

PROJECT LEARNING TREE
Pre Kindergarten Activities listed in PLT Curriculum Guide
Texas Early Childhood Standards

Correlation/Early Childhood Standards Students are expected to:	Activity
II. Language and Communication Domain	
II.A.1. Child shows understanding by responding appropriately. <ul style="list-style-type: none"> • responds to stories by asking and answering questions • makes comments related to the topic being discussed • responds before, during, and after stories read to the whole class, as well as responding when read to in a small group 	4, 13, 36, 87
II.A.2. Child shows understanding by following <ul style="list-style-type: none"> • two step oral directions and usually follows three-step directions • directions on a tape or CD to perform various movements, or gestures 	1, 13, 21, 22, 49, 62, 81
III. Emergent Literacy – Reading Domain	
III.A.1. Child engages in pre-reading and reading related activities. <ul style="list-style-type: none"> • repeats or “chimes in” on repeated parts of predictable stories • engages in acting out a read aloud during circle time or small-group instruction 	4, 22, 36, 62, 87
III.D.3. Child asks and answers appropriate questions about the book. <ul style="list-style-type: none"> • asks questions regarding the story or information in the text (“What just happened?”“What might happen next?” “What would happen if...?” “What was so silly about...?” “How did that work?”) • identifies the cover of the book and where to begin to read • discusses what the author and illustrator do • makes comments about the characters or actions within a story • actively participates while being read to by predicting what might happen next in the story • discusses other ways a story might end • discusses what might happen if different characters were in the story 	36, 87
IV. Emergent Literacy – Writing Domain	
IV.D.1. Child uses some appropriate writing conventions when writing or giving dictation. <ul style="list-style-type: none"> • dictates a story and, when finished, says, “the end” 	13, 21, 22

VI. Science Domain	
VI.A.1. Child describes, observes, and investigates properties and characteristics of common objects. <ul style="list-style-type: none"> • uses senses to explore and sensory language to describe properties of natural and human-made materials • sorts, groups, or classifies objects in meaningful ways based on one or more properties (hard/soft or heavy/light; materials that are made of – wood, plastic, rock, color) 	1, 2, 3 ,4, 22, 46, 54, 61, 63, 87
VI.B.1. Child identifies and describes the characteristics of organisms. <ul style="list-style-type: none"> • describes color, size, and shape of organisms • describes animals’ needs for food, water, air, and shelter or plants’ needs for water, nutrients, air, and light • compares differences and similarities of animals (fish live in water, dogs and cats have fur, all birds have feathers) • uses the tools of science (hand lens and measurement tools) to observe and discuss plants and animals 	1, 2, 6, 22, 46, 61, 62
VI.B.2. Child describes life cycles of organisms. <ul style="list-style-type: none"> • plants seeds, then observes • discusses, and records plant growth • differences between living and nonliving 	62
VI.B.3. Child recognizes, observes, and discusses the relationship of organisms to their environments. <ul style="list-style-type: none"> • observes, discusses, and records seasonal changes in the neighborhood trees and organisms (watches for birds in the spring as they collect nesting materials) 	2, 21
VI.C.1. Child identifies, compares, discusses earth materials, and their properties and uses. <ul style="list-style-type: none"> • observes, discusses, and compares earth materials (rocks, soil, and sand) using hand lenses, sieves, water, and balances • identifies the importance of soil, sunlight, air, and water to plant growth 	62, 63
VI.D.1. Child practices good habits of personal safety. <ul style="list-style-type: none"> • follows/uses safety procedures while using common tools and materials (glue, scissors, rulers, pencils, hammers, wood, safety goggles) 	1
VI.D.3. Child identifies good habits of nutrition and exercise. <ul style="list-style-type: none"> • identifies and discusses nutritious healthy snacks • participates in preparing healthy nutritious snacks 	1, 2, 13, 21, 62

VIII. Fine Arts Domain	
VIII.A.1. Child uses a variety of art materials and activities for sensory experience and exploration. <ul style="list-style-type: none"> • investigates with a variety of materials (crayons, paint, clay, markers) • manipulates modeling clay by rolling, pinching, squeezing, patting, and cutting • selects a variety of materials in the art center for exploration (painting with cotton swabs on paper) • comments on colors, shapes, space, textures, and objects in the environment 	1, 2, 4, 13, 21, 22, 36, 64
VIII.A.2. Child uses art as a form of creative self expression and representation. <ul style="list-style-type: none"> • uses a variety of materials to create art forms 	2, 21, 22, 64
VIII.B.1. Child participates in classroom music activities. <ul style="list-style-type: none"> • sings songs about concepts learned in the curriculum (singing about planting seeds when the theme is gardening, transportation songs, etc.) • creates own musical instruments using boxes, strings, rubber bands, and cans 	1, 2, 4, 49, 62, 79
VIII.B.2. Child responds to different musical styles through movement and play. <ul style="list-style-type: none"> • follows the beat using body and musical instruments (walks or jumps to the beat) 	1, 13, 21, 49, 63, 79
VIII.C.1. Child creates or recreates stories, moods, or experiences through dramatic representations. <ul style="list-style-type: none"> • engages in dramatic play with classmates (plays the part of different characters in a familiar book) • creates props to dramatize a story read aloud or represent mood 	22, 63, 79
IX. Physical Development Domain	
IX.A.2. Child coordinates sequence of movements to perform tasks participates in group games involving movement. <ul style="list-style-type: none"> • moves in rhythm to simple tunes and music patterns 	1, 2, 21

V. Mathematics Domain	
<p>V.C.1 Child names common shapes.</p> <ul style="list-style-type: none"> identifies shapes using her sense of touch when blindfolded (“This shape has 4 sides. It’s a square.”) identifies common shapes, such as circle, square, rectangle, triangle, and rhombus knows the number of sides form shapes, such as square, rectangle, triangle, and rhombus describes attributes of shapes using his own language uses mathematical vocabulary to describe shape pictures (“This triangle has 3 sides and 3 corners.”) identifies common solids 	1, 2
<p>V.C.2 Child creates shapes.</p> <ul style="list-style-type: none"> puts together shapes to make real-world objects and other shapes (using a square and a triangle to make a house) breaks apart shapes to make real - world objects and other shapes (cutting a house picture into a triangle and a square) creates new shapes by putting together 2 or more shapes to make a new shape (2 triangles together make a square) uses mathematical vocabulary to describe shapes pictures 	1
<p>V.E.1. Child sorts objects that are the same and different into groups and uses language to describe how the groups are similar and different.</p> <ul style="list-style-type: none"> sorts objects into groups and explains bases of grouping 	2, 6
<p>V.E.2. Child collects data and organizes it in a graphic representation.</p> <ul style="list-style-type: none"> places concrete objects or picture representations on a floor graph compares data on graphs or charts uses mathematical language to describe data (more, less, same, longer, shorter,) 	67
<p>V.E.3. Child recognizes and creates patterns.</p> <ul style="list-style-type: none"> identifies repeating patterns in nature 	1

PROJECT LEARNING TREE
Kindergarten Language Arts
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Language Arts Students are expected to:	Activity
K.4A predict what might happen next in text based on the cover, title, and illustrations	36, 87
K.4B ask and respond to questions about texts read aloud	36, 87
K.5A identify and use words that name actions, directions, positions, sequences, and locations	1, 55, 79
K.5C identify and sort pictures of objects into conceptual categories (e.g., colors, shapes, textures)	1, 13
K.6B discuss the big idea (theme) of a well-known folktale or fable and connect it to personal experience	18, 36
K.6D recognize recurring phrases and characters in traditional fairy tales, lullabies, and folktales from various cultures	18
K.7A respond to rhythm and rhyme in poetry through identifying a regular beat and similarities in word sounds	49
K.8A retell a main event from a story read aloud	18
K.8B describe characters in a story and the reasons for their actions	18, 36, 87
K.11A follow pictorial directions (e.g., recipes, science experiments)	87
K.11B identify the meaning of specific signs (e.g., traffic signs, warning signs)	87
K.13E share writing with others	2, 46, 95
K.14A dictate or write sentences to tell a story and put the sentences in chronological sequence	21, 46, 78, 79
K.14B write short poems	21, 54
K.21A listen attentively by facing speakers and asking questions to clarify information	13

PROJECT LEARNING TREE
Kindergarten Math
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Math Students are expected to:	Activity
K.2B name the ordinal positions in a sequence such as first, second, third, etc	25
K.8A describe and identify an object by its attributes using informal language	1, 21, 64
K.8C sort a variety of objects including two- and three-dimensional geometric figures according to their attributes and describe how the objects are sorted	1, 6
K.9A describe and compare the attributes of real-life objects such as balls, boxes, cans, and cones or models of three-dimensional geometric figures	1
K.9C describe, identify, and compare circles, triangles, rectangles, and squares (a special type of rectangle)	1
K.10A compare and order two or three concrete objects according to length (longer/shorter than, or the same)	1, 6, 41, 64
K.11A compare events according to duration such as more time than or less time than	27
K.12A construct graphs using real objects or pictures in order to answer questions	1, 22, 25, 41, 64, 65
K.12B use information from a graph of real objects or pictures in order to answer questions	1, 16, 22, 25
K.13A identify mathematics in everyday situations	4

PROJECT LEARNING TREE
Kindergarten Science
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Science Students are expected to:	Activity
K.1B discuss the importance of safe practices to keep self and others safe and healthy	87
K.1C demonstrate how to use, conserve, and dispose of natural resources and materials such as conserving water and reusing or recycling paper, plastic, and metal	36, 54
K.2A ask questions about organisms, objects, and events observed in the natural world	1, 13, 20, 22, 41, 43, 78
K.2C collect data and make observations using simple equipment such as hand lenses, primary balances, and non-standard measurement tools	1, 21, 22, 25, 41, 43, 46, 47, 61, 65, 67, 70
K.2D record and organize data and observations using pictures, numbers, and words	1, 21, 41, 43, 46, 47, 53, 61, 65, 67, 70, 78
K.3A identify and explain a problem such as the impact of littering on the playground and propose a solution in his/her own words	47
K.3B make predictions based on observable patterns in nature such as the shapes of leaves	1, 64
K.3C explore that scientists investigate different things in the natural world and use tools to help in their investigations	67
K.4A collect information using tools, including computers, hand lenses, primary balances, cups, bowls, magnets, collecting nets, and notebooks; timing devices, including clocks and timers; non-standard measuring items such as paper clips and clothespins; weather instruments such as demonstration thermometers and wind socks; and materials to support observations of habitats of organisms such as terrariums and aquariums	1, 25
K.4B use senses as a tool of observation to identify properties and patterns of organisms, objects, and events in the environment	3, 21, 61, 67
K.5A observe and record properties of objects, including relative size and mass, such as bigger or smaller and heavier or lighter, shape, color, and texture	1, 2
K.6A use the five senses to explore different forms of energy such as light, heat, and sound	4, 39
K.7C give examples of ways rocks, soil, and water are useful	70
K.8A observe and describe weather changes from day to day and over seasons	78
K.8B identify events that have repeating patterns, including seasons of the year and day and night	78

