oxygen and nutrients through the body; • identify foods that enhance a healthy heart; • explain the need for foods as a source of nutrients that provide energy for physical activity; • describe the negative effects of smoking on the lungs and the ability to exercise; and • describe the need for rest and sleep in caring for the body. 		
<p>2.5 A-F</p>	<ul style="list-style-type: none"> • use equipment and space safely and properly; • select and use appropriate protective equipment in preventing injuries such as helmets, elbow/knee pads, wrist guards, proper shoes, and clothing; • list the effects the sun has on the body and describe protective measures such as sunscreen, hat, and long sleeves; • list water safety rules and describe their importance; • identify safe cycling and road practices; and • describe appropriate reactions to emergency situations common to physical activity settings such as universal safety precautions and dialing 911. 		
<p>2.6 A&B</p>	<ul style="list-style-type: none"> • identify goals to be accomplished during simple games such as not getting tagged; and • identify strategies in simple games and activities such as dodging to avoid being tagged. 		

2.7 A&B	<ul style="list-style-type: none"> • display good sportsmanship; and • treat others with respect during play. 		
116.5 3.1 A-J	<ul style="list-style-type: none"> • travel in forward, sideways, and backwards and change direction quickly and safely in dynamic situations; • demonstrate proper form and smooth transitions during combinations of fundamental locomotor and body control skills such as running and jumping safely in dynamic situations; • demonstrate mature form in jogging, running, and leaping; • demonstrate moving in and out of a balanced position with control; • demonstrate proper body alignment in lifting, carrying, pushing, and pulling; • demonstrate control and appropriate form such as curled position and protection of neck in rolling activities such as forward roll, shoulder roll, and safety rolls; • transfer on and off equipment with good body control such as boxes, benches, stacked mats, horizontal bar, and balance beam; • clap echoes in a variety of one measure rhythmical patterns; • demonstrate various step patterns and combinations of movement in repeatable sequences; and • demonstrate key elements in manipulative skills such as underhand throw, overhand throw, catch and kick such as position your side to the target. 		
3.2 A&B	<ul style="list-style-type: none"> • identify similar positions in a variety of movements such as straddle positions, ready position, and bending knees to absorb force; and • (B) know that practice, attention and effort are required to improve skills. 		
3.3 A-E	<ul style="list-style-type: none"> • describe and select physical activities that provide for enjoyment and challenge; • participate in moderate to vigorous physical activities on a daily basis that cause increased heart rate, breathing rate, and perspiration; • participate in appropriate exercises for developing flexibility; 		

	<ul style="list-style-type: none"> • lift and support his/her own weight in selected activities that develop muscular strength and endurance of the arms, shoulders, abdomen, back, and legs such as hanging, hopping, and jumping; and • identify opportunities for participation in physical activity in the community such as little league and parks and recreation. 		
3.4 A-D	<ul style="list-style-type: none"> • describe the long term effects of physical activity on the heart; • distinguish between aerobic and anaerobic activities; • identify foods that increase or reduce bodily functions; and • identify principles of good posture and its impact on physical activity. 		
3.5 A-D	<ul style="list-style-type: none"> • use equipment safely and properly; • select and use proper attire that promotes participation and prevents injury; • identify and apply safety precautions when walking, jogging, and skating in the community such as use sidewalks, walk on the left side of street when facing traffic, wear lights/reflective clothing, and be considerate of other pedestrians; and • identify exercise precautions such as awareness of temperature and weather conditions and need for warm-up and cool-down activities. 		
3.6 A&B	<ul style="list-style-type: none"> • identify components of games that can be modified to make the games and participants more successful; and • explain the importance of basic rules in games and activities. 		
3.7 A-C	<ul style="list-style-type: none"> • follow rules, procedures, and etiquette; • persevere when not successful on the first try in learning movement skills; and • accept and respect differences and similarities in physical abilities of self and others. 		
116.6 4.1 A-K	<ul style="list-style-type: none"> • demonstrate changes in speed during straight, curved, and zig zag pathways in dynamic situations; 		

	<ul style="list-style-type: none"> • catch an object while traveling such as catch a football pass on the run; • combine shapes, levels, pathways, and locomotor patterns smoothly into repeatable sequences; • jump and land for height and distance using key elements for creating and absorbing force such as bending knees, swinging arms, and extending; • perform sequences that include traveling, showing good body control combined with stationary balances on various body parts; • demonstrate body control in jumping and landing such as land on feet, bend knees, and absorb force; • transfer weight along and over equipment with good body control; • create a movement sequence with a beginning, middle, and end; • perform basic folk dance steps such as grapevine, schottische, and step-together-step; • travel into and out of a rope turned by others without hesitating; and • demonstrate key elements in manipulative skills such as volleying, hand dribble, foot dribble, punt, striking with body part, racquet, or bat. 		
4.2 A-D	<ul style="list-style-type: none"> • identify similar movement elements in sports skills such as underhand throwing and underhand volleyball serving; • identify ways movement concepts such as time, space, effort, and relationships can be used to refine movement skills; • make appropriate changes in performance based on feedback; and • describe key elements of mature movement patterns of throw for distance or speed such as catch, kick, strike, and jump. 		
4.3 A-F	<ul style="list-style-type: none"> • describe and select physical activities that provide for enjoyment and challenge; • name the components of health-related fitness such as strength, endurance, and flexibility; • identify and demonstrate a variety of exercises that promote flexibility; 		

	<ul style="list-style-type: none"> • improve flexibility in shoulders, trunk, and legs; • participate in activities that develop and maintain muscular strength and endurance; and • identify opportunities for participation in physical activity in the community such as little league and parks and recreation. 		
4.4 A-I	<ul style="list-style-type: none"> • describe the effects of exercise on heart rate through the use of manual pulse checking or heart rate monitors; • participate in moderate to vigorous physical activities on a daily basis; • identify methods for measuring cardiovascular endurance, muscular strength and endurance, and flexibility; • identify major muscle groups and the movements they cause; • describe the relationship between food intake and physical activity such as calories consumed and calories expended; • explain the link between physical activity/inactivity and health such as reduce stress and burn calories; • explain the relationship between physical activity and stress relief and demonstrate stress relief activities such as brisk walking, gentle stretching, and muscle tension and release; • describe the need for rest and sleep in recovering from exercise; and • identify sources of information on skill improvement, fitness, and health such as books and technology. 		
4.5 A-D	<ul style="list-style-type: none"> • use equipment safely and properly; • select and use proper attire that promotes participation and prevents injury; • describe and apply safety precautions when cycling and skating; and • identify potential risks associated with physical activities. 		
4.6 A&B	<ul style="list-style-type: none"> • distinguish between compliance and noncompliance with rules and regulations; and • analyze potential risks associated with unsafe 		

<p>4.7 A-D</p>	<p>movement and improper use of equipment.</p> <ul style="list-style-type: none"> • follow rules, procedures, and etiquette; • respond to winning and losing with dignity and understanding; • work independently and stay on task; and • demonstrate effective communication, consideration and respect for the feelings of others during physical activities such as encourage others, allow others equal turns, and invite others to participate. 		
<p>116.7 5.1 A-L</p>	<ul style="list-style-type: none"> • demonstrate appropriate use of levels in dynamic movement situations such as jumping high for a rebound and bending knees and lowering center of gravity when guarding an opponent; • demonstrate smooth combinations of fundamental locomotor skills such as running and dodging and hop-step-jump; • demonstrate attention to form, power, accuracy, and follow-through in performing movement skills; • demonstrate controlled balance on a variety of objects such as balance board, stilts, scooters, and skates; • demonstrate simple stunts that exhibit agility such as jumping challenges with proper landings; • combine traveling and rolling with smooth transitions; • combine weight transfer and balance on mats and equipment; • demonstrate the ability to contrast a partner's movement; • perform selected folk dances; • jump a rope using various rhythms and foot patterns repeatedly; • demonstrate competence in manipulative skills in dynamic situations such as overhand throw, catch, shooting, hand dribble, foot dribble, kick, and striking activities such as hitting a softball; and • demonstrate combinations of locomotor and manipulative skills in complex and/or game-like situations such as pivoting and throwing, twisting 		

<p>5.2 A-C</p>	<p>and striking, and running and catching.</p> <ul style="list-style-type: none"> • identify common phases such as preparation, movement, follow through, or recovery in a variety of movement skills such as tennis serve, handstand, and free throw; • identify the importance of various elements of performance for different stages during skill learning such as form, power, accuracy, and consistency; and • choose appropriate drills/activities to enhance the learning of a specific skill. 		
<p>5.3 A-C</p>	<ul style="list-style-type: none"> • participate in moderate to vigorous physical activities on a daily basis that develop health-related fitness; • identify appropriate personal fitness goals in each of the components of health-related fitness; and • explain the value of participation in community physical activities such as little league and parks and recreation. 		
<p>5.4 A-I</p>	<ul style="list-style-type: none"> • relate ways that aerobic exercise strengthens and improves the efficiency of the heart and lungs; • self-monitor the heart rate during exercise; • match different types of physical activity with health-related fitness components; • define the principle of frequency, intensity, and time and describe how to incorporate these principles to improve fitness; • describe the structure and function of the muscular and skeletal system as they relate to physical performance such as muscles pull on bones to cause movement, muscles work in pairs, and muscles work by contracting and relaxing; • identify the relationship between optimal body function and a healthy eating plan such as eating a variety of foods in moderation according to U. S. dietary guidelines; • describe common skeletal problems and their effect on the body such as spinal curvatures; • describe the changes that occur in the cardiorespiratory system as a result of smoking and how those changes affect the ability to 		

	<ul style="list-style-type: none"> perform physical activity; and describe how movement and coordination are effected by alcohol and other drugs. 		
5.5 A-D	<ul style="list-style-type: none"> use equipment safely and properly; select and use proper attire that promotes participation and prevents injury; describe the importance of taking personal responsibility for reducing hazards, avoiding accidents, and preventing injuries during physical activity; and identify potentially dangerous exercises and their adverse effects on the body. 		
5.6 A&B	<ul style="list-style-type: none"> describe fundamental components and strategies used in net/wall, invasion, target, and fielding games such as basic positions-goalie, offense, or defense; and explain the concept and importance of team work. 		
5.7 A-C	<ul style="list-style-type: none"> follow rules, procedures, and etiquette; use sportsmanship skills for settling disagreements in socially acceptable ways such as remaining calm, identifying the problem, listening to others, generating solutions, or choosing a solution that is acceptable to all; and describe how physical activity with a partner or partners can increase motivation and enhance safety. 		

Lower Elementary Technology

Foundations			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 126.2(b)(2)(B)	Types 10 words per minute	Typing Master	
Chpt. 126.2(b)(2)(B)	Uses proper keyboarding techniques such as correct hand and body positions and smooth and rhythmic keystroke patterns	Typing Master, Technology training	
Chpt. 126.2(b)(1)(C)	Demonstrates keyboarding techniques for alphabetic, numeric, punctuation, and symbol keys	Typing Master	

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Chpt. 126.2(b)(1)(A)	Uses basic computer terminology appropriate to the task	Technology training	
Chpt. 126.2 (b)(1)(B)	Understands functions of Microsoft Word; start and exit program, create, name and save files	Microsoft Word training	
Chpt. 126.2(b)(1)(C)	Uses networking terminology: online, network, password and access remote equipment on a network i.e. printer	Library research, Technology training	
Chpt. 126.2(b)(2)(A)	Uses a variety of input devices such as mouse, and keyboard	Typing Master, Research, library research	
Chpt. 126.2(b)(2)(D) Chpt. 126.2(b)(7)(A)	Produces documents using Microsoft Word including proof reading and corrections	Microsoft Word checklist, Research	
Chpt. 126.2(b)(2)(D)	Creates digital timelines	Timeliner	
Chpt. 126.2(b)(3)(A)(B)	Understanding of internet usage and safety policies under adult supervision	MSSA Library	

Information Acquisition

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 126.2(b)(4)(A)(B)	Utilizes online Britannica for Elementary Students	MSSA Library	
Chpt. 126.2(b)(5)(A)	Book search using online database	MSSA Library	
Chpt. 126.2(b)(5)(B)	Uses online help	MSSA Library, Research	
Chpt. 126.2(b)(6)(A)(B)	Utilizes Spanish websites	Spanish curriculum	
Chpt. 126.2(b)(6)(A)(B)	Utilizes Athletics/ Health Curriculum websites	PE curriculum	
Chpt. 126.2(b)(6)(A)(B)	Utilizes Music Curriculum websites	Music curriculum	

Communication

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 126.2(b)(10)(A)(B)	Uses font attributes, color, white space, and graphics to ensure that products are appropriate for the defined audience	Research	
Chpt. 126.2(b)(11)(A)(B)	Publishes information in a variety of media, i.e. printed copy, monitor display, stored files	Research	
Chpt. 126.2(b)(12)(A)(B)	Uses technology to facilitate evaluation of communication	Research	

Problem Solving

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 126.2(b)(7)(B)	Uses Microsoft Word to express ideas and solve problems	Research	

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Chpt. 126.2(b)(8)(A)(B)	Uses research skills and communication tools to participate in group projects	Research	
Chpt. 126.2(b)(9)(A)(B)	Uses online help	Research	



UPPER ELEMENTARY CURRICULUM

Upper Elementary Language Arts

Listening Skills			
Standard(s)	Learning Outcome	Core Materials	Extension Material
Chpt. 110.18(b)(26)(B)	Follows multi-step oral commands without having to ask for a repeat of the commands.	Oral presentations, group circle, literature circle	Classroom Management
Chpt. 110.18(b)(28)	Practices positive group dynamics skills, including giving one's opinion non-aggressively, seeking points of disagreement, avoiding personal attacks, and considering suggestions from others	Oral presentations	Weekly Reader Multicultural Fair Feedback Problem Solving
Chpt. 110.18(b)(26)(A)	Responds appropriately with questions and/or comments appropriate to both the content and the mood.	Oral presentations	Highlighting
Chpt. 110.18(b)(26)(A)	Formulates open-ended (who, what, when, where, why, how) questions to expand upon the content and to clarify.	Oral presentations	Charts Nifty-Fifty Library Activities
Chpt. 110.18(b)(26)(A)	Formulates closed-ended questions (answers are yes-no) to narrow the content and to clarify.	Oral presentations	NPR, RFC Island Project
Chpt. 110.18(b)(26)(C)	Summarizes major ideas and supporting evidence using appropriate transitions (e.g., first...then....next....finally)	Oral presentations	Literature Groups: B, M, E & Highlighting
Chpt. 110.18(b)(27)	Concludes how the speaker is feeling based on tone – happy, sad, angry, surprised and scared.	Oral presentations	Highlighting
IMF	Effectively uses a graphic organizer to record and organize notes from an oral source, including CDs, DVDs, or guest speakers	John would like to move to MS	Graphic Organizers such as printed & outlined for Multicultural Fair
Speaking (Oral) Competency			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
MSSA	Participates in literary group discussions.	Literary circle	5 Ws-- <i>Who, What, Where, When and Why</i>
Chpt. 110.18(b)(26)(B)	Gives multi-step commands in a succinct and sequential manner using ordered transitions to facilitate understanding (e.g., first, next, third, lastly).		
Chpt. 110.18(b)(27)	Given a well known story, can present an effective oral presentation from several character's points of view	UE Play Literature Group	<u>True Story of Three Little Pigs</u>
Chpt. 110.18(b)(27)	Defines and practices good oral presentation skills,	Presentations	

	including strong eye contact, controlled speaking rate, necessary volume, natural gestures, proper enunciation, and appropriate vocabulary for the intended audience.		
IMF	Clarifies and supports spoken ideas with factual evidence, details, and concrete examples.	Highlighting Structure Reading Passage	
IMF	Recites short poems from memory.	Poetry books	
IMF	Reads aloud fluently from familiar text with appropriate phrasing and punctuation pauses.	Reader's Theatre scripts	Literature Groups & Circle
IMF	Informally debates issues with classmates in a respectful manner, focusing on the main point, facts, and evidence.	Group circle	Weekly Reader
IMF	"Reads" a dramatic part in a play with appropriate characterization.	UE play	
IMF	When speaking, uses appropriate volume, speed, and enunciation for the given group size.	Reader's Theatre scripts	Feedback Rubric
IMF	Delivers well-organized oral reports with apparent beginnings, middles, and ends.	Presentations Multicultural Fair Report	
IMF	Practices positive presentation skills, including audience eye contact, non-distracting movement, and good posture.	Presentations	Feedback Rubric
IMF	Answers questions from the audience thoroughly and logically.	Presentations	
IMF	Uses visual aids (e.g., poster, diorama, notes) as a prop while still maintaining good eye contact and voice projection.	Presentations	Small Group
IMF	Varies tone to convey different emotions, including happiness, sadness, anger, surprise, and fear.	Reader's Theater UE Play	
IMF	Professionally makes introductions, describes purpose, and shares questions during interviews and oral surveys.	Survey form Open-ended graphic organizer	Multicultural Fair Presentation

Reading

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 110.18(b)(2)(A)	Determines the meaning of grade-level English words derived from Latin or Greek roots.	Vocabulary	<i>Origins</i> in Library
Chpt. 110.18(b)(2)(B)	Identifies unfamiliar words through context clues, including compare-contrast and cause-effect text structures.	Structured reading	Literature Group Discussions
Chpt. 110.18(b)(2)(C)	Completes and composes analogies with various	Word study	

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Chpt. 110.16(b)(2)(C)	similarities (e.g., part to whole, synonyms, antonyms)		
Chpt. 110.16(b)(2)(D)	Identifies, explains the meaning, and appropriately uses common idioms, adages, and other sayings.	Library	Wuzzles
Chpt. 110.18(b)(2)(D)	Identifies, reads, and defines common foreign words, phrases, and abbreviations (e.g., RSVP, que sera sera, quid pro quo)		<u>In a Word</u> (Lib.)
Chpt. 110.18(b)(7), (8), and (9)	Reads a variety of text and analyzes, makes inferences, and draws conclusions about structural patterns, author style, and author purpose.	Bluebonnet and Classics Reading Program	Literature Groups Logic Problems
Chpt. 110.18(b)(10)(B), IMF	Differentiates between fact and opinion and their uses and impact in informational and persuasive text.	Library Internet Sites/Info	Weekly Reader Logic Problems
Chpt. 110.18(b)(10)(A), IMF	Given a non-fiction text, defines, identifies, and summarizes the topic, the main idea, supporting details and facts/opinions.	Bluebonnet and Classics Reading Program	Graphic Organizers
Chpt. 110.18(b)(10)(C), IMF	Identifies different techniques for developing the author's main idea and viewpoint (e.g., proposition and support, cause and effect, problem and solution).	Book review	Graphic Organizers
Chpt. 110.18(b)(10)(D), IMF	After reading multiples sources, extracts and synthesizes similar ideas and logical connections among the texts.	Venn diagram	Literature Groups of Comparisons Logic Problems
Chpt. 110.18(b)(11)(B), IMF	Given a variety of persuasive texts, analyzes and identifies faulty reasoning in the argument/position.		Weekly Reader
Chpt. 110.18(b)(11)(A), IMF	Compares and contrasts, using supporting evidence, the viewpoint and structure of two different non-fiction texts with the same purpose.	Venn diagram	Civilization Study of Multicultural Traits
Chpt. 110.16(b)(12)(B), IMF	Recognizes bias in text through exaggeration, contradiction, and misleading statements.		
Chpt. 110.18(b)(12)(A)	Reads and correctly follows multi-task instructions.		
Chpt. 110.18(b)(12)(B)	Given both print and digital maps, tables, graphs, timelines, and diagrams, successfully interprets factual, quantitative, and technical information.	Research	Timeliner
Chpt. 110.18(b)(13)(A) and (B)	Develops media literacy by identifying advertiser's word, image, graphics, and sound techniques for conveying a product's message: emotional appeal, positive association, and fear		
Chpt. 110.18(b)(13)(C), IMF	Critiques media techniques for persuading an audience: bandwagon, celebrity endorsement, testimonials, emotional appeals, "plain folks", humor.		
Chpt. 110.16(b)(14)(B)	Reviews and differentiates among media genre, including documentary, news, and commercials.		

