Science Standards

GRADE: K

Big Idea 1: The Practice of Science

A: Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

B: The processes of science frequently do not correspond to the traditional portrayal of "the scientific method."

C: Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.

D: Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.K.N.1.In.a Identify a partner to obtain information.	SC.K.N.1.Su.a Collect a designated item with a partner.	SC.K.N.1.Pa.a Share objects with a partner.
SC.K.N.1.In.b Identify information about objects and actions in the natural world through observation.	SC.K.N.1.Su.b Identify information about objects in the natural world through observation.	SC.K.N.1.Pa.b Recognize common objects in the natural world through observation.
SC.K.N.1.In.c Observe, explore, and create a visual representation of real objects.	SC.K.N.1.Su.c Observe, explore, and match pictures to real objects.	

Big Idea 5: Earth in Space and Time

Humans continue to explore Earth's place in space. Gravity and energy influence the formation of galaxies, including our own Milky Way Galaxy, stars, the Solar System, and Earth. Humankind's need to explore continues to lead to the development of knowledge and understanding of our Solar System.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.K.E.5.In.a Identify that objects can fall to the ground unless something stops them.	SC.K.E.5.Su.a Recognize that objects fall to the ground.	SC.K.E.5.Pa.a Track a falling object.
SC.K.E.5.In.b Identify daily activities in a 24-hour period, such as eating breakfast and going to bed, and associate activities with morning and night.	SC.K.E.5.Su.b Identify one common activity that occurs in the day and one that occurs in the night.	SC.K.E.5.Pa.b Recognize one common activity that occurs during the day.
SC.K.E.5.In.c Identify the Sun in the daytime.	SC.K.E.5.Su.c Recognize the Sun in the daytime.	SC.K.E.5.Pa.c Associate the Sun with daytime.
SC.K.E.5.In.d Identify the Moon in the sky at night.	SC.K.E.5.Su.d Recognize the Moon in the sky at night.	SC.K.E.5.Pa.d Associate the Moon with night.
SC.K.E.5.In.e Observe big and small things in the sky.	SC.K.E.5.Su.e Recognize the size of items as either big or small.	SC.K.E.5.Pa.e Recognize items that are big.
SC.K.E.5.In.f Identify an item that is far away and an item that is nearby.	SC.K.E.5.Su.f Recognize familiar objects that are far away or nearby.	SC.K.E.5.Pa.f Recognize items as nearby.

Big Idea 8: Properties of Matter

A. All objects and substances in the world are made of matter. Matter has two fundamental properties: matter takes up space and matter has mass.

B. Objects and substances can be classified by their physical and chemical properties.

Mass is the amount of matter (or "stuff") in an object. Weight, on the other hand, is the measure of force of attraction (gravitational force) between an object and Earth.

The concepts of mass and weight are complicated and potentially confusing to elementary students. Hence, the more familiar term of "weight" is recommended for use to stand for both mass and weight in grades K-5. By grades 6-8, students are expected to understand the distinction between mass and weight, and use them appropriately.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.K.P.8.In.a Sort objects by observable properties, such as size, shape, or color.	SC.K.P.8.Su.a Match objects by an observable property, such as size or color.	SC.K.P.8.Pa.a Recognize two common objects that are identical to each other.

Big Idea 9: Changes in Matter

A. Matter can undergo a variety of changes.

B. Matter can be changed physically or chemically.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.K.P.9.In.a Recognize that the shape of objects, such as paper, changes when cut, torn, or crumpled.	SC.K.P.9.Su.a Recognize that the shape of objects, such as paper, changes when cut or torn.	SC.K.P.9.Pa.a Recognize a change in an object.

Big Idea 10: Forms of Energy

A. Energy is involved in all physical processes and is a unifying concept in many areas of science.

B. Energy exists in many forms and has the ability to do work or cause a change.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.K.P.10.In.a Identify objects that create specific sounds.	SC.K.P.10.Su.a Match sounds to specific objects.	SC.K.P.10.Pa.a Recognize and respond to common sounds.

Big Idea 12: Motion of Objects

A. Motion is a key characteristic of all matter that can be observed, described, and measured.

B. The motion of objects can be changed by forces.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.K.P.12.In.a Identify ways that things move, such as fast or slow.	SC.K.P.12.Su.a Recognize that things move.	SC.K.P.12.Pa.a Track objects in motion.

Big Idea 13: Forces and Changes in Motion

A. It takes energy to change the motion of objects.

B. Energy change is understood in terms of forces--pushes or pulls.

C. Some forces act through physical contact, while others act at a distance.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.K.P.13.In.a Demonstrate pushing or pulling of an object to make it move.	SC.K.P.13.Su.a Recognize that pushing or pulling an object makes it move.	SC.K.P.13.Pa.a Track the movement of objects that are pushed or pulled.

Big Idea 14: Organization and Development of Living Organisms

A. All plants and animals, including humans, are alike in some ways and different in others.

B. All plants and animals, including humans, have internal parts and external structures that function to keep them alive and help them grow and reproduce.

C. Humans can better understand the natural world through careful observation.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.K.L.14.In.a Recognize the senses of sight, hearing, and smell and related body parts.	SC.K.L.14.Su.a Recognize the senses of sight and hearing and related body parts.	SC.K.L.14.Pa.a Recognize and respond to one type of sensory stimuli.
SC.K.L.14.In.b Identify a behavior of an animal or plant in a book or other media that is not real.	SC.K.L.14.Su.b Distinguish a real animal and an animal that is not a living thing, such as a toy animal.	SC.K.L.14.Pa.b Distinguish between a plant and animal.
SC.K.L.14.In.c Identify differences in characteristics of plants and animals.	SC.K.L.14.Su.c Match identical animals and plants.	

GRADE: 1

Big Idea 1: The Practice of Science

A: Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

B: The processes of science frequently do not correspond to the traditional portrayal of "the scientific method."

C: Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.

D: Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.1.N.1.In.a Request information about the environment.	SC.1.N.1.Su.a Ask questions about common objects in the environment.	SC.1.N.1.Pa.a Recognize common objects in the environment.
SC.1.N.1.In.b Use careful observation to	SC.1.N.1.Su.b Recognize differences in	

identify objects based on size, shape, color, or texture. SC.1.N.1.In.c Draw pictures about investigations conducted. SC.1.N.1.In.d Ask a question about a science investigation.	objects through observation of size, shape, or color SC.1.N.1.Su.c Contribute to group recordings of observations.	SC.1.N.1.Pa.b Recognize common objects as the same.

Big Idea 5: Earth in Space and Time

Humans continue to explore Earth's place in space. Gravity and energy influence the formation of galaxies, including our own Milky Way Galaxy, stars, the Solar System, and Earth. Humankind's need to explore continues to lead to the development of knowledge and understanding of our Solar System.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.1.E.5.In.a Identify that there are many stars in the sky.	SC.1.E.5.Su.a Recognize that there are many stars in the sky.	SC.1.E.5.Pa.a Associate stars with the night sky.
SC.1.E.5.In.b Observe and recognize that an object will fall when it is dropped.	SC.1.E.5.Su.b Indicate the location of an object before and after it falls.	SC.1.E.5.Pa.b Track objects that fall to the ground.
SC.1.E.5.In.c Identify that magnifiers enlarge the appearance of objects.	SC.1.E.5.Su.c Match a magnified item to its original item.	SC.1.E.5.Pa.c Recognize a familiar object enlarged by magnification.
SC.1.E.5.In.d Recognize positive and harmful effects of sunlight.	SC.1.E.5.Su.d Recognize a positive effect and a negative effect of sunlight.	SC.1.E.5.Pa.d Recognize effects of sunlight, such as warming and giving light.