Correlation/TEKS Science Students are expected to:	Activity
K.9A differentiate between living and nonliving things based upon whether they have basic needs and produce offspring	21, 79
K.9B examine evidence that living organisms have basic needs such as food, water, and shelter for animals and air, water, nutrients, sunlight, and space for plants	21, 22, 27, 41, 46, 63
K.10A sort plants and animals into groups based on physical characteristics such as color, size, body covering, or leaf shape	6
K.10B identify parts of plants such as roots, stem, and leaves and parts of animals such as head, eyes, and limbs	16, 18, 41, 43, 61-63
K.10C identify ways that young plants resemble the parent plant	41, 43, 64
K.10D observe changes that are part of a simple life cycle of a plant: seed, seedling, plant, flower, and fruit	41, 65, 79

PROJECT LEARNING TREE
Kindergarten Social Studies
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Social Studies Students are expected to:	Activity
K.2B identify contributions of patriots and good citizens who have shaped the community	74
K.3A place events in chronological order	95
K.3B use vocabulary related to time and chronology, including before, after, next, first, last, yesterday, today, and tomorrow	95
K.4B locate places on the school campus and describe their relative locations	4
K.4C identify tools that aid in determining location, including maps and globes	54
K.5B identify how the human characteristics of place such as ways of earning a living, shelter, clothing, food, and activities are based upon geographic location	16, 55
K.6A identify basic human needs of food, clothing, and shelter	55
K.6C explain how basic human needs can be met such as through self-producing, purchasing, and trading	13
K.8A identify purposes for having rules	87
K.8B identify rules that provide order, security, and safety in the home and school	87
K.11B identify similarities and differences among people such as music, clothing, and food	20
K.12A describe and explain the importance of family customs and traditions	18
K.12B compare family customs and traditions	74
K.13B describe how technology helps accomplish specific tasks and meet people's needs	13
K.14A obtain information about a topic using a variety of valid oral sources such as conversations, interviews, and music	81, 95
K.14B obtain information about a topic using a variety of valid visual sources such as pictures, symbols, electronic media, print material, and artifacts	81
K.15A express ideas orally based on knowledge and experiences	21
K.15B create and interpret visuals, including pictures and maps	1, 21, 22, 55, 74, 81
K.16A use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution	49, 53, 54
K.16B use a decision-making process to identify a situation that requires a decision, gather information, generate options, predict outcomes, take action to implement a decision, and reflect on the effectiveness of the decision	39, 49, 53, 54

PROJECT LEARNING TREE
1st grade Language Arts
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Language Arts Students are expected to:	Activity
1.4A confirm predictions about what will happen next in text by "reading the part that tells"	87
1.4B ask relevant questions, seek clarification, and locate facts and details about stories and other texts	4, 87
1.6A identify words that name actions (verbs) and words that name persons, places, or things (nouns)	1, 55
1.6D identify and sort words into conceptual categories (e.g., opposites, living things)	1, 13, 62
1.7A connect the meaning of a well-known story or fable to personal experiences	4, 8, 18, 36
1.7B explain the function of recurring phrases (e.g., "Once upon a time" or "They lived happily ever after") in traditional folk and fairy tales	18
1.8A respond to and use rhythm, rhyme, and alliteration in poetry	49
1.9A describe the plot (problem and solution) and retell a story's beginning, middle, and end with attention to the sequence of events	18
1.9B describe characters in a story and the reasons for their actions and feelings	8, 18, 36, 87
1.10A determine whether a story is true or a fantasy and explain why	8, 18, 31, 87
1.11A recognize sensory details in literary text	8
1.14B identify important facts or details in text, heard or read	8
1.15A follow written multi-step directions with picture cues to assist with understanding	51, 77
1.15B explain the meaning of specific signs and symbols (e.g., map features)	87
1.17E publish and share writing with others	24
1.18A write brief stories that include a beginning, middle, and end	4, 21, 24, 46, 78, 79
1.18B write short poems that convey sensory details	21, 54
1.24C record basic information in simple visual formats (e.g., notes, charts, picture graphs, diagrams)	95
1.26A create a visual display or dramatization to convey the results of the research	95
1.27A listen attentively to speakers and ask relevant questions to clarify information	13

PROJECT LEARNING TREE
1st grade Math
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Math Students are expected to:	Activity
1.6A describe and identify two-dimensional geometric figures, including circles, triangles, rectangles, and squares (a special type of rectangle)	1
1.6C describe and identify two- and three-dimensional geometric figures in order to sort them according to a given attribute using informal and formal language	1
1.7A estimate and measure length using nonstandard units such as paper clips or sides of color tiles	41, 64, 65, 67, 70, 77
1.7B compare and order two or more concrete objects according to length (from longest to shortest	41, 64
1.7G compare and order two or more objects according to relative temperature (from hottest to coldest)	48
1.9A collect and sort data	1, 6, 16, 25, 27, 36 41, 48, 64, 65, 67, 70, 77
1.9B use organized data to construct real-object graphs, picture graphs, and bar-type graphs	1, 22, 25, 27, 36 41, 48, 64, 77
1.10A draw conclusions and answer questions using information organized in real-object graphs, picture graphs, and bar-type graphs	1, 22, 25, 27, 41, 48, 64, 77
1.11A identify mathematics in everyday situations	4, 16
1.12A explain and record observations using objects, words, pictures, numbers, and technology	1, 4, 16, 21, 25, 27, 49, 64, 65, 67, 70, 77

PROJECT LEARNING TREE
1st grade Science
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Science Students are expected to:	Activity
1.1B recognize the importance of safe practices to keep self and others safe and healthy	87
1.1C identify and learn how to use natural resources and materials, including conservation and reuse or recycling of paper, plastic, and metals	13, 30, 31, 32, 36, 51
1.2A ask questions about organisms, objects, and events during observations and investigations	1, 3, 20, 22, 41, 43, 48, 64, 76-78
1.2B plan and conduct simple descriptive investigations such as ways objects move	77
1.2C collect data from observations using simple equipment such as hand lenses, primary balances, thermometers, and non-standard measurement tools	1, 22, 25, 41, 43, 46-48, 61, 65, 67, 70, 77
1.2D record and organize data using pictures, numbers, and words	1, 21, 24, 25, 41, 43, 46, 47, 53, 61, 65, 67, 70, 77, 78
1.2E communicate observations and provide reasons for explanations using student-generated data from simple descriptive investigations	24
1.3A identify and explain a problem such as finding a home for a classroom pet and propose a solution in his/her own words	31, 47
1.3B make predictions based on observable patterns	1, 64
1.3C describe what scientists do	24, 67
1.4A collect, record, and compare information using tools, including computers, hand lenses, primary balances, cups, bowls, magnets, collecting nets, notebooks, and safety goggles; timing devices, including clocks and timers; non-standard measuring items such as paper clips and clothespins; weather instruments such as classroom demonstration thermometers and wind socks; and materials to support observations of habitats of organisms such as aquariums and terrariums	1, 21, 46, 76
1.4B measure and compare organisms and objects using non-standard unit	21, 61, 64, 67, 77
1.5A classify objects by observable properties of the materials from which they are made such as larger and smaller, heavier and lighter, shape, color, and texture	1, 2
1.6A identify and discuss how different forms of energy such as light, heat, and sound are important to everyday life	4, 39
1.7A observe, compare, describe, and sort components of soil by size, texture, and color	41, 48, 70
1.8A record weather information, including relative temperature, such as hot or cold, clear or cloudy, calm or windy, and rainy or icy	48

1.8C identify characteristics of the seasons of the year and day and night	78
1.8D demonstrate that air is all around us and observe that wind is moving air	48
1.9A sort and classify living and nonliving things based upon whether or not they have basic needs and produce offspring	21, 27, 41, 48, 63, 79
1.9B analyze and record examples of interdependence found in various situations such as terrariums and aquariums or pet and caregiver	8, 22
1.9C gather evidence of interdependence among living organisms such as energy transfer through food chains and animals using plants for shelter	6, 8, 18, 21, 22, 24, 25, 46
1.10A investigate how the external characteristics of an animal are related to where it lives, how it moves, and what it eats	6, 25
1.10B identify and compare the parts of plants	2, 16, 41, 43, 61-63, 65

PROJECT LEARNING TREE
1st grade Social Studies
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Social Studies Students are expected to:	Activity
1.3A distinguish among past, present, and future	95
1.3C create a calendar and simple timeline	76, 95
1.5A create and use simple maps such as maps of the home, classroom, school, and community	30, 74
1.6A identify and describe the physical characteristics of place such as landforms, bodies of water, natural resources, and weather	20, 55, 61
1.6B identify examples of and uses for natural resources in the community, state, and nation	13, 20, 30
1.7A describe ways that families meet basic human needs	55
1.7B describe similarities and differences in ways families meet basic human needs	20, 55
1.8A identify examples of goods and services in the home, school, and community	13
1.10B describe how specialized jobs contribute to the production of goods and services	13
1.11A explain the purpose for rules and laws in the home, school, and community	74, 87
1.11B identify rules and laws that establish order, provide security, and manage conflict	74, 87
1.12A identify the responsibilities of authority figures in the home, school, and community	74
1.12B identify and describe the roles of public officials in the community, state, and nation	74
1.12C identify and describe the role of a good citizen in maintaining a constitutional republic	74
1.13A identify characteristics of good citizenship, including truthfulness, justice, equality, respect for oneself and others, responsibility in daily life, and participation in government by educating oneself about the issues, respectfully holding public officials to their word, and voting	36, 74
1.13C identify other individuals who exemplify good citizenship	74
1.15A describe and explain the importance of various beliefs, customs, language, and traditions of families and communities	18, 74
1.15B explain the way folktales and legends such as Aesop's fables reflect beliefs, customs, language, and traditions of communities	18
1.16A describe how technology changes the ways families live	53, 95
1.16B describe how technology changes communication, transportation, and recreation	53, 95
1.16C describe how technology changes the way people work	95
1.17A obtain information about a topic using a variety of valid oral sources such as conversations, interviews, and music	54, 81, 95