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Chpt. 110.18(b)(13)(D) Chpt. 110.16(b)(14)(C)	Analyzes and evaluates digital media for levels of formality/ informality and point of view.		
Chpt. 110.16(b)(9)	Selects books for “pleasure” and demonstrates comprehension and evidence of completion through creative means (e.g., book talk, journal, literary projects).	Silent reading	
IMF	Understands the organization of a newspaper, reads it, and discusses key issues and current events.	Weekly Reader	
IMF	Solves age-appropriate crossword puzzles and Sudoku puzzles.		Strimko
Literary Appreciation and Understanding			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Defines and identifies a variety of genre, including historical fiction, realistic fiction, science fiction, fantasy, fables, fairy tales, legends, folktales, tall tales, mythology, mystery, humor, biography, autobiography, poetry, and non-fiction.	Book reviews - library	Monthly Focus
Chpt. 110.18(b)(3)(B), IMF	Given a variety of multi-cultural folktales, distinguishes among folktale motifs, including the trickster, transformation, rule of three, the magic hand, impossible tasks, and refrains.	Library	Multicultural Fair Project
Chpt. 110.16(b)(3)(B), IMF	Compares and contrasts creation stories from a variety of cultures.	Summer packet	
Chpt. 110.18(b)(6)(C) Chpt. 110.16(b)(6)(A) IMF	For a variety of fictional works, identifies literary elements, including plot, conflict/resolution, climax, theme, characters, setting, tone/mood, foreshadowing, and point of view.	Book review	Literature Groups Oral Read Aloud
Chpt. 110.18(b)(3)(A), IMF	Distinguishes between topic and theme in a fictional work.	Book review	Literature Groups
Chpt. 110.18(b)(6)(A), IMF	Defines, identifies, and summarizes elements of plot development: rising action, turning point, climax, falling action, denouement.	Class Lesson	
Chpt. 110.18(b)(5)	Compares and contrasts literary elements for a fictional story and its dramatic interpretation (stage production, DVD, VHS).		
Chpt. 110.18(b)(3)(C)	Compares literary elements for similar stories set in different cultural settings.	Library	
Chpt. 110.18(b)(4) Chpt. 110.16(b)(4)	Defines, identifies, and creates works using figurative language, including simile, metaphor, alliteration, hyperbole, onomatopoeia, and personification.	Library unit	Individual Booklet

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Chpt. 110.18(b)(8)	Understands the interdependence among an author's sensory language, imagery, stylistic elements, and figurative language.		<u>There's A Frog in your Throat</u>
IMF	Defines and differentiates between narration and dialogue in literary works.	UE language unit Class Lesson	Drops in the Bucket and Sentence Analysis using <u>Eats, Shoots and Leaves</u>
Chpt. 110.16(b)(4)	Reads and identifies various forms of poetry, including poems of address, narrative poems, epic poems, tankas, and cinquains,	Read aloud	Poetry Activities in Library
IMF	Correctly identifies the authors of at least 10 familiar children's classics.	Classics reading program	Read Aloud
IMF	Offers a brief biography of the authors of familiar children's classics.	Genre Focus	
MSSA	Actively engages in literary circles for both historical and classical children's literature.	Literary circle Genre Focus	

Effective Writing

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 110.18(b)(20)(A)	Follows basic rules of capitalization, including the start of a sentence, names, proper nouns, titles, nationalities, days of the week, months, "I", letter salutations/closings, countries, languages, nationalities, acronyms, initials, abbreviations, and organizations.	UE Language curriculum	IOWA Practice <u>Twenty-Odd Ducks</u> Drops in the Buckets
Chpt. 110.18(b)(20)(B)	Follows basic rules for commas, including: series of words/phrases, multiple adjectives before a noun, addresses and dates, after letter salutations/closings, and in compound sentences.	UE Language curriculum	<u>Eat, Shoots and Leaves</u> IOWA Practice Drops in the Bucket
Chpt. 110.18(b)(20)(B)	Follows basic rules for apostrophes, quotations, parentheses, brackets, and ellipses.	UE Language curriculum	IOWA Practice <u>The Girl's Like Spaghetti</u> Drops in the Bucket
Chpt. 110.18(b)(20)(C)	Knows and follows basic conventions for italics and underlining, including names of vehicles and titles.	UE Language curriculum	IOWA Practice Drops in the Bucket
Chpt. 110.18(b)(21)(A)	Differentiates and applies correct usage of commonly confused words (e.g., its, it's; affect, effect).	UE Language curriculum	IOWA Practice Drops in the Bucket
Chpt. 110.18(b)(21)(B)	Effectively uses patterns/rules and a print dictionary to determine and check spelling.	Dictionary unit	Classroom Practice IOWA Practice Drops in the Bucket
Chpt. 110.18(b)(21)(C)	Uses word processing grammar and spell checkers while understanding limitations to both.	Word processing Final Drafts	(Word) IOWA Practice Drops in the Bucket
	Understands and applies increasingly complex		Small Group Diagramming

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Chpt. 110.18(b)(19)(A)	standards for parts of speech, including irregular verbs, non-count nouns (e.g., rice, moose), collective nouns (e.g., class, public), indefinite pronouns (e.g., all, anything), reflexive pronouns (e.g., myself, ourselves), subordinating conjunctions (e.g., while, if), conjunctive adverbs (e.g., consequently, indeed), predicate adjectives (comparative and superlative), prepositional phrases, and transitional words (e.g., also, moreover, in addition to).	Grammar box	<u>A Cache of Jewels and Other Books</u> by Ruth Heller
Chpt. 110.18(b)(19)(B)	Differentiates and applies active and passive voice.	Read Aloud Books	
Chpt. 110.16(b)(20)(B), MSSA, IMF	Through sentence analysis, identifies and uses the complete subject/predicate, the direct object, the indirect object, the main clause, and the subordinate clause.	Grammar box	Small Group Diagramming
Chpt. 110.18(b)(19)(C), IMF	Writes complete simple, compound, and complex sentences with correct subject-verb agreement and correct punctuation.	Writing unit	Small Group Diagrams Albanesi Materials
IMF	Accurately spells words on common 4th, 5th, and 6th grade vocabulary lists (e.g., Princeton Review)	Vocabulary Words Their Way	Worldly Wise
IMF	Writes appropriately formatted invitations to family, friends, and peers.	Letter unit	Multicultural Fair Research
Chpt. 110.18(b)(17)(B)	Writes appropriately formatted letters to friends and/or relatives which include rich ideas and important information.	Letter unit	
IMF	Writes appropriately formatted thank you letters that express grace and courtesy.	Letter unit	
Chpt. 110.18(b)(14)	Understands and applies the steps in the writing process to all forms of writing: planning, drafting, revising, editing, and publishing.	Writing unit	Multicultural Fair Reports
Chpt. 110.18(b)(14)(A)	Applies various strategies -- including discussion, background reading, persona, interests, and interviews -- in the planning stage of the writing process.	Pre-writing activities	
Chpt. 110.18(b)(14)(B)	Uses a variety of organizational strategies -- including sequences of events, cause-effect, compare-contrast-- when writing a first draft.	Pre-writing activities	B.M.E. format
Chpt. 110.18(b)(14)(C)	Revises drafts to enhance style, clarify meaning, vary sentence structure, improve transitions, enrich vocabulary, address audience needs, and to unify purpose.	Writing unit	Multicultural Fair Reports
Chpt. 110.18(b)(14)(D)	Focusing on attention to detail, edits drafts for grammar, mechanics, spelling	Writing checklist	

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Chpt. 110.18(b)(14)(E)	Revises final draft in response to self, peer, and teacher feedback and publishes final product to appropriate audience,	Writing checklist Teacher/Peer editing	
Chpt. 110.18(b)(15)(A)	Authors imaginative stories which include clear, well defined literary elements: plot, point of view, developed characters and dialogue, detailed setting using sensory details and figurative language.	Writing rotation	
Chpt. 110.18(b)(15)(B)	Composes a variety of poems, including free verse, shape poetry, tankas, ballads, and cinquains using figurative language and graphic elements.	Picnic poetry	Library Activity Grandpersons Day
Chpt. 110.18(b)(16)	Creates a personal narrative that follows the “show, don’t tell” method (i.e., sensory experiences) and has appropriate tone, tense, and point of view.	Writing unit and rotation	5 Senses
Chpt. 110.18(b)(17)(A)	Writes multi-paragraph essays which have a well defined topic, a clear introduction and conclusion, and well developed support details/evidence with appropriate examples and specific facts.	Writing unit and rotation	Science Fair
Chpt. 110.18(b)(17)(C)	Provides evidence from the text to demonstrate understanding and to justify opinions of various literary pieces, including classic books, short stories, comparative studies, and fiction and non-fiction excerpts.	Highlighting important information	
Chpt. 110.18(b)(17)(D)	Produces and presents a multimedia oral presentation (e.g., Powerpoint) to compliment research or literary analysis.	PowerPoint	Island Civilization Project
Chpt. 110.18(b)(18), IMF	Given a specific issue and audience, writes a persuasive paper that includes consideration of alternatives, detailed evidence to support the position, and sound reasoning.	Writing unit	Island Civilization Brochure
Chpt. 110.15(b)(13)(A), IMF	Produces a sequential, multi-task procedural paper that can be followed and validated by classmates (e.g., recipe).	Writing unit	Descriptive Writing in Rotations

Handwriting

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 110.15(b)(21)(A)	Uses appropriate pencil grip and paper position when writing.	Handwriting unit	
Chpt. 110.15(b)(21)(A)	Spaces letters appropriately within a word.	Handwriting unit	
Chpt. 110.15(b)(21)(A)	Correctly spaces words within a sentence.	Handwriting unit	

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MSSA	Varies size of handwriting to conform with paper and line size.	Handwriting unit	
Chpt. 110.15(b)(21)(A)	Legibly and accurately forms D'Nealian lower case manuscript.	Handwriting unit	
Chpt. 110.15(b)(21)(A)	Legibly and accurately forms D'Nealian upper case manuscript.	Handwriting unit	
Chpt. 110.15(b)(21)(A)	Maintains the correct height for both lower and upper case D'Nealian manuscript.	Handwriting unit	
Chpt. 110.15(b)(21)(A), IMF	Legibly and accurately forms cursive lower case manuscript.	Handwriting unit	
Chpt. 110.15(b)(21)(A), IMF	Legibly and accurately forms cursive upper case manuscript.	Handwriting unit	
Chpt. 110.15(b)(21)(A)	Maintains the correct height for both lower and upper case cursive manuscript.	Handwriting unit	
IMF	Experiments with various other forms of historic or cultural handwriting (e.g., calligraphy, roundhand, cuneiform, hieroglyphs)	Ancient civilization unit	
IMF	Masters at least two decorative hands and writes it easily in both pencil and ink.		
IMF	"Illuminates" decorative copywork.	Research	

Upper Elementary Mathematics

Numbers, Number Sense, and Operations			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt 111.17(b)(1)(A) IMF	Uses place value to recognize, name, and write – in symbols and in words – quantities up to 999,999,999,999,999.	Place value chart	
Chpt 111.17(b)(1)(A)	Using place value, compares and orders whole numbers up to 999,999,999,999,999 using $<$, $>$, and $=$.	Place value chart	
IMF, Chpt 111.17(b)(1)(B)	Recognizes and writes decimals to .999999.	Decimal fraction board	
IMF, MSSA, Chpt 111.17(b)(5)(B)	Defines and differentiates between prime and composite numbers and identifies prime numbers from 1 to 50.	Peg board	
IMF, Chpt 111.17(b)(1)(B)	Using place value, compares and orders decimals to the millionths using $<$, $>$, and $=$.	Decimal board	

Upper Elementary

MSSA Curriculum

Chpt. 111.165(b)(5)(A) and (B)	Rounds whole numbers to the the nearest ten, hundred, or thousand to approximate reasonable results in problem situations.		Rounding charts
IMF	Rounds mixed numbers off to the nearest whole number.		Fraction circles
MSSA	Applies understanding of fractions as 1) part of a whole unit, 2) as part of a collection, 3) as locations on a number line, and 4) as a division of whole numbers.	Fraction line	
MSSA	Defines, identifies, classifies, and gives examples of whole numbers, natural numbers, integers, prime numbers, composite numbers, proper/improper fractions, mixed numbers, decimals, positive numbers, negative numbers, rational numbers, irrational numbers, and real numbers.		
MSSA, Chpt. 111.22(b)(1)(A)	Given a variety of numbers (e.g., percentages, mixed numbers, decimals, improper fractions), can place in order from smallest to largest.		
Chpt 111.165(b)(4) (A) Chpt 111.17(b)(3)(D)	Model factors and products using arrays and area models.		
Chpt 111.165(b)(4) (B)	Represents multiplication and division in symbolic, word, and picture models.	Problem solving	
MSSA	Expresses place value as a power of 10 (e.g., $1000 = 10^3$).	Numeration	
MSSA, Chpt. 111.22(b)(1)(D)	Represents numbers in exponential form .	Numeration	
MSSA, IMF	Represents natural numbers in expanded form using powers of ten in standard and exponential form (e.g., 5,000 as (5×1000) or 5×10^3).	Numeration	
MSSA, IMF	Represents rational numbers (including decimals) in scientific (exponential) notation (e.g., 3.25×10^{-5}).	Numeration	
MSSA, Chpt 111.17(b)(2)(C)	Using a number line, approximates the location of rational and irrational numbers, both in decimal and fraction form.	Fraction/decimal line	
MSSA	Defines, recognizes, and gives examples showing the relationship between perfect squares and square roots.	Square root board	Bead chains
IMF	Counts accurately in Base 2, Base 3, Base 4, Base 5, Base 6, Base 7.	Base 10 material	
MSSA, Chpt 111.17(b)(2)(D) Chpt. 111.165(b)(2)(D)	Understands and defines the relationship among fractions, decimals, and percentages.		
MSSA	Understands “percent” to mean “per 100”.		
MSSA	Represents a ratio in three ways: 1) words, 2) colon, 3)		

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	fraction.		
Chpt. 111.165(b)(2)(A), (B), and (C)	Using concrete materials, illustrates mixed numbers, improper fractions, and equivalent fractions.	Fraction circles	Fraction insets
IMF, Chpt. 111.22(b)(2)(A) and (B)	Adds mixed numbers both concretely (with materials) and abstractly	Fraction circle box	
IMF, Chpt. 111.22(b)(2)(A) and (B)	Subtracts mixed numbers both concretely (with materials) and abstractly.	Fraction circle box	
IMF, Chpt 111.17(b)(2)(B)	Simplifies improper fractions to whole numbers (e.g., $12/6 = 2$).	Fraction circle box	
Chpt 111.17(b)(2)(B)	Simplifies improper fraction to mixed numbers (e.g., $13/6 = 2 \frac{1}{6}$).	Fraction circle box	
IMF	Multiplies mixed numbers.	Fraction circle box	
IMF	Divides mixed numbers.	Fraction circle box	
IMF	Can count to 100 using fractions (by $1/2$ s, $1/3$ s, $1/4$ s, $1/5$ s, $1/6$ s, $1/7$ s, $1/8$ s, $1/9$ s, $1/10$ s).		
IMF, Chpt. 111.22(b)(1)(B)	Identifies and writes decimal equivalencies to regular fractions (e.g., $\frac{1}{2} = .5$).	Fraction circles, Decimal fraction board	
IMF, Chpt. 111.22(b)(2)(B), Chpt 111.17(b)(3)(A)	Adds and subtracts decimals.	Decimal fraction board	
IMF	Multiplies and divides decimals.	Decimal fraction board	
IMF, Chpt 111.165(b)(3) (A) Chpt 111.165(b)(4) (D)	Solves math problems which include multiple operations, including addition, subtraction, multiplication, and division.	Problem solving	
IMF, Chpt 111.17(b)(3)(C)	Divides 7-digit numbers by 2, 3, and 4-digit divisors with and without remainders.	Long division racks/tubes	
IMF	Memorizes and recites basic division facts with a divisor of 10.		
IMF	In long division, expresses the remainder as a fraction.		
Chpt. 111.22(b)(1)(B)	Writes the ratio of two quantities as a fraction.		
MSSA	Solves for a missing variable in a proportion.	Textbook	
Chpt. 111.22(b)(1)(B)	Writes a ratio with a denominator of 100 as a percentage and vice versa.	Textbook	
Chpt. 111.22(b)(1)(B)	Writes a decimal less than one as a percent and vice versa.	Textbook	
MSSA	Defines and shows 1) symbolically and 2) on a number line the absolute value of a number.	Textbook	

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IMF	Given a set of positive and negative numbers, places them in numeric order.	Textbook	
IMF	Identifies additive inverses for both positive and negative numbers.	Textbook	
IMF, Chpt. 111.22(b)(1)(B) Chpt. 111.165(b)(2)(D)	States equivalent forms (e.g., decimal, percent, fraction) for both positive and negative numbers.	Textbook	
IMF	Adds and subtracts positive and negative numbers.	Textbook	
IMF	Multiplies and divides positive and negative numbers.	Textbook	
IMF	Defines and calculates reciprocal for both positive and negative numbers.	Textbook	
IMF	Simplifies expressions which contain multiple operations and both positive/ negative numbers.	Textbook	
Chpt 111.17(b)(4)	Uses rounding and compatible numbers to estimate solutions to problems.	Textbook	
IMF, Chpt. 111.17(b)(14)(A)	Calculates simple interest on a loan or earned on savings.	Textbook	
IMF, Chpt. 111.17(b)(14)(A)	Converts American money into a given foreign currency and vice versa.		
IMF, Chpt. 111.17(b)(14)(A)	Multiplies and divides money amounts in decimal notation.	Problem solving	
IMF	Knows the rules of divisibility for 2s, 5s, 9s, and 10s.	Numeration	
IMF, Chpt. 111.22(b)(1)(E)	Factors numbers from 1 to 50.	Peg board	
MSSA, Chpt. 111.17(b)(14)(A)	Calculates math problems for practical life scenarios (e.g., mentally computes 10, 15 or 20% tip; calculates 10% off of a retail item).	Textbook	
MSSA, Chpt. 111.165(b)(1)(B)	Both identifies and represents sequentially on a number line decimals, fractions, mixed numbers, and positive and negative integers.	number line	
IMF, Chpt. 111.22(b)(1)(B)	Changes a percentage to a fraction in simplest form.	Textbook	
IMF, Chpt. 111.22(b)(1)(B)	Changes a proper fraction to a percentage.	Textbook	
IMF	Calculates a percent (between 1-100%) of a given number.	Textbook	
IMF	Calculates a percent (less than 1% or greater than 100%) of a given number.	Textbook	
IMF,	Writes a decimal greater than one as a percentage and vice versa.	Textbook	
IMF	Using proportions, calculates the percentage a given number is greater than another given number.	Textbook	
IMF, Chpt. 111.17(b)(14)(A)	Given a completed worksheet/assessment, calculates	Textbook	

	the percentage of questions answered correctly.		
IMF, Chpt. 111.22(b)(3)(A)	Using proportions and given two numbers, calculates the percentage one number is of the other.	Textbook	
IMF	Counts from -20 to +20.	Textbook	
MSSA	Matches key words in story problems to determine the correct operation (e.g., addition – more than, total, added to, increased by; subtraction – difference, less, decreased by, fewer than; equals – yields, is, sold for, gives.	Problem solving	
IMF	Multiplies whole numbers by a fraction.	Fraction circles, fraction circle box	
IMF	Divides fractions by a whole number.	Fraction circles, fraction circle box	
IMF	Adds fractions that have different denominators.	Fraction circles, fraction circle box	
IMF	Subtracts fractions that have different denominators.	Fraction circles, fraction circle box	
IMF	Multiplies a fraction by a fraction.	Fraction circles, fraction circle box	
IMF	Divides a fraction by a fraction.	Fraction circles, fraction circle box	
Patterns, Functions, and Algebra			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt 111.165(b)(6)(B)	Identifies and uses patterns to multiply and divide by 10s, 100s, and 1000s.	Numeration	
Chpt 111.165(b)(7)	Creates tables to record, organize and analyze data to discover patterns and rules.	Charts and graphs	
Chpt 111.165(b)(14) (C) Chpt 111.165(b)(14) (A)	Studies and observes patterns in art (e.g., Escher’s tessellations).	Geometry nomenclature	
IMF, Chpt. 111.17(b)(4)(E)	Solves for the “missing factor” in division and multiplications problems.	.	
IMF	Defines and identifies irrational numbers (e.g., $\sqrt{2}$).	Textbook	
IMF	Solves equations and inequalities containing both positive and negative numbers and one variable.	Textbook	
IMF	Simplifies one-variable algebraic expressions.	Textbook	
MSSA, Chpt. 111.22(b)(2)(E)	Understands and applies the orders of operations.	Textbook	
MSSA, Chpt 111.17(b)(5)(A)	Represents simple observed patterns symbolically.	Textbook	
MSSA, Chpt 111.17(b)(6)	Changes written expressions to algebraic expressions (e.g., 4 more than a number = $n+4$)	Textbook	

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MSSA, Chpt 111.17(b)(5)(A)	Describes, extends, creates, and makes generalizations about arithmetic sequences and simple geometric and numeric patterns.	Textbook	
MSSA, Chpt. 111.22(b)(3)(A)	Uses algebra to solve simple proportions.	Textbook	
MSSA	Defines, uses, and differentiates among appropriate vocabulary including “expressions,” “equation,” and “variable”.	Textbook	
MSSA	Defines, understands, and uses variables to represent an unknown quantity.	Textbook	
MSSA	Uses appropriate symbols for multiplication and division, including raised dots, fraction bars, and parentheses.	Textbook	
MSSA	Solves one-step mental math equations using variables and whole numbers (e.g., $6 * n = 30$)	Textbook	
MSSA	Evaluates simple algebraic expressions using the order of operations (e.g., $(a+b)*c$ given a value for each variable).	Textbook	
MSSA	Translates simple sentences and word problems into algebraic equations to be solved (e.g., A rectangle’s area is 143 cm^2 and its length is 11 cm. Write an equation to find the width of the rectangle and solve for w.)	Textbook	
MSSA	Understands and applies the commutative, associative, distributive, identity, and zero properties in algebraic situations (e.g., $3+a = a+3$).	Textbook	
MSSA	Applies the commutative and associative properties for addition and multiplication.	Textbook	
MSSA	Applies the distributive property of multiplication over addition and subtraction.	Textbook	
MSSA	Demonstrates how to solve single step equations using manipulatives and/or symbols such as $15a=60$.	Textbook	
IMF	Understands and calculates the square and cube of a binomial.	Textbook	
IMF	Understands and calculates the square and cube of a trinomial.	Textbook	
IMF	Understands and calculates square and cube roots.	Square root board	
IMF	Understands and calculates square and cube roots of binomials and trinomials.	Textbook	
IMF	Solves equations and inequalities containing positive	Textbook	

	numbers, negative numbers, and one variable using addition, subtraction, multiplication, and division.		
MSSA, Chpt. 111.22(b)(2)(B)	Uses t-tables to write and evaluate simple algebraic expressions (function rule).	Textbook	
MSSA	Uses t-tables to represent and describe proportional relationships and other relationships such as perimeter, area, conversions, and formula generation to represent relationships.	Textbook	
MSSA	Solves problems using formulas and proportions.	Textbook	
MSSA	Using concrete materials and graph paper, solves simple algebraic equations.	Textbook	
MSSA	Writes and uses formulas to solve problems.	Textbook	
MSSA	Formulates equations from problem situations described by linear relationships.	Textbook	
MSSA, Chpt. 111.22(b)(3)(B)	Using concrete materials, tables, and first quadrant graphs, shows how a change in one variable can change a second variable (e.g., If you have \$37 and gum costs \$1 and licorice costs \$2, how many of each can you buy? Give all possible solutions).	Textbook	

Data Analysis and Probability

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Identifies and understands the components of line and bar graphs, including titles, x and y axis, scales, axis titles, and data points.	Textbook	
Chpt. 111.17(b)(13)(C)	Using gathered data, constructs picture graphs, bar graphs, pie charts (with fractions), and line graphs.		
Chpt 111.15(b)(13)(C)	Analyzes data to predict if an event is “more likely than”, “less likely than”, “equally likely”, “impossible”, or “certain” to occur.		
IMF, MSSA, Chpt. 111.22(b)(10)(D)	Reads and interprets scatter diagrams, stacked and clustered bar graphs, pie charts (with percentages), stacked line graphs, and stem-and-leaf plots.	UE charts and graphs	
MSSA, Chpt. 111.22(b)(10)(A)	Given a set of data, determines the correct interval and the correct graph to display the information.	UE charts and graphs	
IMF, MSSA, Chpt. 111.17(b)(13)(C), Chpt. 111.17(b)(13)(A)	Using gathered data, constructs scatter diagrams, stacked and clustered bar graphs, single and stacked line graphs, and single stem-and-leaf plots on graph paper and Excel.	UE charts and graphs	
IMF, MSSA, Chpt. 111.22(b)(10)(C)	Using gathered data, constructs pie charts (circle	UE charts and graphs	

	graphs) using percentages in both Excel and using a protractor.		
MSSA	Redraws a graph using a different scale.	UE charts and graphs	
IMF, MSSA	Tabulates data into a table.	UE charts and graphs	
MSSA, Chpt. 111.17(b)(16)(A)	Analyzes and draws conclusions from graphical representations, including pie charts, stacked and clustered bar charts, scatter diagrams, line graphs, and single stem-and-leaf plots.	UE charts and graphs	
MSSA, Chpt. 111.17(b)(16)(A)	Given a line graph, identifies and describes the trend and formulates questions or predictions based on the data.	Textbook	
MSSA, Chpt. 111.17(b)(9)	Identifies the four quadrants, the origin, and the x and y axes on a Cartesian coordinate plane.	Textbook	
MSSA, Chpt. 111.17(b)(9)	Identifies the location of a given ordered pair on a Cartesian grid.	Textbook	
IMF, Chpt. 111.17(b)(9)	Given a location on a Cartesian grid, identifies the ordered pair.	Textbook	
IMF, Chpt. 111.17(b)(9)	Given a sum, graphs on a Cartesian grid all possible ordered pairs of addends.	Textbook	
IMF, Chpt. 111.17(b)(15)(A)	Constructs a frequency table.	Textbook	
IMF, Chpt. 111.17(b)(13)(B)	Defines and uses statistical vocabulary, including “average”, “mean”, “median”, “mode”, “range” and “distribution”.	Textbook	
MSSA, Chpt. 111.22(b)(10)(B)	Using manipulatives, such as unifix cubes, demonstrates understanding of “mean”, “median”, and “mode”.	Textbook	
IMF, Chpt. 111.17(b)(13)(B)	Calculates the “average” for a set of data.	Textbook	
MSSA, Chpt. 111.17(b)(13)(B)	Calculates the “range” for a set of data.	Textbook	
IMF, MSSA, Chpt. 111.17(b)(13)(B)	Calculates the “mean” for a set of data.	Textbook	
IMF, MSSA, Chpt. 111.17(b)(13)(B)	Calculates the “median”, for both odd and even data sets) for a set of data.	Textbook	
IMF, MSSA, Chpt. 111.17(b)(13)(B)	Calculates the “mode” for a set of data.	Textbook	
IMF, MSSA	Can identify the “mean”, “median”, and “mode” on a normal curve/distribution.	Textbook	