Big Idea 6: Earth Structures

Humans continue to explore the composition and structure of the surface of the Earth. External sources of energy have continuously altered the features of Earth by means of both constructive and destructive forces. All life, including human civilization, is dependent on Earth's water and natural resources.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.1.E.6.In.a Identify rocks, water, and living things in the environment.	SC.1.E.6.Su.a Recognize rocks and living things in the environment.	SC.1.E.6.Pa.a Recognize living things in the environment.
SC.1.E.6.In.b Identify reasons people need water and safe practices around water.	SC.1.E.6.Su.b Identify reasons people need water.	SC.1.E.6.Pa.b Recognize one way people use water.
SC.1.E.6.In.c Distinguish between events that happen slowly and those that happen fast.	SC.1.E.6.Su.c Distinguish between actions that are fast or slow.	SC.1.E.6.Pa.c Recognize an action as fast or slow.

Big Idea 8: Properties of Matter

A. All objects and substances in the world are made of matter. Matter has two fundamental properties: matter takes up space and matter has mass.

B. Objects and substances can be classified by their physical and chemical properties. Mass is the amount of matter (or "stuff") in an object. Weight, on the other hand, is the measure of force of attraction (gravitational force) between an object and Earth.

The concepts of mass and weight are complicated and potentially confusing to elementary students. Hence, the more familiar term of "weight" is recommended for use to stand for both mass and weight in grades K-5. By grades 6-8, students are expected to understand the distinction between mass and weight, and use them appropriately.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.1.P.8.In.a Sort objects by observable properties, such as size, shape, color, or texture.	SC.1.P.8.Su.a Sort objects by an observable property, such as size, shape, or color.	SC.1.P.8.Pa.a Identify common classroom objects by one observable property, such as size or color.

Big Idea 12: Motion of Objects

A. Motion is a key characteristic of all matter that can be observed, described, and measured.

B. The motion of objects can be changed by forces.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.1.P.12.In.a Demonstrate and identify that objects can move in different ways, such as up and down, in a straight line, and back and forth.	SC.1.P.12.Su.a Demonstrate that objects can move in different ways, such as up and down.	SC.1.P.12.Pa.a Track objects moving up and down.

Big Idea 13: Forces and Changes in Motion

A. It takes energy to change the motion of objects.

B. Energy change is understood in terms of forces--pushes or pulls.

C. Some forces act through physical contact, while others act at a distance.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.1.P.13.In.a Identify the effect that a push or pull has on an object, such as changing the	SC.1.P.13.Su.a Demonstrate and recognize that pushing or pulling of an	SC.1.P.13.Pa.a Apply a

way an object moves.	object makes it move.	push to move an object.

Big Idea 14: Organization and Development of Living Organisms **A. All plants and animals, including humans, are alike in some ways and different in others.** **B. All plants and animals, including humans, have internal parts and external structures that function to keep them alive and help them grow and reproduce.** **C. Humans can better understand the natural world through careful observation.**		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.1.L.14.In.a Use sight, hearing, and smell to make observations.	SC.1.L.14.Su.a Use sight and hearing to make observations.	SC.1.L.14.Pa.a Recognize and respond to different types of sensory stimuli.
SC.1.L.14.In.b Identify the leaf, flower, and stem of a plant.	SC.1.L.14.Su.b Recognize the leaf and flower of a plant.	SC.1.L.14.Pa.b Recognize that plants have leaves.
SC.1.L.14.In.c Identify characteristics of living and nonliving things, including whether they need food or water.	SC.1.L.14.Su.c Distinguish common living and nonliving things in the environment.	SC.1.L.14.Pa.c Recognize self and others as living things.

Big Idea 16: Heredity and Reproduction **A. Offspring of plants and animals are similar to, but not exactly like, their parents or each other.** **B. Life cycles vary among organisms, but reproduction is a major stage in the life cycle of all organisms.**		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.1.L.16.In.a Match offspring of specific animals to adult animals.	SC.1.L.16.Su.a Recognize that baby plants and animals have parents.	SC.1.L.16.Pa.a Recognize one's own parents.

Big Idea 17: Interdependence **A. Plants and animals, including humans, interact with and depend upon each other and their environment to satisfy their basic needs.** **B. Both human activities and natural events can have major impacts on the environment.** **C. Energy flows from the sun through producers to consumers.**

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.1.L.17.In.a Observe and recognize that plants and animals need water and food.	SC.1.L.17.Su.a Observe and recognize that plants and animals need water.	SC.1.L.17.Pa.a Observe and recognize that people need water.

GRADE: 2

Big Idea 1: The Practice of Science

A: Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

B: The processes of science frequently do not correspond to the traditional portrayal of "the scientific method."

C: Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.

D: Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.2.N.1.In.a Ask questions and make observations about things in the natural world.	SC.2.N.1.Su.a Answer yes and no questions and make observations about common objects and actions in the natural world.	SC.2.N.1.Pa.a Request a change or help to solve a problem in the environment.
SC.2.N.1.In.b Identify information about objects based on observation.	SC.2.N.1.Su.b Identify characteristics of objects based on observation.	SC.2.N.1.Pa.b Use senses to recognize objects.
SC.2.N.1.In.c Recognize that the results of a scientific activity should be the same when repeated	SC.2.N.1.Su.c Recognize that science activities can be repeated.	SC.2.N.1.Pa.c Recognize common objects in different environments.
SC.2.N.1.In.d Recognize that scientists work to solve problems.	SC.2.N.1.Su.d Recognize that people work in science.	

Big Idea 6: Earth Structures

Humans continue to explore the composition and structure of the surface of Earth. External sources of energy have continuously altered the features of Earth by means of both constructive and destructive forces. All life, including human civilization, is dependent on Earth's water and natural resources.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.2.E.6.In.a Sort rocks according to size and shape. SC.2.E.6.In.b Identify components of soil, such as dead plants and pieces of rock. SC.2.E.6.In.c Recognize soil types based on color (dark or light) and texture (size of particles).	SC.2.E.6.Su.a Sort rocks according to size. SC.2.E.6.Su.b Identify small pieces of rock in the soil. SC.2.E.6.Su.c Sort soil samples according to physical properties, such as color (dark or light) or texture (size of particles).	SC.2.E.6.Pa.a Recognize the ground in the environment. SC.2.E.6.Pa.b Distinguish examples of soil from other substances.

Big Idea 7: Earth Systems and Patterns

Humans continue to explore the interactions among water, air, and land. Air and water are in constant motion that results in changing conditions that can be observed over time.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.2.E.7.In.a Identify common weather patterns associated with each season. SC.2.E.7.In.b Identify that the Sun heats the outside air and water. SC.2.E.7.In.c Recognize that water in an open container will disappear (evaporate). SC.2.E.7.In.d Identify effects of wind. SC.2.E.7.In.e Identify harmful consequences of being outside in severe weather, such as lightning, hurricanes, or tornados.	SC.2.E.7.Su.a Recognize types of weather and match to the weather outdoors. SC.2.E.7.Su.b Recognize that items outside are heated by the Sun. SC.2.E.7.Su.c Recognize that wet things will dry when they are left in the air. SC.2.E.7.Su.d Recognize effects of wind. SC.2.E.7.Su.e Recognize reasons for staying inside during severe weather, such as hurricanes and thunderstorms.	SC.2.E.7.Pa.a Recognize daily outdoor temperature as hot or cold. SC.2.E.7.Pa.b Distinguish between items that are wet and items that are dry. SC.2.E.7.Pa.c Indicate awareness of air moving. SC.2.E.7.Pa.d Recognize where to go to avoid severe weather, such as thunder and lightning.