1.17B obtain information about a topic using a variety of valid visual sources such as pictures, symbols, electronic media, maps, literature, and artifacts	39, 49, 53, 81, 95
1.18A express ideas orally based on knowledge and experiences	21, 31, 39, 49, 53 74, 77, 81
1.18B create and interpret visual and written material	18, 21, 22, 31, 39, 49, 53-55, 74, 77, 81, 95
1.19A use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution	4, 31, 49, 53, 54
1.19B use a decision-making process to identify a situation that requires a decision, gather information, generate options, predict outcomes, take action to implement a decision, and reflect on the effectiveness of that decision	53

PROJECT LEARNING TREE
2nd grade Language Arts
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Language Arts Students are expected to:	Activity
2.3A use ideas (e.g., illustrations, titles, topic sentences, key words, and foreshadowing) to make and confirm predictions	87, 89
2.3B ask relevant questions, seek clarification, and locate facts and details about stories and other texts and support answers with evidence from text	4, 87
2.6A identify moral lessons as themes in well-known fables, legends, myths, or stories	4, 8, 18, 89
2.6B compare different versions of the same story in traditional and contemporary folktales with respect to their characters, settings, and plot	18
2.7A describe how rhyme, rhythm, and repetition interact to create images in poetry	49
2.9B describe main characters in works of fiction, including their traits, motivations, and feelings	8, 18, 87
2.10A distinguish between fiction and nonfiction	8, 18, 87
2.11A recognize that some words and phrases have literal and non-literal meanings (e.g., take steps)	8
2.14B locate the facts that are clearly stated in a text	13
2.14C describe the order of events or ideas in a text	8
2.15A follow written multi-step directions	51, 77
2.18A write brief stories that include a beginning, middle, and end	4, 8, 21, 24, 46, 78, 79, 89
2.18B write short poems that convey sensory details	21, 54
2.25C record basic information in simple visual formats (e.g., notes, charts, picture graphs, diagrams)	95
2.27A create a visual display or dramatization to convey the results of the research	95
2.28A listen attentively to speakers and ask relevant questions to clarify information	13

PROJECT LEARNING TREE
2nd grade Math
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Math Students are expected to:	Activity
2.7B use attributes to describe how 2 two-dimensional figures or 2 three-dimensional geometric figures are alike or different	1
2.9A identify concrete models that approximate standard units of length and use them to measure length	21, 41, 65, 67, 77
2.10A read a thermometer to gather data	48, 49
2.11A construct picture graphs and bar-type graphs	1, 16, 21, 22, 25, 27 41, 77
2.11B draw conclusions and answer questions based on picture graphs and bar-type graphs	1, 16, 22, 25, 27 41, 49, 77
2.12A identify the mathematics in everyday situations	4, 16
2.13A explain and record observations using objects, words, pictures, numbers, and technology	1, 4, 16, 21, 25, 27, 48 65, 67, 77
2.13B relate informal language to mathematical language and symbols	49

PROJECT LEARNING TREE
2nd grade Science
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Science Students are expected to:	Activity
2.1B describe the importance of safe practices	87
2.1C identify and demonstrate how to use, conserve, and dispose of natural resources and materials such as conserving water and reuse or recycling of paper, plastic, and metal	13, 15, 36, 51, 89
2.2A ask questions about organisms, objects, and events during observations and investigations	1-3, 20, 22, 24 41, 43, 64, 68, 76-78
2.2B plan and conduct descriptive investigations such as how organisms grow	65, 77
2.2C collect data from observations using simple equipment such as hand lenses, primary balances, thermometers, and non-standard measurement tools	1, 21, 22, 24, 41, 43, 46-48, 61, 65, 67, 70, 77
2.2D record and organize data using pictures, numbers, and words	1, 21, 24, 25, 41, 43, 46-48, 61, 65, 67, 70, 77
2.3A identify and explain a problem in his/her own words and propose a task and solution for the problem such as lack of water in a habitat	31
2.3C identify what a scientist is and explore what different scientists do	24, 67
2.4A collect, record, and compare information using tools, including computers, hand lenses, rulers, primary balances, plastic beakers, magnets, collecting nets, notebooks, and safety goggles; timing devices, including clocks and stopwatches; weather instruments such as thermometers, wind vanes, and rain gauges; and materials to support observations of habitats of organisms such as terrariums and aquariums	1, 76
2.4B measure and compare organisms and objects using non-standard units that approximate metric units	21, 67, 77
2.5A classify matter by physical properties, including shape, relative mass, relative temperature, texture, flexibility, and whether material is a solid or liquid	1
2.7C distinguish between natural and manmade resources	15, 89
2.8A measure, record, and graph weather information, including temperature, wind conditions, precipitation, and cloud coverage, in order to identify patterns in the data	48
2.8B identify the importance of weather and seasonal information to make choices in clothing, activities, and transportation	78
2.9A identify the basic needs of plants and animals	41, 46, 62, 63, 77

2.9B identify factors in the environment, including temperature and precipitation, that affect growth and behavior such as migration, hibernation, and dormancy of living things	27, 76, 77
2.9C compare and give examples of the ways living organisms depend on each other and on their environments such as food chains within a garden, park, beach, lake, and wooded area	6, 8, 21, 22, 24, 25, 46, 47
2.10A observe, record, and compare how the physical characteristics and behaviors of animals help them meet their basic needs such as fins help fish move and balance in the water	6, 25
2.10B observe, record, and compare how the physical characteristics of plants help them meet their basic needs such as stems carry water throughout the plant	41, 62, 63, 65, 76, 77

PROJECT LEARNING TREE
2nd grade Social Studies
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Social Studies Students are expected to:	Activity
2.2A describe the order of events by using designations of time periods such as historical and present times	76, 95
2.2B apply vocabulary related to chronology, including past, present, and future	95
2.2C create and interpret timelines for events in the past and present	76, 95
2.4C explain how people and events have influenced local community history	74
2.5B create maps to show places and routes within the home, school, and community	30, 74
2.7B describe how natural resources and natural hazards affect activities and settlement patterns	30, 49
2.7C explain how people depend on the physical environment and natural resources to meet basic needs	49, 55
2.7D identify the characteristics of different communities, including urban, suburban, and rural, and how they affect activities and settlement patterns	20, 55, 74
2.8A identify ways in which people have modified the physical environment such as building roads, clearing land for urban development and agricultural use, and drilling for oil	30, 49, 95
2.8B identify positive and negative consequences of human modification of the physical environment such as the use of irrigation to improve crop yields	30, 49, 95
2.8C identify ways people can conserve and replenish natural resources	15, 30, 49, 51
2.10C examine the development of a product from a natural resource to a finished product	13, 15
2.11B identify governmental services in the community such as police and fire protection, libraries, schools, and parks and explain their value to the community	32, 74, 81
2.12A name current public officials, including mayor, governor, and president	74
2.12B compare the roles of public officials, including mayor, governor, and president	74
2.13A identify characteristics of good citizenship, including truthfulness, justice, equality, respect for oneself and others, responsibility in daily life, and participation in government by educating oneself about the issues, respectfully holding public officials to their word, and voting	36, 74
2.13C identify other individuals who exemplify good citizenship	74
2.13D identify ways to actively practice good citizenship, including involvement in community service	31, 36, 74
2.15A identify selected stories, poems, statues, paintings, and other examples of the local cultural heritage	18
2.15B explain the significance of selected stories, poems, statues, paintings, and other examples of the local cultural heritage	18
2.16A identify the significance of various ethnic and/or cultural celebrations	18, 74

2.16B compare ethnic and/or cultural celebrations	18, 20, 74
2.17A describe how science and technology change communication, transportation, and recreation	53
2.17B explain how science and technology change the ways in which people meet basic needs	53
2.18A obtain information about a topic using a variety of valid oral sources such as conversations, interviews, and music	53, 54, 81, 95
2.18B obtain information about a topic using a variety of valid visual sources such as pictures, maps, electronic sources, literature, reference sources, and artifacts	39, 49, 53, 95
2.18C use various parts of a source, including the table of contents, glossary, and index, as well as keyword Internet searches to locate information	53
2.18D sequence and categorize information	53
2.18E interpret oral, visual, and print material by identifying the main idea, predicting, and comparing and contrasting.	53
2.19A express ideas orally based on knowledge and experiences	21, 31, 39, 49, 53, 74, 77, 81
2.19B create written and visual material such as stories, poems, maps, and graphic organizers to express ideas	18, 21, 22, 31, 39, 49, 53-55, 74, 77, 81, 95
2.20A use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution	4, 31, 49, 53, 54
2.20B use a decision-making process to identify a situation that requires a decision, gather information, generate options, predict outcomes, take action to implement a decision, and reflect on the effectiveness of that decision	53

