

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