Big Idea 8: Properties of Matter

A. All objects and substances in the world are made of matter. Matter has two fundamental properties: matter takes up space and matter has mass.

B. Objects and substances can be classified by their physical and chemical properties.

Mass is the amount of matter (or "stuff") in an object. Weight, on the other hand, is the

measure of force of attraction (gravitational force) between an object and Earth.

The concepts of mass and weight are complicated and potentially confusing to elementary students. Hence, the more familiar term of "weight" is recommended for use to stand for both mass and weight in grades K-5. By grades 6-8, students are expected to understand the distinction between mass and weight, and use them appropriately.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.2.P.8.In.a Identify objects by observable properties, such as, size, shape, color,	SC.2.P.8.Su.a Identify objects by observable properties, such as size, shape, and color.	SC.2.P.8.Pa.a Match objects by one observable property, such as size or color.
SC.2.P.8.In.b Identify objects and materials as solid or liquid.	SC.2.P.8.Su.b Recognize water in solid or liquid states.	SC.2.P.8.Pa.b Recognize water as a liquid.
SC.2.P.8.In.c Recognize that solids have a definite shape and liquids take the shape of their container.	SC.2.P.8.Su.c Recognize that solids have a definite shape.	SC.2.P.8.Pa.c Recognize different containers that hold liquids.
SC.2.P.8.In.d Describe and compare outside daily temperatures as warm or cold.	SC.2.P.8.Su.d Identify outside temperatures as warm or cold.	SC.2.P.8.Pa.d Recognize common objects or materials as warm or cold.
SC.2.P.8.In.e Compare the volume of liquid in a variety of containers.	SC.2.P.8.Su.e Recognize different volumes of liquids in identical containers.	

Big Idea 9: Changes in Matter

A. Matter can undergo a variety of changes.

B. Matter can be changed physically or chemically.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.2.P.9.In.a Explore and identify that observable properties of materials can be changed.	SC.2.P.9.Su.a Recognize changes in observable properties of materials.	SC.2.P.9.Pa.a Recognize that the appearance of an object or material has changed.

Big Idea 10: Forms of Energy

A. Energy is involved in all physical processes and is a unifying concept in many areas of science.

B. Energy exists in many forms and has the ability to do work or cause a change.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.2.P.10.In.a Identify ways people	SC.2.P.10.Su.a Recognize a way people	SC.2.P.10.Pa.a Activate a device

use electricity in their lives.	use electricity in their lives.	that uses electricity.

Big Idea 13: Forces and Changes in Motion

A. It takes energy to change the motion of objects.

B. Energy change is understood in terms of forces--pushes or pulls.

C. Some forces act through physical contact, while others act at a distance.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.2.P.13.In.a Observe and identify that pushing or pulling an object can change the direction of movement of the object. SC.2.P.13.In.b Observe and recognize that magnets can move some objects. SC.2.P.13.In.c Identify and demonstrate that an object will fall to the ground when dropped. SC.2.P.13.In.d Identify that pushing or pulling an object with more force will make the object go faster or farther.	SC.2.P.13.Su.a Identify that pushing or pulling an object makes it move. SC.2.P.13.Su.b Use magnets to cause objects to move. SC.2.P.13.Su.c Recognize that an object will fall to the ground when dropped. SC.2.P.13.Su.d Recognize that pushing or pulling an object with more force will make the object go faster or farther.	SC.2.P.13.Pa.a Recognize that pushing and pulling an object makes it move. SC.2.P.13.Pa.b Indicate that an object has fallen.

Big Idea 14: Organization and Development of Living Organisms

A. All plants and animals, including humans, are alike in some ways and different in others.

B. All plants and animals, including humans, have internal parts and external structures that function to keep them alive and help them grow and reproduce.

C. Humans can better understand the natural world through careful observation.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.2.L.14.In.a Identify major external body parts, such as hands and legs, and their uses.	SC.2.L.14.Su.a Match external body parts, such as a foot, to their uses.	SC.2.L.14.Pa.a Recognize one or more external body parts.

Big Idea 16: Heredity and Reproduction

A. Offspring of plants and animals are similar to, but not exactly like, their parents or

each other.

B. Life cycles vary among organisms, but reproduction is a major stage in the life cycle of all organisms.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.2.L.16.In.a Observe and recognize the major stages in the life cycles of plants and animals.	SC.2.L.16.Su.a Observe and recognize the sequence of stages in the life cycles of common animals.	SC.2.L.16.Pa.a Recognize that offspring can be matched with their parents, such as a human baby with adult humans and a puppy with dogs.

Big Idea 17: Interdependence

A. Plants and animals, including humans, interact with and depend upon each other and their environment to satisfy their basic needs.

B. Both human activities and natural events can have major impacts on the environment.

C. Energy flows from the sun through producers to consumers.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.2.L.17.In.a Identify the basic needs of living things, including water, food, and air.	SC.2.L.17.Su.a Recognize that living things have basic needs, including water and food.	SC.2.L.17.Pa.a Recognize that animals need water.
SC.2.L.17.In.b Recognize that many different kinds of living things are found in different habitats.	SC.2.L.17.Su.b Recognize that many kinds of living things are found in the environment.	SC.2.L.17.Pa.b Recognize common living things in the immediate environment.

GRADE: 3

Big Idea 1: The Practice of Science

A: Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

B: The processes of science frequently do not correspond to the traditional portrayal of "the scientific method."

C: Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.

D: Scientific knowledge is based on observation and inference; it is important to

recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.3.N.1.In.a Ask questions, explore, observe, and identify outcomes.	SC.3.N.1.Su.a Ask literal questions, explore, observe, and share information.	SC.3.N.1.Pa.a Explore, observe, and recognize common objects in the natural world.
SC.3.N.1.In.b Work with a group to make observations and identify results.	SC.3.N.1.Su.b Work with a partner to make observations.	SC.3.N.1.Pa.b Assist with investigations with a partner.
SC.3.N.1.In.c Record observations to describe findings using written or visual formats, such as picture stories.	SC.3.N.1.Su.c Record observations to describe findings using dictated words and phrases and pictures.	SC.3.N.1.Pa.c Recognize that people share information.
SC.3.N.1.In.d Recognize that scientists share their knowledge and results with each other.	SC.3.N.1.Su.d Recognize that people work in different kinds of jobs related to science.	

Big Idea 3: The Role of Theories, Laws, Hypotheses, and Models The terms that describe examples of scientific knowledge, for example; "theory," "law," "hypothesis," and "model" have very specific meanings and functions within science.		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.3.N.3.In.a Recognize meanings of words used in science, such as energy, temperature, and gravity.	SC.3.N.3.Su.a Recognize meanings of words used in science, such as telescope, environment, and solid.	SC.3.N.3.Pa.a Recognize common objects related to science by name, such as ice, animal, and plant.
SC.3.N.3.In.b Use models to identify how things work.	SC.3.N.3.Su.b Recognize that models represent real things.	SC.3.N.3.Pa.b Recognize a model of a real object.
SC.3.N.3.In.c Identify that models are representations of things found in the real world.		