PROJECT LEARNING TREE
3rd grade Language Arts
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Language Arts Students are expected to:	Activity
3.2A use ideas (e.g., illustrations, titles, topic sentences, key words, and foreshadowing clues) to make and confirm prediction	87, 89
3.2B ask relevant questions, seek clarification, and locate facts and details about stories and other texts and support answers with evidence from text	4, 87
3.5A paraphrase the themes and supporting details of fables, legends, myths, or stories	4, 8, 18, 89
3.5B compare and contrast the settings in myths and traditional folktales	18
3.6A describe the characteristics of various forms of poetry and how they create imagery (e.g., narrative poetry, lyrical poetry, humorous poetry, free verse)	5
3.8B describe the interaction of characters including their relationships and the changes they undergo	18
3.10A identify language that creates a graphic visual experience and appeals to the senses	4, 8, 89
3.13B draw conclusions from the facts presented in text and support those assertions with textual evidence	13
3.13C identify explicit cause and effect relationships among ideas in text	8
3.13D use text features (e.g., bold print, captions, key words, italics) to locate information and make and verify predictions about contents of text	7
3.15A follow and explain a set of written multi-step directions	51, 77
3.15B locate and use specific information in graphic features of text	7
3.18A write imaginative stories that build the plot to a climax and contain details about the characters and setting	4, 8, 18, 21, 24, 78, 79, 89
3.18B write poems that convey sensory details using the conventions of poetry (e.g., rhyme, meter, patterns of verse)	5, 21, 54
3.19A write about important personal experiences	2, 76
3.20Aii write brief composition that includes supporting sentences with simple facts, details, and explanations	49
3.20B write letters whose language is tailored to the audience and purpose (e.g., a thank you note to a friend) and that use appropriate conventions (e.g., date, salutation, closing)	7
3.26A follow the research plan to collect information from multiple sources of information, both oral and written	7
3.26C take simple notes and sort evidence into provided categories or an organizer	95
3.29A listen attentively to speakers, ask relevant questions, and make pertinent comments	5, 13

PROJECT LEARNING TREE
3rd grade Math
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Math Students are expected to:	Activity
3.9C identify lines of symmetry in two-dimensional geometric figures	1
3.11A use linear measurement tools to estimate and measure lengths using standard units	4, 21, 41, 65, 67, 77
3.11B use standard units to find the perimeter of a shape	21
3.12A use a thermometer to measure temperature	48, 49
3.13A collect, organize, record, and display data in pictographs and bar graphs where each picture or cell might represent more than one piece of data	1, 16, 22, 25, 27, 41, 49, 65, 77
3.13B interpret information from pictographs and bar graphs	1, 16, 22, 25, 27, 41, 49, 77
3.14A identify the mathematics in everyday situations	4, 16, 53
3.14B solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness	53
3.14C select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem	53
3.15A explain and record observations using objects, words, pictures, numbers, and technology	4, 16, 21, 25, 27, 48, 49, 65, 67, 77

PROJECT LEARNING TREE
3rd grade Science
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Science Students are expected to:	Activity
3.1A demonstrate safe practices as described in the Texas Safety Standards during classroom and outdoor investigations, including observing a schoolyard habitat	87
3.1B make informed choices in the use and conservation of natural resources by recycling or reusing materials such as paper, aluminum cans, and plastics	13, 15, 36, 51, 89
3.2A plan and implement descriptive investigations, including asking and answering questions, making inferences, and selecting and using equipment or technology needed, to solve a specific problem in the natural world	4, 41
3.2B collect data by observing and measuring using the metric system and recognize differences between observed and measured data	41, 77
3.2C construct maps, graphic organizers, simple tables, charts, and bar graphs using tools and current technology to organize, examine, and evaluate measured data	1, 21, 48, 65, 67, 70, 77
3.2D analyze and interpret patterns in data to construct reasonable explanations based on evidence from investigations	48, 65, 67, 70
3.2F communicate valid conclusions supported by data in writing, by drawing pictures, and through verbal discussion	77
3.3D connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists	34, 67
3.4A collect, record, and analyze information using tools, including microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, wind vanes, rain gauges, pan balances, graduated cylinders, beakers, spring scales, hot plates, meter sticks, compasses, magnets, collecting nets, notebooks, sound recorders, and Sun, Earth, and Moon system models; timing devices, including clocks and stopwatches; and materials to support observation of habitats of organisms such as terrariums and aquariums	1, 21, 22, 24, 43, 46, 61, 67, 76
3.4B use safety equipment as appropriate, including safety goggles and gloves	78
3.6A explore different forms of energy, including mechanical, light, sound, and heat/thermal in everyday life	4, 39
3.7A explore and record how soils are formed by weathering of rock and the decomposition of plant and animal remains	70
3.7D explore the characteristics of natural resources that make them useful in products and materials such as clothing and furniture and how resources may be conserved	15, 39, 89
3.8A observe, measure, record, and compare day-to-day weather changes in different locations at the same time that include air temperature, wind direction, and precipitation	48

3.9A observe and describe the physical characteristics of environments and how they support populations and communities within an ecosystem	7, 8, 20, 47, 48
3.9B identify and describe the flow of energy in a food chain and predict how changes in a food chain affect the ecosystem such as removal of frogs from a pond or bees from a field	8, 24
3.9C describe environmental changes such as floods and droughts where some organisms thrive and others perish or move to new locations	47, 77, 80
3.10A explore how structures and functions of plants and animals allow them to survive in a particular environment	2, 6, 25, 41, 61-63, 77
3.10B explore that some characteristics of organisms are inherited such as the number of limbs on an animal or flower color and recognize that some behaviors are learned in response to living in a certain environment such as animals using tools to get food	6, 18
3.10C investigate and compare how animals and plants undergo a series of orderly changes in their diverse life cycles such as tomato plants, frogs, and lady bugs	65, 79

PROJECT LEARNING TREE
3rd grade Social Studies
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Social Studies Students are expected to:	Activity
3.2A identify reasons people have formed communities, including a need for security, religious freedom, law, and material well-being	74
3.2B identify ways in which people in the local community and other communities meet their needs for government, education, communication, transportation, and recreation	74
3.2C compare ways in which various other communities meet their needs	74
3.3A use vocabulary related to chronology, including past, present, and future times	53, 95
3.3B create and interpret timelines	76, 95
3.3C apply the terms year, decade, and century to describe historical times	76, 95
3.4A describe and explain variations in the physical environment, including climate, landforms, natural resources, and natural hazards	30
3.4B identify and compare how people in different communities adapt to or modify the physical environment in which they live such as deserts, mountains, wetlands, and plains	20, 55
3.4D describe the effects of human processes such as building new homes, conservation, and pollution in shaping the landscape	30, 49, 55, 95
3.4E identify and compare the human characteristics of various regions	20
3.9A describe the basic structure of government in the local community, state, and nation	74
3.9B identify local, state, and national government officials and explain how they are chosen	74
3.9C identify services commonly provided by local, state, and national governments	74, 81
3.11A identify characteristics of good citizenship, including truthfulness, justice, equality, respect for oneself and others, responsibility in daily life, and participation in government by educating oneself about the issues, respectfully holding public officials to their word, and voting	36, 74
3.11C identify and explain the importance of individual acts of civic responsibility, including obeying laws, serving the community, serving on a jury, and voting	36, 74
3.12A give examples of community changes that result from individual or group decisions	31, 74
3.12B identify examples of actions individuals and groups can take to improve the community	31, 74
3.12C identify examples of nonprofit and/or civic organizations such as the Red Cross and explain how they serve the common good	74
3.13A explain the significance of various ethnic and/or cultural celebrations in the local community and other communities	18, 20, 74
3.13B compare ethnic and/or cultural celebrations in the local community with other communities	18, 20, 74

3.17A research information, including historical and current events, and geographic data, about the community and world, using a variety of valid print, oral, visual, and Internet resources	36, 49, 53, 95
3.17B sequence and categorize information	49, 53
3.17C interpret oral, visual, and print material by identifying the main idea, distinguishing between fact and opinion, identifying cause and effect, and comparing and contrasting	49, 53
3.17E interpret and create visuals, including graphs, charts, tables, timelines, illustrations, and maps	22, 36, 39, 49, 53-55
3.18A express ideas orally based on knowledge and experiences	5, 21, 31, 39, 49, 53, 74, 77, 81
3.18B use technology to create written and visual material such as stories, poems, pictures, maps, and graphic organizers to express ideas	5, 18, 21, 22, 31, 39, 49, 53-55, 74, 77, 81, 95
3.19A use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution	4, 31, 49, 53, 54
3.19B use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision	53

PROJECT LEARNING TREE
4th grade Language Arts
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Language Arts Students are expected to:	Activity
4.3A summarize and explain the lesson or message of a work of fiction as its theme	18, 89
4.3B compare and contrast the adventures or exploits of characters (e.g., the trickster) in traditional and classical literature	18
4.4A explain how the structural elements of poetry (e.g., rhyme, meter, stanzas, line breaks) relate to form (e.g., lyrical poetry, free verse)	5
4.6B describe the interaction of characters including their relationships and the changes they undergo	18
4.6C identify whether the narrator or speaker of a story is first or third person	90
4.7A identify similarities and differences between the events and characters' experiences in a fictional work and the actual events and experiences described in an author's biography or autobiography	90
4.8A identify the author's use of similes and metaphors to produce imagery	8, 89
4.10A explain the difference between a stated and an implied purpose for an expository text	90
4.11D use multiple text features (e.g., guide words, topic and concluding sentences) to gain an overview of the contents of text and to locate information	7, 11
4.13A determine the sequence of activities needed to carry out a procedure (e.g., following a recipe)	41, 42, 51, 77
4.13B explain factual information presented graphically (e.g., charts, diagrams, graphs, illustrations)	7, 9, 16
4.16A write imaginative stories that build the plot to a climax and contain details about the characters and setting	4, 8, 18, 21, 24, 78, 79, 89
4.16B write poems that convey sensory details using the conventions of poetry (e.g., rhyme, meter, patterns of verse)	5, 21, 44, 54
4.17A write about important personal experiences	2, 76
4.18Aii create brief compositions that include supporting sentences with simple facts, details, and explanations	49
4.18B write letters whose language is tailored to the audience and purpose (e.g., a thank you note to a friend) and that use appropriate conventions (e.g., date, salutation, closing)	7, 9, 54
4.23A generate research topics from personal interests or by brainstorming with others, narrow to one topic, and formulate open-ended questions about the major research topic	11
4.23B generate a research plan for gathering relevant information (e.g., surveys, interviews, encyclopedias) about the major research question	11, 41
4.24A follow the research plan to collect information from multiple sources of information both oral and written	7, 58
4.24C take simple notes and sort evidence into provided categories or an organizer	45, 58, 95
4.27A listen attentively to speakers, ask relevant questions, and make pertinent comments	5, 13