Measurement			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Defines the concepts of length, mass (weight), volume (capacity), and temperature and the appropriate English (customary) and metric measures.	UE measurement unit	
Chpt. 111.165(b)(11)(E)	Explains the difference between weight and mass.	UE measurement unit	
IMF	Defines, writes, and abbreviates standard English (customary) measures, including inch, foot, yard, cups, pints, quarts, gallons, ounces, and pounds.	UE measurement unit	
MSSA, Chpt. 111.22(b)(8)(B)	In the English (customary) system, selects the correct tool and measures to the nearest 1/16 of an inch using a ruler, yardstick, and tape measure.	UE measurement unit	
MSSA, Chpt. 111.22(b)(8)(B)	In the metric system, selects the correct tool and measures accurately to the nearest millimeter, centimeter, tenth of a centimeter, meter, and part of a meter.	UE measurement unit	
MSSA	Understands and articulates the concept of precision (i.e., the smaller the unit of measure used, the more precise).	UE measurement unit	
MSSA, Chpt. 111.22(b)(8)(B)	Uses both metric and English (customary) linear measurement tools, including rulers, yard sticks, meter sticks, tape measures, and trundle wheels, to measure and solve word problems and to estimate/measure length.	UE measurement unit	
IMF, Chpt. 111.22(b)(11)(A)	Effectively uses both balance scales and bathroom scales to weigh and record a variety of weights and objects.	UE measurement unit	
MSSA, Chpt. 111.22(b)(8)(B)	Appropriately and accurately uses measurement tools, including analog clocks, protractors, and thermometers.	UE measurement unit	
IMF, Chpt. 111.22(b)(11)(A)	Applies length, temperature, and volume measurement to ecology projects, including rain measurement, plant height and circumference, and outside temperature readings.	UE measurement unit	
IMF, Chpt. 111.22(b)(11)(A)	Applies weight and volume measurement to cooking and food preparation projects.	UE measurement unit	
MSSA, Chpt. 111.22(b)(8)(A)	Estimates both metric and English (customary) systems given objects and MSSA examples (e.g.,	UE measurement unit	

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MSSA Curriculum

	soccer field, computer table, bookcase, rug, basketball court, etc.). Evaluates reasonableness of results.		
MSSA, Chpt. 111.22(b)(8)(B), Chpt. 111.22(b)(8)(D)	Using the English (customary) system, converts within units of length, mass, or capacity (e.g., 1 cup = 8 oz, 3 ft = 1 yd, 5,280 ft = 1 mile, 16 oz = 1 lb, 2,000 lbs = 1 ton).	UE measurement unit	
MSSA, Chpt. 111.22(b)(8)(B), Chpt. 111.22(b)(8)(D)	Using the metric system, converts within units of length, mass, or volume (capacity).	UE measurement unit	
MSSA, Chpt. 111.22(b)(8)(B)	Solves multi-step conversion problems (e.g., 365 days = x seconds, 6 cups = x gallons).	UE measurement unit	
MSSA, Chpt. 111.22(b)(8)(B)	Adds/Subtracts mixed units of measure (e.g., in/ft/yd, oz/lb, month/year, hour/min.).	UE measurement unit	
MSSA, Chpt. 111.22(b)(8)(B)	Multiplies mixed units of measure by a whole number (e.g., 5 lbs 8 oz times 3).	UE measurement unit	
MSSA, Chpt. 111.22(b)(8)(B), Chpt. 111.17(b)(11)(A)	Computes the change in temperature, both in Fahrenheit and Celsius, between positive and negative degrees.	UE measurement unit	
IMF, MSSA, Chpt. 111.22(b)(8)(B) Chpt. 111.17(b)(11)(A)	Using the appropriate equations, converts between Fahrenheit and Celsius temperatures.	UE measurement unit	
Chpt. 111.165(b)(12)(A)	Effectively uses a variety of different thermometers to measure and record temperature, both Fahrenheit and Celsius, and changes in temperature.	UE measurement unit	
Chpt. 111.165(b)(12)(B)	Effectively uses analog clocks and/or a stopwatch to solve problems using elapsed time.	UE measurement unit	
IMF, Chpt. 111.17(b)(10)(A)	Uses conversion tables to determine English/Metric equivalent lengths, weights, and volumes.	UE measurement unit	
IMF, Chpt. 111.22(b)(8)(B), Chpt. 111.17(b)(10)(A) and (B)	Solves word problems involving the measurements of weight, volume, temperature, time, and length.	UE measurement unit	
MSSA, Chpt. 111.22(b)(11)(A)	Using kinesthetic materials and practical life situations (classroom indoor and outdoor items), estimates the area and volume of regular and irregular items using both English and metric units.	UE measurement unit	

Geometry

Standard(s)	Learning Outcome	Core Materials	Extension Materials
MSSA	Using 45, right, and straight angles as benchmarks, estimates angle measures.	UE geometry nomenclature	
MSSA, Chpt. 111.22(b)(8)(C)	Draws and measures angles with a protractor.	UE geometry nomenclature	
MSSA, Chpt. 111.22(b)(6)(A)	Defines, identifies, and constructs acute, right, straight,	UE geometry nomenclature	

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MSSA Curriculum

	obtuse, and congruent angles.		
MSSA, Chpt. 111.165(b)(8)(C)	Defines, identifies, and constructs triangles by their sides (equilateral, scalene, isosceles).	UE geometry nomenclature	
MSSA, Chpt. 111.22(b)(6)(A) Chpt. 111.165(b)(8)(A)	Given three points, classifies angles as acute, obtuse, or right.	UE geometry nomenclature	
MSSA, Chpt. 111.22(b)(6)(B)	Given the name of specific polygons (e.g., heptagon, nonagon, pentagon), constructs the correct geometric shape.	UE geometry nomenclature	
MSSA, Chpt. 111.22(b)(6)(B)	Defines, identifies, differentiates, and constructs all quadrilaterals (parallelogram, rectangle, square, trapezoid, rhombus) and identifies sides, vertices, and angles.	UE geometry nomenclature	
MSSA, Chpt. 111.17(b)(10)(B)	Derives formulas for the perimeter of polygons.	UE geometry nomenclature	
MSSA, Chpt. 111.22(b)(6)(C)	Defines and identifies circles, their centers, radii, diameters, and circumference .	UE geometry nomenclature	
MSSA, Chpt. 111.22(b)(11)(A)	Differentiates and calculates perimeter, area, and volume using real-life scenarios (e.g., basketball court, recycling bin, compost bin).	UE geometry nomenclature	
MSSA, Chpt. 111.17(b)(10)(B)	Explains and applies the relationship between area and perimeter – hold perimeter constant and vary area; hold area constant and vary perimeter.	UE geometry nomenclature	
MSSA	Understands and explains using practical life materials the relationship between surface area and volume.	UE geometry nomenclature	
IMF, Chpt. 111.17(b)(7)	Defines, identifies, and constructs parallel, perpendicular, and intersecting lines using straightedges, compasses, and protractors.	UE geometry nomenclature	
MSSA, Chpt. 111.17(b)(7)	Identifies parallel and perpendicular lines in both 2-D and 3-D shapes.	UE geometry nomenclature	
MSSA, Chpt. 111.17(b)(7)	Identifies, draws, and uses symbols to represent parallel and perpendicular lines in both two and three dimensions.	UE geometry nomenclature	
Chpt. 111.165(b)(8)(B)	Understands and explains using practical life and campus materials (e.g., bookcases, sidewalk) parallel, perpendicular, and intersecting lines.	UE geometry nomenclature	
MSSA	Defines, recognizes, draws, and symbolizes the geometric terms, “point,” “ray”, “line”, “segment”, and “angle”.	UE geometry nomenclature	
MSSA, Chpt. 111.165(b)(10)	Uses lines to represent ordered numbers, decimals, and fractions and locates and names points on the number line.	UE geometry nomenclature	
Chpt. 111.17(b)(7)	Understands the relationship between congruent and	UE geometry nomenclature	

	similar figures and can recognize them through both observation and measurement in 2-d and 3-d figures.		
IMF, MSSA, Chpt. 111.22(b)(6)(B)	Identifies the sum of the interior angles of a triangle and a regular polygon.	UE geometry nomenclature	
IMF	Understands the generalized proof of the Pythagorean Theorem using concrete materials.	UE geometry nomenclature	
IMF, Chpt. 111.17(b)(14)(A)	Identifies line (bilateral) and radial symmetry in items of nature, including vertebrates, invertebrates, landscapes, and leaves.	UE geometry nomenclature	
IMF, Chpt. 111.22(b)(11)(A), MSSA, Chpt. 111.165(b)(9)(A)	Creates shapes through paper folding and artwork (e.g., origami, mandalas) to demonstrate line and radial symmetry.	UE geometry nomenclature	
MSSA, Chpt. 111.17(b)(9)(B)	Verifies the congruency of two shapes by applying translations, reflections, and rotations.	UE geometry nomenclature	
IMF, MSSA, Chpt. 111.17(b)(8)(A), Chpt. 111.17(b)(8)(B)	Defines, identifies, and represents on coordinate graphs “reflection,” “translation” and “rotation” as it applies to symmetry.	UE geometry nomenclature	
MSSA, Chpt. 111.17(b)(9)(C)	Verifies symmetry of a shape by using reflections.	UE geometry nomenclature	
IMF	Defines the word, “bisect,” and demonstrates bisecting an angle and a line segment using a compass and straightedge.	UE geometry nomenclature	
IMF	Defines, identifies and creates nets of basic polyhedra, including prisms (rectangular, hexagonal, etc.) and pyramids (triangular, rectangular).	UE geometry nomenclature	
IMF	Defines, identifies, and constructs from a variety of materials (cardstock nets, toothpicks and marshmallows, etc.) the five platonic solids – dodecahedron, tetrahedron, cube, octahedron, and icosahedron .	UE geometry nomenclature	
IMF	Given a scale, constructs a 2-d scale drawing or a 3-d scale model of an object.	UE geometry nomenclature	
MSSA	Defines and graphically illustrates pi, π .	UE geometry nomenclature	
MSSA	Distinguishes between regular and irregular polygons.	UE geometry nomenclature	
IMF, MSSA, Chpt. 111.17(b)(10)(C)	Calculates the area of various polygons by breaking the shape into triangles and parallelograms.	UE geometry nomenclature	
IMF, MSSA, Chpt. 111.17(b)(10)(C)	Calculates the area of a parallelogram and a triangle using integers, decimals, and fractions.	UE geometry nomenclature	
MSSA, Chpt. 111.22(b)(6)(C)	Explains the relationship of radius, diameter, circumference, area, and pi as it relates to circles.	UE geometry nomenclature	
IMF, MSSA, Chpt. 111.22(b)(6)(C)	Calculates the area and circumference of a circle using pi and either an integer, a decimal, or a fraction.	UE geometry nomenclature	

IMF, Chpt. 111.17(b)(10)(C)	Calculates the volume of a cube, a rectangular prism, a triangular and rectangular pyramid, a cylinder, a cone, and a sphere using integers, fractions, and decimals.	UE geometry nomenclature	
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Upper Elementary Social Studies

History (General and Early Man)			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Explains and illustrates a day and a year in astronomically (e.g., day=1 earth rotation, yr=1 revolution around the sun).	LE/UE earth science	
Chpt 113.5(b)(3)(A) and (C)	Defines and correctly uses the words/abbreviations for time periods in history (e.g., decade, age, eon, period, epoch, era, century, millennium, AD/CE, BC/BCE, c., and circa).	Timeline	
IMF	Identifies in BC/BCE dates that the higher number indicates the older year.	Timeline	
IMF	Compares and contrasts information shown on modern and historical maps of the same region.	Ancient civilization unit	
IMF	Constructs and interprets timelines of events and civilizations studied.	Ancient civilization unit	
IMF	Identifies, sequences, and briefly describes the geologic eras (e.g., Cenozoic, Mesozoic, Paleozoic, Precambrian).	Timeline of life	
IMF	Identifies, describes, and illustrates major forms of life found in the geologic time periods: Archeon Eon (formerly Archeozoic Era), Proterozoic Eon (formerly Proterozoic Era), Paleozoic Era, Mesozoic Era, Cenozoic Era.	Timeline of life	
IMF	Explains and gives examples of fossilization processes, including, tar/asphalt, amber, carbonization		
IMF	Describes the great climatic and environmental changes that shaped the earth and eventually permitted the growth of life.	Timeline of life	
Chpt. 113.33 (c)(25)(A)	Using maps, identifies and describes significant archeological sites with evidence of modern human origins.	Early humans unit	
IMF	Using models or pictures, identifies and describes common fossils, including ammonites, brachiopods,		

	crinoids		
IMF, IMF	Explains, in simple terms, and illustrates the evolution of early people as hunter-gatherers, tool makers (bone, flint, wood), fire starters, and artists (cave paintings, beads, jewelry).	Early humans	
IMF Chpt 113.5(b)(2)(A) and (B) Chpt. 113.4(b)(8)(A) and (B)	Identifies and describes the fundamental needs of people – shelter/housing, clothing, transportation, defense, art/music, philosophy/religion, communication, food/nutrition.	Early humans	
MSSA, IMF	Compares and contrasts – both chronologically and characteristically – the hominids (e.g., australopithecus, homo habilis, homo erectus, homo sapiens neandertalensis, homo sapiens sapiens).	Early humans	
MSSA, IMF	Studies, sequences, and explains artifacts, plants, and geological evidence of south Texas prehistoric hunter-gatherers, including the Clovis and Folsom people, and well-known archeological sites in south Texas, including the three rivers area (Frio, Nueces, and Atascosa), Choke Canyon, the Medina River (Richard Beene site), and Leon Creek (Pavo Real site).	Environmental trip, field trips	
IMF IMF, Chpt. 113.33 (c)(13)(A)	Researches, creates timelines, and explains the importance of the invention of metallurgy and agriculture (both the growing of crops and the domestication of animals).	Early humans	
Chpt 113.5(b)(1)(A) Chpt. 113.4(b)(7)(A) IMF	Relates settlement locations with water sources – lakes, oceans, rivers, streams – names specific examples, and locates the sites on modern maps.	Early humans	
Chpt 113.4(b)(16)(A) and (B) IMF	Researches and explains how science and technology have affected the fundamental needs of people over time.	Early humans	
Chpt. 113.33 (c)(13)(A) and (B) IMF	Relates agriculture to permanent settlements, population growth, and a causation variable to civilization.		
Chpt 113.5(b)(1)(A) Chpt. 113.4(b)(11)(A) and (C)	Describes, in basic terms, the history of government, rulers, and common citizens and their rights.	Early humans	
Chpt 113.3(b)(15)(A), IMF	Describes how societal beliefs, customs, and traditions are passed to generations (e.g., storytelling).	Environmental trip	

History (Ancient Mesopotamia)

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Identifies and gives examples of the characteristics of a	Early humans	

	civilization: 1) geographic boundaries and political institutions, 2) economy that produces food surpluses, 3) social classes, 4) distinct population areas or cities, 5) developed religion, learning, art, and/or architecture, 6) record-keeping system.		
IMF	Compares the characteristics of a civilization with the fundamental needs of humans.	Early humans	
IMF, Chpt. 113.33 (c)(15)(B)	Researches and presents the fundamental needs of humans for the Sumerians, the Babylonians, and the Assyrians.	Early humans	
Chpt. 113.33 (c)(12)(A), Chpt. 113.33 (c)(11)(B) IMF	Locates and identifies the fertile crescent, the Tigris and Euphrates rivers, and key Sumerian, Babylonian, and Assyrian areas on both a historical and modern map.	Early humans	
IMF	Defines and explains polytheism and identifies key gods worshipped by the Mesopotamian civilizations.	Early humans	
IMF	Reads, analyzes, and creatively presents Mesopotamian myths and/or folktales,.	Early humans	
Chpt. 113.33 (c)(17)(B) IMF	Presents a cause-and-effect analysis of the impact of irrigation, slavery, metal-smithing, animal domestication, and inventions (e.g., the sail, the wheel, and the plow) on Mesopotamian civilization.		
IMF Chpt. 113.33 (c)(23)(A), Chpt. 113.33 (c)(20)(A) and (B)	Researches, identifies, and explains major Mesopotamian achievements in writing (e.g., cuneiform and tax collection), architecture (e.g., ziggurats), and art (e.g., cylinder seals, large relief sculpture, and mosaics).	Early humans	
Chpt. 113.33 (c)(18)(A), Chpt. 113.33 (c)(16)(B) IMF	Presents biographical information for Hammurabi and explains Hammurabi's code, including modern usage of "an eye for an eye."		

History (Ancient Egypt)

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Researches and presents the fundamental needs of humans for the Egyptians and Nubians.	Early humans	
IMF, Chpt. 113.33 (c)(12)(A), Chpt. 113.33 (c)(11)(B)	Using both ancient and modern maps, locates and identifies the Nile River and delta, the Mediterranean and Red Seas, the Gulf of Suez, Upper and Lower Egypt, Luxor, Giza, and Cairo.	Early humans	
IMF	Defines and explains Egyptian beliefs about death, the afterlife, and mummification and identifies key gods	Early humans	

	worshipped by the Egyptian and Nubian civilizations.		
IMF	Reads, analyzes, and creatively presents Egyptian myths and/or folktales.	Early humans	
IMF, Chpt. 113.33 (c)(17)(B)	Analyzes the social strata of ancient Egypt, including the relationship of pharaohs to peasants and the role of slaves.	Early humans	
IMF, Chpt. 113.33 (c)(23)(A), Chpt. 113.33 (c)(20)(A) and (B)	Researches, identifies, and explains major Egyptian achievements in hieroglyphic writing, architecture (e.g. pyramids, obelisks, and the sphinx), a calendar, the agricultural system, and papyrus.		
IMF	Selects and presents biographical information for an Egyptian ruler (e.g., Hatshepsut, Tutankhamen, Ramesses II, Cleopatra IV, Khufu), explains the pharaoh's role, and defines and gives examples of a dynasty.		

History (Ancient Greece)

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Researches and presents the fundamental needs of humans for the Athenians and Spartans.	Ancient civilizations unit	
IMF, Chpt. 113.33 (c)(12)(A)	Locates and identifies the Greek empire from 800-300 BCE on both historical and modern maps, including the city-states of Athens, Sparta, Crete, Argos, Corinth, and Megara.	Ancient civilizations unit	
IMF	Defines and explains polytheism and identifies key gods worshipped by the Greek civilization, including the patron gods of key city-states (e.g., Athena and Athens, Artemis and Sparta, Hera and Argos, Poseidon and Corinth, Apollo and Megara).	Ancient civilizations unit	
IMF	Reads, analyzes, and creatively presents Greek myths and/or folktales,	Ancient civilizations literary circle	
IMF	Discusses the reasons for instituting athletic competitions among the Greek city-states and identifies and models the types of sports featured.	Ancient civilizations simulation	
IMF	Presents a cause-and-effect analysis of the impact of Greek city-states' geographic location and the effect on 1) maritime trade, 2) colonization, and 3) Greek cultural expansion.		
IMF	Explains Athen's government, often called the beginning of democracy, and defines political concepts, including the "polis" (i.e., city-state), civic	Ancient civilizations simulation	

	participation and voting rights, legislative bodies, constitution writing, and rule of law.		
IMF	Researches, identifies, and explains major Greek achievements, including the lyceum, the gymnasium, the Library of Alexandria, the first complete alphabet with symbols for consonants/vowels, and architecture (e.g., the Parthenon, the Temple of Apollo, the Acropolis).		
IMF	Describe the status of women and the functions of slaves in ancient Athens.	Ancient civilizations simulation	

History (Ancient Greece)

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Presents biographical information for famous Greeks and their major contributions (e.g., Thales – science; Pythagoras and Euclid – math; Hippocrates – medicine; Socrates, Plato, and Aristotle – philosophy; Herodotus, Thucydides, Homer, Aeschylus, Sophocles, Aristophanes, and Euripides -- history, poetry, and drama).	Ancient civilizations simulation	
IMF	Understand and relates the origins of marathons.	Ancient civilizations unit	
IMF	Analyzes the causes, course, and consequences of the Peloponnesian Wars between Athens and Sparta.		

History (Ancient Rome)

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF, IMF	Explains how the geographical location of ancient Rome contributed to the shaping of Roman society and the expansion of its political power in the Mediterranean region.	Ancient civilizations simulation	
IMF	Defines, identifies chronologically, and compares and contrasts kingdoms, republics, and empires.	Ancient civilizations simulation	
IMF, IMF	Researches and presents the fundamental needs of humans for the ancient Romans.	Ancient civilizations unit	
IMF, Chpt. 113.33 (c)(12)(A)	Locates and identifies the Roman empire circa 500 CE on both modern and historical maps and labels key locations, including Hadrian's Wall, Carthage, Syracuse, and Rome.	Ancient civilizations simulation	
IMF	Compares and contrasts ancient Roman polytheism	Ancient civilizations unit	

	and its many deities with the beginning of monotheistic Christianity.		
IMF	Reads, analyzes, and creatively presents Roman myths.	Ancient civilizations unit	
IMF	Describes the government of the Roman Republic and its contribution to the development of democratic principles, including separation of powers, rule of law, representative government, and the notion of civic duty.	Ancient civilizations simulation	
IMF	Researches, identifies, and explains major Roman achievements, including law, literature, poetry, architecture, engineering, and technology (e.g., aqueducts, baths, arenas, roads, bridges, central heating, plumbing, and sanitation).		
IMF	Describes the characteristics of slavery under the Romans.	Ancient civilizations simulation	
IMF	Researches and presents information about mythological or real characters in Roman history, including Romulus and Remus, Hadrian, Hannibal, and Cicero.	Ancient civilizations unit	
IMF	Explains the influence/spread of the Roman alphabet and the Latin language, its use as the education language for over 1,000 years, and its role in scientific/academic vocabulary.	Ancient civilizations unit	

History (Mesoamerica) – Taught by Spanish Specialists

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 113.33(c)(7)(A) IMF	Researches and presents the fundamental needs of humans for the Incas, the Aztecs, and the Mayans.		
Chpt. 113.33 (c)(12)(A) IMF	Locates and identifies the on both modern and historical maps the Mayan, Inca, and Aztec empires and pinpoints key features, including: Mayan – Palenque, Tikal, Mayapan, Chichen Itza, and Tulum; Inca – Machu Picchu, Cuzco, Sacasahuman, Lake Titicaca, the Inca Road, the Andes Mountains; Aztec – Tuxpan, Tenochtitlan, Huaxyaacac, Tehuantepec.		
Chpt. 113.33(c)(7)(A) IMF	Defines and explains polytheism and identifies key gods worshipped by the Mesoamerican civilizations, including Huitzilpochtli, Tezcatlipoca, Quetzalcoatl		

	(Aztec), Inti (Inca), and Kukulcan, Itzamna, Ix-Chel, and Hun-Hunahpu (Mayan).		
Chpt. 113.33(c)(7)(A) IMF	Reads, analyzes, and creatively presents Mesoamerican myths.		
Chpt. 113.33(c)(23)(C) IMF	Summarizes the ideas in astronomy (equinoxes, calendar, 365-day year), mathematics (the number zero), and agricultural engineering (roads, terraced farming, floating gardens, canals, irrigation) that developed in Mesoamerica and Andean South America and their impact on our lives today.		
IMF Chpt. 113.33(c)(21)(A)	Researches, describes, and compares the government and strict societal structure of the Mayans, Aztecs, and Incas and the impact on expansion, culture, and demise.		
Chpt. 113.33(c)(19)(A) IMF	Compares and contrasts Egyptian and Inca mummification.		
IMF Chpt. 113.33(c)(20)(B)	Compares and contrasts, both in written and artistic format, Mesopotamian ziggurats, Egyptian pyramids, and Mesoamerican pyramids.		
IMF Chpt. 113.33(c)(17)(A)	Presents biographical information for the Spanish conquistadors, Francisco Pizarro and Hernando Cortes, and sequences the events leading to the conquest of the Incas and the Aztecs.		