Big Idea 5: Earth in Space and Time Humans continue to explore Earth's place in space. Gravity and energy influence the formation of galaxies, including our own Milky Way Galaxy, stars, the Solar System, and Earth. Humankind's need to explore continues to lead to the development of knowledge and understanding of our Solar System.		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.3.E.5.In.a Recognize that stars in the sky look different from each other.	SC.3.E.5.Su.a Recognize that all stars except the Sun appear very small.	SC.3.E.5.Pa.a Recognize stars in the sky.
SC.3.E.5.In.b Recognize that the Sun is	SC.3.E.5.Su.b Recognize that the Sun	SC.3.E.5.Pa.b Recognize that

a star that gives off its own light. SC.3.E.5.In.c Recognize that the Sun is the closest star to Earth. SC.3.E.5.In.d Observe and describe ways to keep an object from falling due to gravity. SC.3.E.5.In.e Recognize that stars appear larger and closer when seen through a telescope.	gives off light. SC.3.E.5.Su.c Recognize that the Sun is a star. SC.3.E.5.Su.d Observe and recognize ways to stop a falling object, such as catching a ball. SC.3.E.5.Su.e Recognize a telescope as a tool to view stars in space.	the Sun is bright. SC.3.E.5.Pa.c Recognize that an object can be stopped from falling. SC.3.E.5.Pa.d Match a familiar object enlarged by magnification.

Big Idea 6: Earth Structures

Humans continue to explore the composition and structure of the surface of Earth. External sources of energy have continuously altered the features of Earth by means of both constructive and destructive forces. All life, including human civilization, is dependent on Earth's water and natural resources.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.3.E.6.In.a Identify that energy from the Sun heats objects.	SC.3.E.6.Su.a Recognize that many things will get hot when left in the Sun.	SC.3.E.6.Pa.a Distinguish between hot and cold objects.

Big Idea 8: Properties of Matter

A. All objects and substances in the world are made of matter. Matter has two fundamental properties: matter takes up space and matter has mass.

B. Objects and substances can be classified by their physical and chemical properties. Mass is the amount of matter (or "stuff") in an object. Weight, on the other hand, is the measure of force of attraction (gravitational force) between an object and Earth.

The concepts of mass and weight are complicated and potentially confusing to elementary students. Hence, the more familiar term of "weight" is recommended for use to stand for both mass and weight in grades K-5. By grades 6-8, students are expected to understand the distinction between mass and weight, and use them appropriately.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.3.P.8.In.a Observe and identify the colder/hotter temperature measured on a thermometer. SC.3.P.8.In.b Measure the weight of solids or liquids. SC.3.P.8.In.c Group objects by two	SC.3.P.8.Su.a Recognize that a thermometer measures temperature (cold and hot). SC.3.P.8.Su.b Sort solid objects by weight (heavy and light). SC.3.P.8.Su.c Sort objects by an	SC.3.P.8.Pa.a Recognize the temperature of items, such as food, as cool or warm. SC.3.P.8.Pa.b Recognize the larger of two objects. SC.3.P.8.Pa.c Match objects by an

observable properties, such as size and shape or color and texture.	observable property, such as size, shape, color, and texture.	observable property, such as size, shape, and color.

Big Idea 9: Changes in Matter **A. Matter can undergo a variety of changes.** **B. Matter can be changed physically or chemically.**		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.3.P.9.In.a Describe changes in the state of water as a result of freezing and melting.	SC.3.P.9.Su.a Identify that water can change from solid to liquid state by heating.	SC.3.P.9.Pa.a Recognize that ice can change to water.

Big Idea 10: Forms of Energy **A. Energy is involved in all physical processes and is a unifying concept in many areas of science.** **B. Energy exists in many forms and has the ability to do work or cause a change.**		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.3.P.10.In.a Recognize forms of energy, such as light, heat, electrical, and energy of motion. SC.3.P.10.In.b Recognize examples of the use of energy, such as electrical (radio, freezer) and energy of motion (bowling, wind). SC.3.P.10.In.c Identify that light may come from different sources, such as the Sun or electric lamp.	SC.3.P.10.Su.a Recognize objects that use electricity (television) and the energy of motion (bowling ball). SC.3.P.10.Su.b Recognize examples of sources of light, such as the Sun or a flashlight.	SC.3.P.10.Pa.a Recognize the change in the motion of an object. SC.3.P.10.Pa.b Distinguish light and dark.

Big Idea 11: Energy Transfer and Transformations **A. Waves involve a transfer of energy without a transfer of matter.** **B. Water and sound waves transfer energy through a material.** **C. Light waves can travel through a vacuum and through matter.**		
Access Point for Students with Significant Cognitive Disabilities		

Independent	*Supported*	*Participatory*
SC.3.P.11.In.a Identify that objects that give off light often give off heat.	SC.3.P.11.Su.a Recognize objects that give off both heat and light, such as a light bulb.	SC.3.P.11.Pa.a Recognize sources of light.
SC.3.P.11.In.b Observe and identify that heat is produced when objects are rubbed together.	SC.3.P.11.Su.b Observe and recognize that rubbing objects together causes heat.	SC.3.P.11.Pa.b Recognize sources of heat.

Big Idea 14: Organization and Development of Living Organisms

A. All plants and animals, including humans, are alike in some ways and different in others.

B. All plants and animals, including humans, have internal parts and external structures that function to keep them alive and help them grow and reproduce.

C. Humans can better understand the natural world through careful observation.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.3.L.14.In.a Identify the major parts of a plant, including seed, root, stem, leaf, and flower, and their functions.	SC.3.L.14.Su.a Identify the major parts of a plant, such as the root, stem, leaf, and flower.	SC.3.L.14.Pa.a Recognize the leaf and flower of a plant.
SC.3.L.14.In.b Identify behaviors of plants that show they are growing.	SC.3.L.14.Su.b Recognize that plants grow toward light and roots grow down in the soil.	SC.3.L.14.Pa.b Recognize that plants grow.

Big Idea 15: Diversity and Evolution of Living Organisms

A. Earth is home to a great diversity of living things, but changes in the environment can affect their survival.

B. Individuals of the same kind often differ in their characteristics and sometimes the differences give individuals an advantage in surviving and reproducing.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.3.L.15.In.a Classify animals by a similar physical characteristic, such as fur, feathers, and number of legs.	SC.3.L.15.Su.a Sort common animals by observable characteristics.	SC.3.L.15.Pa.a Match animals that are the same.
SC.3.L.15.In.b Classify parts of plants into groups based on physical characteristics, such as classifying leaves by shape.	SC.3.L.15.Su.b Sort common plants by observable characteristics.	SC.3.L.15.Pa.b Match plants that are the same.

Big Idea 17: Interdependence

A. Plants and animals, including humans, interact with and depend upon each other and their environment to satisfy their basic needs.