PROJECT LEARNING TREE
4th grade Math
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Math Students are expected to:	Activity
4.2A use concrete objects and pictorial models to generate equivalent fractions	66, 67
4.3A use addition and subtraction to solve problems involving whole numbers	38, 73
4.3B add and subtract decimals to the hundredths place using concrete objects and pictorial models	66, 67
4.11A estimate and use measurement tools to determine length (including perimeter), area, capacity and weight/mass using standard units SI (metric) and customary	4, 21, 41, 65-67, 77
4.11C use concrete models of standard cubic units to measure volume	66
4.12A use a thermometer to measure temperature and changes in temperature	48, 49
4.13A use concrete objects or pictures to make generalizations about determining all possible combinations of a given set of data or of objects in a problem situation	25, 27
4.13B interpret bar graphs	16, 22, 25, 27, 41
4.14A identify the mathematics in everyday situations	4, 16, 38, 53
4.14B solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness	53
4.14C select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem	53
4.14D use tools such as real objects, manipulatives, and technology to solve problems	53
4.15A explain and record observations using objects, words, pictures, numbers, and technology	4, 16, 21, 25, 27, 48, 49, 65-67, 77

PROJECT LEARNING TREE
4th grade Science
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Science Students are expected to:	Activity
4.1B make informed choices in the use and conservation of natural resources and reusing and recycling of materials such as paper, aluminum, glass, cans, and plastic	13-15, 36, 38, 51, 89
4.2A plan and implement descriptive investigations, including asking well-defined questions, making inferences, and selecting and using appropriate equipment or technology to answer his/her questions	4, 41, 77
4.2B collect and record data by observing and measuring, using the metric system, and using descriptive words and numerals such as labeled drawings, writing, and concept maps	9, 23, 24, 41, 65-67, 70, 77
4.2C construct simple tables, charts, bar graphs, and maps using tools and current technology to organize, examine, and evaluate data	9, 21, 48, 65-67, 70, 77, 80
4.2D analyze data and interpret patterns to construct reasonable explanations from data that can be observed and measured	48, 65, 70, 77
4.2F communicate valid, oral, and written results supported by data	9, 24, 77
4.3D connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists	34, 67
4.4A collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, mirrors, spring scales, pan balances, triple beam balances, graduated cylinders, beakers, hot plates, meter sticks, compasses, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observation of habitats of organisms such as terrariums and aquariums	21-24, 43, 46, 61, 66, 67, 73, 76
4.4B use safety equipment as appropriate, including safety goggles and gloves	77, 78
4.6A differentiate among forms of energy, including mechanical, sound, electrical, light, and heat/thermal	4, 39, 73
4.7A examine properties of soils, including color and texture, capacity to retain water, and ability to support the growth of plants	41, 44, 48, 69, 70
4.7B observe and identify slow changes to Earth's surface caused by weathering, erosion, and deposition from water, wind, and ice	44
4.7C identify and classify Earth's renewable resources, including air, plants, water, and animals; and nonrenewable resources, including coal, oil, and natural gas; and the importance of conservation	14, 15, 38, 39, 75, 82, 89
4.8B describe and illustrate the continuous movement of water above and on the surface of Earth through the water cycle and explain the role of the Sun as a major source of energy in this process	44
4.9A investigate that most producers need sunlight, water, and carbon dioxide to make their own food, while consumers are dependent on other organisms for food	8, 23, 27, 28, 42, 45, 63, 88
4.9B describe the flow of energy through food webs, beginning with the Sun, and predict how changes in the ecosystem affect the food web such as a fire in a forest	23, 45, 88

4.10A explore how adaptations enable organisms to survive in their environment such as comparing birds' beaks and leaves on plants	6, 10, 11, 18, 25, 43, 46, 62, 63, 88
4.10B demonstrate that some likenesses between parents and offspring are inherited, passed from generation to generation such as eye color in humans or shapes of leaves in plants. Other likenesses are learned such as table manners or reading a book and seals balancing balls on their noses	41
4.10C explore, illustrate, and compare life cycles in living organisms such as butterflies, beetles, radishes, or lima beans	79

PROJECT LEARNING TREE
4th grade Social Studies
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Social Studies Students are expected to:	Activity
4.1B identify American Indian groups in Texas and North America before European exploration such as the Lipan Apache, Karankawa, Caddo, and Jumano	90
4.1C describe the regions in which American Indians lived and identify American Indian groups remaining in Texas such as the Ysleta Del Sur Pueblo, Alabama-Coushatta, and Kickapoo	90
4.1D compare the ways of life of American Indian groups in Texas and North America before European exploration	90
4.4C identify the impact of railroads on life in Texas, including changes to cities and major industries	95
4.4D examine the effects upon American Indian life resulting from changes in Texas, including the Red River War, building of U.S. forts and railroads, and loss of buffalo	90
4.5A identify the impact of various issues and events on life in Texas such as urbanization, increased use of oil and gas, the Great Depression, the Dust Bowl, and World War II	40, 95
4.5B explain the development and impact of the oil and gas industry upon industrialization and urbanization in Texas, including important places and people such as Spindletop and Pattillo Higgins	95
4.6B translate geographic data, population distribution, and natural resources into a variety of formats such as graphs and maps	14, 30, 49
4.9A describe ways people have adapted to and modified their environment in Texas, past and present, such as timber clearing, agricultural production, wetlands drainage, energy production, and construction of dams	39, 40, 44, 49, 95
4.9B identify reasons why people have adapted to and modified their environment in Texas, past and present, such as the use of natural resources to meet basic needs, facilitate transportation, and enhance recreational activities	40, 54, 75, 95
4.9C compare the positive and negative consequences of human modification of the environment in Texas, past and present, both governmental and private, such as economic development and the impact on habitats and wildlife as well as air and water quality	39, 40, 54, 95
4.11A describe the development of the free enterprise system in Texas	69
4.11B describe how the free enterprise system works, including supply and demand	69
4.11C give examples of the benefits of the free enterprise system such as choice and opportunity	69
4.12A explain how people in different regions of Texas earn their living, past and present, through a subsistence economy and providing goods and services	34, 40
4.12B explain how geographic factors such as climate, transportation, and natural resources have influenced the location of economic activities in Texas	14, 34
4.12E explain how developments in transportation and communication have influenced economic activities in Texas	34

4.13A identify ways in which technological changes in areas such as transportation and communication have resulted in increased interdependence among Texas, the United States, and the world	53
4.15B identify and explain the basic functions of the three branches of government according to the Texas Constitution	58
4.17B explain how individuals can participate voluntarily in civic affairs at state and local levels through activities such as holding public officials to their word, writing letters, and participating in historic preservation and service projects	36, 54, 88
4.17C explain the duty of the individual in state and local elections such as being informed and voting	58
4.17D identify the importance of historical figures and important individuals who modeled active participation in the democratic process such as Sam Houston, Barbara Jordan, Lorenzo de Zavala, Ann Richards, Sam Rayburn, Henry B. González, James A. Baker III, Wallace Jefferson, and other local individuals	58
4.17E explain how to contact elected and appointed leaders in state and local governments	58
4.19B identify customs, celebrations, and traditions of various cultural, regional, and local groups in Texas such as Cinco de Mayo, Oktoberfest, the Strawberry Festival, and Fiesta San Antonio	90
4.20B describe how scientific discoveries and innovations such as in aerospace, agriculture, energy, and technology have benefited individuals, businesses, and society in Texas	36, 53
4.20C predict how future scientific discoveries and technological innovations might affect life in Texas	36, 53
4.21A differentiate between, locate, and use valid primary and secondary sources such as computer software; interviews; biographies; oral, print, and visual material; documents; and artifacts to acquire information about the United States and Texas	40, 49, 53
4.21B analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions	49, 53, 90
4.21C organize and interpret information in outlines, reports, databases, and visuals, including graphs, charts, timelines, and maps	9, 14, 36, 38-40, 44, 49, 53, 54, 58, 73
4.21D identify different points of view about an issue, topic, historical event, or current event	5, 9, 14, 36, 39, 40, 49, 53
4.22B incorporate main and supporting ideas in verbal and written communication	53
4.22C express ideas orally based on research and experiences	9, 21, 31, 39, 49, 53, 58, 69, 73, 77, 81, 82, 88
4.22D create written and visual material such as journal entries, reports, graphic organizers, outlines, and bibliographies	14, 22, 31, 39, 40, 49, 53-55, 58, 69, 73, 77, 81, 82
4.23A use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution	4, 14, 31, 38, 49, 53, 54
4.23B use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision	38, 40, 53

PROJECT LEARNING TREE
5th grade Language Arts
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Language Arts Students are expected to:	Activity
5.3A compare and contrast the themes or moral lessons of several works of fiction from various cultures	18
5.3B describe the phenomena explained in origin myths from various cultures	4, 18, 92
5.4A analyze how poets use sound effects (e.g., alliteration, internal rhyme, onomatopoeia, rhyme scheme) to reinforce meaning in poems	5
5.6B explain the roles and functions of characters in various plots, including their relationships and conflicts	18
5.6C explain different forms of third-person points of view in stories	90
5.8A evaluate the impact of sensory details, imagery, and figurative language in literary text	8, 89
5.10A draw conclusions from the information presented by an author and evaluate how well the author's purpose was achieved	90
5.11D use multiple text features and graphics to gain an overview of the contents of text and to locate information	7, 11
5.12A identify the author's viewpoint or position and explain the basic relationships among ideas (e.g., parallelism, comparison, causality) in the argument	17
5.13A interpret details from procedural text to complete a task, solve a problem, or perform procedures	51, 77
5.13B interpret factual or quantitative information presented in maps, charts, illustrations, graphs, timelines, tables, and diagrams	7, 9, 13, 16
5.14A explain how messages conveyed in various forms of media are presented differently (e.g., documentaries, online information, televised news)	60
5.14B consider the difference in techniques used in media (e.g., commercials, documentaries, news)	60
5.14D analyze various digital media venues for levels of formality and informality	60
5.16A write imaginative stories	8, 21, 24, 78, 79, 89
5.16Ai write imaginative stories that include a clearly defined focus, plot, and point of view	18
5.16B write poems	5, 21
5.16Bii write poems figurative language	44, 54
5.17A write a personal narrative that conveys thoughts and feelings about an experience	2, 76
5.18Aii create multi-paragraph essays to convey information about the topic that guide and inform the reader's understanding of key ideas and evidence	17, 86
5.18Aiii create multi-paragraph essays to include specific facts, details, and examples in an appropriately organized structure	49, 86

