

Proclamation 2021 Breakouts to the Texas Prekindergarten Guidelines (TPG)

Course	Prekindergarten		
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For the full text of the Texas Prekindergarten Guidelines, visit <https://tea.texas.gov/WorkArea/DownloadAsset.aspx?id=25769825386>.

(VI) SCIENCE DOMAIN. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process."

Recurring themes are pervasive in sciences, mathematics, and technology. These ideas transcend disciplinary boundaries and include patterns, cycles, systems, models, and change and constancy.

The study of elementary science includes planning and safely implementing classroom and outdoor investigations using scientific processes, including inquiry methods, analyzing information, making informed decisions, and using tools to collect and record information, while addressing the major concepts and vocabulary, in the context of physical, earth, and life sciences. Districts and organizations are encouraged to facilitate inquiry-based instruction for at least 80% of instructional time allotted for science instruction.

In prekindergarten, children observe and describe the natural world using their five senses. Children do science as inquiry in order to develop and enrich their abilities to understand scientific concepts and processes. Children develop vocabulary through their experiences investigating properties of common objects, earth materials, and organisms.

A central theme throughout the study of scientific investigation and reasoning; matter and energy; force, motion, and energy; Earth and space; and organisms and environment is active engagement in asking questions, communicating ideas, and exploring with scientific tools. Scientific investigation and reasoning involves practicing safe procedures, asking questions about the natural world, and seeking answers to those questions through simple observations and descriptive investigations.

Matter is described in terms of its physical properties, including relative size and mass, shape, color, and texture. The importance of light, heat, and sound energy is identified as it relates to the children's everyday life. The location and motion of objects are explored.

Weather is recorded and discussed on a daily basis so s may begin to recognize patterns in the weather. Other patterns are observed in the appearance of objects in the sky.

In life science, children recognize the interdependence of organisms in the natural world. They understand that all organisms have basic needs that can be satisfied through interactions with living and nonliving things.

Children will investigate the life cycle of plants and identify likenesses between parents and offspring.

Science content is closely integrated to math and literacy goals but adds the aspect of helping the child learn about the natural world. The prekindergarten child experiences first hand many ideas of life science, physical science, earth science and chemistry best offered in discovery and exploration opportunities. Enriched play environments support an understanding for the scientific process: observe, question, investigate, collect data, and draw conclusions.

Domain	Skill	Outcome	Breakout
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(VI) SCIENCE DOMAIN	(A) Physical Science Skills. Prekindergarten children learn to explore properties of materials, positions, and motion of objects through investigations which allow them to notice the attributes of each of these. These explorations using the senses continue as children use attributes to classify and sort objects, make observations and predictions, problem- solve, compare, and question. Children learn about sources of energy by investigating and discussing light, heat, electricity, and magnetism. This builds early understanding of life science, physical science, earth science and chemistry. Processes such as observing and recording data, posing questions, predicting, investigating and drawing conclusions can provide experiences to support literacy, math, and sciences.	(1) Child observes, investigates, describes, and discusses properties and characteristics of common objects	(a) Child observes properties of common objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(1) Child observes, investigates, describes, and discusses properties and characteristics of common objects	(b) Child observes characteristics of common objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(1) Child observes, investigates, describes, and discusses properties and characteristics of common objects	(c) Child investigates properties of common objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(1) Child observes, investigates, describes, and discusses properties and characteristics of common objects	(d) Child investigates characteristics of common objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(1) Child observes, investigates, describes, and discusses properties and characteristics of common objects	(e) Child describes properties of common objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(1) Child observes, investigates, describes, and discusses properties and characteristics of common objects	(f) Child describes characteristics of common objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(1) Child observes, investigates, describes, and discusses properties and characteristics of common objects	(g) Child discusses properties of common objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(1) Child observes, investigates, describes, and discusses properties and characteristics of common objects	(h) Child discusses characteristics of common objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(2) Child observes, investigates, describes, and discusses position and motion of objects	(a) Child observes position of objects

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(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(2) Child observes, investigates, describes, and discusses position and motion of objects	(b) Child observes motion of objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(2) Child observes, investigates, describes, and discusses position and motion of objects	(c) Child investigates position of objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(2) Child observes, investigates, describes, and discusses position and motion of objects	(d) Child investigates motion of objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(2) Child observes, investigates, describes, and discusses position and motion of objects	(e) Child describes position of objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(2) Child observes, investigates, describes, and discusses position and motion of objects	(f) Child describes motion of objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(2) Child observes, investigates, describes, and discusses position and motion of objects	(g) Child discusses position of objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(2) Child observes, investigates, describes, and discusses position and motion of objects	(h) Child discusses motion of objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(3) Child uses simple measuring devices to learn about objects	(a) Child uses simple measuring devices to learn about objects
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(4) Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity	(a) Child observes sources of energy including light
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(4) Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity	(b) Child observes sources of energy including heat
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(4) Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity	(c) Child observes sources of energy including electricity
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(4) Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity	(d) Child investigates sources of energy including light
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(4) Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity	(e) Child investigates sources of energy including heat