B. Both human activities and natural events can have major impacts on the environment.

C. Energy flows from the sun through producers to consumers.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.3.L.17.In.a Identify changes in the appearance of animals and plants throughout the year.	SC.3.L.17.Su.a Recognize that the appearance of some plants in the environment changes throughout the year.	SC.3.L.17.Pa.a Recognize clothing worn by humans in different weather (seasons).
SC.3.L.17.In.b Recognize that most plants make their own food.	SC.3.L.17.Su.b Recognize that plants need light to grow.	SC.3.L.17.Pa.b Recognize that plants need water.

GRADE: 4

Big Idea 1: The Practice of Science

A: Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

B: The processes of science frequently do not correspond to the traditional portrayal of "the scientific method."

C: Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.

D: Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.4.N.1.In.a Ask a question about the natural world and use selected reference material to find information, observe, explore, and identify findings.	SC.4.N.1.Su.a Ask a question about the natural world, explore materials, observe, and share information.	SC.4.N.1.Pa.a Explore, observe, and select an object or picture to solve a simple problem.
SC.4.N.1.In.b Compare own observations with observations of others.	SC.4.N.1.Su.b Identify information based on observations of self and others.	SC.4.N.1.Pa.b Recognize differences in objects or pictures.

SC.4.N.1.In.c Relate findings to predefined science questions. SC.4.N.1.In.d Communicate observations and findings through the use of pictures, writing, or charts. SC.4.N.1.In.e Recognize that scientists perform experiments, make observations, and gather evidence.	SC.4.N.1.Su.c Answer questions about objects and actions related to science. SC.4.N.1.Su.d Record observations using drawings, dictation, or pictures. SC.4.N.1.Su.e Recognize ways that scientists collect evidence, such as by observations or measuring.	SC.4.N.1.Pa.c Select an object or picture to represent observed events. SC.4.N.1.Pa.d Recognize that people share information about science.

Big Idea 2: The Characteristics of Scientific Knowledge

A: Scientific knowledge is based on empirical evidence, and is appropriate for understanding the natural world, but it provides only a limited understanding of the supernatural, aesthetic, or other ways of knowing, such as art, philosophy, or religion.

B: Scientific knowledge is durable and robust, but open to change.

C: Because science is based on empirical evidence it strives for objectivity, but as it is a human endeavor the processes, methods, and knowledge of science include subjectivity, as well as creativity and discovery.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.4.N.2.In.a Identify that science focuses on the natural world.	SC.4.N.2.Su.a Recognize that science focuses on the natural world.	SC.4.N.2.Pa.a Associate science with the natural world in the local environment.

Big Idea 3: The Role of Theories, Laws, Hypotheses, and Models

The terms that describe examples of scientific knowledge, for example; "theory," "law," "hypothesis," and "model" have very specific meanings and functions within science.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.4.N.3.In.a Identify different types of models, such as a replica, a picture, or an animation.	SC.4.N.3.Su.a Recognize different types of models, such as a replica or a picture.	SC.4.N.3.Pa.a Match a model that is a replica to a real object.

Big Idea 5: Earth in Space and Time

Humans continue to explore Earth's place in space. Gravity and energy influence the

formation of galaxies, including our own Milky Way Galaxy, stars, the Solar System, and Earth. Humankind's need to explore continues to lead to the development of knowledge and understanding of our Solar System.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.4.E.5.In.a Identify that there are many stars in the sky with some that create patterns.	SC.4.E.5.Su.a Recognize a pattern of stars in the sky, such as the Big Dipper.	SC.4.E.5.Pa.a Recognize that there are many stars in the sky.
SC.4.E.5.In.b Label three phases of the moon, including full, half (quarter), and crescent.	SC.4.E.5.Su.b Identify a full moon and a half (quarter) moon.	SC.4.E.5.Pa.b Recognize a full moon as a circle.
SC.4.E.5.In.c Recognize that Earth revolves around the Sun.	SC.4.E.5.Su.c Recognize that Earth is always turning (rotating).	SC.4.E.5.Pa.c Identify morning, noon, and night.
SC.4.E.5.In.d Recognize that the Sun appears to rise and set because of Earth's rotation in a 24-hour day.	SC.4.E.5.Su.d Recognize that the side of Earth facing the Sun has daylight.	SC.4.E.5.Pa.d Recognize a space-related object.
SC.4.E.5.In.e Identify objects and people related to the space program in Florida.	SC.4.E.5.Su.e Recognize an object or person related to the space program in Florida.	

Big Idea 6: Earth Structures

Humans continue to explore the composition and structure of the surface of Earth. External sources of energy have continuously altered the features of Earth by means of both constructive and destructive forces. All life, including human civilization, is dependent on Earth's water and natural resources.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.4.E.6.In.a Recognize that rocks are classified by the way they are formed, such as sedimentary.	SC.4.E.6.Su.a Sort rocks according to observable characteristics, including color, shape, and size.	SC.4.E.6.Pa.a Distinguish rocks from other substances found on the Earth's surface.
SC.4.E.6.In.b Identify physical properties (hardness, streak color, and luster) of common minerals, such as rock salt, talc, gold, and silver.	SC.4.E.6.Su.b Sort common minerals, such as rock salt, talc, gold, and silver, by their physical properties (luster and color).	SC.4.E.6.Pa.b Recognize common minerals, such as rock salt, talc, gold, and silver.
SC.4.E.6.In.c Recognize that some natural resources used by humans are non-renewable, such as oil.	SC.4.E.6.Su.c Recognize that some natural resources can run out (non-renewable).	SC.4.E.6.Pa.c Recognize the universal symbol for recycling.
SC.4.E.6.In.d Identify that wind and water cause physical weathering and erosion of rocks.	SC.4.E.6.Su.d Recognize examples of weathering or erosion in the environment.	SC.4.E.6.Pa.d Recognize the effect of weathering on an object.
SC.4.E.6.In.e Identify tools used to observe things that are far away and things that are very small.	SC.4.E.6.Su.e Recognize tools that will make things look larger, such as a telescope and a magnifier.	SC.4.E.6.Pa.e Recognize that something has been magnified.
		SC.4.E.6.Pa.f Recognize

SC.4.E.6.In.f Identify natural resources found in Florida, including solar energy, water, and limestone.	SC.4.E.6.Su.f Recognize natural resources found in Florida, such as solar energy and water.	water as a resource in Florida.

Big Idea 8: Properties of Matter

A. All objects and substances in the world are made of matter. Matter has two fundamental properties: matter takes up space and matter has mass.

B. Objects and substances can be classified by their physical and chemical properties. Mass is the amount of matter (or "stuff") in an object. Weight, on the other hand, is the measure of force of attraction (gravitational force) between an object and Earth.

The concepts of mass and weight are complicated and potentially confusing to elementary students. Hence, the more familiar term of "weight" is recommended for use to stand for both mass and weight in grades K-5. By grades 6-8, students are expected to understand the distinction between mass and weight, and use them appropriately.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.4.P.8.In.a Compare objects and materials based on physical properties, such as size, shape, color, texture, weight, hardness, odor, taste, and temperature.	SC.4.P.8.Su.a Sort objects by physical properties, such as size, shape, color, texture, weight (heavy or light), and temperature (hot or cold).	SC.4.P.8.Pa.a Match objects with similar observable properties, such as size, shape, color, or texture.
SC.4.P.8.In.b Identify properties and uses of water in solid and liquid states.	SC.4.P.8.Su.b Identify uses of water in solid or liquid states.	SC.4.P.8.Pa.b Identify ice as a solid.
SC.4.P.8.In.c Identify that a whole object weighs the same as all of its parts together.	SC.4.P.8.Su.c Recognize that the parts of an object can be put together to make a whole.	SC.4.P.8.Pa.c Recognize that some objects have parts.
SC.4.P.8.In.d Identify objects a magnet will attract.	SC.4.P.8.Su.d Demonstrate that magnets can attract other magnets.	SC.4.P.8.Pa.d Recognize that objects can stick together.