5.18B write formal and informal letters that convey ideas, include important information, demonstrate a sense of closure, and use appropriate conventions (e.g., date, salutation, closing)	7, 9, 60
5.23A brainstorm, consult with others, decide upon a topic, and formulate open-ended questions to address the major research topic	11
5.23B generate a research plan for gathering relevant information about the major research question	11, 17, 41
5.24A follow the research plan to collect data from a range of print and electronic resources (e.g., reference texts, periodicals, web pages, online sources) and data from experts	7, 17, 58
5.24C record data, utilizing available technology (e.g., word processors) in order to see the relationships between ideas, and convert graphic/visual data (e.g., charts, diagrams, timelines) into written notes	76, 93, 95
5.26B develops a topic sentence, summarizes findings, and uses evidence to support conclusions	17
5.27A listen to and interpret a speaker's messages (both verbal and nonverbal) and ask questions to clarify the speaker's purpose or perspective	5, 56
5.29A participate in student-led discussions by eliciting and considering suggestions from other group members and by identifying points of agreement and disagreement	13, 56, 92

PROJECT LEARNING TREE
5th grade Math
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Math Students are expected to:	Activity
5.2C compare two fractional quantities in problem-solving situations using a variety of methods, including common denominators	66, 67
5.3A use addition and subtraction to solve problems involving whole numbers and decimals	38, 73, 85
5.3B use multiplication to solve problems involving whole numbers (no more than three digits times two digits without technology)	38
5.3E model situations using addition and/or subtraction involving fractions with like denominators using concrete objects, pictures, words, and numbers	66
5.5A describe the relationship between sets of data in graphic organizers such as lists, tables, charts, and diagrams	38
5.10C select and use appropriate units and formulas to measure length, perimeter, area, and volume	4, 41, 65, 66
5.12A use fractions to describe the results of an experiment	66, 67
5.12B use experimental results to make predictions	48
5.13B describe characteristics of data presented in tables and graphs including median, mode, and range	37
5.13C graph a given set of data using an appropriate graphical representation such as a picture or line graph	25, 27
5.14A identify the mathematics in everyday situations	4, 12, 16, 38, 53, 85
5.14B solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness	53
5.14C select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem	53
5.14D use tools such as real objects, manipulatives, and technology to solve problems	53
5.15A explain and record observations using objects, words, pictures, numbers, and technology	4, 16, 21, 25, 27, 48, 49, 65-67, 77

PROJECT LEARNING TREE

5th grade Science

Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Science Students are expected to:	Activity
5.1B make informed choices in the conservation, disposal, and recycling of materials	13-15, 36-38, 51, 52, 83, 89
5.2A describe, plan, and implement simple experimental investigations testing one variable	4, 41, 77
5.2C collect information by detailed observations and accurate measuring	2, 9, 21-24, 41, 47, 48, 64-68, 77
5.2D analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence	47, 65, 67, 70, 77
5.2G construct appropriate simple graphs, tables, maps, and charts using technology, including computers, to organize, examine, and evaluate information	9, 21, 41, 47, 66, 70, 77, 80
5.3D connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists	34, 67
5.4A collect, record, and analyze information using tools, including calculators, microscopes, cameras, computers, hand lenses, metric rulers, Celsius thermometers, prisms, mirrors, pan balances, triple beam balances, spring scales, graduated cylinders, beakers, hot plates, meter sticks, magnets, collecting nets, and notebooks; timing devices, including clocks and stopwatches; and materials to support observations of habitats or organism such as terrariums and aquariums	21-24, 43, 46, 61, 66, 67, 73, 76
5.4B use safety equipment, including safety goggles and gloves	77, 78
5.6A explore the uses of energy, including mechanical, light, thermal, electrical, and sound energy	4, 39, 73
5.7A explore the processes that led to the formation of sedimentary rocks and fossil fuels	15
5.7C identify alternative energy resources such as wind, solar, hydroelectric, geothermal, and biofuels	39
5.8A differentiate between weather and climate	7
5.8B explain how the Sun and the ocean interact in the water cycle	44
5.9A observe the way organisms live and survive in their ecosystem by interacting with the living and non-living elements	7-9, 11, 26, 45, 48, 86
5.9B describe how the flow of energy derived from the Sun, used by producers to create their own food, is transferred through a food chain and food web to consumers and decomposer	8, 23, 24, 45
5.9C predict the effects of changes in ecosystems caused by living organisms, including humans, such as the overpopulation of grazers or the building of highways	12, 40, 47, 54, 69, 80, 88
5.9D identify the significance of the carbon dioxide-oxygen cycle to the survival of plants and animals	27, 88

5.10A compare the structures and functions of different species that help them live and survive such as hooves on prairie animals or webbed feet in aquatic animals	6, 10, 18
5.10B differentiate between inherited traits of plants and animals such as spines on a cactus or shape of a beak and learned behaviors such as an animal learning tricks or a child riding a bicycle	41

PROJECT LEARNING TREE
5th grade Social Studies
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Social Studies Students are expected to:	Activity
5.4G identify the challenges, opportunities, and contributions of people from various American Indian and immigrant groups	90
5.9A describe how and why people have adapted to and modified their environment in the United States, past and present, such as the use of human resources to meet basic needs	75
5.11C give examples of the benefits of the free enterprise system in the United States	69
5.13B identify and explain how geographic factors have influenced the location of economic activities in the United States	34
5.16A identify and explain the basic functions of the three branches of government	58
5.18A explain the duty individuals have to participate in civic affairs at the local, state, and national levels	36, 52, 56-58, 60, 88, 96
5.18B explain how to contact elected and appointed leaders in local, state, and national governments	56-58
5.22A identify the similarities and differences within and among various racial, ethnic, and religious groups in the United States	20, 92
5.22B describe customs and traditions of various racial, ethnic, and religious groups in the United States	20, 90, 92
5.22C summarize the contributions of people of various racial, ethnic, and religious groups to our national identity	20, 90, 92
5.23B identify how scientific discoveries, technological innovations, and the rapid growth of technology industry have advanced the economic development of the United States, including the transcontinental railroad and the space program	53, 93
5.23C explain how scientific discoveries and technological innovations in the fields of medicine, communication, and transportation have benefited individuals and society in the United States	53, 93
5.23D predict how future scientific discoveries and technological innovations could affect society in the United States	36, 53, 93
5.24A differentiate between, locate, and use valid primary and secondary sources such as computer software; interviews; biographies; oral, print, and visual material; documents; and artifacts to acquire information about the United States	40, 52, 53, 56, 57, 60
5.24B analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions	49, 52, 53, 56, 57, 90
5.24C organize and interpret information in outlines, reports, databases, and visuals, including graphs, chart, timelines, and maps	9, 12, 14, 36-40, 44, 49, 52, 53, 56-58, 73, 93, 95

5.24D identify different points of view about an issue, topic, or current event	5, 9, 14, 36, 37, 39, 49, 52, 53, 56, 57, 86
5.24E identify the historical context of an event	40
5.25C express ideas orally based on research and experiences	9, 12, 14, 21, 31, 39, 49, 52, 53, 56-60, 69, 77, 81, 82, 85, 86, 88, 95
5.25D create written and visual material such as journal entries, reports, graphic organizers, outlines, and bibliographies	12, 14, 22, 31, 37, 39, 40, 49, 52-58, 77, 81-83, 85, 86, 96
5.26A use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution	4, 12, 14, 31, 37, 38, 49, 52-54, 96
5.26B use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision	37, 38, 96

PROJECT LEARNING TREE
6th grade Language Arts
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Language Arts Students are expected to:	Activity
6.3B analyze the function of stylistic elements (e.g., magic helper, rule of three) in traditional and classical literature from various culture	18
6.4A explain how figurative language (e.g., personification, metaphors, similes, hyperbole) contributes to the meaning of a poem	5
6.6C describe different forms of point-of-view, including first- and third-person	90
6.7A identify the literary language and devices used in memoirs and personal narratives and compare their characteristics with those of an autobiography.	91
6.10B explain whether facts included in an argument are used for or against an issue	33, 49, 59
6.12A follow multi-tasked instructions to complete a task, solve a problem, or perform procedures	51, 77
6.12B interpret factual, quantitative, or technical information presented in maps, charts, illustrations, graphs, timelines, tables, and diagrams	7, 9, 13, 35
6.13A explain messages conveyed in various forms of media	59, 60
6.13B recognize how various techniques influence viewers' emotions	59
6.13C critique persuasive techniques (e.g., testimonials, bandwagon appeal) used in media messages	60
6.13D analyze various digital media venues for levels of formality and informality	60
6.15A write imaginative stories	21, 24, 78, 79
6.15Ai write a imaginative story with a clearly defined focus, plot, and point of view	15, 18
6.15B write poems	5, 21
6.15Bi write poems using poetic techniques (e.g., alliteration, onomatopoeia)	91
6.15Bii write poems with figurative language (e.g., similes, metaphors)	44, 54, 91
6.15Biii write poems with graphic elements (e.g., capital letters, line length)	91
6.16A write a personal narrative that has a clearly defined focus and communicates the importance of or reasons for actions and/or consequences	2, 76, 89
6.17Aii create multi-paragraph essays to convey information about a topic that guide and inform the reader's understanding of key ideas and evidence	17, 86
6.17Aiii create multi-paragraph essays to convey information about a topic that include specific facts, details, and examples in an appropriately organized structure	49, 86

6.17B write informal letters that convey ideas, include important information, demonstrate a sense of closure, and use appropriate conventions (e.g., date, salutation, closing)	7, 9, 20, 60
6.17D produce a multimedia presentation involving text and graphics using available technology	3, 11, 17, 33, 42, 45, 55, 56, 58, 86, 88, 95
6.22A brainstorm, consult with others, decide upon a topic, and formulate open-ended questions to address the major research topic	11
6.22B generate a research plan for gathering relevant information about the major research question	11, 17, 41
6.23A follow the research plan to collect data from a range of print and electronic resources (e.g., reference texts, periodicals, web pages, online sources) and data from experts	7, 17, 58
6.23C record data, utilizing available technology (e.g., word processors) in order to see the relationships between ideas, and convert graphic/visual data (e.g., charts, diagrams, timelines) into written notes	76, 93, 95
6.25B develops a topic sentence, summarizes findings, and uses evidence to support conclusions	17
6.26A listen to and interpret a speaker's messages (both verbal and nonverbal) and ask questions to clarify the speaker's purpose and perspective	5, 33, 56
6.26C paraphrase the major ideas and supporting evidence in formal and informal presentations	33, 49
6.27A give an organized presentation with a specific point of view, employing eye contact, speaking rate, volume, enunciation, natural gestures, and conventions of language to communicate ideas effectively	35
6.28A participate in student-led discussions by eliciting and considering suggestions from other group members and by identifying points of agreement and disagreement	13, 35, 56, 69, 89, 92