History (Indus Valley and China)

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 113.33(c)(7)(A) IMF	Researches and presents the fundamental needs of humans for the Indus Valley civilization and the ancient Chinese culture.		
Chpt. 113.22 (b)(4)(A) IMF	Locates and identifies the on both modern and historical maps these Indus valley geographic sites and features: Pakistan, India, Karachi, Delhi, Lahore, the Arabian Sea, the Indus River, Harappa, Mohenjo-Daro, Rupnagar, Amri, Kot Diji, Sutkagen Dor, Yamuna River, and the Gulf of Khambhat		
Chpt. 113.22 (b)(4)(A) IMF	Locates and identifies the on both modern and historical maps these ancient Chinese geographic sites and features: Huang He (Yellow) River, Yangtze River, East China Sea, Shanghai, Beijing, Mongolia, Russia, North and South Korea, Himalayas, Shang		

	Kingdom, western Zhou kingdom, eastern Zhou kingdom		
IMF	Uses a timeline to show the start, growth, comparison with other civilizations (Egypt, Mesopotamia, Greece) and decline of the Indus and ancient Chinese civilizations.		
IMF	Describes the social structure of Ancient China, outlines the role of dynasties as a hereditary ruling system, and summarizes the Shang and Zhou dynasties.		
IMF	Researches and presents biographical information, including accomplishments and modern day implications, of the Chinese philosopher, Confucius.		
IMF Chpt. 113.33(c)(21)(A)	Describes the time period from the eastern Zhou dynasty to centralization of China (aka Imperial China) – the longest running centralized civilization.		
IMF	Researches highly-prized artisan materials, including jade, bronze, and silk, and the production and use of them.		

History (American/Texas History)

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Focusing on culture and geography, celebrates historical holidays and events (e.g., Native American Heritage Month (Nov), Columbus Day (the discovery of America), Veteran’s Day (the story of the American soldier), Thanksgiving (the story of the pilgrims), Winter holidays (Dec), MLK Day (Jan), Black History Month (Feb), Abraham Lincoln’s birthday (Feb), George Washington’s birthday (Feb)).	American History unit	
IMF	Researches and presents biographical studies of famous scientists, inventors, politicians, individualists, and philosophers in history (e.g., Harriet Tubman, Eli Whitney, Clara Barton, Edward Jenner, Benjamin Franklin).		
Chpt. 113.20 (b)(1)(A) and (B)	Identifies chronologically and defines the major eras and events in U.S. history through 1836 (the Texas Revolution), including native American groups in Texas, European exploration, colonization, revolution, drafting of the Declaration of Independence, creation and ratification of the Constitution, and beginning of	American History unit	

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	westward expansion.		
Chpt. 113.20 (b)(1)(C)	Explains the significance of the following events: 1492, traditional founding of America; 1587, Lost colony of Roanoke; 1607, founding of Jamestown; 1620, arrival of the Pilgrims and signing of the Mayflower Compact; 1776, adoption of the Declaration of Independence; 1787, writing of the U.S. Constitution; 1803, Louisiana Purchase, and 1836, the Texas Revolution.		
Chpt. 113.15(b)(1)(A)	Studies, maps, and explains possible origins of native American groups in Texas and North America (e.g., Bering Straits).	Native American unit	
Chpt. 113.15(b)(1)(B)	Researches, presents, and compares the fundamental needs of humans for pre-European Indian groups in Texas, including Caddo, Jumano, Karankawa, and Lipan Apache.	Native American unit	
Chpt. 113.16 (b)(1)(A) Chpt. 113.15(b)(2)(A) Chpt. 113.20(b)(2)(A)	Researches and describes when, where, and why (e.g., greed, national/ individual economic gain, new trade routes, religious freedom and proselytizing, professional curiosity) groups of people explored, colonized, and settled America.	American History unit	
Chpt. 113.20(b)(2)(A) Chpt. 113.16 (b)(1)(A) IMF	Summarizes the Age of Discovery, the work of Henry the Navigator, and sequences the events and timelines of Portuguese, Spanish, French, Dutch, and English explorers.	American History unit	
Chpt. 113.20(b)(2)(A) IMF	Presents biographical and exploration information for European explorers (e.g., Vespucci, Hudson, Cabot, Balboa, Drake, Coronado, de Soto, Marquette, Cartier, Da Gama)	American History unit	
Chpt. 113.15(b)(2)(B)	Identifies the accomplishments and significant impact of European explorers in Texas and on Texas indians, including Cabeza de Vaca, Francisco Coronado, and Rene Robert Cavalier Siere de la Salle.	American History unit	
Chpt. 113.16(b)(1)(B)	Locates and summarizes the lost colony of Roanoke, offers theories for the colony's demise, and describes the importance of Sir Walter Raleigh and Virginia Dare.	American History unit	
Chpt. 113.20(b)(1)(C) and 3(B) IMF	Locates on a modern map the location of the Plymouth colony, and presents a background leading to the voyage, an outline of the trip on the Mayflower, and a summary of the Mayflower Compact.	American History unit	
Chpt. 113.15(b)(2)(C)	Locates and identifies on modern maps the 26 Spanish		

	Catholic missions which were established within the boundaries of present-day Texas.		
Chpt. 113.15(b)(2)(C)	Explains the purpose of the Spanish missions in Texas, presents daily life within their borders, and artistically depicts San Antonio missions.		
Chpt. 113.16(b)(1)(B) IMF	Describes the accomplishments of significant individuals during the colonial period, including William Bradford, Anne Hutchinson, William Penn, John Smith, John Wise, and Roger Williams.	American History unit	
Chpt. 113.16(b)(1)(A) IMF	Identifies, locates on a modern map, and orders the 13 original colonies and major cities in the colony.	American History unit	
IMF	Describes the role of women in early American colonies.	American History unit	
IMF Chpt. 113.20(b)(2)(A)	Compares and contrasts political, economic, religious, and social reasons for the establishment of the 13 English colonies.	American History unit	
IMF Chpt. 113.15(b)(1)(B)	Researches, presents, and compares the fundamental needs of humans for Indian groups in Texas between the 1700s and 1800s, including Wichita, Comanche, Kickipoo, and Kiowa.		
IMF Chpt. 113.20(b)(3)(A)	Defines “representative government”, explains the reasons for its growth during the colonial period, and identifies how Thomas Paine and Benjamin Franklin contributed to its popularity.	American History unit	
IMF	Defines, uses, and gives present-day examples of key Revolutionary War vocabulary (e.g., propaganda, loyalist, boycott, tory, patriot, grievance, ratify).	American History <i>Interact Simulation</i>	
Chpt. 113.16(b)(2)(A) IMF	Identifies and analyzes the causes and effects of events prior to and during the American Revolution, including the French and Indian War, the Boston Massacre, the Intolerable Acts, and the Boston Tea Party.	American History <i>Interact Simulation</i>	
Chpt. 113.16(b)(2)(B) Chpt. 113.20(b)(4)(B)	Presents biographical information for patriot heroes and “Founding Fathers,” including John Adams, Samuel Adams, Benjamin Franklin, Nathan Hale, Paul Revere, Patrick Henry, Crispus Attucks, Thomas Jefferson, Marquis de Lafayette, and George Washington.	American History unit	
Chpt. 113.16(b)(2)(C), IMF	Summarize the results of the American Revolution, including the establishment of the United States and the development of the U.S. military.	American History <i>Interact Simulation</i>	
Chpt. 113.16(b)(3)(A) and (B)	Identifies the purpose, the dates, and the creators of	American History <i>Interact Simulation</i>	

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IMF	important U.S. documents, including the Declaration of Independence, the Articles of Confederation, and the U.S. Constitution.		
IMF, Chpt. 113.16(b)(4)(D)	Chronicles the key events, key players, and long-term impact of Thomas Jefferson's Louisiana Purchase (1803) and the subsequent Lewis and Clark expedition (1804-1806).	American History	
Chpt. 113.15(b)(2)(D), IMF	Identify Texas' role in the Mexican War of Independence (1810-1821) and the war's impact on the development of Texas.		
Chpt. 113.20(b)(2)(A) Chpt. 113.16(b)(4)(A)	Describe the causes (e.g., trade, impressments of U.S. merchant sailors into the Royal Navy, Tecumseh's war) and effects (e.g., Era of Good Feelings, long-term peace with Canada, national anthem) of the War of 1812.		
Chpt. 113.16(b)(4)(B)	Researches, sequences, and summarizes the movement of the Industrial Revolution from England to the United States, the impact on the southern and northern sections of the U.S., and key inventors and entrepreneurs in America, including Eli Whitney, Samuel Slater, Robert Fulton, and Francis Cabot Lowell.		
Chpt. 113.15(b)(2)(E)	Explains the Mexican government's colonization laws for Texas, the reasons they were popular, and notable empresarios (entrepreneurs) who helped to recruit new settlers, including Stephen F. Austin (the "Father of Texas") and Lorenzo de Zavala.		
Chpt. 113.16(b)(4)(C)	Identifies on a map and describes how the Santa Fe trail and the Erie Canal both helped to facilitate westward expansion.	American History unit	
Chpt. 113.15(b)(3)(A)	Analyzes the causes, major events, and effects of the Texas Revolution, including the Battle of the Alamo, the Texas Declaration of Independence, the Runaway Scrape, and the Battle of San Jacinto.		
Chpt. 113.15(b)(3)(B) Chpt. 113.15(b)(3)(C)	Summarizes the important contributions of three distinct groups during the Texas Revolution and the formation of the republic: 1) Texians (e.g., William B. Travis, James Bowie, David Crockett, Sam Houston, Anson Jones, Mirabeau Lamar); 2) Tejanos (e.g., Juan Antonio Padilla, Juan Seguin, Jose Antonio Navarro); and 3) non-combatants (e.g., Susanna Dickinson and Enrique Esparza).		

Geography

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 113.16(b)(6)(A)	Identifies, defines, and uses geographic tools, including globes, atlases, grid systems, scales, compass roses, grid systems, and legends (keys).	Library atlas lessons	
IMF	Given the names of countries, verbally identifies their continent and uses an atlas's index and grid system to locate the countries and the capital cities.	Library atlas lessons	
Chpt. 113.5(b)(5)(B) Chpt. 113.3(b)(4)(B)	Duplicates the furniture layout of the classroom, a specialist's room, or the library as a detailed scale model.	Library orientation lesson	
Chpt. 113.22(b)(3)	Given an atlas, differentiates among political maps, physical maps, and thematic maps (e.g., population, travel, economic, climatic).	Library atlas lessons	
Chpt. 113.5(b)(5)(A)	Given a starting point, identifies whether a second point is N, S, E, W, NE, NW, SE, SW.	Compass unit	
Chpt. 113.5(b)(5)(C)	Using a simple compass, identifies the directions NE, NW, SE, and SW.	Compass unit	
Chpt. 113.5(b)(5)(C) Chpt. 113.4(b)(5)(B)	Using a model layout, uses symbols and a map key to construct a basic map on grid paper.	Charts and graphs	
Chpt. 113.22(b)(3)	Uses thematic maps (e.g., population, precipitation, etc.) to extract information, to format into bar, line, or circle graphs, and to compare countries, states, or national and international cities.	Charts and graphs	
Chpt. 113.5(b)(4)(A)	Identifies geological land forms on a 3-D model (e.g., mountain, mesa, foothill, valley, plateau, canyon, volcano, crater lake, palisade).	Library atlas lessons	
Chpt. 113.5(b)(4)(A)	Defines and identifies examples of land forms (e.g., continents, islands, archipelago, peninsula, delta, isthmus, cape) on both a detailed map and globe.	Library atlas lessons	
Chpt. 113.4(b)(6)(A)	Given a detailed map, identifies the major oceans, seas (e.g., Mediterranean, Caribbean, South China, Bering, Sea of Japan, Arabian, Black, Red), lakes (e.g., Caspian Sea, great lakes, Lake Victoria, Great Salt Lake), gulfs (e.g., Gulf of Mexico, Oman, Gulf of Aden, Gulf of California, Persian gulf), and rivers (e.g., Nile, Amazon, Ganges, Yangtze, Mississippi, Missouri, Indus, Danube, Euphrates, Tigris, Rio Grande, Colorado).		The Geography Man
Chpt. 113.4(b)(6)(A)	Using an atlas and globe, identifies and names the		The Geography Man

	major rivers of the world (Nile, Amazon, Mississippi, Yangtze, Missouri, Rio Grande, Congo, Danube, Ganges, Rhine, Volga, Euphrates, Tigris, Yukon, Indus).		
Chpt. 113.16(b)(7)(D)	Using an atlas and globe, identifies and names the major mountains of the world (Himalayas, Rocky, Atlas, Alps, Ural, Pyrenees, Andes, Appalachian).	Library almanac lessons	The Geography Man
Chpt. 113.5(b)(4)(A), (B), and (C)	Gives examples of ways climate and environment affects people's lives.	Biomes	
Chpt. 113.5(b)(4)(D) Chpt. 113.4(b)(8)(B) Chpt. 113.4(b)(7)(B)	Describes and illustrates the following characteristics of deserts: 1) climate and environment, 2) plants and animals, 3) clothing, 4) transportation, 5) housing and shelter, 6) children and their daily lives.	Zoology	
Chpt. 113.5(b)(4)(D) Chpt. 113.4(b)(8)(B) Chpt. 113.4(b)(7)(B)	Describes and illustrates the following characteristics of arctic regions: 1) climate and environment, 2) plants and animals, 3) clothing, 4) transportation, 5) housing and shelter, 6) children and their daily lives.	Biomes	
Chpt. 113.5(b)(4)(D) Chpt. 113.4(b)(8)(B) Chpt. 113.4(b)(7)(B)	Describes and illustrates the following characteristics of rainforests: 1) climate and environment, 2) plants and animals, 3) clothing, 4) transportation, 5) housing and shelter, 6) children and their daily lives.	Biomes	
Chpt. 113.5(b)(4)(D) Chpt. 113.4(b)(8)(B) Chpt. 113.4(b)(7)(B)	Describes and illustrates the following characteristics of temperate regions: 1) climate and environment, 2) plants and animals, 3) clothing, 4) transportation, 5) housing and shelter, 6) children and their daily lives.	Biomes	
Chpt. 113.4(b)(6)(B) Chpt. 113.4(b)(6)(C) Chpt. 113.4(b)(7)(A) Chpt 113.4(b)(14)(A) and (B)	Investigates and orally presents country research which include geography, major cities, natural resources, industries, culture, art, literature, and economics.	Multicultural Fair	
IMF	Given a model or picture, identifies flags of countries studied in history (e.g., Guatemala, Peru, Canada, Portugal, Greece, India, Pakistan, Libya, etc.).	Pin maps	
Chpt 113.4(b)(1)(B)	Locates, identifies on a map and globe, and briefly describes (e.g., history, landmarks) Washington D.C.	Pin maps	
Chpt. 113.4(b)(8)(A)	For each of the five U.S. regions, explains, in basic terms, the states, the physical geography, major cities, major natural resources and industries, cultural heritage/traditions, food, and settled ethnic groups.	Library lessons	
Chpt. 113.15 (b)(7)	Identifies, maps, and compares the geographic regions of Texas (mountains and basins, Great plains, North central plains, coastal plains), including landforms,	Biomes	Wall charts

	climate, vegetation, and comparable regions outside of Texas.		
Chpt 113.15(b)(9)	Describes reasons and ways humans have modified their geographic environment and the impact these modifications have made (e.g., agricultural production/destruction of habitats, wetlands drainage/endangered species, energy production, introduced species.	Early humans	
Civics			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt 113.5(b)(6)(A)	Defines and outlines key characteristics of good citizens (e.g., belief in truth, equality, justice, responsibility for the common good) and the actions they regularly take.	Circle	<i>Weekly Reader</i> magazine
IMF	Recognizes and names the current president and vice president of the United States, the governor of Texas, the mayor of San Antonio, Texas' two U.S. senators, and San Antonio's U.S. representative.		<i>Weekly Reader</i> magazine
Chpt 113.4(b)(12)(A) IMF	Without notes or researching, presents biographical information about well-known U.S. presidents, including George Washington, John Adams, Thomas Jefferson, James Madison, Abraham Lincoln, Teddy Roosevelt, Franklin D. Roosevelt, and the current president.		<i>Weekly Reader</i> magazine
Chpt. 113.16(b)(17)	Identifies and describes the history of national landmarks and patriotic/political symbols, including the Washington Monument, the Jefferson Memorial, the Lincoln Memorial, Capitol Mall, the U.S. Capitol, the White House, the Vietnam Veterans Memorial Wall, Air Force One, Marine One, Mount Rushmore, the liberty bell, Independence Hall, Uncle Sam, the Republican elephant, and Democratic donkey.		<i>Weekly Reader</i> magazine
Chpt. 113.16(b)(17)(D)	Names the date and significance of national celebrations, including Memorial Day, Veterans Day, Labor Day, Martin Luther King, Jr. Day, and Independence Day.	Circle	<i>Weekly Reader</i> magazine
IMF	Defines and correctly uses civics vocabulary, including census, citizen, amend, delegate, alien, separation of powers, veto, check and balances, and immigrant.		<i>Weekly Reader</i> magazine
Chpt 113.22(b)(14)	Understands, contrasts, and gives examples of	Circle	<i>Weekly Reader</i> magazine

	individual rights, responsibilities, and freedoms in democratic societies.		
Chpt 113.15(b)(17)	Gives examples of actively participating in a democratic society, including running or helping others run for office, writing letters to public officials, voting, and helping in national, state, and local service projects.		
Chpt 113.5(b)(6)(C)	Researches, defines, and gives examples of different types of governments, including monarchies, dictatorships, republics, democracies, autocracies.		
Chpt 113.22(b)(11)	Categorizes types of governments into limited (e.g., constitutional monarchy, constitutional republic) and unlimited (e.g., absolute monarchy, totalitarian dictatorship) governments, differentiates between them, and gives specific examples (e.g., Cuba – unlimited; Israel – limited).		
Chpt 113.22(b)(11)	Defines the United States' government type.		
Chpt 113.16(b)(20)	Describes the fundamental rights guaranteed by each amendment in the Bill of Rights.		
Chpt 113.16(b)(18)	After selecting a topic of concern, contacts an elected or appointed leader in local, state, or national government.		
Chpt. 113.16(b)(19)	Identifies the Founding Fathers and summarizes each of their contributions to the U.S. government.		
Chpt 113.16(b)(22)	Summarizes the racial, ethnic, and religious groups, both in Texas and the U.S., and describes their customs, celebrations, traditions, and contributions to our society.		

Economics

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt 113.22(b)(8)	Defines “economy”, describes three types – traditional, command, and market, and gives historical or present-day examples of each.		
Chpt. 113.22(b)(9)	Identifies and describes the various factors of production (natural resources, labor, capital, entrepreneurs) and issues that can arise when one factor is scarce.		
Chpt 113.15(b)(13)(C)	Defines “import” and “export” and lists both primary import and exports for Texas and the U.S.	Resources map	

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Chpt 113.5(b)(10)(C)	Traces the development of a Texas export from natural resource to finished product.	Sequencing chart	
Chpt 113.5(b)(6)(B)	Using various geographic databases (e.g., CIA Factbook), compares factors, including purchasing power, life expectancy, and literacy, to the country's level of economic development.	Multicultural Fair	
Chpt 113.16(b)(10)	Identifies major industries of colonial America, Texas (past to present), and current regions of the United States.		
Chpt 113.16(b)(11)(A-C)	Defines a free market system, summarizes its history and operation in the U.S., and lists its benefits (e.g., choice, opportunity).		
Chpt 113.16(b)(13)	Selects, researches and orally presents a factor -- immigration, migration, limited resources, mass production, specialization, division of labor, American culture of "equal opportunity" -- that affects economic development and growth in the U.S.		
Chpt 113.15(b)(13)	Studies, explains, and cites specific examples of world economic interdependence.		
Chpt 113.5(b)(8)(D)	Researches and presents biographical studies of famous entrepreneurs (e.g., Henry Ford, Milton Hershey, Walt Disney, Bill Gates).		