Big Idea 9: Changes in Matter

A. Matter can undergo a variety of changes.

B. Matter can be changed physically or chemically.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.4.P.9.In.a Observe and describe properties of materials that have been changed into other materials, such as decayed leaves of a plant.	SC.4.P.9.Su.a Indicate differences in materials that have been changed into other materials, such as rust on a can.	SC.4.P.9.Pa.a Recognize changes in observable properties of materials.

Big Idea 10: Forms of Energy

A. Energy is involved in all physical processes and is a unifying concept in many areas of science.

B. Energy exists in many forms and has the ability to do work or cause a change.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.4.P.10.In.a Identify forms of energy, such as light, heat, electrical, and energy of motion.	SC.4.P.10.Su.a Recognize uses of different forms of energy, including electricity (computer, freezer); heat (camp fire, stove); and energy of motion (rollercoaster, pinball machine).	SC.4.P.10.Pa.a Recognize a source of heat energy (fire, heater).
SC.4.P.10.In.b Describe the results of applying electrical energy (turn on lights, make motors run); heat energy (burn wood, change temperature); and energy of motion (go faster, change direction).	SC.4.P.10.Su.b Recognize the results of using electrical energy (turning on television); heat energy (burning wood); and energy of motion (rolling ball).	SC.4.P.10.Pa.b Recognize objects that create sounds.
SC.4.P.10.In.c Recognize that vibrations cause sound and identify sounds as high or low (pitch).	SC.4.P.10.Su.c Recognize sounds as high or low (pitch).	SC.4.P.10.Pa.c Recognize that moving air can move objects.
SC.4.P.10.In.d Identify machines that use energy from moving water or air, including a windmill and a waterwheel.	SC.4.P.10.Su.d Identify objects that use energy from moving air, such as a pinwheel or sailboat.	

Big Idea 11: Energy Transfer and Transformations

A. Waves involve a transfer of energy without a transfer of matter.

B. Water and sound waves transfer energy through a material.

C. Light waves can travel through a vacuum and through matter.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.4.P.11.In.a Identify that a hot object will make a cold object warm when they touch.	SC.4.P.11.Su.a Recognize that a hot object can make a cold object warm when they touch.	SC.4.P.11.Pa.a Recognize a temperature change from cold to warm.
SC.4.P.11.In.b Identify materials that are strong conductors of heat, such as metal.	SC.4.P.11.Su.b Recognize a common material that is a strong conductor of heat, such as metal.	SC.4.P.11.Pa.b Recognize common objects that conduct heat.

Big Idea 12: Motion of Objects

A. Motion is a key characteristic of all matter that can be observed, described, and measured.

B. The motion of objects can be changed by forces.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.4.P.12.In.a Identify that the position of an object changes when the object is in motion.	SC.4.P.12.Su.a Recognize that movement causes an object to change position.	SC.4.P.12.Pa.a Recognize that an object can move in different directions, such as left to right, straight line, and zigzag.
SC.4.P.12.In.b Identify speed as how long it takes to travel a certain distance.	SC.4.P.12.Su.b Identify objects that move at different speeds.	SC.4.P.12.Pa.b Recognize an object as moving fast or slow.

Big Idea 16: Heredity and Reproduction

A. Offspring of plants and animals are similar to, but not exactly like, their parents or each other.

B. Life cycles vary among organisms, but reproduction is a major stage in the life cycle of all organisms.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.4.L.16.In.a Identify that insects spread pollen to help flowering plants make seeds.	SC.4.L.16.Su.a Recognize that many flowering plants grow from their own seeds.	SC.4.L.16.Pa.a Recognize that many plants have flowers and leaves.
SC.4.L.16.In.b Identify behaviors that animals have naturally (inherit) and behaviors that animals learn.	SC.4.L.16.Su.b Recognize behaviors of common animals.	SC.4.L.16.Pa.b Recognize similarities between self and parents.
SC.4.L.16.In.c Identify similarities in the major stages in the life cycles of common Florida plants and animals.	SC.4.L.16.Su.b Recognize behaviors of common animals. SC.4.L.16.Su.c Recognize the major stages in life cycles of common plants and animals.	SC.4.L.16.Pa.c Match offspring of animals with parents.

Big Idea 17: Interdependence

A. Plants and animals, including humans, interact with and depend upon each other and their environment to satisfy their basic needs.

B. Both human activities and natural events can have major impacts on the environment.

C. Energy flows from the sun through producers to consumers.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.4.L.17.In.a Identify seasonal changes in Florida plants and animals. SC.4.L.17.In.b Recognize that animals cannot make their own food and they must eat plants or other animals to survive. SC.4.L.17.In.c Recognize that plants (producers) use energy from the Sun to make their food and animals (consumers) eat plants or other animals for their food. SC.4.L.17.In.d Recognize things that people do to help or hurt the environment, such as recycling and pollution.	SC.4.L.17.Su.a Recognize seasonal changes in some Florida plants, such as the presence of flowers and change in leaf color. SC.4.L.17.Su.b Recognize that animals (consumers) eat plants or other animals for their food. SC.4.L.17.Su.c Recognize ways that people can help improve the environment, such as cleaning up trash.	SC.4.L.17.Pa.a Recognize a seasonal change in the appearance of a common plant. SC.4.L.17.Pa.b Recognize that animals eat food. SC.4.L.17.Pa.c Recognize ways that people can help improve the immediate environment, such as cleaning up trash.

GRADE: 5

Big Idea 1: The Practice of Science

A: Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

B: The processes of science frequently do not correspond to the traditional portrayal of "the scientific method."

C: Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.

D: Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.5.N.1.In.a Ask a question about the natural world, use selected reference materials to find information, work with others to carry out a simple experiment, and share results. SC.5.N.1.In.b Identify the basic purpose of an experiment. SC.5.N.1.In.c Recognize that experiments may include activities that are repeated.	SC.5.N.1.Su.a Ask questions about the natural world, use selected materials to find information, observe, and identify answers to the question. SC.5.N.1.Su.b Identify the result of a simple experiment. SC.5.N.1.Su.c Recognize that experiments can be repeated with	SC.5.N.1.Pa.a Explore, observe, and select an object or picture to respond to a question about the natural world. SC.5.N.1.Pa.b Recognize that people use observation and actions to get answers to questions about the natural world.

SC.5.N.1.In.d Recognize that scientists use various methods to perform investigations, such as reviewing work of other scientists, making observations, and conducting experiments. SC.5.N.1.In.e Determine whether descriptions of observations are based on fact or personal belief.	other groups. SC.5.N.1.Su.d Recognize ways that scientific evidence can be collected, such as by observing or measuring. SC.5.N.1.Su.e Recognize facts about a scientific observation.	

Big Idea 2: The Characteristics of Scientific Knowledge

A: Scientific knowledge is based on empirical evidence, and is appropriate for understanding the natural world, but it provides only a limited understanding of the supernatural, aesthetic, or other ways of knowing, such as art, philosophy, or religion.

B: Scientific knowledge is durable and robust, but open to change.

