

Expeditions

TEKS Blueprint

S	Skulls
D	Decomposition
ES	Ecological Succession
R	Reptile Room
A	Arthropod Room
M	Mammal Room

TEKS	Student Expectation	S	D	ES	R	A	M	Readiness Supporting	Verb(s)	Level of Complexity
3.9 a	Observe and describe the physical characteristics of environments and how they support populations and communities within an ecosystem.	~	~	~	~	~	~	Supporting	Observe, Describe	Low (remember)
3.10 c	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.			~		~		Supporting	Investigate, Compare	High (evaluate)
4.7 a	Examine properties of soils, including color and texture, capacity to retain water, and ability to support the growth of plants.		~					Supporting	Examine	High (evaluate)
5.9 a	Observe the way organisms live and survive in their ecosystem by interacting with the living and non-living elements.	~			~	~	~	Readiness	Observe	High (analyze)
5.9 b	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 decomposers.				~			Readiness	Describe	Medium (apply)
5.9 c	Predict the effects of changes in ecosystems caused by living organisms, including humans, such as the overpopulation of grazers or the building of highways.			~				Supporting	Predict	High (create)
5.9 d	Identify the significance of the carbon dioxide-oxygen cycle to the survival of plants and animals.		~					Supporting	Identify	High (analyze)
5.10 a	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.	~			~	~	~	Readiness	Compare	High (analyze)
5.10 b	Differentiate between inherited traits of plants and animals such as spines on a cactus or the shape of a beak and learned behaviors such as an animal learning tricks or a child riding a bicycle.				~	~	~	Readiness	Differentiate	High (analyze)
5.10 c	Describe the differences between complete and incomplete metamorphosis of insects.					~		Supporting	Describe, Differentiat	High (analyze)

Forces in Nature

TEKS Blueprint

NT	Newton's Tower (Ziplines)
SR	Sky R.A.D. (Rockets)
RG	Rock Garden (Millennium Forest Part 1)
MR	Make it Rain! (Millennium Forest Part 2)

TEKS	Student Expectation	NT	SR	RG	MR	Readiness Supporting	Verb(s)	Level of Complexity
3.7 b	Investigate rapid changes in Earth's surface such as volcanic eruptions, earthquakes, and landslides.					Supporting	Investigate	High (analyze)
4.7 a	Examine properties of soils, including color and texture, capacity to retain water, and ability to support the growth of plants.					Supporting	Examine	High (evaluate)
4.7 c	Identify and classify Earth's renewable resources, including air, plants, water, animals, and nonrenewable resources, including coal, oil, and natural gas, and the importance of conservation.					Supporting	Identify, Classify	Low (understand)
5.1 a	Demonstrate safe practices and the use of safety equipment as described in the Texas Safety Standards during classroom and outdoor investigations.					S. I. and R.	Demonstrate	Low (understand)
5.2 a	Describe, plan, and implement simple experimental investigations testing one variable.					S. I. and R.	Describe, Plan, Implement	High (create)
5.2 c	Collect information by detailed observations and accurate measuring.					S. I. and R.	Collect, Observe, Measuring	High (analyze)
5.2 d	Analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence.					S. I. and R.	Analyze, Interpret, Construct	High (create)
5.2 f	Communicate valid conclusions in (both) written (and verbal) form(s).					S. I. and R.	Communicate	High (create)
5.3 a	In all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student.					S. I. and R.	Analyze, Evaluate, Critique	High (evaluate)
5.4 a	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 organisms such as terrariums and aquariums.					S. I. and R.	Collect, Record, Analyze	High (analyze)
5.6 a	Explore the uses of energy, including mechanical, light, thermal, electrical, and sound energy.					Readiness	Explore	Low (understand)
5.6 d	Design an experiment that tests the effect of force on an object.					Supporting	Design	High (create)
5.7 a	Explore the processes that lead to the formation of sedimentary rocks and fossil fuels.					Readiness	Explore	High (apply)
5.7 b	Recognize how landforms such as deltas, canyons, and sand dunes are the result of changes to Earth's surface by wind, water, and ice.					Readiness	Recognize	Low (remember)
5.7 c	Identify alternative energy resources such as wind, solar, hydroelectric, geothermal, and bio-fuels.					Readiness	Identify	High (analyze)
5.7 d	Identify fossils as evidence of past living organisms and the nature of the environments at the time using models					Supporting	Identify	High (analyze)

Limnology

TEKS Blueprint

WC	Water Cycle
TB	Turtle Barn
pH	pH Lab
DP	Dry Pond
SP	Sky Pond

TEKS	Student Expectation	WC	TB	pH	DP	SP	Readiness Supporting	Verb(s)	Level of Complexity
3.9 a	Observe and describe the physical characteristics of environments and how they support populations and communities within an ecosystem.						Supporting	Observe, Describe	Low (remember)
3.10 c	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.						Supporting	Investigate, Compare	High (evaluate)
4.8 b	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.						Supporting	Describe, Illustrate	Low (understand)
5.1 a	Demonstrate safe practices and the use of safety equipment as described in the Texas Safety Standards during classroom and outdoor investigations.						S. I. and R.	Demonstrate	Low (understand)
5.2 a	Describe, plan, and implement simple experimental investigations testing one variable.						S. I. and R.	Describe, Implement	High (create)
5.2 b	Ask well defined questions, formulate testable hypotheses, and select and use appropriate equipment and technology.						S. I. and R.	Ask, Use Select, Formulate	High (create)
5.2 c	Collect information by detailed observations and accurate measuring.						S. I. and R.	Collect, Observe	High (analyze)
5.2 d	Analyze and interpret information to construct reasonable explanations from direct (observable) and indirect (inferred) evidence.						S. I. and R.	Analyze, Interpret, Construct	High (create)
5.2 e	Demonstrate that repeated investigations may increase the reliability of results.						S. I. and R.	Demonstrate	Low (understand)
5.2 f	Communicate valid conclusions in (both) written (and verbal) form(s).						S. I. and R.	Communicate	High (create)
5.3 a	In all fields of science analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student.						S. I. and R.	Analyze, Evaluate, Critique	High (evaluate)
5.3 b	Evaluate the accuracy of the information related to promotional materials for products and services such as nutritional labels.						S. I. and R.	Evaluate	High (evaluate)
5.3 d	Connect grade level appropriate science concepts with the history of science, science careers, and contributions of scientists.						S. I. and R.	Connect	Medium (apply)
5.4 a	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, notebooks, timing devices, including clocks and stopwatches, and materials to support observations of habitats or organisms such as terrariums and aquariums.						S. I. and R.	Collect, Record, Analyze	High (analyze)
5.5 c	Demonstrate that some mixtures maintain physical properties of their ingredients such as iron filings and sand.						Supporting	Demonstrate	Low (understand)
5.5 d	Identify changes that can occur in the physical properties of the ingredients of solutions such as dissolving salt in water or adding lemon juice to water.						Supporting	Identify	High (analyze)
5.8 b	Explain how the sun and the ocean interact in the water cycle.						Supporting		Low (understand)
5.9 a	Observe the way organisms live and survive in their ecosystem by interacting with the living and non-living elements.						Readiness	Observe	High (analyze)
5.9 b	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 decomposers.						Readiness	Describe	Medium (apply)
5.10 a	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.						Readiness	Compare	High (analyze)
5.10 b	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.						Readiness	Differentiate	High (analyze)