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(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(4) Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity	(f) Child investigates sources of energy including electricity
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(4) Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity	(g) Child describes sources of energy including light
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(4) Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity	(h) Child describes sources of energy including heat
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(4) Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity	(i) Child describes sources of energy including electricity
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(4) Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity	(j) Child discusses sources of energy including light
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(4) Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity	(k) Child discusses sources of energy including heat
(VI) SCIENCE DOMAIN	(A) Physical Science Skills	(4) Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity	(l) Child discusses sources of energy including electricity
(VI) SCIENCE DOMAIN	(B) Life Sciences Skills. Prekindergarten children are naturally curious about the characteristics of organisms. Children understand differences in living and non-living things.	(1) Child observes, investigates, describes, and discusses the characteristics of organisms	(a) Child observes the characteristics of organisms
(VI) SCIENCE DOMAIN	(B) Life Sciences Skills	(1) Child observes, investigates, describes, and discusses the characteristics of organisms	(b) Child investigates the characteristics of organisms
(VI) SCIENCE DOMAIN	(B) Life Sciences Skills	(1) Child observes, investigates, describes, and discusses the characteristics of organisms	(c) Child describes the characteristics of organisms
(VI) SCIENCE DOMAIN	(B) Life Sciences Skills	(1) Child observes, investigates, describes, and discusses the characteristics of organisms	(d) Child discusses the characteristics of organisms
(VI) SCIENCE DOMAIN	(B) Life Sciences Skills	(2) Child describes life cycles of organisms	(a) Child describes life cycles of organisms
(VI) SCIENCE DOMAIN	(B) Life Sciences Skills	(3) Child observes, investigates, describes, and discusses the relationship of organisms to their environments	(a) Child observes the relationship of organisms to their environments

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(VI) SCIENCE DOMAIN	(B) Life Sciences Skills	(3) Child observes, investigates, describes, and discusses the relationship of organisms to their environments	(b) Child investigates the relationship of organisms to their environments
(VI) SCIENCE DOMAIN	(B) Life Sciences Skills	(3) Child observes, investigates, describes, and discusses the relationship of organisms to their environments	(c) Child describes the relationship of organisms to their environments
(VI) SCIENCE DOMAIN	(B) Life Sciences Skills	(3) Child observes, investigates, describes, and discusses the relationship of organisms to their environments	(d) Child discusses the relationship of organisms to their environments
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills. Prekindergarten children are enthusiastic learners about earth and space. They are discovering their place in the world and how to impact their environment with positive actions.	(1) Child observes, investigates, describes, and discusses earth materials, and their properties and uses	(a) Child observes earth materials
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(1) Child observes, investigates, describes, and discusses earth materials, and their properties and uses	(b) Child investigates earth materials
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(1) Child observes, investigates, describes, and discusses earth materials, and their properties and uses	(c) Child describes earth materials
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(1) Child observes, investigates, describes, and discusses earth materials, and their properties and uses	(d) Child discusses earth materials
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(1) Child observes, investigates, describes, and discusses earth materials, and their properties and uses	(e) Child discusses [earth materials'] properties
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(1) Child observes, investigates, describes, and discusses earth materials, and their properties and uses	(f) Child discusses [earth materials'] uses
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(2) Child identifies, observes, and discusses objects in the sky	(a) Child identifies objects in the sky
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(2) Child identifies, observes, and discusses objects in the sky	(b) Child observes objects in the sky
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(2) Child identifies, observes, and discusses objects in the sky	(c) Child discusses objects in the sky
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(3) Child observes and describes what happens during changes in the earth and sky	(a) Child observes what happens during changes in the earth
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(3) Child observes and describes what happens during changes in the earth and sky	(b) Child observes what happens during changes in the sky

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(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(3) Child observes and describes what happens during changes in the earth and sky	(c) Child describes what happens during changes in the earth
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(3) Child observes and describes what happens during changes in the earth and sky	(d) Child describes what happens during changes in the sky
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(4) Child demonstrates the importance of caring for our environment and our planet	(a) Child demonstrates the importance of caring for our environment
(VI) SCIENCE DOMAIN	(C) Earth and Space Science Skills	(4) Child demonstrates the importance of caring for our environment and our planet	(b) Child demonstrates the importance of caring for our planet