C: Because science is based on empirical evidence it strives for objectivity, but as it is a human endeavor the processes, methods, and knowledge of science include subjectivity, as well as creativity and discovery.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.5.N.2.In.a Identify that science knowledge is based on observations and evidence.	SC.5.N.2.Su.a Recognize that science knowledge is based on careful observations.	SC.5.N.2.Pa.a Recognize the importance of making careful observations.
SC.5.N.2.In.b Recognize that experiments involve procedures that can be repeated the same way by others.	SC.5.N.2.Su.b Recognize the importance of following correct procedures when carrying out science experiments.	SC.5.N.2.Pa.b Recognize that a common activity can be repeated.

Big Idea 5: Earth in Space and Time

Humans continue to explore Earth's place in space. Gravity and energy influence the formation of galaxies, including our own Milky Way Galaxy, stars, the Solar System, and Earth. Humankind's need to explore continues to lead to the development of knowledge and understanding of our Solar System.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.5.E.5.In.a Identify that a galaxy is made of a very large number of stars and the planets that orbit them.	SC.5.E.5.Su.a Recognize that a galaxy is a group of stars.	SC.5.E.5.Pa.a Recognize that stars are very far away from Earth.
SC.5.E.5.In.b Recognize major differences in the characteristics of the planets in the Solar	SC.5.E.5.Su.b Recognize that surface of planet Earth is covered by water and land.	SC.5.E.5.Pa.b Recognize Earth as the planet where we

System. SC.5.E.5.In.c Identify that the Solar System includes the Sun, Earth, Moon, and other planets and their moons.	SC.5.E.5.Su.c Identify that the Sun, Earth, and Moon are part of the Solar System.	live.

Big Idea 7: Earth Systems and Patterns

Humans continue to explore the interactions among water, air, and land. Air and water are in constant motion that results in changing conditions that can be observed over time.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.5.E.7.In.a Label the state of water in each stage of the water cycle.	SC.5.E.7.Su.a Match different states of water (liquid and solid) to changes in temperature.	SC.5.E.7.Pa.a Distinguish between water as a liquid and ice as a solid.
SC.5.E.7.In.b Recognize that water evaporates from the ocean, falls as precipitation, and then goes back into the ocean.	SC.5.E.7.Su.b Observe and recognize that water evaporates over time.	SC.5.E.7.Pa.b Recognize that wet things will dry when they are left in the air.
SC.5.E.7.In.c Identify elements that make up weather, including temperature, precipitation, and wind speed and direction.	SC.5.E.7.Su.c Recognize elements of weather, including temperature, precipitation, and wind.	SC.5.E.7.Pa.c Recognize the weather conditions including hot/cold and raining/not raining during the day.
SC.5.E.7.In.d Describe types of precipitation, including rain, snow, and hail.	SC.5.E.7.Su.d Identify different types of precipitation, including rain and snow.	SC.5.E.7.Pa.d Recognize examples of severe weather conditions.
SC.5.E.7.In.e Recognize weather-related differences in environments, such as swamps and deserts.	SC.5.E.7.Su.e Match specific weather conditions with different locations.	
SC.5.E.7.In.f Identify features of weather in different climate zones, such as tropical and polar.	SC.5.E.7.Su.f Identify what to do in severe weather.	
SC.5.E.7.In.g Identify emergency plans and procedures for severe weather.		

Big Idea 8: Properties of Matter

A. All objects and substances in the world are made of matter. Matter has two fundamental properties: matter takes up space and matter has mass.

B. Objects and substances can be classified by their physical and chemical properties. Mass is the amount of matter (or "stuff") in an object. Weight, on the other hand, is the

measure of force of attraction (gravitational force) between an object and Earth.

The concepts of mass and weight are complicated and potentially confusing to elementary students. Hence, the more familiar term of "weight" is recommended for use to stand for both mass and weight in grades K-5. By grades 6-8, students are expected to understand the distinction between mass and weight, and use them appropriately.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.5.P.8.In.a Identify basic properties of solids, liquids, and gases, such as color, texture, and temperature.	SC.5.P.8.Su.a Identify the basic properties of solids and liquids, such as color, texture, and temperature.	SC.5.P.8.Pa.a Distinguish between water as a solid or liquid.
SC.5.P.8.In.b Identify examples of materials that will dissolve in water and those that will not.	SC.5.P.8.Su.b Recognize examples of materials that will dissolve in water.	SC.5.P.8.Pa.b Recognize a common substance that dissolves in water.
SC.5.P.8.In.c Identify the observable properties of the parts of a mixture, such as the particle size, shape, and color.	SC.5.P.8.Su.c Identify the separate parts of a mixture by color or shape.	SC.5.P.8.Pa.c Separate a group of objects into its parts.
SC.5.P.8.In.d Recognize that materials are made of very small parts that cannot be seen without a magnifying glass or a microscope.	SC.5.P.8.Su.d Use a magnifying tool to see small parts of an object.	

Big Idea 9: Changes in Matter

A. Matter can undergo a variety of changes.

B. Matter can be changed physically or chemically.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.5.P.9.In.a Observe and identify that heating and cooling can change the properties of materials.	SC.5.P.9.Su.a Recognize changes in properties of materials caused by heating or cooling.	SC.5.P.9.Pa.a Recognize that freezing changes water to ice.

Big Idea 10: Forms of Energy

A. Energy is involved in all physical processes and is a unifying concept in many areas of science.

B. Energy exists in many forms and has the ability to do work or cause a change.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.5.P.10.In.a Identify forms of energy, including heat, light, sound, electrical, and mechanical.	SC.5.P.10.Su.a Recognize uses of electrical energy (popcorn popper, vacuum cleaner), heat energy (grill, heater), light energy (sunlight, flashlight), and mechanical energy (bicycle).	SC.5.P.10.Pa.a Recognize a source of light energy (Sun, light bulb).

SC.5.P.10.In.b Identify ways energy can cause things to move or create changes. SC.5.P.10.In.c Identify that electrically charged materials will pull (attract) other materials. SC.5.P.10.In.d Demonstrate that electricity can produce heat, light, and sound.	SC.5.P.10.Su.b Recognize that energy is required to cause motion. SC.5.P.10.Su.c Recognize that electrically charged materials will pull (attract) other materials. SC.5.P.10.Su.d Recognize examples of electricity as a producer of heat, light, and sound.	SC.5.P.10.Pa.b Initiate a change in the motion of an object. SC.5.P.10.Pa.c Demonstrate pushing away (repulsion) and pulling (attraction). SC.5.P.10.Pa.d Identify one source of sound, heat, or light that uses electricity.

Big Idea 11: Energy Transfer and Transformations

A. Waves involve a transfer of energy without a transfer of matter.

B. Water and sound waves transfer energy through a material.

C. Light waves can travel through a vacuum and through matter.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.5.P.11.In.a Identify the power source and wires (conductors) in an electrical circuit. SC.5.P.11.In.b Identify materials that conduct electricity.	SC.5.P.11.Su.a Recognize the power source in an electrical circuit. SC.5.P.11.Su.b Recognize a material that conducts electricity.	SC.5.P.11.Pa.a Recognize that electrical systems must be turned on (closed) in order to work.