Upper Elementary Science

Scientific Process			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 112.22(b)(4)(A)	Competently uses data collection/analysis tools, including calculators, microscopes, cameras, safety goggles, timing devices, computers, weather instruments, hand lenses, measuring sticks, balances (simple, beam, spring scale) , magnets, compasses, beakers, petri dishes, graduated cylinders, hot plates, test tubes, and telescopes.	UE experiments	
Chpt. 112.22(b)(1)	Knows and demonstrates safe practices at all times during field and lab investigations.	Environmental trip	
Chpt. 112.22(b)(2) and (3)	Defines, understands, and implements the scientific method (asks a measurable question, researches the background, forms a testable hypothesis, runs	Scientific method for experiments	

	experiments using fair testing standards, collect/analyze data, draw conclusions, communicate results) during all field and lab investigations and projects		
Chpt. 112.22(a)(5) Chpt. 112.22(b)(5)	Defines and gives examples of systems, their cycles, their processes and properties, interdependence, and the relationship of the whole to the parts.	Life, physical, earth	
Chpt. 112.7(b)(4)(B)	Demonstrates that repeated investigations increase the reliability and validity of results.	Experiments	
Chpt. 112.4(b)(2)(E)	Distinguishes between observations and inferences in science experiments or field investigations.		
Chpt. 112.22(b)(2)(E)	Organizes data in both hand-drawn and digital (Excel) graphs, tables, maps, and charts.	Science Fair	
Chpt. 112.22(b)(4)(B)	Evaluates data in graphs, tables, maps, and charts then identifies patterns using percentages, averages, range, and frequency.		
Chpt. 112.4(b)(2)(F)	Communicates explanations of investigations and rationale for conclusions.	Scientific Method	
Chpt. 112.6(b)(6)(A)	Identifies and explains patterns of change such as in weather, metamorphosis, and objects in the sky.	Life, physical, earth	
IMF	Participates in age-appropriate science fairs to discover answers using scientific inquiry (e.g., What batteries last the longest? Where is the best place to store apples? Make ice cubes starting with different temperatures of water. Does the starting temperature of water affect how long it takes to freeze?).	Science fair	

Life Science

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 112.4(b)(5)(A)	Understands the basic and dynamic idea of classification (taxonomy) – broad/specific and similarities/differences.	UE Life Science Curriculum 3 yr cycle	
IMF	Charts the top levels of the taxonomic classification system: kingdom, phylum, sub-phylum, and class, and order.	UE Life Science Curriculum 3 yr cycle	
Chpt. 112.5(b)(10)(B)	Cites specific characteristics which distinguish plants from animals and gives examples.	UE Life Science Curriculum 3 yr cycle	
Chpt. 115.5(b)(4)(B) and (C) Chpt. 115.5(b)(3)(A)	Describes the function of organ systems in animals, including the digestive, circulatory, respiratory, skeletal, endocrine, and urinary.	UE Life Science Curriculum 3 yr cycle	
Chpt. 112.5(b)(10)(B)	Cites specific characteristics which distinguish	UE Life Science Curriculum 3 yr cycle	

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	invertebrates from vertebrates and gives examples.		
Chpt. 112.5(b)(10)(B)	Describes basic characteristics, compares/contrasts and classifies invertebrates into the three phylums/sub-phylums arthropods (including insects), mollusks, and crustaceans.	UE Life Science Curriculum 3 yr cycle	
IMF	Defines and gives examples of zoology vocabulary, including predator/prey, herbivore, omnivore, carnivore, adaptation, endothermic/exothermic, diurnal/nocturnal/crepuscular, camouflage, habitat, niche, and biome.	UE Life Science Curriculum 3 yr cycle	
Chpt. 112.6(b)(8)(C)	Compares and contrasts current species with extinct species from the past (e.g., smiladon and African lion; dire wolf and gray wolf; woolly mammoth and Asian elephant).	UE Life Science Curriculum 3 yr cycle	
Chpt. 112.5(b)(10)(B)	Compares and contrasts the basic characteristics of vertebrate classes – mammals (wild and domestic), birds (wild and domestic), amphibians, reptiles, fish.	UE Life Science Curriculum 3 yr cycle	
IMF	Identifies common vertebrates and places them into the correct class – mammal, bird, amphibian, reptile, or fish.	UE Life Science Curriculum 3 yr cycle	
IMF	Given a variety of different species, identifies its fundamental needs: covering (e.g., scales, hair, feathers), communication, defense, transportation (e.g., fly, burrow, slither), nutrition/diet, and shelter.	UE Life Science Curriculum 3 yr cycle	
Chpt. 112.5(b)(8)(C) and (D) Chpt. 112.4(b)(6)(D) Chpt. 112.4(b)(9)(A) IMF	Defines, identifies, and compares physical adaptations that animals use to survive in specific biomes/habitats, to find food, and to defend themselves (e.g., eyes, mouths, teeth, ears, feet, skin, locomotion, young).	UE Life Science Curriculum 3 yr cycle	
Chpt. 112.7(b)(6)(C)	Describes and compares life cycles of plants and animal classes (e.g., mammal, reptile, invertebrate, bird, amphibian) for a variety of biomes.		
Chpt. 112.22(b)(8)(C)	Explains and graphically shows energy flow in food webs and food chains of various biomes/habitats, including energy source, producers, consumers, scavengers/decomposers.		
IMF	Demonstrates how various organisms act upon a dead tree to decompose it.		
IMF	Demonstrates how forest decomposers turn humus into soil.		
Chpt. 112.22(b)(11)(A)	Identifies and gives examples of adaptations, the purpose of the adaptations, and the advantages of these	UE trip	

	adaptations for animal and plant species in various niches and biomes.		
Chpt. 112.7(b)(9)(C)	Given an ecosystem (real or imaginary), predicts adaptive characteristics (physical or behavioral) required for survival and reproduction.	UE trip	
Chpt. 112.5(b)(3)(D), IMF	Explains and sequences the human relationship with animals, including hunter/gatherer, farmer (domestication of animals), pets, animal food products, animal by-products (e.g., wool, compost).	Early humans, Our History unit	Sequencing chart, Timeliner
Chpt. 112.5(b)(5)(A) and (B) Chpt. 112.4(b)(6)(A) and (B)	Understands the concepts of systems, including interdependence, wholes/parts, and shared purpose, and can cite real-world examples.		
IMF	Explains how cells fit into living systems and are the basic structures of living things.	Life science unit	
IMF	Using a microscope, identifies the following parts of a cell: nucleus, cell membrane, cytoplasm, cell wall, chloroplast, and vacuole.	Life science unit	
IMF	Identifies and gives examples of different cells within the human body.	Life science unit	
IMF	Distinguishes similarities and differences between plant and animal cells.		
IMF	Understands and explains that growth is a result of cell division.		
IMF	Defines and gives examples of common botany vocabulary, including acidic/basic, deciduous/evergreen, hard wood/soft wood, annual/perennial/biennial, simple/compound leaf, chlorophyll, photosynthesis, sand, silt, clay, loam, nitrogen, phosphorous, and potassium.		
IMF	Flow charts the taxonomy of plants from vascular/non-vascular, to seed/spore, to angiosperm/gymnosperm, to monocot/dicot.	Botany	
IMF	Describes characteristics, gives examples, and classifies vascular and non-vascular plants, seed and spore plants, and seeds-from-cones and seeds-from-flowers plants.	Botany	
IMF	Explains pollination and the role of insects in the process.	Botany	
IMF	Identifies and explains each of the basic needs of plants: light, warmth, water, air, time, and minerals.	Botany	
Chpt. 112.5(b)(10)(A)	Explains and demonstrates that plants adapt to their	Botany	

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Chpt. 112.5(b)(9)(A) and (B)	environment and grow in predictable patterns.		
Chpt. 112.5(b)(8)(A)	Defines and identifies an ecosystem and its parts (atmosphere, soil, water, sun, living organisms).		
IMF	Defines, contrasts, and gives examples of bio-degradable, recyclable, and non-degradable items.	Ecology unit	
IMF	Identifies and explains the major causes of water and air pollution and offers ideas to combat the problem.	Ecology unit	
IMF	Describes the function of waste-water treatment plants and marks local plants on a map.	Ecology unit	
Chpt. 112.3(b)(10)(C)	Explains “reduces, reuse, recycle” and identifies how organic (rocks, soil, water, leaves) and inorganic (plastic, aluminum) items can be recycled, reused, or reduced.	Ecology unit	
Chpt. 112.5(b)(3)(E)	Researches and presents the history of life science concepts and contributing scientists and philosophers (e.g., Luther Burbank, Carl Linnaeus, Jane Goodall, George Washington Carver)		
Chpt. 112.5(b)(11)(B), IMF	Defines soil (type, texture, color) and explains the relationship between water and various soils (sand, loam, silt, clay).	UE trip	
Chpt. 112.5(b)(3)(D), IMF	Explains and sequences the human relationship with plants, including uses for plants; edible plants; tree harvesting; plants used for clothing, dye, medicine, herbs/spices.	Fundamental needs	
IMF	Identifies the parts and functions of a plant: roots, stem, leaves, and fruit.	Botany	
IMF	Given a leaf, identifies whether it is compound or simple.	Botany	
IMF	Given a real flower, dissects, locates, names, and describes the functions of the petal, the sepals, the stamen (anther, filament), the pistil, the receptacle, and the stalk.	Botany	
IMF	Given a leaf, identifies the basic leaf shape and advantages of the shape.	Botany	
IMF	Given a real leaf, locates, names, and describes the functions of the blade, stipule, petiole, and veins.	Botany	
IMF	Given a real leaf, can identify the edging (smooth, lobed, toothed) and vein pattern (palmate, pinnate, parallel, and center-veined).	Botany	
IMF	Differentiates and identifies the two major kinds of root systems, tap root and fibrous root.	Botany	

IMF	Explains the relationship between fruit and seeds in plants.	Botany	
IMF	Given a graphic, locates, identifies, and describes the functions of the seed parts, seed coat, seed leaf, shoot, helium, and root.	Botany	
IMF	Compares and contrasts seed dispersal and the type of fruit – succulent or dry.	Botany	
IMF	Classifies vegetables into their correct plant part: stem vegetables (e.g., asparagus, celery, rhubarb), leaf vegetables (e.g., broccoli, cabbage, spinach), or root vegetable (e.g., carrots, parsnips, turnips).	Botany	
IMF	Identifies and illustrates classroom and garden plants.		
IMF	Identifies and describes common trees by their wood, shape, leaves, fruit, seed, and/or bark.		
Chpt. 112.4(b)(6)(C)	Explains the process and requirements for photosynthesis and graphically illustrates the cycle.	Botany	
IMF	Designs the layout and planting schedule for an outdoor vegetable garden in San Antonio, Texas.	UE garden	
IMF	Researches, writes, and presents a persuasive paper either for or against chemical fertilizers.		
IMF	Identifies common organic fertilizers and pest controls for a garden.		
Chpt. 112.22(b)(10)	Relates the definition of a system to all living things and their structure: molecular, cellular, tissue organ, organism, population, ecosystem.		
Chpt. 112.22(b)(10)	Given each structure of a living thing, defines its corresponding function(s).		

Outdoor Nature Trail

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Observes, identifies, classifies, and illustrates regional animals (invertebrates, mammals, reptiles, amphibians, birds).	Nature trail curriculum	
IMF	Using field guides, identifies on campus unfamiliar trees, shrubs, grasses, vines, cacti, garden flowers, vegetables, and wild flowers	Nature trail curriculum	library field guide books
IMF	Using leaf, bark rubbing, and measurement samples and approximations, identifies common trees, plants, shrubs, and wild flowers around the school.	Nature trail curriculum	library plant, tree, and herb research
IMF	Gathers data (e.g., number of plants with compound	Nature trail curriculum	

	versus simple leaves, number of plant galls per tree type), prepares graphs, and presents findings.		
IMF	Uses maps and command cards to find objects.	Nature trail curriculum	
IMF	Creates basic maps of small areas for peers to follow.	Nature trail curriculum	
IMF	Creates command cards for peers to use on the trail (e.g., take 10 steps east, walk to the nearest oak tree...)	Nature trail curriculum	
IMF	Uses a compass to record cardinal directions for a nature route.	Nature trail curriculum	
IMF	Observes and illustrates cloud patterns for identification.	Earth science curriculum	
IMF	Uses nature observations to inspire sensory writing, including poetry, journaling, and short stories.		
MSSA	Using field guides, observes, identifies, and classifies scat by class and/or order.		

Earth Science

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 112.4(b)(10)(B)	Identifies fossil fuels (petroleum, coal, natural gas), how they are formed, and how they are used.	Earth science curriculum	
Chpt. 112.5(b)(11)(A)	Defines and identifies samples of renewable, non-renewable, and inexhaustible resources.	Earth science curriculum	
Chpt. 112.5(b)(11)(D)	Identifies the sun as a form of fuel and describes how it is captured and used.	Earth science curriculum	
IMF	Describes ways to conserve natural resources.	Earth science curriculum	
IMF	Explains, in simple terms, the “Big Bang” theory of cosmic creation	Earth science curriculum	
IMF	Explains, in simple terms, the role of gravity in the formation of the first stars.	Earth science curriculum	
Chpt. 112.5(b)(3)(A)	Explains, in basic terms, how scientists believe stars are formed from interstellar gas and dust particles in a nebula.	Earth science curriculum	
IMF	Defines and explains the life cycle of stars (e.g., red giant/red supergiant, super nova/planetary nebula, white dwarf/black hole/neutron star).	Earth science curriculum	
IMF	Relates, in simple terms, a star’s brightness to its size, distance, and temperature.	Earth science curriculum	
IMf	Identifies and classifies well known stars, including Polaris, the sun, Betelgeuse, Sirius, Castor, and Pollux.	Earth science curriculum	
Chpt 113.5(b)(13)(C)	Recounts well-known constellations, time of visibility	Earth science curriculum	

	in Texas, and the myths/legends connected to them.		
Chpt. 112.5(b)(11)(C)	Identifies, describes, and shares basic facts about each planet in our solar system.	Earth science curriculum	
IMF	Defines and explains the formation of black holes.	Earth science curriculum	
IMF	Defines and differentiates among “orbit”, “rotation”, and “revolution”.	Earth science curriculum	
IMF	Describes and demonstrates through models our day/night cycle and the earth’s rotation.	Earth science curriculum	
IMF	Explains and demonstrates through example the four seasons, the earth/sun relationship, and the length of daylight.	Earth science curriculum	
IMF	Defines, describes, and shows through models the two solstices and the two equinoxes.	Earth science curriculum	
IMF	Defines and distinguishes between perihelion and aphelion on an elliptical orbit.	Earth science curriculum	
IMF	Defines eclipse and explains the cause of solar and lunar eclipses.	Earth science curriculum	
IMF	Defines and identifies pictorially meteors, meteoroids, meteorites, comets, and asteroids.	Earth science curriculum	
IMF	Researches and explains the relationship among the Earth, the moon, and tides.	Earth science curriculum	
IMF	Uses and interprets graphical data to determine the cyclical nature of tides.	Earth science curriculum	
IMF	Researches, creates a timeline, and presents a history of the human space program and a speculation of its future activities.	Earth science curriculum	
IMF	Identifies and describes the interior structure of the earth (inner/outer core, mantle, outer mantle, crust).	Earth science curriculum	
IMF	Explains the causes, characteristics, and types of volcanoes and how they have affected the earth’s surface.	Earth science curriculum	
IMF	Understands that atmospheric gases (and eventually oceans) are derived from inside the earth through volcanic eruptions.	Earth science curriculum	
IMF	Maps the Ring of Fire and identifies well-known volcanoes for each type (cinder cones, composite, shield, lava domes).	Earth science curriculum	
IMF	Describes, in basic terms, plate tectonics and its effect on mountain formation, faults and earthquakes, and volcanoes. continental drift.	Earth science curriculum	

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Chpt. 112.5(b)(6)(B)	Explains the causes of earthquakes and their effect on the earth's surface.	Earth science curriculum	
Chpt. 112.7(b)(12)(A)	Defines and demonstrates the processes of weathering and erosion and how they continually break down/build up land.	Earth science unit	
Chpt. 112.6(b)(11)(B)	Lists and explains the effects of the oceans on land (e.g., erosion, el Nino, currents).	Earth science curriculum	
IMF	Explains, in simple terms, the hydraulic action of running water (streams) as the main type of water erosion.	Earth science curriculum	
IMF	Defines and differentiate among igneous, sedimentary, and metamorphic rocks.	Earth science curriculum	
IMF	Describes and graphically illustrates the rock cycle.	Earth science curriculum	
Chpt. 112.3(b)(10)(B)	Given samples, identifies rocks as igneous, sedimentary, or metamorphic	Earth science curriculum	
Chpt. 112.6(b)(11)(A)	Lists and identifies the various types of soil, the properties of soil (texture, capacity to retain water, ability to support life), and MSSA campus examples for each.	UE trip	
Chpt. 112.7(b)(11)(B)	Explains how scientists use index fossils to determine the age of other fossils or layers of sedimentary rock.		
Chpt. 112.7(b)(11)(B)	Uses tree-growth rings and sedimentary rock sequences to draw conclusions about history and time.		
Chpt. 112.7(b)(12)(B)	Describes and graphically depicts the process which lead to the formation of 1) coal, 2) oil, 3) gas, and 4) minerals.		
Chpt. 112.5(b)(2)(D)	Differentiates between a mineral and a rock and classifies samples accordingly.		
Chpt. 112.4(b)(10)(A)	Describes and graphically illustrates the water cycle.	Earth science unit	
IMF	Explains the effect of temperature on air movement.	Earth science curriculum	
IMF	Defines and differentiates between weather and climate.	Earth science curriculum	
IMF	Defines and illustrates basic cloud types (e.g., cumulus, cirrus, stratus, nimbus), relates them to air mass stability, and predicts short-range weather from them.	Earth science curriculum	
IMF	Explains, in basic terms, the causes of ocean currents and their effects on local climate.	Earth science curriculum	
IMF	Given a weather report and map, interprets basic weather symbols, including "sunny", "rain", "thunderstorms", "snow", "cloudy", and "partly cloudy" and can insert onto maps.		

Chpt. 112.5(b)(3)(E)	Researches and presents the history of earth science concepts and contributing scientists and philosophers (e.g., Galileo, Copernicus, Thoreau)		
Physical Science			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Understands, defines, and recites the order, from smallest to largest, of the building blocks of organisms: subatomic particles, atoms, elements, molecules, cell organelles, cells, tissues, organs, systems, organisms.	Physical science curriculum	
IMF	Explains, in simple terms, the basic structure of atoms and differentiates among protons, electrons, and neutrons.	Physical science curriculum	
IMF	Defines and differentiates among chemical elements, molecules, and compounds.	Physical science curriculum	
IMF	Studies the history of the Periodic Table and the contributions of Dmitri Mendeleev.	Physical science curriculum	
IMF	Researches specified common elements from the Periodic Table and knows the symbol, atomic structure, and properties of each.	Physical science curriculum	
Chpt. 112.7(b)(7)(A)	Classifies matter based on physical properties (e.g., density, ductility, malleability, boiling/melting points, electrical conductivity, solubility, magnetism).	Physical science curriculum	
IMF	Explains the link between temperature and molecular movement.	Physical science curriculum	
Chpt. 112.5(b)(7)(A) Chpt. 112.5(b)(3)(E)	Demonstrates that an object's appearance can change while its material substance remains constant (e.g., ice, water, steam).	Physical science curriculum	
Chpt. 112.22(b)(7)(A) and (B)	Defines, understands, and differentiates between physical (i.e., energy and states of matter) and chemical (i.e., molecular) properties of substances.	Physical science curriculum	
Chpt. 112.22(b)(7)(A) and (B)	Contrasts between a compound (chemical change resulting in a new substance) and a mixture and compares the properties of the compound and the original substances.	Physical science curriculum	
IMF	Prepares solutions and mixtures and tests for chemical and physical properties.	Physical science curriculum	
IMF	Uses an overflow basin to measure the volume of irregular solids.		
Chpt. 112.5(b)(1)(A)	Demonstrates that density determines whether an	Physical science unit	

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Chpt. 112.5(b)(2)(B)	object sinks or floats. (buoyancy).		
IMF	Explains the basic principles of fire and combustion.	Physical science unit	
Chpt. 112.5(b)(1)(A) Chpt. 112.5(b)(2)(B)	Define, distinguish, and demonstrate opaque, semi-opaque, and transparent.	Physical science unit	
Chpt. 112.5(b)(1)(A) Chpt. 112.5(b)(2)(B) and (D)	Demonstrates and theorizes why an object's shadow varies with its position in relation to a light source.	Physical science unit	
Chpt. 112.5(b)(1)(A), IMF Chpt. 112.5(b)(2)(D)	Demonstrates how both water and air pressure can make objects move.	Physical science unit	
Chpt. 112.7(b)(8)(D)	Defines a wave, classifies as visible or invisible, and identifies different kinds and their formation, including sound, seismic, water, and electromagnetic waves.	Physical science unit	
Chpt. 112.5(b)(1)(A), IMF Chpt. 112.5(b)(2)(D)	Demonstrates that sound waves travel fastest through solids, then liquids, and slowest through gases and relates it to the density of the medium (i.e., more molecules means more collisions per second means faster wave travel).	Physical science unit	
Chpt. 112.5(b)(1)(A), IMF Chpt. 112.5(b)(2)(A)	Demonstrates that light waves travel in straight lines through a single medium.	Physical science unit	
IMF	Given a diagram of the electromagnetic spectrum, gives examples for each type of wave (e.g., lasers – infrared, MRI – x-ray, the sun – ultraviolet).	Physical science unit	
Chpt. 112.5(b)(1)(A), IMF Chpt. 112.5(b)(2)(B)	Demonstrates that light waves can bend when passing from one medium to another.	Physical science unit	
Chpt. 112.5(b)(1)(A), IMF Chpt. 112.5(b)(2)(B)	Demonstrates that dark colors absorb more light energy than light colors.	Physical science unit	
Chpt. 112.7(b)(8)(B)	Compares, contrasts, graphically defines, and gives real-world examples of reflection and refraction.	Physical science unit	
IMF	Explains why objects reflected in a mirror appear to be reversed.	Physical science unit	
Chpt. 112.5(b)(1)(A), IMF Chpt. 112.5(b)(2)(B) and (A)	Demonstrates that mirrors and other highly reflective materials absorb almost no light energy.	Physical science unit	
Chpt. 112.22(b)(6), IMF	Researches the laws of force and motion as theorized first by Aristotle, then Galileo, and then Sir Isaac Newton in his three laws of motion.	Physical science curriculum	
Chpt. 112.22(b)(6)(A), IMF	Defines, understands, and gives examples of force, motion, mass, gravity, weight, velocity, momentum, and speed.	Physical science curriculum	
Chpt. 112.22(b)(6), IMF	Defines, understands, and gives examples of the relationships between force and motion, speed and velocity, mass and weight, and acceleration and	Physical science curriculum	

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	velocity.		
Chpt. 112.22(b)(6)(C), IMF	Identifies forces that shape our universe, including uplifting, movement of water, volcanic activity, orbits, and tides.	Physical science curriculum	
Chpt. 112.22(b)(8)(A), IMF	Defines, understands, and gives examples of different types of energy (e.g., kinetic, potential, thermal, gravitational, sound, chemical, nuclear).	Physical science curriculum	
Chpt. 112.22(b)(9)(A) and B), IMF	Describes and gives examples of how humans transform energy in practical life scenarios (e.g., chemical to thermal energy when we burn wood in a fireplace, hydroelectric and wind power plants, water heaters).	Physical science curriculum	
Chpt. 112.7(b)(8)(C), IMF	Differentiates between static and current electricity and demonstrates how electric current can flow through a circuit	Physical science curriculum	
IMF	Shares the basic principles and real life examples of simple machines – lever, inclined plane, wheel/axle, pulley, wedge, screw	Physical science curriculum	

Upper Elementary Library Skills

Location of Materials			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 113.4(b)(11)(B)	Explains, in basic terms, the history of libraries and the role of school and public libraries.		
MSSA	Practices proper grace and courtesy when using a book, avoiding dog-earing, defacing, spine abuse, page turning errors, and food/drink usage.		
MSSA, IMF	Defines and identifies the parts of a book, including the front cover, back cover, inside title page, copyright page, dedication, spine, call number, barcode, publisher, chapter, table of contents, index, glossary, dust jacket, and captions.	book reviews scavenger hunt	
MSSA, Chpt. 110.5(b)(26)(D)	Knows the role of an author, illustrator, and editor and locates the names on a book.	picture books scavenger hunt	
MSSA	Identifies various types of illustrations, including collage, prints, photographs, pastel, paint, and sketches.	storybooks	
MSSA, IMF	Recognizes the works of classic children’s authors	children’s books	

	(e.g., Lois Lowry, Avi, Sharon Creech, Gary Paulsen)	author web sites teachingwithbooks.net	
MSSA	Understands how books are placed on bookcases, top-to-bottom, left-to-right, and can skim/scan call numbers efficiently.	library books with various call numbers scavenger hunt	
MSSA, IMF	Understands and uses the Dewey Decimal system for non-fiction materials	scavenger hunt	
MSSA, IMF	Reads fiction and biography call numbers by applying rules of alphabetization for up to three letters.	alphabetical work with dictionaries	