PROJECT LEARNING TREE
6th grade Math
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Math Students are expected to:	Activity
6.2A model addition and subtraction situations involving fractions with objects, pictures, words, and numbers	66, 67
6.2B addition and subtraction to solve problems involving fractions and decimals	66, 67, 73, 84, 85
6.2C use multiplication and division of whole numbers to solve problems including situations involving equivalent ratios and rates	38, 84
6.8A estimate measurements (including circumference) and evaluate reasonableness of results	21, 67
6.8B select and use appropriate units, tools, or formulas to measure and to solve problems involving length (including perimeter), area, time, temperature, volume, and weight	4, 21, 41, 49, 66, 77
6.10A select and use an appropriate representation for presenting and displaying different graphical representations of the same data including line plot, line graph, bar graph, and stem and leaf plot	35, 37, 84
6.10D solve problems by collecting, organizing, displaying, and interpreting data	41, 48, 77
6.11A identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics	4, 12, 16, 27, 29, 38, 53, 85
6.11B use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness	53
6.11C select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem	53
6.11D select tools such as real objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems	29, 53
6.12A communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models	16

PROJECT LEARNING TREE
6th grade Science
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Science Students are expected to:	Activity
6.1B practice appropriate use and conservation of resources, including disposal, reuse, or recycling of materials	13-15, 36-38, 51, 52, 83, 89
6.2A plan and implement comparative and descriptive investigations by making observations, asking well-defined questions, and using appropriate equipment and technology	9
6.2B design and implement experimental investigations by making observations, asking well-defined questions, formulating testable hypotheses, and using appropriate equipment and technology	4, 41, 70, 77
6.2C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers	9, 21, 23, 24, 41, 48, 65-67, 70, 77
6.2D construct tables and graphs, using repeated trials and means, to organize data and identify patterns	9, 41, 65-67, 70, 77, 84
6.2E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends	70
6.3D relate the impact of research on scientific thought and society, including the history of science and contributions of scientists as related to the content	67
6.4A use appropriate tools to collect, record, and analyze information, including journals/notebooks, beakers, Petri dishes, meter sticks, graduated cylinders, hot plates, test tubes, triple beam balances, microscopes, thermometers, calculators, computers, timing devices, and other equipment as needed to teach the curriculum	21-24, 61, 66, 67, 72, 73, 76
6.4B use preventative safety equipment, including chemical splash goggles, aprons, and gloves, and be prepared to use emergency safety equipment, including an eye/face wash, a fire blanket, and a fire extinguisher	77, 78
6.7A research and debate the advantages and disadvantages of using coal, oil, natural gas, nuclear power, biomass, wind, hydropower, geothermal, and solar resources	39, 82
6.9C demonstrate energy transformations such as energy in a flashlight battery changes from chemical energy to electrical energy to light energy	73
6.12E describe biotic and abiotic parts of an ecosystem in which organisms interact	23, 26, 47, 48
6.12F diagram the levels of organization within an ecosystem, including organism, population, community, and ecosystem	8-11, 45

PROJECT LEARNING TREE
6th grade Social Studies
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Social Studies Students are expected to:	Activity
6.2B evaluate the social, political, economic, and cultural contributions of individuals and groups from various societies, past and present	40, 91
6.3A pose and answer geographic questions, including: Where is it located? Why is it there? What is significant about its location? How is its location related to the location of other people, place and environments?	49
6.3B pose and answer questions about geographic distributions and patterns for various world regions and countries shown on maps, graphs, charts, models, and databases	49
6.3C compare various world regions and countries using data from geographic tools, including maps, graphs, charts, databases, and models	49
6.3D create thematic maps, graphs, charts, models, and databases depicting aspects such as population, disease, and economic activities of various world regions and countries	49
6.6B identify the location of renewable and nonrenewable natural resources such as fresh water, fossil fuels, fertile soils, and timber	14, 39, 94
6.7A identify and analyze ways people have adapted to the physical environment in various places and regions	75
6.7B identify and analyze ways people have modified the physical environment such as mining, irrigation, and transportation infrastructure	40
6.7C describe ways in which technology influences human interactions with the environment such as humans building dams for flood control	40
6.8A describe ways in which the factors of production (natural resources, labor, capital, and entrepreneurs) influence the economies of various contemporary societies	14
6.8B identify problems and issues that may arise when one or more of the factors of production is in relatively short supply	14
6.8C explain the impact of relative scarcity of resources on international trade and economic interdependence among and within societies	14
6.14A identify and explain the duty of civic participation in societies with representative governments	54, 56, 57
6.14B explain relationships among rights, responsibilities, and duties in societies with representative governments	54, 56, 57
6.15A define culture and the common traits that unify a culture region	17
6.15B identify and describe common traits that define cultures	17
6.15F identify and explain examples of conflict and cooperation between and among cultures	17

6.19D explain the relationship among religious ideas, philosophical ideas, and cultures	19
6.20A give examples of scientific discoveries and technological innovations, including the roles of scientists and inventors, that have transcended the boundaries of societies and have shaped the world	53, 93
6.20C make predictions about future social, political, economic, cultural, and environmental impacts that may result from future scientific discoveries and technological innovations	36, 53
6.21B analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions	12, 35
6.21C organize and interpret information from outlines, reports, databases, and visuals, including graphs, charts, timelines, and maps	9, 12, 31, 36-39, 44, 77, 81, 84, 95
6.21D identify different points of view about an issue or current topic	9, 33, 35-37, 49, 59, 73, 91
6.22C express ideas orally based on research and experiences	5, 9, 12, 21, 35, 36, 37, 40, 49, 60, 77, 81-83, 96
6.22D create written and visual material such as journal entries, reports, graphic organizers, outlines, and bibliographies based on research	12, 15, 22, 33, 36, 37-40, 55-58, 77, 81-85, 96
6.23A use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution	4, 37, 52, 54, 96
6.23B use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision	38

PROJECT LEARNING TREE
7th grade Language Arts
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Language Arts Students are expected to:	Activity
7.4A analyze the importance of graphical elements (e.g., capital letters, line length, word position) on the meaning of a poem	5
7.5A explain a playwright's use of dialogue and stage directions	42
7.6C analyze different forms of point of view, including first-person, third-person omniscient, and third-person limited	90
7.7A describe the structural and substantive differences between an autobiography or a diary and a fictional adaptation of it	91
7.10B distinguish factual claims from commonplace assertions and opinions	33, 49, 59
7.12A follow multi-dimensional instructions from text to complete a task, solve a problem, or perform procedures	51, 77
7.13A interpret both explicit and implicit messages in various forms of media	59, 60
7.13B interpret how visual and sound techniques (e.g., special effects, camera angles, lighting, music) influence the message	60
7.13C evaluate various ways media influences and informs audiences	59
7.13D assess the correct level of formality and tone for successful participation in various digital media	60
7.15Ai write an imaginative story that sustains reader interest	21, 89
7.15B write a poem	5, 21, 91
7.15Bii write a poetic figurative language (e.g., personification, idioms, hyperbole)	44, 54
7.16A write a personal narrative that has a clearly defined focus and communicates the importance of or reasons actions and/or consequences	76
7.17A write a multi-paragraph essay to convey information about a topic	17
7.17Aiii write a multi-paragraph essay to convey information about a topic that is logically organized with appropriate facts and details and includes no extraneous information or inconsistencies	49, 86
7.17B write a letter that reflects an opinion, registers a complaint, or requests information in a business or friendly context	31, 60
7.17D produce a multimedia presentation involving text and graphics using available technology	11, 17, 33, 42, 45, 55, 56, 58, 86, 88, 95
7.22A brainstorm, consult with others, decide upon a topic, and formulate a major research question to address the major research topic	11
7.22B 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	11, 17

7.23A follow the research plan to gather information from a range of relevant print and electronic sources using advanced search strategies	17, 58
7.26A listen to and interpret a speaker's purpose by explaining the content, evaluating the delivery of the presentation, and asking questions or making comments about the evidence that supports a speaker's claims	33, 56
7.26C draw conclusions about the speaker's message by considering verbal communication (e.g., word choice, tone) and nonverbal cues (e.g., posture, gestures, facial expressions)	49
7.27A present a critique of a literary work, film, or dramatic production, employing eye contact, speaking rate, volume, enunciation, a variety of natural gestures, and conventions of language to communicate ideas effectively	71
7.28A participate productively in discussions, plan agendas with clear goals and deadlines, set time limits for speakers, take notes, and vote on key issues	56, 69, 71, 89, 92

PROJECT LEARNING TREE
7th grade Math
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEK Math Students are expected to:	Activity
7.2A represent multiplication and division situations involving fractions and decimals with models, including concrete objects, pictures, words, and numbers	50, 67, 84
7.2B use addition, subtraction, multiplication, and division to solve problems involving fractions and decimals	67, 73, 84, 85
7.2D use division to find unit rates and ratios in proportional relationships such as speed, density, price, recipes, and student-teacher ratio	38, 50
7.2F select and use appropriate operations to solve problems and justify the selections	50
7.3A estimate and find solutions to application problems involving percent	50
7.3B estimate and find solutions to application problems involving proportional relationships such as similarity, scaling, unit costs, and related measurement units	50
7.9A estimate measurements and solve application problems involving length (including perimeter and circumference) and area of polygons and other shapes	50, 67
7.11A select and use an appropriate representation for presenting and displaying relationships among collected data, including line plot, line graph, bar graph, stem and leaf plot, circle graph, and Venn diagrams, and justify the selection	4, 35, 37, 50, 77, 84
7.11B make inferences and convincing arguments based on an analysis of given or collected data	50
7.13A identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics	4, 12, 16, 21, 27, 29, 38, 50, 53, 85
7.13B use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness	53
7.13C select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem	50, 53
7.13D select tools such as real objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems	29, 50, 53
7.14A communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models	16

