TIS (Priority) Science Standards

Scale

4	3	2	1	NA
Extending	Proficient	Foundational	Emergent	Not Applicable
 I can demonstrate a deeper level.	 I can do it!	 I need more practice.	 I need more support.	Standard has not been introduced yet.

TIS (Priority) Science Standards

Kindergarten

Physical Science
Understands force and motion.
Determines the effect of sunlight on Earth's surface.
Life Science
Understands what plants and animals need to survive.
Earth Science
Describes weather patterns over time.
Understands the purpose of weather forecasting.
Describes how plants and animals can change their environment.
Makes a model to show the habitat of plants and animals.
Communicates solutions to reduce human impact.
Engineering & Technology
Defines a design problem that can be solved with a new object or tool.
Analyzes data from tests.

TIS (Priority) Science Standards

1st Grade

Physical Science
Understands sounds and vibrations.
Understands light.
Life Science
Understands what plants and animals need to survive in their habitat.
Determines patterns in behavior of parents and offspring.
Earth Science
Describes patterns of the sun, moon and stars.
Observes at different times of year to relate daylight to time of year.
Engineering & Technology
Defines a design problem that can be solved with a new object or tool.
Analyzes data from tests.

TIS (Priority) Science Standards

2nd Grade

Physical Science
Classifies materials based on their properties.
Understands changes caused by heating or cooling.
Life Science
Understand what plants need to grow.
Understands how an animal pollinates plants.
Understands the diversity of life in different habitats.
Earth Science
Describe how Earth events can occur.
Understands how wind or water shape the land.
Represents the kinds of land and bodies of water in an area.
Identifies where water is found on Earth.
Engineering & Technology
Defines a design problem that can be solved with a new object or tool.
Analyzes data from tests.

TIS (Priority) Science Standards

3rd Grade

Physical Science
Understands force and motion.
Understands magnetic interactions.
Life Science
Understands life cycles.
Understands inherited traits.
Analyzes fossils.
Explains variations in species' characteristics.
Earth Science
Describes and predicts weather.
Describes climates in different regions.
Engineering & Technology
Defines a design problem reflecting a need or want.
Generates and compares multiple possible solutions to a problem.
Plans and carries out tests with variables.

TIS (Priority) Science Standards

4th Grade

Physical Science
Understands force and motion.
Understands the effect of sunlight on Earth's surface.
Life Science
Describes patterns of what plants and animals need to survive.
Earth Science
Describes weather patterns over time.
Obtains information about the purpose of weather forecasting.
Describes how plants and animals can change their environment.
Describes solutions that reduce human impact on the environment.
Engineering & Technology
Defines a simple problem that can be solved with a new object or tool.
Analyzes data from tests on two objects.

TIS (Priority) Science Standards

5th Grade

Physical Science
Understands matter.
Measure and graphs changes in heating, cooling, and mixing.
Identifies materials based on their properties.
Determines whether a physical or chemical change occurred.
Describes how energy from the sun is converted into food.
Life Science
Understands how plants get the materials they need for growth.
Describes the movement of matter within the environment.
Earth Science
Describes the impact of the sun's brightness and stars on the planets.
Describes the ways the various spheres interact.
Describes the distribution of water on Earth.
Obtains information about how to protect the Earth.
Engineering & Technology
Defines a simple design problem reflecting a need or want.
Compares multiple possible solutions to a problem.
Plans and carries out tests in which variables are controlled.

TIS (Priority) Science Standards

6th Grade

Physical Science
Describes atomic composition.
Determines whether a physical or chemical change occurred.
Applies Newton's Third Law.
Understands Newton's First and Second Laws.
Determines the factors that affect electric and magnetic forces.
Understands gravitational interactions.
Understands potential and kinetic energy.
Life Science
Understands that living things have different cell types.
Describes the function of a cell.
Understands the probability of successful reproduction.
Understands the role of photosynthesis.
Explains the patterns of interactions among organisms in ecosystems.
Earth Science
Describes lunar phases, eclipses of the sun and moon, and seasons.
Describes the role of gravity in the solar system.
Interprets data on fossils and rocks.
Describes the cycling of water through Earth's systems.
Interprets data to forecast future catastrophic events.
Understands human impact on the environment.
Engineering & Technology
Defines a simple design problem reflecting a need or want.
Compares multiple possible solutions to a problem.
Plans and carries out tests in which variables are controlled.

TIS (Priority) Science Standards

7th Grade

Physical Science
Describes atomic composition.
Determines whether a physical or chemical change occurred.
Understand and apply the principles of motion and stability to explain and predict the behavior of objects and systems under various forces.
Determines the factors that affect electric and magnetic forces.
Understands gravitational interactions.
Understands potential and kinetic energy.
Life Science
Understands that living things have different cell types.
Describes the function of a cell.
Understands the probability of successful reproduction.
Understands the role of photosynthesis.
Explains the patterns of interactions among organisms in ecosystems.
Earth Science
Describes lunar phases, eclipses of the sun and moon, and seasons.
Describes the role of gravity in the solar system.
Interprets data on fossils and rocks.
Describes the cycling of water through Earth's systems.
Interprets data to forecast future catastrophic events.
Understands human impact on the environment.
Engineering & Technology
Defines a simple design problem reflecting a need or want.
Compares multiple possible solutions to a problem.
Plans and carries out tests in which variables are controlled.

TIS (Priority) Science Standards

8th Grade

Physical Science
Describes atomic composition.
Determines whether a physical or chemical change occurred.
Understand and apply the principles of motion and stability to explain and predict the behavior of objects and systems under various forces.
Determines the factors that affect electric and magnetic forces.
Understands gravitational interactions.
Understands potential and kinetic energy.
Life Science
Understands that living things have different cell types.
Describes the function of a cell.
Understands the probability of successful reproduction.
Understands the role of photosynthesis.
Explains the patterns of interactions among organisms in ecosystems.
Earth Science
Describes lunar phases, eclipses of the sun and moon, and seasons.
Describes the role of gravity in the solar system.
Interprets data on fossils and rocks.
Describes the cycling of water through Earth's systems.
Interprets data to forecast future catastrophic events.
Understands human impact on the environment.
Engineering & Technology
Defines a simple design problem reflecting a need or want.
Compares multiple possible solutions to a problem.
Plans and carries out tests in which variables are controlled.