Research Skills – Big 6 Research Model

Standard(s)	Learning Outcome	Core Materials	Extension Materials
MSSA, Chpt. 110.18(b)(22)(A) and (B)	Understands and applies the Big 6 research model to inquiry-based projects.	Big 6 organization materials	
MSSA, IMF, Chpt. 110.18(b)(24)(B)	Given a task, selects the appropriate reference book to use – dictionary, thesaurus, or encyclopedia, atlas, or almanac.	reference books library lesson sheets	
MSSA, Chpt. 110.5(b)(4)(C), IMF	Understands how words are ordered in a dictionary, encyclopedia, and thesaurus and how to read each entry.	reference books laminated prompt cards library lesson sheets	
MSSA, Chpt. 110.5(b)(4)(C), IMF	Defines, locates, and uses guide words in a dictionary, encyclopedia, and thesaurus.	library lesson sheet reference books	
MSSA, Chpt. 110.5(b)(4)(A), IMF	After locating entry words in a dictionary, finds syllabication, simple definitions, and parts of speech, and etymology.	dictionary library game strips etymology cards	
MSSA, IMF	Given a topic, locates the entry, the article, and the author in an encyclopedia using guide words and the index.	library lesson sheets encyclopedias	
MSSA, Chpt. 110.18(b)(23)(A),	Effectively uses on-line encyclopedias to find relevant articles for research.	library lesson sheets Britannica on-line school edition	
MSSA, Chpt. 110.5(b)(4)(C), IMF	Using a thesaurus, locates the entry, antonyms, synonyms, and homophones.	thesaurus library lesson sheet	
MSSA, IMF	Locates and uses a variety of atlases to locate continents, countries, cities, resources, landforms, water forms, landmarks	atlases library lesson sheet globe	
MSSA, IMF	Locates and uses an almanac, its index, and its tables of contents to locate statistical data.	almanacs library lesson sheet	
MSSA, IMF	Distinguishes among and knows how and when to use a table of contents, an index, and a glossary.	accordion book paper non-fiction books	
Chpt. 110.18(b)(22)(A), IMF	Given a topic, names other related key words that either broaden or narrows the topic.	keywords learning sheet encyclopedia	

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		www.ask.com	
MSSA	Navigates visual search to locate relevant and valid web sites for research.	library lesson sheet	
MSSA, Chpt. 110.5(b)(26)(A)	Locates books in the library database using both visual search and typed keywords.	keywords learning sheet library lessons sheet	
Chpt. 110.18(b)(22)(A), MSSA, IMF	Given a topic, generates both open and closed-ended questions for research.	KWL fishbone diagram data chart 2	
Chpt. 110.18(b)(22)(A), MSSA, IMF	Using non-fiction books, utilizes headings, sub-headings, topic sentences, graphic aids, and captions to generate relevant questions.	datachart 2 wall chart note cards	
MSSA, IMF, Chpt. 110.18(b)(23)	Uses “trash and treasure” to locate pertinent information and avoid plagiarism	non-fiction books library lesson sheet	
MSSA, IMF, Chpt. 110.18(b)(23)(D) and (E)	Cites references using MLA format and creates a bibliography.	MLA format cards Non-fiction books Library lesson sheet	
Chpt. 110.18(b)(25) IMF MSSA	Synthesizes notes and answers from questions into various forms, including original essays, reports, dioramas, sequencing charts, timelines, PowerPoint presentations, and bar graphs.	Timeliner software graphing paper PowerPoint	
MSSA, IMF	Uses both self and peer editing to identify spelling, grammatical, and content errors.	peer editing forms	
Chpt 113.4(b)(3) (A) and (B), MSSA	Uses multiple sources of information, including digital, hardcover, oral (interviews, CDs, DVDs), and photographs.	library collection	

Upper Elementary Health

Food and Nutrition			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 115.5(b)(1)(C), IMF	Identifies basic nutrients (carbohydrates, proteins, fats, fiber, vitamins, minerals, water).		
Chpt. 115.7(b)(1), IMF	Given samples, classifies foods into the basic food groups: grains, vegetables, fruits, fats/oils, milk/dairy, meat/beans/fish/nuts.		
Chpt. 115.5(b)(1)(D), IMF Chpt. 115.4(b)(1)(D)	Identifies the components of and gives examples of well-balanced and nutritious diets.		
Chpt. 115.7(b)(1)(A)	Given actual food labels, reads and analyzes nutritional information.		

IMF	Compares and contrasts various food processing and preparation methods with nutritional value (e.g., boiling, frying, roasting, drying, freezing, reheating) .		
IMF	Defines and gives examples and symptoms of food-borne infections, including e-coli, salmonella, and campylobacter bacteria.		
IMF	Relates social, ethnic, religious, and geographic variables to diet and gives examples within and outside the United States.		
Chpt. 115.4(b)(1)(D), IMF	Researches the positive and negative effects of food on the body (e.g., calories, nutrients, obesity, cholesterol) and presents findings.		
Chpt. 115.4(b)(1)(D), IMF	Researches and explains concerns over processed foods , including artificial sweeteners, sulfites, artificial coloring, preservatives, pesticides, and trans-fats.		
Chpt. 115.4(b)(1)(D), IMF	Relates too much salt intake in diets to high blood pressure.		
Chpt. 115.4(b)(1)(C) and (D), IMF	Understands and explains the relationship among animal fats (saturated fats), cholesterol, and heart disease.		
Chpt. 115.5(b)(7)(A), IMF	Understands and identifies commercial food advertising techniques and their influence on eating habits.		
Chpt. 115.4(b)(1)(G)	Evaluate the results of good dietary and eating habits.		
IMF	Relates portion sizes to everyday items (e.g., one serving of meat is the size of a deck of cards).		
IMF	Analyzes and depicts in a tabular or graphic format the human body's nutritional needs based on age, sex, size, and activity level.		
IMF	Defines and understands calories and determines the appropriate calorie intake for him/herself.		
IMF	Given a person's size, age, sex, and activity level, approximates the appropriate daily caloric intake.		
IMF	Explains the mission and role of the USDA and its involvement with nutrition and good health.		
IMF	Researches and presents common food allergies (e.g., nuts, milk, eggs, soy), causes, reactions, and treatment plans.		
IMF	Researches and graphs yearly data for childhood and adult obesity rates and researches the link between		

	obesity and health problems (e.g., diabetes, heart disease).		
Community Life and Human Development			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 115.22(b)(1), IMF	Explains and demonstrates good personal hygiene and health habits (e.g., regular baths, brushing teeth, washing hands, cover mouth when sneezing, picking nose, exercise, sleep).		
Chpt. 115.22(b)(1)(F)	Identifies and describes the mental, physical, and social benefits or regular exercise and fitness.		
Chpt. 115.7(b)(1) Chpt. 115.6(b)(1)(C)	Differentiates between activity-related exercise and health-related exercise; anaerobic and aerobic exercise.		
Chpt. 115.4(b)(7)(B)	Identifies common illnesses and their symptoms (e.g., cold, flu, strep throat, ear infection).		
Chpt. 115.4(b)(4)(A)	Recognizes that many diseases and illnesses are caused by germs, bacteria, and viruses.		
Chpt. 115.22(b)(3) Chpt. 115.6(b)(5)(D)	Explains how diseases and illnesses can be prevented or controlled and classifies communicable from non-communicable.		
Chpt. 115.5(b)(8)(B)	Describes how weather and pollution affect a person's health.		
IMF	Differentiates between infectious (external) and internal dysfunction (e.g., auto-immune diseases) disorders.		
IMF	Describes the human body's natural defenses against disease (skin, immune system/white blood cells, lymphatic system).		
Chpt. 115.7(b)(4)(E)	Describes actions to take when ill.		
Chpt. 115.22(b)(3)(A)	Explains how personal health habits can affect others (e.g., smoking, not covering mouth when sneezing, attending school while contagious).		
Chpt. 115.22(b)(3)(C)	Defines, in basic terms, "preventative care" and recognizes the importance of regular medical and dental visits.		
Chpt. 115.5(b)(4)(A), IMF	Identifies and explains, in basic terms, the stages of human development.		
IMF, Chpt. 115.22(b)(6)	Categorizes and gives examples of basic human needs: physical (e.g., food, water, oxygen); social (e.g., belonging, learning, play, spirituality); emotional (e.g.,		

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	love, esteem, self-efficiency)		
Chpt. 115.22(b)(10)(A), Chpt. 115.22(b)(7), IMF	Practices conflict resolution strategies, including seeking win-win solutions, weighing needs and interests, and applying empathy to discussions.		
IMF	Identifies, defines, and understands the universal emotions felt in all societies (happiness, anger, disgust, surprise, fear, sadness).		
Chpt. 115.22(b)(10)(C), (5) Chpt. 115.22(b)(7)(D)	Practices and models self-control.		
Chpt. 115.22(b)(10)(E)	Identifies grief management techniques (e.g., talking to others, journaling, not being hard on yourself, the DABDA model).		
Chpt. 115.22(b)(10)(D)	Aspires toward a virtuous life by demonstrating honesty, kindness, respect, responsibility, gratitude, cooperation, friendliness, integrity, compassion, enthusiasm, and courtesy		
IMF	Recognizes and understands individual responsibility, family responsibility, community responsibility, and societal responsibility.		
Chpt. 115.22(b)(10)(F) and (G)	Explains “stress” and “stressors” and gives examples of stress reduction techniques (e.g., meditation, exercise, music).		
Chpt. 115.22(b)(9)(A) and (B)	Identifies unhealthy risk factors in families (e.g., substance abuse, unemployment, neglect, physical abuse) and identifies local, community, and school support systems that help.		
IMF, Chpt. 115.22(b)(8)(A) and (B)	Researches and reports health and technology developments (e.g., development of an HIV vaccine).		
IMF, Chpt. 115.22(b)(2)	Understands and explains, in basic terms, the human reproductive system, prenatal development, and birth.		
IMF, Chpt. 115.22(b)(2)(B) and (C)	Identifies, understands and explains the major changes that occur during adolescence and puberty.		
IMF	Demonstrates an emotionally mature, non-sexist view and relationship to the opposite sex.		
Chpt. 115.6(b)(1)(E)	Graphs, by age, the optimal amount of sleep needed nightly and interprets the information from a personal standpoint.		

Safety

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 115.5(b)(6)(C)	Recognizes, names, and offers basic information about		

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	potentially dangerous substances.		
Chpt. 115.5(b)(2)(D)	Explains why medicines must follow specific pharmacist or doctor’s instructions.		
Chpt. 115.7(b)(4)(B)	Relates the importance of immunization to disease prevention.		
Chpt. 115.22(b)(5)	Identifies products containing nicotine, explains the long-term health consequences of using nicotine (e.g., smoking, “dipping”), and brainstorms ways to avoid nicotine.		
Chpt. 115.22(b)(5)	Identifies products containing alcohol and explains the long-term health and social consequences of using/overusing alcohol.		
IMF, Chpt. 115.7(b)(7)(A)	Gives examples of media glamorizing casual use of drugs and sex and debates its affect on personal habits.		
IMF	Researches and reports on common illegal drugs, their effects, and their impacts on long-term health.		
IMF	Defines and understands the terms “stimulant”, “depressant”, “hallucinogen”, “prescription drugs”, and “volatile chemicals.”		
Chpt. 115.22(b)(11)(A)	Identifies adults and mentors at school, in the community, and in health and human service organizations that can assist in making informed choices about health and safety issues.		
Chpt. 115.22(b)(11)(B)	Appreciates the power of peer pressure and practices assertive communication and refusal skills.		
Chpt. 115.22(b)(11)(E)	Relates personal and vocational goal setting to long-term health benefits.		
Chpt. 115.22(b)(5)	Identifies products containing caffeine and explains the effects of caffeine.		
Chpt. 115.22(b)(7)	Understands interpersonal skills critical to long-term health (e.g., goal-setting, critical thinking, decision-making, problem solving)		
Chpt. 115.5(b)(6)(C)	Names and identifies common plants/parts that are poisonous (e.g., daffodil bulbs, jasmine berries, oleander leaves).		
Chpt. 115.5(b)(6)(C)	Names and identifies common venomous animals in south Texas (e.g., scorpions, brown recluse spider, copperhead snake, coral snake)		
Chpt. 115.5(b)(2)(E)	Recognizes and gives examples of potentially dangerous situations (e.g., fire, lightening storm, power line down, high traffic areas)		
Chpt. 115.6(b)(4)(F)	Recognizes and gives examples of potentially		

	dangerous social situations (e.g., gangs, leaving a party alone with a stranger).		
Chpt. 115.7(b)(8)(D)	Relates environmental protection with community and individual health (e.g., cleaner air/water, U/V rays, recycling).		
Chpt. 115.5(b)(2)(A)	Identifies safety rules at the school, in the home, and in the community.		
Chpt. 115.4(b)(7)(B)	Explains and gives examples of technological improvements that have improved health and safety (e.g., better sunblock, improved exercise equipment)		
Chpt. 115.22(b)(4)	Critically assesses and evaluates health products, practices, and services (e.g., sunblock, dietary aids, over-the-counter medicines, weight loss programs).		

Upper Elementary Visual Arts

Art Expression and Study			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 117.14(b)(1) and (2)	Identifies and discusses the elements of color, texture, form, line, space, and value in artwork from many cultures, from many media, and across historical time periods including self and family experiences.		
Chpt. 117.14(b)(1) and (2)	Identifies and discusses the principles of pattern, rhythm, emphasis, balance, proportion, and unity in artwork from many cultures, from many media, and across historical time periods, including self and family experiences.		
Chpt. 117.1(b)(1)(B) Chpt. 117.1(b)(3)(B)	Groups significant works of art by a common element or visual characteristic.		
Chpt. 117.14(b)(3) (C)	Identifies the elements of art and the principles of art in American society.		
Chpt. 117.1(b)(1)(A)	Uses knowledge of the five senses and life experiences as inspiration for expressing him/herself.		
MSSA	Theorizes why different cultures in the past and present have used different materials for their artwork.		
Chpt. 117.1(b)(3)(A)	Uses artwork for documenting history, sharing traditions, and initiating storytelling/ story writing.		
Chpt. 117.1(b)(3)(C)	Studies and relates art to everyday life.		

Upper Elementary

MSSA Curriculum

Chpt. 117.14(b)(3)(A)	Compares and contrasts artwork from various national periods and across cultures.		
Chpt. 117.14(b)(1) and (2)	Identifies and explains the influence of historical and political events in artwork.		
Chpt. 117.14(b)(4)(B)	Constructively evaluates general intent, mood, and expressive quality in personal artwork.		
MSSA	Researches and presents biographical studies of famous artists in history (e.g., Manet, El Greco, Warhol, Seurat, Vermeer, Calder, Matisse, Degas).		
MSSA	Using a color wheel, identifies "warm" or "cool" groups, complementary colors, and opposite colors.		
Chpt. 117.17(b)(3)(C)	Identifies and explains art skills necessary for a variety of occupations and jobs.		
MSSA	Distinguishes between 2-D and 3-D art.		
MSSA	Identifies specific pieces of art and music that elicit a similar emotional response.		
MSSA	Describe how balance is effectively used in a work of art (e.g., symmetrical, asymmetrical, radial).		
MSSA	Describes and shows examples depicting how artists can show the same theme by using different media and styles.		
MSSA	Views selected works of art from a culture and describe how they have changed or not changed in theme and content over a period of time.		
MSSA	Develops specific criteria individually or in groups to assess and critique works of art.		
MSSA	Describes tactics employed in advertising to sway the viewer's thinking and provides examples.		
MSSA	Understands, defines, and illustrates with real-life examples art vocabulary terms , including: abstract, acrylic, aesthetics, asymmetry, balance, bas-relief, collage, contrast, dominance, dye, fiber, form, genre, glaze, gradation, harmony, linear perspective, medium, mobile, mosaic, mural, negative space, neutral, opaque, palette, papier mache, pastels, perspective, pigment, proportion, relief, stippling, tempera, texture, unity, value, and wash.		

Art Application

Standard(s)	Learning	Core	Extension
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Upper Elementary

MSSA Curriculum

	Outcome	Materials	Materials
MSSA	Defines, identifies, creates, and uses primary, secondary, and tertiary colors in art.		
Chpt. 117.1(b)(2)(C)	Creates artwork based on personal observation and experiences.		
Chpt. 117.1(b)(2)(A-C)	Produces drawings, painting, prints, construction, photographs, digitally-generated art, ceramics, and fiberart, using a wide variety of art materials.		
MSSA	After identifying a given artwork's theme, creates a work of art that uses a similar subject matter, symbol, idea, and/or meaning.		
MSSA	Discovers how an artist has thoughtfully used all of the space within an artwork and creates an original artwork which effectively uses space.		
MSSA	Creates original artwork using the elements of color, texture, form, line, space, and value.		
MSSA	Creates original artwork using the principles of pattern, rhythm, emphasis, balance, proportion, and unity.		
MSSA	Creates original artwork that reflects a variety of culture's traditions, celebrations, and history.		
MSSA	Uses simplified forms, such as cones, spheres, and cubes, to begin drawing more complex forms		
MSSA	Uses a visual arts form to help express an idea in a non-art subject (e.g., science project, poetry, a social studies project).		
MSSA	Makes simple patterns by repeating dots, lines, shapes, and colors.		
MSSA	Applies the rules of two-point perspective in creating thematic works of art.		
MSSA	Creates a drawing, using varying tints, shades, and intensities.		
MSSA	Produces art work that demonstrates tactile and visual textures.		
MSSA	Overlaps objects as a method to create a sense of depth in a work of art.		
MSSA	Mixes primary colors to create secondary colors and tertiary colors.		
MSSA	Adds black and white to colors to alter the value.		
IMF	Produces simple pinch pots, slab art, and coil work		

Upper Elementary

MSSA Curriculum

	using a variety of clays and glazes.		
MSSA	Creates original mixed media artwork using tissue, fiber, found items, photos, paint, and paper.		
MSSA	Creates original fiber art (e.g., yarn, reeds, ribbon, cloth) using weaving, tying, wrapping, braiding, basketry, and stitching techniques.		
MSSA	Creates original paintings (e.g., watercolors, tempera, watercolor crayons) using resist, wet-on-wet, wet-on-dry, sponge, wash, and masking.		
MSSA	Creates original drawings (e.g., pencils, pastels, chalk, colored pencil, markers, charcoal) using stippling, crosshatching, shading, sketching, rendering, and contour line techniques.		
MSSA	Produces cultural artwork to complement cross-curricular studies, including early man (rock art), ancient Mesopotamia (pottery), ancient Egypt (paper making), ancient Greece (mosaics), ancient Rome (sculpture), mesoamerica (weaving), and American history (quilting, painting).		

Upper Elementary Theatre

Researching, Planning and Preparing Dramatizations			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 117.7(b)(4)(A)	Identifies theatre and storytelling forms from different cultures.	Readers' Theatre scripts	Play Performance
Chpt. 117.7(b)(5)(B)	Uses theatre vocabulary, including plot (beginning, middle, and end), scene, sets, conflict, script, and audience, to describe theatrical experiences.	Reading play scripts	Play performance
National Standard 4.1	Identifies who, what, where, when, and why (the Five Ws) in a theatrical experience.	Reading play scripts	Play performance
Chpt. 117.3(b)(3)(A-B)	Identifies various types of theatre elements, including costuming, sound, make up, set construction, direction, production, scene design, lighting, and stage management.	Reading play scripts	Play performance
Chpt. 117.19(b)(3)(B)	Safely and collaboratively sets up a school or outdoor space for a dramatic production.	UE play presentation and planning	
Chpt. 117.34(b)(3)(A)	Designs, creates, and demonstrates safe use of props, costumes, and visual elements to help define a	UE play presentation and planning	

	character, the setting, an action sequence, or a theme in a dramatic performance.		
Chpt. 117.34(b)(3)(C)	Plans dramatizations, including puppet shows or short plays based on picture books, collaboratively with peers/teachers.	Create original scripts and puppets	
Chpt. 117.19(b)(4) Chpt. 117.34(b)(4)(A)	Reads or watches a dramatic play or skit and relates it to a particular place, time, culture, and life experiences.	Attendance at MSSA play productions	

Creative Expression and Performance

Standard(s)	Learning Outcome	Core Materials	Extension Materials
IMF	Retell familiar stories, sequencing story points and identifying character, setting, and conflict.	Classroom literature	
Chpt. 117.3(b)(2)(B)	Participates in storytelling.	Rehearse and perform stories for lower classes	
National Standard 4.2	Varies pitch, tone, volume, and tempo of voice to dramatize different characters.	UE play performance	
Chpt. 117.10(b)(1)(D)	Participates in role-play and recreating dialogue.	UE play performance	
Chpt. 117.34(b)(2)(A) Chpt. 117.34(b)(3)(D)	Practices grace and courtesy with others while preparing and performing dramatic events.	UE play performance	
Chpt. 117.34(b)(2)(C)	After researching a role, effectively selects and portrays a character through body language, dialect, and dialogue.	UE play performance	
Chpt. 117.34(b)(3)(A)	After researching a role, effectively complements a character's persona with appropriate props, costume, and visual elements.	UE play performance	

Evaluation of Theatre Arts

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 117.34(b)(5)(A)	Responds to a live performance with appropriate audience behavior	Attendance at MSSA play performances	
Chpt. 117.34(b)(5)(D)	Adds movement, music, and visual elements to a theatric script to enhance the dramatization.	UE play production	

Upper Elementary Physical Education

UE

Standard(s)	Learning Outcome	Core Materials	Extension Materials
116.6 4.1 A-K	<ul style="list-style-type: none"> • demonstrate changes in speed during straight, curved, and zig zag pathways in dynamic situations; • catch an object while traveling such as catch a football pass on the run; • combine shapes, levels, pathways, and locomotor patterns smoothly into repeatable sequences; • jump and land for height and distance using key elements for creating and absorbing force such as bending knees, swinging arms, and extending; • perform sequences that include traveling, showing good body control combined with stationary balances on various body parts; • (demonstrate body control in jumping and landing such as land on feet, bend knees, and absorb force); • transfer weight along and over equipment with good body control; • create a movement sequence with a beginning, middle, and end; • perform basic folk dance steps such as grapevine, schottische, and step-together-step; • travel into and out of a rope turned by others without hesitating; and • demonstrate key elements in manipulative skills such as volleying, hand dribble, foot dribble, punt, striking with body part, racquet, or bat. 		
4.2 A-D	<ul style="list-style-type: none"> • identify similar movement elements in sports skills such as underhand throwing and underhand volleyball serving; • identify ways movement concepts such as time, space, effort, and relationships can be used to refine movement skills; • make appropriate changes in performance based on feedback; and • describe key elements of mature movement patterns of throw for distance or speed such as catch, kick, strike, and jump. 		
4.3 A-F	<ul style="list-style-type: none"> • describe and select physical activities that provide for enjoyment and challenge; 		

	<ul style="list-style-type: none"> • name the components of health-related fitness such as strength, endurance, and flexibility; • identify and demonstrate a variety of exercises that promote flexibility; • improve flexibility in shoulders, trunk, and legs; • participate in activities that develop and maintain muscular strength and endurance; and • identify opportunities for participation in physical activity in the community such as little league and parks and recreation. 		
4.4 A-I	<ul style="list-style-type: none"> • describe the effects of exercise on heart rate through the use of manual pulse checking or heart rate monitors; • participate in moderate to vigorous physical activities on a daily basis; • identify methods for measuring cardiovascular endurance, muscular strength and endurance, and flexibility; identify major muscle groups and the movements they cause; • describe the relationship between food intake and physical activity such as calories consumed and calories expended; • explain the link between physical activity/inactivity and health such as reduce stress and burn calories; • explain the relationship between physical activity and stress relief and demonstrate stress relief activities such as brisk walking, gentle stretching, and muscle tension and release; • describe the need for rest and sleep in recovering from exercise; and • identify sources of information on skill improvement, fitness, and health such as books and technology. 		
4.5 A-D	<ul style="list-style-type: none"> • use equipment safely and properly; • select and use proper attire that promotes participation and prevents injury; • describe and apply safety precautions when cycling and skating; and • identify potential risks associated with physical activities 		