PROJECT LEARNING TREE

7th grade Science

Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Science Students are expected to:	Activity
7.1B practice appropriate use and conservation of resources, including disposal, reuse, or recycling of materials	14, 15, 37, 38, 51, 52, 83, 89
7.2B design and implement experimental investigations by making observations, asking well-defined questions, formulating testable hypotheses, and using appropriate equipment and technology	4, 41, 70, 77
7.2C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers	21, 23, 41, 48, 67, 70, 77
7.2D construct tables and graphs, using repeated trials and means, to organize data and identify patterns	41, 67, 70, 77, 84
7.2E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends	70
7.3D relate the impact of research on scientific thought and society, including the history of science and contributions of scientists as related to the content	67
7.4A use appropriate tools to collect, record, and analyze information, including life science models, hand lens, stereoscopes, microscopes, beakers, Petri dishes, microscope slides, graduated cylinders, test tubes, meter sticks, metric rulers, metric tape measures, timing devices, hot plates, balances, thermometers, calculators, water test kits, computers, temperature and pH probes, collecting nets, insect traps, globes, digital cameras, journals/notebooks, and other equipment as needed to teach the curriculum	21-23, 67, 72, 73, 76
7.4B use preventative safety equipment, including chemical splash goggles, aprons, and gloves, and be prepared to use emergency safety equipment, including an eye/face wash, a fire blanket, and a fire extinguisher	77
7.8B analyze the effects of weathering, erosion, and deposition on the environment in ecoregions of Texas	44
7.8C model the effects of human activity on groundwater and surface water in a watershed	44
7.10A observe and describe how different environments, including microhabitats in schoolyards and biomes, support different varieties of organisms	10, 11, 22, 23, 29, 47, 71
7.10B describe how biodiversity contributes to the sustainability of an ecosystem	11, 23, 26, 29, 45, 47, 71
7.10C observe, record, and describe the role of ecological succession such as in a microhabitat of a garden with weeds	23, 47, 80
7.11A examine organisms or their structures such as insects or leaves and use dichotomous keys for identification	64, 68
7.11B explain variation within a population or species by comparing external features, behaviors, or physiology of organisms that enhance their survival such as migration, hibernation, or storage of food in a bulb	10
7.12A 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	10, 11, 29

7.12D differentiate between structure and function in plant and animal cell organelles, including cell membrane, cell wall, nucleus, cytoplasm, mitochondrion, chloroplast, and vacuole	41
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PROJECT LEARNING TREE
7th grade Social Studies
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Social Studies Students are expected to:	Activity
7.10A identify ways in which Texans have adapted to and modified the environment and analyze the positive and negative consequences of the modifications	40
7.16B explain and analyze civic responsibilities of Texas citizens and the importance of civic participation	33, 54, 56, 57
7.20A compare types and uses of technology, past and present	93
7.21B analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions	12, 35
7.21C organize and interpret information from outlines, reports, databases, and visuals, including graphs, charts, timelines, and maps	12, 37-39, 44, 50, 71, 73, 77, 81, 82, 84, 95
7.21E support a point of view on a social studies issue or event	49
7.21F identify bias in written, oral, and visual material	91
7.21H use appropriate mathematical skills to interpret social studies information such as maps and graphs	50
7.22D create written, oral, and visual presentations of social studies information	40, 49, 56-58
7.23A use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution	4, 52, 54, 96
7.23B use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision	37, 38

PROJECT LEARNING TREE
8th grade Language Arts
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Language Arts Students are expected to:	Activity
8.4A compare and contrast the relationship between the purpose and characteristics of different poetic forms (e.g., epic poetry, lyric poetry)	5
8.6C analyze different forms of point of view, including limited versus omniscient, subjective versus objective	90
8.7A analyze passages in well-known speeches for the author's use of literary devices and word and phrase choice (e.g., aphorisms, epigraphs) to appeal to the audience	91
8.10B distinguish factual claims from commonplace assertions and opinions and evaluate inferences from their logic in text	33, 49, 59
8.13A evaluate the role of media in focusing attention on events and informing opinion on issues	59, 60
8.13B interpret how visual and sound techniques (e.g., special effects, camera angles, lighting, music) influence the message	60
8.13C evaluate various techniques used to create a point of view in media and the impact on audience	59
8.13D assess the correct level of formality and tone for successful participation in various digital media	60
8.15A write an imaginative story	21
8.15Ai write an imaginative story that sustains reader interest	89
8.15B write a poem	5, 21, 91
8.15Bii write a poem that using figurative language (e.g., personification, idioms, hyperbole)	44, 54
8.16A write a personal narrative that has a clearly defined focus and includes reflections on decisions, actions, and/or consequences	76
8.17A write a multi-paragraph essay to convey information about a topic	17
8.17Aiii write a multi-paragraph essay to convey information about a topic that is logically organized with appropriate facts and details and includes no extraneous information or inconsistencies	49, 86
8.17B write a letter that reflects an opinion, registers a complaint, or requests information in a business or friendly context	60
8.17D produce a multimedia presentation involving text, graphics, images, and sound using available technology	11, 17, 33, 42, 45, 55, 56, 58, 86, 95
8.22A brainstorm, consult with others, decide upon a topic, and formulate a major research question to address the major research topic	11
8.22B 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	11, 17

8.23A follow the research plan to gather information from a range of relevant print and electronic sources using advanced search strategies	17, 58
8.26A listen to and interpret a speaker's purpose by explaining the content, evaluating the delivery of the presentation, and asking questions or making comments about the evidence that supports a speaker's claims	33, 56
8.26C summarize formal and informal presentations, distinguish between facts and opinions, and determine the effectiveness of rhetorical devices	33, 49
8.27A advocate a position using anecdotes, analogies, and/or illustrations, and use eye contact, speaking rate, volume, enunciation, a variety of natural gestures, and conventions of language to communicate ideas effectively	35, 71
8.28A participate productively in discussions, plan agendas with clear goals and deadlines, set time limits for speakers, take notes, and vote on key issues	56, 71, 89, 92

PROJECT LEARNING TREE
8th grade Math
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Math Students are expected to:	Activity
8.2A select appropriate operations to solve problems involving rational numbers and justify the selections	85
8.4 generate a different representation of data given another representation of data (such as a table, graph, equation, or verbal description)	50, 84
8.5A predict, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations	50
8.12C select and use an appropriate representation for presenting and displaying relationships among collected data, including line plots, line graphs, stem and leaf plots, circle graphs, bar graphs, box and whisker plots, histograms, and Venn diagrams, with and without the use of technology	35, 37, 50, 77, 84
8.14A identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics	12, 16, 21, 27, 29, 38, 50, 53, 85
8.14B use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness	53
8.14C select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem	50, 53
8.14D select tools such as real objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems	29, 50, 53
8.15A communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models	16

PROJECT LEARNING TREE
8th grade Science
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Science Students are expected to:	Activity
8.1B practice appropriate use and conservation of resources, including disposal, reuse, or recycling of materials	14, 15, 37, 38, 51, 52, 83, 89
8.2B design and implement comparative and experimental investigations by making observations, asking well-defined questions, formulating testable hypotheses, and using appropriate equipment and technology	4, 41, 70, 77
8.2C collect and record data using the International System of Units (SI) and qualitative means such as labeled drawings, writing, and graphic organizers	21, 23, 41, 48, 67, 70, 77
8.2D construct tables and graphs, using repeated trials and means, to organize data and identify patterns	41, 67, 70, 77, 84
8.2E analyze data to formulate reasonable explanations, communicate valid conclusions supported by the data, and predict trends	70
8.3D relate the impact of research on scientific thought and society, including the history of science and contributions of scientists as related to the content	67
8.4A use appropriate tools to collect, record, and analyze information, including lab journals/notebooks, beakers, meter sticks, graduated cylinders, anemometers, psychrometers, hot plates, test tubes, spring scales, balances, microscopes, thermometers, calculators, computers, spectrosopes, timing devices, and other equipment as needed to teach the curriculum	21-23, 67, 72, 73, 76
8.4B use preventative safety equipment, including chemical splash goggles, aprons, and gloves, and be prepared to use emergency safety equipment, including an eye/face wash, a fire blanket, and a fire extinguisher.	77
8.11A describe producer/consumer, predator/prey, and parasite/host relationships as they occur in food webs within marine, freshwater, and terrestrial ecosystems	10, 23, 45
8.11B investigate how organisms and populations in an ecosystem depend on and may compete for biotic and abiotic factors such as quantity of light, water, range of temperatures, or soil composition	27, 29, 45, 47, 77
8.11C explore how short- and long-term environmental changes affect organisms and traits in subsequent populations	35, 40, 47, 77, 80, 88

PROJECT LEARNING TREE
8th grade Social Studies
Correlation to the Texas Essential Knowledge and Skills

Correlation/TEKS Social Studies Students are expected to:	Activity
8.19D identify examples of responsible citizenship, including obeying rules and laws, staying informed on public issues, voting, and serving on juries	33, 56-58
8.21A identify different points of view of political parties and interest groups on important historical and contemporary issues	33, 54
8.23B explain the relationship between urbanization and conflicts resulting from differences in religion, social class, and political beliefs	56, 57
8.23C identify ways conflicts between people from various racial, ethnic, and religious groups were resolved	56, 57
8.23D analyze the contributions of people of various racial, ethnic, and religious groups to our national identity	56, 57
8.27B analyze the impact of transportation and communication systems on the growth, development, and urbanization of the United States	53
8.27D explain how technological innovations brought about economic growth such as how the factory system contributed to rapid industrialization and the Transcontinental Railroad led to the opening of the west	53
8.28A compare the effects of scientific discoveries and technological innovations that have influenced daily life in different periods in U.S. history	93
8.29B analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions	35
8.29C organize and interpret information from outlines, reports, databases, and visuals, including graphs, charts, timelines, and maps	37-39, 44, 71, 73, 77, 81, 82, 84, 95
8.29E support a point of view on a social studies issue or event	49
8.29F identify bias in written, oral, and visual material	91
8.30D create written, oral, and visual presentations of social studies information	40, 49, 56-58
8.31A use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution	4, 52, 96
8.31B use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision	37, 38