4.6 A & B	<ul style="list-style-type: none"> • distinguish between compliance and noncompliance with rules and regulations; and • analyze potential risks associated with unsafe movement and improper use of equipment 		
4.7 A-D	<ul style="list-style-type: none"> • follow rules, procedures, and etiquette; • respond to winning and losing with dignity and understanding; • work independently and stay on task; and • demonstrate effective communication, consideration and respect for the feelings of others during physical activities such as encourage others, allow others equal turns, and invite others to participate. 		
116.7 5.1 A-L	<ul style="list-style-type: none"> • demonstrate appropriate use of levels in dynamic movement situations such as jumping high for a rebound and bending knees and lowering center of gravity when guarding an opponent; • demonstrate smooth combinations of fundamental locomotor skills such as running and dodging and hop-step-jump; • demonstrate attention to form, power, accuracy, and follow-through in performing movement skills; • demonstrate controlled balance on a variety of objects such as balance board, stilts, scooters, and skates; • demonstrate simple stunts that exhibit agility such as jumping challenges with proper landings; • combine traveling and rolling with smooth transitions; • combine weight transfer and balance on mats and equipment; • demonstrate the ability to contrast a partner's movement; • perform selected folk dances; • jump a rope using various rhythms and foot patterns repeatedly; • demonstrate competence in manipulative skills in dynamic situations such as overhand throw, catch, shooting, hand dribble, foot dribble, kick, and striking activities such as hitting a softball; and 		

	<ul style="list-style-type: none"> • demonstrate combinations of locomotor and manipulative skills in complex and/or game-like situations such as pivoting and throwing, twisting and striking, and running and catching. 		
<p>5.2 A-C</p>	<ul style="list-style-type: none"> • identify common phases such as preparation, movement, follow through, or recovery in a variety of movement skills such as tennis serve, handstand, and free throw; • identify the importance of various elements of performance for different stages during skill learning such as form, power, accuracy, and consistency; and • choose appropriate drills/activities to enhance the learning of a specific skill. 		
<p>5.3 A-C</p>	<ul style="list-style-type: none"> • participate in moderate to vigorous physical activities on a daily basis that develop health-related fitness; • identify appropriate personal fitness goals in each of the components of health-related fitness; and • explain the value of participation in community physical activities such as little league and parks and recreation. 		
<p>5.4 A-I</p>	<ul style="list-style-type: none"> • relate ways that aerobic exercise strengthens and improves the efficiency of the heart and lungs; • self-monitor the heart rate during exercise; • match different types of physical activity with health-related fitness components; • define the principle of frequency, intensity, and time and describe how to incorporate these principles to improve fitness; • describe the structure and function of the muscular and skeletal system as they relate to physical performance such as muscles pull on bones to cause movement, muscles work in pairs, and muscles work by contracting and relaxing; • identify the relationship between optimal body function and a healthy eating plan such as eating a variety of foods in moderation according to U. S. dietary guidelines; • describe common skeletal problems and their effect on the body such as spinal curvatures; 		

	<ul style="list-style-type: none"> • describe the changes that occur in the cardiorespiratory system as a result of smoking and how those changes affect the ability to perform physical activity; and • describe how movement and coordination are effected by alcohol and other drugs 		
5.5 A-D	<ul style="list-style-type: none"> • use equipment safely and properly; • select and use proper attire that promotes participation and prevents injury; • describe the importance of taking personal responsibility for reducing hazards, avoiding accidents, and preventing injuries during physical activity; and • identify potentially dangerous exercises and their adverse effects on the body. 		
5.6 A&B	<ul style="list-style-type: none"> • describe fundamental components and strategies used in net/wall, invasion, target, and fielding games such as basic positions-goalie, offense, or defense; and • explain the concept and importance of team work. 		
5.7 A-C	<ul style="list-style-type: none"> • follow rules, procedures, and etiquette; • use sportsmanship skills for settling disagreements in socially acceptable ways such as remaining calm, identifying the problem, listening to others, generating solutions, or choosing a solution that is acceptable to all; and • describe how physical activity with a partner or partners can increase motivation and enhance safety. 		
6.1 A-K	<ul style="list-style-type: none"> • perform locomotor skills in dynamic fitness, sport, and rhythmic activities; • use relationships, levels, speed, direction, and pathways effectively in complex group and individual physical activities such as crouching low for volleyball digs, stretching high during lay-ups, positioning for a soccer pass, or passing ahead of a receiver; • perform sequences that combine traveling, rolling, balancing, and weight transfer into smooth, flowing sequences; • move in time to complex rhythmical patterns such 		

	<ul style="list-style-type: none"> • as 3/4 time or 6/8 time; • design and refine a jump rope routine to music; • throw a variety of objects demonstrating both accuracy and distance such as frisbee, softball, and basketball; • strike a ball to a wall or a partner with a paddle/racquet using forehand and backhand strokes continuously; • strike a ball using a golf club or a hockey stick consistently so it travels in an intended direction and height; • hand and foot dribble while preventing an opponent from stealing the ball; • keep an object in the air without catching it in a small group such as volleyball and football; and • throw and catch a ball consistently while guarded by an opponent. 		
<p>6.2 A-C</p>	<ul style="list-style-type: none"> • know that appropriate practice in static and dynamic setting, attention, and effort are required when learning movement skills; • make appropriate changes in performance based on feedback to improve skills; and • practice in ways that are appropriate for learning skills such as whole/part/whole, shorter practice distributed over time is better than one long session, or practicing is best in game-like conditions. 		
<p>6.3 A-D</p>	<ul style="list-style-type: none"> • identify opportunities in the school and community for regular participation in physical activity; • participate in moderate to vigorous health-related physical activities on a regular basis; • establish and monitor progress toward appropriate personal fitness goals in each of the components of health-related fitness such as personal logs, group projects, and no space/or criterion referenced tests; and • identify and know how to use technological tools used for measuring and monitoring fitness parameters such as computer programs, heart rate monitors, skin-fold calipers, and impedance testing equipment. 		

<p>6.4 A-I</p>	<ul style="list-style-type: none"> • describe selected long-term benefits of regular physical activity; • classify activities as being aerobic or anaerobic; • describe the effects of aerobic exercise on the heart and overall health; • analyze effects of exercise on heart rate through the use of manual pulse checking and recovery rates, heart rate monitors, perceived exertion scales, and/or computer generated data; • identify each health-related fitness component and describe how participating in cardiovascular endurance, muscular strength and endurance, and flexibility actions impact personal fitness; • identify specific foods that contain protein, vitamins, and minerals that are key elements to optimal body function; • recognize the effects of substance abuse on personal health and performance in physical activity; • analyze ways outside influences affect decisions about care of the body such as alcohol and tobacco advertising and peer pressure; and • recognize that idealized images of the human body and performance as presented by the media may not be appropriate to imitate. 		
<p>6.5 A-E</p>	<ul style="list-style-type: none"> • use equipment safely and properly; • select and use proper attire that promotes participation and prevents injury; • include warm-up and cool-down procedures regularly during exercise; monitor potentially dangerous environmental conditions such as wind, cold, heat, and insects; and recommend prevention and treatment; • identify potentially dangerous exercises and their adverse effects on the body; and • explain water safety and basic rescue procedures. 		
<p>6.6 A&B</p>	<ul style="list-style-type: none"> • know basic rules for sports played such as setting up to start, restarting, violating rules; and • keep accurate score during a contest. 		
<p>6.7 A-F</p>	<ul style="list-style-type: none"> • participate in establishing rules, procedures, and etiquette that are safe and effective for specific 		

	<ul style="list-style-type: none"> activity situations; • handle conflicts that arise with others without confrontation; • identify and follow rules while playing sports and games; • accept decisions made by game officials such as student, teachers, and officials outside the school; • accept successes and performance limitations of self and others, exhibit appropriate behavior responses, and recognize that improvement is possible with appropriate practice; and • modify games/activities to improve the game/activity. 		
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Upper Elementary Technology

Foundations			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 126.3(b)(2)(B)(F)	Types 20 words per minute	Typing Master	
Chpt. 126.3(b)(2)(B)	Uses proper keyboarding techniques such as correct hand and body positions and smooth and rhythmic keystroke patterns	Typing Master, Technology training	
Chpt. 126.3(b)(2)(C)	Demonstrates keyboarding techniques for alphabetic, numeric, punctuation, and symbol keys	Typing Master	
Chpt. 126.3(b)(1)(A)	Uses basic computer terminology appropriate to the task	Technology training	
Chpt. 126.3 (b)(1)(B)	Understands functions of Microsoft Word; save and delete files, uses menu options and commands, and work with more than one software application	Microsoft Word training	
Chpt. 126.3 (b)(1)(B)	Understands functions of Microsoft Excel;	Microsoft Excel training	
Chpt. 126.3 (b)(1)(B)	Understands functions of Microsoft PowerPoint and can create an effective presentation from a report	Microsoft PowerPoint training	
Chpt. 126.3(b)(1)(C)(E)	Uses networking terminology: online, network, password, hyperlink, keyword and access remote equipment on a network i.e. printer	Research, Technology training	
Chpt. 126.3(b)(2)(A)	Uses a variety of input devices such as mouse,	Typing Master, Research, library	

	keyboard, disk drive, CD-ROM, and touch screen	research, Technology training	
Chpt. 126.3(b)(2)(D) Chpt. 126.3(b)(7)(A)	Produces documents using Microsoft Word including proof reading and corrections, and bibliographies	Microsoft Word training, Research	
Chpt. 126.3 (b)(2)(E)	Uses language skills including capitalization, punctuation, spelling, word division, and use of numbers and symbols	Research, Technology training	
Chpt. 126.3(b)(2)(D)	Creates digital timelines	Timeliner	
Chpt. 126.3(b)(3)(A)(B)	Understands and uses online search engines	Technology training, MSSA Library	
Chpt. 126.3 (b)(1)(B)	Understands functions of Wordpress	Wordpress training	

Information Acquisition

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 126.3(b)(4)(A)(B)	Utilizes online Britannica and Compton's On-line	MSSA Library	
Chpt. 126.3(b)(4)(A)(B)	Gathers information from internet/intranet resources using keyword searches	Timeliner, Research, MSSA Library	
Chpt. 126.3(b)(5)(A)	Book search using online database	MSSA Library	
Chpt. 126.3(b)(5)(B)	Uses online help	MSSA Library, Research	
Chpt. 126.3(b)(6)(A)(B)(C)	Utilizes Spanish websites	Spanish curriculum	
Chpt. 126.3(b)(6)(A)(B)(C)	Utilizes Athletics/ Health Curriculum websites	PE curriculum	
Chpt. 126.3(b)(6)(A)(B)(C)	Utilizes Music Curriculum websites	Music curriculum	

Communication

Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 126.3(b)(10)(A)(B)	Uses font attributes, color, white space, and graphics to ensure that products are appropriate for the defined audience	Research, Word training	
Chpt. 126.3(b)(10)(C)	Uses applications including spreadsheets and databases to develop charts and graphs by using data from various sources	Research, Excel training	
Chpt. 126.3(b)(11)(A)(B)	Publishes information in a variety of media, i.e. printed copy, monitor display, stored files, or video	Research	
Chpt. 126.3(b)(11)(A)(B)	Demonstrates printer techniques such as two-sided printing, booklets, copy ratio, and paper size	MSSA Library, Research	
Chpt. 126.3(b)(11)(B)	Use presentation software to communicate with a specific audience	Research presentations	
Chpt. 126.3(b)(12)(A)(B)	Uses technology to facilitate evaluation of communication	Research	
Chpt. 126.3(b)(12)(C)	Uses technology assessment tools to monitor progress i.e. checklists, timelines, or rubrics	Research, Peer assessment	

Problem Solving			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 126.3(b)(7)(A)(B)(C)	Uses Microsoft Word to express ideas and solve problems	Research, Technology training	
Chpt. 126.3(b)(7)(A)(B)(C)	Uses Microsoft Excel to express ideas and solve problems	Research, Technology training	
Chpt. 126.3(b)(7)(A)(B)(C)	Uses Microsoft Powerpoint to express ideas and solve problems	Research, Technology training	
Chpt. 126.3(b)(8)(A)(B)	Uses research skills and communication tools to participate in group projects	Research	
Chpt. 126.3(b)(9)(A)(B)	Uses software features such as online help to evaluate final product	Research	



MIDDLE SCHOOL CURRICULUM

Middle School Language Arts and Writing

In alignment with the Texas Essential Knowledge and Skills for Middle School Students and National Language Arts Standards by National Council of Teachers of English

Reading and Vocabulary Development	
Student Essential Learning	Content
1. The student will understand new vocabulary and use it when reading and writing.	Determine the meaning of grade-level academic English words derived from Latin, Greek, or other linguistic roots and affixes Use context (within a sentence and in larger sections of text) to determine or clarify the meaning of unfamiliar or ambiguous words Complete analogies that describe part to whole or whole to part Identify the meaning of foreign words commonly used in written English with emphasis on Latin and Greek words Use a dictionary, a glossary, or a thesaurus (printed or electronic) to determine the meanings, syllabication, pronunciations, alternate word choices, and parts of speech of words.
Reading Comprehension	
Student Essential Learning	Content
1. The student will analyze, make inferences and draw conclusions about theme and genre in different cultural, historical, and contemporary contexts and provide evidence from the text to support their understanding.	Describe multiple themes in a work of fiction Describe conventions in myths and epic tales Analyze how place and time influence the theme or message of a literary work
2. The student will understand, make inferences and draw conclusions about the structure and elements of poetry.	Provide evidence from text to support their understanding Analyze the importance of graphical elements (e.g., capital letters, line length, word position) on the meaning of a poem
3. The student will understand, make inferences and draw conclusions about the structure and elements of drama.	Provide evidence from text to support their understanding Explain a playwright's use of dialogue and stage directions
4. The student will understand, make inferences and draw conclusions about the structure and elements of fiction.	Provide evidence from text to support their understanding Explain the influence of the setting on plot development Analyze the development of the plot through the internal and external responses of the characters, including their motivations and conflicts Analyze different forms of point of view, including first-person, third-person omniscient, and third-person limited
5. The student will understand, make inferences and draw conclusions about the varied structural patterns and features of literary nonfiction.	Provide evidence from text to support their understanding Describe the structural and substantive differences between an autobiography or a diary and a fictional adaptation of it
6. The student will understand, make inferences and draw conclusions about how an author's sensory language creates imagery in literary text.	Provide evidence from text to support their understanding Determine the figurative meaning of phrases Analyze how an author's use of language creates imagery, appeals to the senses, and suggests mood

<p>7. The student will analyze, make inferences and draw conclusions about the author's purpose in cultural, historical, and contemporary contexts.</p>	<p>Provide evidence from the text to support their understanding Explain the difference between the theme of a literary work and the author's purpose in an expository text</p>
<p>8. The student will analyze, make inferences and draw conclusions about expository text.</p>	<p>Provide evidence from text to support their understanding Evaluate a summary of the original text for accuracy of the main ideas, supporting details, and overall meaning Distinguish factual claims from commonplace assertions and opinions Use different organizational patterns as guides for summarizing and forming an overview of different kinds of expository text Synthesize and make logical connections between ideas within a text and across two or three texts representing similar or different genres, and support those findings with textual evidence</p>
<p>9. The student will analyze, make inferences and draw conclusions about persuasive text.</p>	<p>Provide evidence from text to support their analysis Analyze the structure of the central argument in contemporary policy speeches Identify such rhetorical fallacies as ad hominem, exaggeration, stereotyping, or categorical claims in persuasive texts</p>
<p>10. The student will understand how to glean and use information in procedural texts.</p>	<p>Follow multi-dimensional instructions from text to complete a task, solve a problem, or perform procedures Explain the function of the graphical components of a text</p>

Writing Process

<p>Student Essential Learning</p>	<p>Content</p>
<p>1. The student will use elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text.</p>	<p>Plan a first draft by selecting a genre appropriate for conveying the intended meaning to an audience, determining appropriate topics through a range of strategies Develop drafts by choosing an appropriate organizational strategy (e.g., sequence of events, cause-effect, compare-contrast) and building on ideas to create a focused, organized, and coherent piece of writing Revise drafts to ensure precise word choice and vivid images; consistent point of view; use of simple, compound, and complex sentences; internal and external coherence; and the use of effective transitions after rethinking how well questions of purpose, audience, and genre have been addressed Peer Editing process for mechanics, content, purpose and audience Edit drafts for grammar, mechanics, and spelling Revise final draft in response to feedback from peers and teacher and publish written work for appropriate audiences</p>

Writing Process (Literary Texts)

<p>Student Essential Learning</p>	<p>Content</p>
<p>1. The students will write literary texts to express their ideas and feelings about real or imagined people, events, and ideas.</p>	<p>5 paragraph essay Narrative Compare and Contrast Cause and Effect Poetry Persuasive</p>

Descriptive Essay	
Mechanics of Writing	
Student Essential Learning	Content
1. The student will understand the function of and use the conventions of academic language when speaking and writing.	Verbs (perfect and progressive tenses) and participles Appositive phrases Adverbial and adjectival phrases and clauses Conjunctive adverbs Prepositions and prepositional phrases and their influence on subject-verb agreement Relative pronouns Subordinating conjunctions Transitions for sentence to sentence or paragraph to paragraph coherence Write complex sentences and differentiate between main versus subordinate clauses Use a variety of complete sentences (e.g., simple, compound, complex) that include properly placed modifiers, correctly identified antecedents, parallel structures, and consistent tenses Diagramming Clauses/Tenses/Moods
2. The student will write legibly and use appropriate capitalization and punctuation conventions in their compositions	Use conventions of capitalization Recognize and use punctuation marks Spell correctly, including using various resources to determine and check correct spellings D'Nealian Cursive
Research	
Student Essential Learning	Content
1. The student will ask open-ended research questions and develop a plan for answering them.	Brainstorm, consult with others, decide upon a topic, and formulate a major research question to address the major research topic Apply steps for obtaining and evaluating information from a wide variety of sources and create a written plan after preliminary research in reference works and additional text searches
2. The student will determine, locate, and explore the full range of relevant sources addressing a research question and systematically record the information they gather.	Follow the research plan to gather information from a range of relevant print and electronic sources using advanced search strategies Categorize information thematically in order to see the larger constructs inherent in the information Record bibliographic information Differentiate between paraphrasing and plagiarism and identify the importance of using valid and reliable sources Digital Note Taking
3. The student will clarify research questions and evaluate and synthesize collected information.	Narrow or broaden the major research question based on further research and investigation Determine the reliability and validity of the sources used Explain why one source is more useful and relevant than another
4. The student will organize and present their ideas and information according to the purpose of the research and their audience.	Draws conclusions and summarizes or paraphrases the findings in a systematic way Presents the findings in a meaningful format Follows accepted formats for integrating quotations and citations into the written text to maintain a flow of ideas

Applying Knowledge

Student Essential Learning	Content
1. The student will apply language arts and writing skills to presentations, technology and cross-curriculum projects.	Oral Presentations Newspaper Artistic Displays Exhibits Journaling and Free Writing Literature Response Notes Literary <u>Daybook</u>

7th Grade Math - Pre-Algebra

In alignment with the Texas Essential Knowledge and Skills for Middle School Students and National Council of Teachers of Mathematics Standards and Principles (NCTM)

Number, Operation, and Quantitative Reasoning

Student Essential Learning	Content
1. The student will understand that different forms of numbers are appropriate for different situations.	Compare and order rational numbers in various forms including integers, percents, and positive and negative fractions and decimals Select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships Approximate (mentally and with calculators) the value of irrational numbers as they arise from problem situations Express numbers in scientific notation, including negative exponents, in appropriate problem situations Compare and order real numbers with a calculator
2. The student will select and use appropriate operations to solve problems and justify solutions.	Select appropriate operations to solve problems involving rational numbers Use appropriate operations to solve problems involving rational numbers in problem situations Evaluate a solution for reasonableness use multiplication by a given constant factor (including unit rate) to represent and solve problems involving proportional relationships including conversions between measurement systems

Patterns, Relationships, and Algebraic Thinking

Student Essential Learning	Content
1. The student will identify proportional or non-proportional linear relationships in problem situations and solves problems.	Compare and contrast proportional and non-proportional linear relationships Estimate and find solutions to application problems involving percents and other proportional relationships such as similarity and rates
2. The student will use graphs, tables, and algebraic representations to make predictions and solve problems.	Predict, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations Find and evaluate an algebraic expression to determine any term in an arithmetic sequence (with a constant rate of change)

Geometry and Spatial Reasoning	
Student Essential Learning	Content
1. The student will use transformational geometry to develop spatial sense.	Generate similar figures using dilations including enlargements and reductions Graph dilations, reflections, and translations on a coordinate plane
2. The student will use geometry to model and describe the physical world	Draw three-dimensional figures from different perspectives Use pictures or models to demonstrate the Pythagorean Theorem Locate and name points on a coordinate plane using ordered pairs of rational numbers
Measurement	
Student Essential Learning	Content
1. The student will use procedures to determine measures of three-dimensional figures	Find lateral and total surface area of prisms, pyramids, and cylinders of two dimensional shapes Connect models of prisms, cylinders, pyramids, spheres, and cones to formulas for volume of these objects Estimate measurements and use formulas to solve application problems involving lateral and total surface area and volume
2. The student will use indirect measurement to solve problems.	Use the Pythagorean Theorem to solve real-life problems Use proportional relationships in similar two-dimensional figures or similar three-dimensional figures to find missing measurements
3. The student will describe how changes in dimensions affect linear, area, and volume measures	Describe the resulting effects on perimeter and area when dimensions of a shape are changed proportionally Describe the resulting effect on volume when dimensions of a solid are changed proportionally
Probability and Statistics	
Student Essential Learning	Content
1. The student will recognize that a physical or mathematical model (including geometric) can be used to describe the experimental and theoretical probability of real-life events.	Construct sample spaces for simple or composite experiments Find the probability of independent events Find the probabilities of a simple event and its complement and describe the relationship between the two
2. The student will use statistical procedures to describe data	Use variability and select the appropriate measure of central tendency to describe a set of data and justify the choice for a particular situation Draw conclusions and make predictions by analyzing trends in scatterplots Select and use an appropriate representation for presenting and displaying relationships among collected data
3. The student evaluates predictions and conclusions based on statistical data	Evaluate methods of sampling to determine validity of an inference made from a set of data Recognize misuses of graphical or numerical information and evaluate predictions and conclusions based on data analysis

8th Grade Math - Algebra I

In alignment with the Texas Essential Knowledge and Skills for Middle School Students and National Council of Teachers of Mathematics Standards and Principles (NCTM)

Foundations for Functions

Student Essential Learning	Content
1. The student will understand that a function represents a dependence of one quantity on another and can be described in a variety of ways.	Describe independent and dependent quantities in functional relationships Gather and record data and use data sets to determine functional relationships between quantities Describe functional relationships for given problem situations Write equations or inequalities Represent relationships among quantities using concrete models, tables, graphs, diagrams, verbal descriptions, equations, and inequalities Interpret and make decisions, predictions, and critical judgments from functional relationships
2. The student will use the properties and attributes of functions.	Identify and sketch the general forms of linear ($y = x$) and quadratic ($y = x^2$) parent functions Identify mathematical domains and ranges and determine reasonable domain and range values for given situations Interpret situations in terms of given graphs or creates situations that fit given graphs Collect and organize data, make and interpret scatterplots (including recognizing positive, negative, or no correlation for data approximating linear situations), and model, predict, and make decisions and critical judgments in problem situations
3. The student will understand how algebra can be used to express generalizations and recognizes and uses the power of symbols to represent situations.	Use symbols to represent unknowns and variables Look for patterns and represent generalizations algebraically
4. The student will understand the importance of the skills required to manipulate symbols in order to solve problems and uses the necessary algebraic skills required to simplify algebraic expressions and solve equations and inequalities in problem situations.	Find specific function values, simplify polynomial expressions, transform and solve equations, and factor as necessary in problem situations Use the commutative, associative, and distributive properties to simplify algebraic expressions Connect equation notation with function notation, such as $y = x + 1$ and $f(x) = x + 1$

Linear Functions

Student Essential Learning	Content
1. The student will understand that linear functions can be represented in different ways and translates among their various representations.	Determine whether or not given situations can be represented by linear functions Determine the domain and range for linear functions in given situations Use, translate, and make connections among algebraic, tabular, graphical, or verbal descriptions of linear functions
2. The student will understand the meaning of the slope and intercepts of the graphs of linear functions and zeros of linear functions and interprets and describes the effects of changes in parameters of linear functions in real-world and mathematical situations.	Develop the concept of slope as rate of change and determine slopes from graphs, tables, and algebraic representations Interpret the meaning of slope and intercepts in situations using data, symbolic representations, or graphs Investigate, describe, and predict the effects of changes in m and b on the graph of $y = mx + b$ Graph and write equations of lines given characteristics such as two points, a point and a slope, or a slope and y -intercept Determine the intercepts of the graphs of linear functions and zeros of linear functions from graphs, tables, and algebraic representations Interpret and predict the effects of changing slope and y -intercept in applied situations

	Relate direct variation to linear functions and solve problems involving proportional change
3. The student will formulate equations and inequalities based on linear functions, use a variety of methods to solve them, and analyze the solutions in terms of the situation.	Analyze situations involving linear functions and formulate linear equations or inequalities to solve problems Investigate methods for solving linear equations and inequalities using concrete models, graphs, and the properties of equality, select a method, and solve the equations and inequalities Interpret and determine the reasonableness of solutions to linear equations and inequalities
4. The student formulates systems of linear equations from problem situations, uses a variety of methods to solve them, and analyzes the solutions in terms of the situation.	analyze situations and formulate systems of linear equations in two unknowns to solve problems solve systems of linear equations using concrete models, graphs, tables, and algebraic methods interpret and determine the reasonableness of solutions to systems of linear equations
Quadratic and Other Non-Linear Functions	
Student Essential Learning	Content
1. The student will understand that the graphs of quadratic functions are affected by the parameters of the function and can interpret and describe the effects of changes in the parameters of quadratic functions.	Determine the domain and range for quadratic functions in given situations Investigate, describe, and predict the effects of changes in a on the graph of $y = ax^2 + c$ Investigate, describe, and predict the effects of changes in c on the graph of $y = ax^2 + c$ Analyze graphs of quadratic functions and draw conclusions
2. The student will understand there is more than one way to solve a quadratic equation and solves them using appropriate methods.	Solve quadratic equations using concrete models, tables, graphs, and algebraic methods Make connections among the solutions (roots) of quadratic equations, the zeros of their related functions, and the horizontal intercepts (x-intercepts) of the graph of the function
3. The student will understand there are situations modeled by functions that are neither linear nor quadratic and models the situations.	Use patterns to generate the laws of exponents and apply them in problem-solving situations Analyze data and represent situations involving inverse variation using concrete models, tables, graphs, or algebraic methods Analyze data and represent situations involving exponential growth and decay using concrete models, tables, graphs, or algebraic methods

Middle School History

In alignment with the Texas Essential Knowledge and Skills for Middle School Students and National History Standards by The National Center for History in the Schools.

Middle Ages	
Student Essential Learning	Content
1. The student will explore Middle Age topics, complete with written assignments, maps and art projects.	Early writings, art and religion Centers for learning/Monasteries Charlemagne Vikings Feudalism Manorial System Peasant Life and Nobility Norman Conquest Role of the Church as State The Crusades

	<p>Arab Civilization Cultural Revolution of the 12th century Towns and trade</p>
<p>2. The students will explore Renaissance topics, complete with written assignments, maps and art projects.</p>	<p>Patrons of Art, Architecture, and Literature The Medici Family Venice Leonardo Di Vinci/ Michelangelo Age of Exploration Growth of banking and commerce The Protestant Reformation England's "Golden Age"</p>

US History

Student Essential Learning	Content
<p>1. The student will understand traditional historical points of reference in U.S. history through 1877.</p>	<p>Identify the major eras and events in U.S. history through 1877, including colonization, revolution, drafting of the Declaration of Independence, creation and ratification of the Constitution, religious revivals such as the Second Great Awakening, early republic, the Age of Jackson, westward expansion, reform movements, sectionalism, Civil War, and Reconstruction, and describe their causes and effects</p> <p>Explain the significance of the following dates: 1607, founding of Jamestown; 1620, arrival of the Pilgrims and signing of the Mayflower Compact; 1776, adoption of the Declaration of Independence; 1787, writing of the U.S. Constitution; 1803, Louisiana Purchase; and 1861-1865, Civil War</p> <p>Identify reasons for European exploration and colonization of North America</p> <p>Compare political, economic, religious, and social reasons for the establishment of the 13 English colonies</p> <p>Explain the reasons for the growth of representative government and institutions during the colonial period</p> <p>Analyze the importance of the Mayflower Compact, the Fundamental Orders of Connecticut, and the Virginia House of Burgesses to the growth of representative government</p> <p>Analyze causes of the American Revolution, including the Proclamation of 1763, the Intolerable Acts, the Stamp Act, mercantilism, lack of representation in Parliament, and British economic policies following the French and Indian War</p> <p>Explain the roles played by significant individuals during the American Revolution</p> <p>Explain the issues surrounding important events of the American Revolution</p> <p>Explain the causes, important events, and effects of the War of 1812</p> <p>Identify the foreign policies of presidents Washington through Monroe and explain the impact of Washington's Farewell Address and the Monroe Doctrine</p> <p>Analyze the relationship between the concept of Manifest Destiny and the westward growth of the nation</p> <p>Explain the causes and effects of the U.S.-Mexican War and their impact on the United States</p> <p>Identify areas that were acquired to form the United States, including the Louisiana Purchase</p> <p>Analyze the impact of slavery on different sections of the United States</p>

	<p>Explain the roles played by significant individuals during the Civil War Explain the causes of the Civil War, including sectionalism, states' rights, and slavery Analyze Abraham Lincoln's ideas about liberty, equality, union, and government as contained in his first and second inaugural addresses and the Gettysburg Address</p>
Extensions and Projects	
Student Essential Learning	Content
<p>1. The students will complete projects including art extensions and research.</p>	<p>Small Group Seminar Discussions Socratic Seminary Current Events Geography Map skills Country studies Visual presentations Research papers Power Point Presentations</p>

7th Grade Science

In alignment with the Texas Essential Knowledge and Skills for Middle School Students and National Science Education Standards (1996) - Center for Science, Mathematics, and Engineering Education (CSMEE)

Scientific Investigation and Reasoning	
<i>Students will develop a rich knowledge of science and their natural world through different modes of scientific inquiry, formulating questions, ways of proposing explanations based on evidence derived from their work.</i>	
Student Essential Learning	Content
<p>1. The student will conduct lab and field investigations and use the scientific inquiry methods during lab and field investigations.</p>	<p>Plan and implement comparative investigations by making observations, asking well-defined questions and using appropriate equipment Design and implement experimental investigations Collect and record data Construct labeled drawings, writing and graphic organizers Construct tables and graphs Organize data and identify patterns Analyze data to formulate reasonable explanations Communicate valid conclusions supported by data Use data to predict trends Think critically and logically about relationships between evidence and explanations Communicate scientific arguments</p>

<p>2. The student will know how to use a variety of tools and equipment to conduct a science inquiry</p>	<p>Use appropriate tools to collect, record, and analyze information Correct and accurate use of equipment such as graduated cylinders, triple beam balances, metric rulers, metric tape measures, timing devices, hot plates, beakers, etc. Correct use of preventative safety equipment such as aprons, eye goggles and gloves</p>
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Matter and Energy

Students will understand that matter and energy are conserved throughout living systems

<p>Student Essential Learning</p>	<p>Content</p>
<p>1. The student will know that interactions occur between matter and energy.</p>	<p>Recognize that radiant energy from the sun is transformed into chemical energy through photosynthesis Energy in plants Soil composition Effects of sunlight on green plants</p>
<p>2. The student will know that matter has physical and chemical properties and can undergo physical and chemical changes.</p>	<p>Identify that organic compounds contain carbon and other elements such as hydrogen, oxygen, phosphorous, nitrogen and sulfur Distinguish between chemical and physical changes in the digestive system Recognize how large molecules are broken down into smaller molecules, such as carbohydrates can be broken down into sugars Sunlight, chlorophyll and the production of carbohydrates The components of biomass</p>

Force, Motion and Energy

Students will understand that force, motion and energy are observed in living systems and the environment in several ways.

<p>Student Essential Learning</p>	<p>Content</p>
<p>1. The students will know that there is a relationship between force, motion and energy.</p>	<p>Demonstrate and illustrate forces that affect motions in everyday life such as emergence of seedlings, turgor pressure, and geotropism Changing states of matter Measuring mass, volume and density of liquids, solids and gases</p>

Earth and Space

Students will understand that Earth and space phenomena can be observed in a variety of settings. Both natural events and human activities can impact Earth systems.

<p>Student Essential Learning</p>	<p>Content</p>
<p>1. The student will know that natural events and human activity can impact Earth.</p>	<p>Predict and describe how different types of catastrophic events impact ecosystems, such as floods, hurricanes, tornadoes and earthquakes Analyze the effects of weathering, erosion and deposition Changes over time in a small area Weather factors Water in the air: humidity and clouds Model the effects of human activity on groundwater and surface water in a water shed Water in soil The Edwards Aquifer</p>

Organisms and Environment

Students will understand the relationship between living organisms and their environment, that all organisms obtain energy, get rid of wastes, grow, and reproduce, and that all living organisms are made up of smaller units called cells.

Student Essential Learning	Content
1. The student will know there is a relationship between organisms and the environment.	Seed scarification and the controlled Soil composition Organisms that produce and consume
2. The student will know that living structures at all levels of organization demonstrate the complementary nature of structure and function.	Investigate and explain how internal structures of organisms have adaptations that allow specific functions such as gills in fish, hollow bones in birds, or xylem in plants Identify the main functions of the systems of the human organism, including the circulatory, respiratory, skeletal, muscular, digestive, excretory, reproductive, integumentary, nervous, and endocrine systems Recognize levels of organization in plants and animals, including cells, tissues, organs, organ systems, and organisms Differentiate between structure and function in plant and animal cell organelles, including cell membrane, cell wall, nucleus, cytoplasm, mitochondrion, chloroplast, and vacuole Compare the functions of a cell to the functions of organisms such as waste removal Recognize that according to cell theory all organisms are composed of cells and cells carry on similar functions such as extracting energy from food to sustain life

8th Grade Science

In alignment with the Texas Essential Knowledge and Skills for Middle School Students and National Science Education Standards (1996) - Center for Science, Mathematics, and Engineering Education (CSMEE)

Scientific Investigation and Reasoning
Students will develop a rich knowledge of science and their natural world through different modes of scientific inquiry, formulating questions, ways of proposing explanations based on evidence derived from their work. Students will use descriptive investigations and descriptive statistics in their lab work.

Student Essential Learning	Content
1. The student will conduct lab and field investigations and use the scientific inquiry methods during lab and field investigations. The students will use critical thinking, problem solving, and scientific reasoning to make informed decisions.	Plan and implement comparative investigations by making observations, asking well-defined questions and using appropriate equipment Design and implement experimental investigations Collect and record data Construct labeled drawings, writing and graphic organizers Construct tables and graphs Organize data and identify patterns Analyze data to formulate reasonable explanations Communicate valid conclusions supported by data Use data to predict trends Communicate scientific arguments Analyze, evaluate and critique scientific explanations

	<p>Use models to represent aspects of the natural world</p> <p>Identify advantages and limitations of models such as size, scale, properties and materials</p> <p>Relate the impact of research on scientific thought and society</p>
2. The student will know how to use a variety of tools and equipment to conduct a science inquiry.	<p>Use appropriate tools to collect, record, and analyze information</p> <p>Correct and accurate use of equipment such as graduated cylinders, triple beam balances, metric rulers, metric tape measures, timing devices, hot plates, beakers, etc.</p> <p>Correct use of preventative safety equipment such as aprons, eye goggles and gloves</p>
<p>Matter and Energy</p> <p><i>Students will understand that interactions occur between matter and energy.</i></p>	
Student Essential Learning	Content
1. The student will know that matter is composed of atoms and has chemical and physical properties.	<p>Describe the structure of atoms, including the masses, electrical charges, and locations, of protons and neutrons in the nucleus and electrons in the electron cloud</p> <p>John Dalton's Atomic Theory</p> <p>Identify that protons determine an element's identity and valence electrons determine its chemical properties, including reactivity</p> <p>Interpret the arrangement of the Periodic Table, including groups and periods</p> <p>Investigate how evidence of chemical reactions indicate that new substances with different properties are formed</p> <p>Balancing chemical equations</p> <p>Relative atomic and molecular mass</p> <p>Fluids and vacuums</p> <p>Identifies the chemical formulas for basic familiar compounds, including oxygen, water, hydrochloric acid, sodium chloride, carbon dioxide, carbon monoxide, and sulfuric acid.</p> <p>Differentiates between acids and bases.</p>
<p>Force, Motion and Energy</p> <p><i>Students will understand that force, motion and energy are observed in living systems and the environment in several ways.</i></p>	
Student Essential Learning	Content
1. The students will know that there is a relationship between force, motion and energy.	Demonstrate and calculate how unbalanced forces change the speed or direction of an object's motion
<p>Earth and Space</p> <p><i>Students will understand that Earth and space phenomena can be observed in a variety of settings. Both natural events and human activities can impact Earth systems.</i></p>	
Student Essential Learning	Content
1. The student will know characteristics of the universe and that natural events can impact Earth systems.	<p>Describe components of the universe</p> <p>Temperature and heat</p> <p>Specific heat</p> <p>Light, filters and color</p> <p>Sunlight and the spectrum</p>
<p>Organisms and Environment</p> <p><i>Students will understand the relationship between living organisms and their environment, that all organisms obtain energy, get rid of wastes, grow, and reproduce, and that all living organisms are made up of smaller units called cells.</i></p>	

Student Essential Learning	Content
1. The student will know there is a relationship between organisms and the environment.	Seed scarification and the controlled Soil composition Organisms that produce and consume
2. The student will know that living structures at all levels of organization demonstrate the complementary nature of structure and function.	Investigate and explain how internal structures of organisms have adaptations that allow specific functions such as gills in fish, hollow bones in birds, or xylem in plants Identify the main functions of the systems of the human organism, including the circulatory, respiratory, skeletal, muscular, digestive, excretory, reproductive, integumentary, nervous, and endocrine systems Recognize levels of organization in plants and animals, including cells, tissues, organs, organ systems, and organisms Differentiate between structure and function in plant and animal cell organelles, including cell membrane, cell wall, nucleus, cytoplasm, mitochondrion, chloroplast, and vacuole Compare the functions of a cell to the functions of organisms such as waste removal Recognize that according to cell theory all organisms are composed of cells and cells carry on similar functions such as extracting energy from food to sustain life Defines, understands, and graphically depicts specific hereditary definitions, including cell, nucleus, DNA, chromosomes, genes, traits, and human genome. Identifies specific traits which can be passed on from one generation to another in various living organisms.

Middle School Technology

Foundations			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 126.12(b)(2)(B)(F)	Types 30 words per minute	Typing Master	
Chpt. 126.12(b)(2)(B)	Uses proper keyboarding techniques such as correct hand and body positions and smooth and rhythmic keystroke patterns	Typing Master, Technology training	
Chpt. 126.12(b)(2)(C)	Demonstrates keyboarding techniques for alphabetic, numeric, punctuation, and symbol keys	Typing Master	
Chpt. 126.12(b)(1)(A)	Uses basic computer terminology and operating systems, software, applications and communication and networking components	Technology training	
Chpt. 126.12(b)(1)(B)	Compares, contrasts and appropriately uses various input, processing, output, and primary/secondary storage devices	Technology training, Research	

Middle School

MSSA Curriculum

Chpt. 126.12(b)(1)(C)	Demonstrates the ability to select and use software for a defined task according to quality, appropriateness, effectiveness, and efficiency	Research, Presentations, MSSA Library	
Chpt. 126.12(b)(1)(E)(F)	Understands functions of Microsoft Word; save and delete files, uses menu options and commands, creates MLA bibliographies and citations, and works with more than one software application	Microsoft Word training	
Chpt. 126.12(b)(1)(E)(F)	Understands functions of Microsoft Excel; creates bar, pie, and line charts	Microsoft Excel training	
Chpt. 126.12(b)(1)(E)(F)	Understands functions of Microsoft Power Point; creates and executes a complete Power Point presentation	Microsoft Power Point training	
Chpt. 126.12(b)(1)(E)(F)	Understands functions of Microsoft Publisher	Microsoft Publisher training	
Chpt. 126.12(b)(1)(E)	Uses networking terminology: online, network, password, hyperlink, keyword and access remote equipment on a network i.e. printer	Research, Technology training	
Chpt. 126.12(b)(2)(A)	Uses a variety of input devices such as mouse, keyboard, disk drive, microphone, digital camera, and printer	Typing Master, Research, library research, Technology training	
Chpt. 126.12(b)(2)(D) Chpt. 126.12(b)(7)(A)	Produces documents using Microsoft Word including proof reading and corrections	Microsoft Word training, Research	
Chpt. 126.12(b)(2)(E)	Uses language skills including capitalization, punctuation, spelling, word division, and use of numbers and symbols	Research, Technology training	
Chpt. 126.12(b)(1)(H)	Uses and understands terminology related to the Internet; e-mail, URLs, electronic bookmarks, WWW page, HTML	Technology training, MSSA Library	
Chpt. 126.12(b)(2)(D)	Creates digital timelines	Timeliner	
Chpt. 126.12(b)(3)(A)(B)	Understanding of internet usage and safety policies	Technology training, MSSA Library	
Chpt. 126.12(b)(3)(A)(B)(C)	Understands copyright law and models ethical acquisition and use of digital information, citing sources using established digital methods; understands consequences of copyright violations	Technology training, MSSA Library	
Chpt. 126.12(b)(3)(D)	Identifies the impact of technology applications on society through research, interviews, and personal observation	MSSA Library	
Chpt. 126.12(b)(3)(E)	Demonstrates knowledge of relevancy of technology to future careers, life-long learning, and daily living for individuals of all ages	MSSA Library	
Chpt. 126.12(b)(1)(E)	Understands functions and executes Glogster	MSSA Library	
Chpt. 126.12(b)(1)(E)	Understands and executes Animoto	MSSA Library	
Chpt. 126.12(b)(1)(E)	Understands and executes Prezi	MSSA Library	

Information Acquisition			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 126.12(b)(5)(A)	Identifies, maneuvers, and utilizes digital note taking, online dictionaries, thesauruses, and encyclopedias	MSSA Library	
Chpt. 126.12(b)(4)(A)(B)	Gathers information from internet/intranet resources using keyword searches and Boolean operators	Timeliner, Research, MSSA Library	
Chpt. 126.12(b)(5)(A)(B)	Book search using online database to locate fiction and non-fiction materials	MSSA Library	
Chpt. 126.12(b)(5)(C)	Uses online help	MSSA Library, Research	
Chpt. 126.12(b)(6)(A)	Resolves information conflicts and validates information through assessing, researching, and comparing data	MSSA Library, Research	
Chpt. 126.12(b)(6)(B)	Demonstrates the ability to identify the source, location, media type, relevancy, and content validity of available information	MSSA Library, Research	
Chpt. 126.12(b)(6)(A)(B)(C)	Utilizes Spanish websites	Spanish curriculum, Library research	
Chpt. 126.12(b)(6)(A)(B)(C)	Utilizes Athletics/ Health Curriculum websites	PE curriculum, Library research	
Chpt. 126.12(b)(6)(A)(B)(C)	Utilizes Music Curriculum websites	Music curriculum, Library research	
Communication			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 126.12(b)(10)(A)(B)	Uses productivity tools to create effective document files for defined audiences: slideshows, posters, multimedia presentations, newsletters, brochures, and reports	Research, Presentations, MSSA Library	
Chpt. 126.12(b)(10)(C)	Uses applications including spreadsheets and databases to develop charts and graphs by using data from various sources	Research	
Chpt. 126.12(b)(10)(D)(E)	Demonstrates appropriate usage of fonts, styles, sizes and effective use of graphics and page design to effectively communicate	Research, Presentations, MSSA Library	
Chpt. 126.12(b)(11)(A)(B)	Publishes information in a variety of media, i.e. printed copy, monitor display, stored files, or video	Research	
Chpt. 126.12(b)(12)(A)	Successfully evaluates websites based on accuracy, source, timelines, and credibility	MSSA Library	
Chpt. 126.12(b)(11)(C)	Uses telecommunication tools for publishing: Internet browsers, video conferencing (SKYPE) or distance learning	MSSA Library	

Chpt. 126.12(b)(12)(A)	Uses technology assessment tools to monitor progress i.e. checklists, timelines, database managers, daily/monthly planners, project management tools	Research, Peer assessment	
Chpt. 126.12(b)(12)(A)(B)(C)(D)	Employs technology specifications to evaluate projects for design, content delivery, purpose, and audience, demonstrating that a product can be evaluated using established criteria	Research, Peer assessment	
Problem Solving			
Standard(s)	Learning Outcome	Core Materials	Extension Materials
Chpt. 126.12(b)(7)(A)(B)(C)	Uses Microsoft Word to plan, create, and edit documents using readable fonts, alignment, page setup, tabs, and ruler settings	Research, Technology training	
Chpt. 126.12(b)(7)(A)(B)(C)	Uses Microsoft Excel to create and edit spreadsheets using all data types, formulas and functions, and chart information	Research, Technology training	
Chpt. 126.12(b)(7)(A)(B)(C)(E)	Creates and edits databases by defining fields, entering data, and designing layouts appropriate for reporting	Research, Presentations	
Chpt. 126.12(b)(7)(A)(B)(C)	Uses Microsoft Power Point to express ideas and solve problems	Research, Technology training, Presentations	
Chpt. 126.12(b)(7)(H)(I)(J)	Uses interactive virtual environments such as virtual reality or simulations	MSSA Library	
Chpt. 126.12(b)(7)(D)	Demonstrates proficiency in use of multimedia programs by creating projects incorporating text, audio, video, and graphics	Research, MSSA Library	
Chpt. 126.12(b)(8)(A)(B)(C)	Participates in electronic communities as learner, initiator, teacher/mentor and contributor	MSSA Library, Spanish Curriculum	
Chpt. 126.12(b)(8)(D)	Uses technology in self-directed activities by sharing products for defined audiences	Presentations	
Chpt. 126.12(b)(8)(E)	Integrates technology applications skills, strategies, and use of Word, Excel, telecommunications, draw, paint, and utility programs into the curricula	Research, Presentations	
Chpt. 126.12(b)(9)(A)	Design and implement procedures to track trends, set timelines, and review progress for continual improvement in process and product	MSSA Library, Timeliner	
Chpt. 126.12(b)(9)(B)	Resolve information conflicts and validate information through research and comparison data	MSSA Library	