Big Idea 13: Forces and Changes in Motion

A. It takes energy to change the motion of objects.

B. Energy change is understood in terms of forces--pushes or pulls.

C. Some forces act through physical contact, while others act at a distance.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.5.P.13.In.a Distinguish between movement of an object caused by gravity and movement caused by pushes and pulls. SC.5.P.13.In.b Identify that heavier objects take more force to move than lighter ones.	SC.5.P.13.Su.a Recognize that gravity causes an object to move. SC.5.P.13.Su.b Recognize that a heavier object is harder to move than a light one. SC.5.P.13.Su.c Recognize the source	SC.5.P.13.Pa.a Recognize that pushing or pulling makes an object move. SC.5.P.13.Pa.b Recognize a way to stop an object from moving.

SC.5.P.13.In.c Identify that an opposing force (push or pull) is needed to prevent an object from moving.	of a force (push or pull) used to stop an object from moving.	

Big Idea 14: Organization and Development of Living Organisms

A. All plants and animals, including humans, are alike in some ways and different in others.

B. All plants and animals, including humans, have internal parts and external structures that function to keep them alive and help them grow and reproduce.

C. Humans can better understand the natural world through careful observation.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.5.L.14.In.a Distinguish major external and internal body parts, including skin, brain, heart, lungs, stomach, muscles and skeleton, reproductive organs, and sensory organs.	SC.5.L.14.Su.a Identify major external and internal body parts, including skin, brain, heart, lungs, stomach, and sensory organs.	SC.5.L.14.Pa.a Recognize body parts related to movement and the five senses.
SC.5.L.14.In.b Identify functions of plant and animal structures; for example, plant stem transports food to leaves, and heart pumps blood to parts of the body.	SC.5.L.14.Su.b Recognize the functions of the major parts of plants and animals.	SC.5.L.14.Pa.b Observe plants and animals and recognize how they are alike in the way they look.

Big Idea 15: Diversity and Evolution of Living Organisms

A. Earth is home to a great diversity of living things, but changes in the environment can affect their survival.

B. Individuals of the same kind often differ in their characteristics and sometimes the differences give individuals an advantage in surviving and reproducing.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.5.L.15.In.a Identify ways that plants and animals can be affected by changes in their habitats, such as lack of food or water, disease, or reduced space.	SC.5.L.15.Su.a Recognize ways that plants and animals can be affected by changes in their habitats, such as lack of food or water.	SC.5.L.15.Pa.a Recognize what happens when plants don't get water.

Big Idea 17: Interdependence

A. Plants and animals, including humans, interact with and depend upon each other and their environment to satisfy their basic needs.

B. Both human activities and natural events can have major impacts on the environment. **C. Energy flows from the sun through producers to consumers.**		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.5.L.17.In.a Identify features of common plants and animals that enable them to survive in different habitats (environments).	SC.5.L.17.Su.a Recognize that many different kinds of living things are found in different habitats.	SC.5.L.17.Pa.a Match common living things with their habitats.

GRADE: 6

Big Idea 1: The Practice of Science **A: Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.** **B: The processes of science frequently do not correspond to the traditional portrayal of "the scientific method."** **C: Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.** **D: Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.**		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.6.N.1.In.a Identify a problem from the sixth grade curriculum, use reference materials to gather information, carry out an experiment, collect and record data, and report results.	SC.6.N.1.Su.a Recognize a problem from the sixth grade curriculum, use materials to gather information, carry out a simple experiment, and record and share results.	SC.6.N.1.Pa.a Recognize a problem related to the sixth grade curriculum, observe and explore objects or activities, and recognize a solution.
SC.6.N.1.In.b Identify that scientific investigations can be repeated the same way by others.	SC.6.N.1.Su.b Recognize that experiments involve procedures that can be repeated the same way by others.	SC.6.N.1.Pa.b Recognize that when a common activity is repeated, it has the same result.
SC.6.N.1.In.c Identify that scientists can use different kinds of experiments, methods, and explanations to find answers to scientific questions.	SC.6.N.1.Su.c Recognize that scientists perform experiments, make observations, and gather evidence to answer scientific questions.	SC.6.N.1.Pa.c Recognize that people conduct activities and share information about science.
SC.6.N.1.In.d Compare results of observations and experiments of self and others.	SC.6.N.1.Su.d Identify information based on observations and experiments of self and others.	

Big Idea 2: The Characteristics of Scientific Knowledge

A: Scientific knowledge is based on empirical evidence, and is appropriate for understanding the natural world, but it provides only a limited understanding of the supernatural, aesthetic, or other ways of knowing, such as art, philosophy, or religion.

B: Scientific knowledge is durable and robust, but open to change.

C: Because science is based on empirical evidence it strives for objectivity, but as it is a human endeavor the processes, methods, and knowledge of science include subjectivity, as well as creativity and discovery.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.6.N.2.In.a Identify familiar topics included in the study of science.	SC.6.N.2.Su.a Recognize familiar topics in the study of science.	SC.6.N.2.Pa.a Recognize objects and pictures related to science.
SC.6.N.2.In.b Identify that scientific knowledge changes with new evidence or new interpretations.	SC.6.N.2.Su.b Recognize that scientific knowledge changes when new things are discovered.	SC.6.N.2.Pa.b Recognize a scientist as a person who works with science.
	SC.6.N.2.Su.c Recognize contributions of well-known scientists.	

Big Idea 3: The Role of Theories, Laws, Hypotheses, and Models

The terms that describe examples of scientific knowledge, for example; "theory," "law," "hypothesis," and "model" have very specific meanings and functions within science.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.6.N.3.In.a Identify that a scientific theory is an explanation of nature supported by evidence.	SC.6.N.3.Su.a Recognize that a scientific theory is an explanation of nature.	SC.6.N.3.Pa.a Observe and recognize a predictable cause-effect relationship related to a science topic.
SC.6.N.3.In.b Identify examples of scientific laws (proven descriptions of nature), such as the law of gravity.	SC.6.N.3.Su.b Recognize events that are based on scientific laws, such as the law of gravity.	SC.6.N.3.Pa.b Associate a model with an activity used in the context of sixth grade science access points.
SC.6.N.3.In.c Identify models used in the context of sixth grade science access points.	SC.6.N.3.Su.c Recognize models used in the context of sixth grade science access points.	

Big Idea 6: Earth Structures

Over geologic time, internal and external sources of energy have continuously altered the features of Earth by means of both constructive and destructive forces. All life,

including human civilization, is dependent on Earth's internal and external energy and material resources.		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.6.E.6.In.a Describe how weathering and erosion reshape the Earth's surface. SC.6.E.6.In.b Identify various landforms in Florida, including coastlines, rivers, lakes, and dunes.	SC.6.E.6.Su.a Recognize that wind and water cause physical weathering and erosion. SC.6.E.6.Su.b Recognize different landforms in Florida, including beaches (coastlines), rivers, and lakes.	SC.6.E.6.Pa.a Recognize that water can move soil. SC.6.E.6.Pa.b Recognize a landform in Florida, such as a beach (coastline), river, or lake.

Big Idea 7: Earth Systems and Patterns **The scientific theory of the evolution of Earth states that changes in our planet are driven by the flow of energy and the cycling of matter through dynamic interactions among the atmosphere, hydrosphere, cryosphere, geosphere, and biosphere, and the resources used to sustain human civilization on Earth.**		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.6.E.7.In.a Recognize that heat is a flow of energy that moves through Earth's land, air, and water in different ways, including conduction, convection, and radiation. SC.6.E.7.In.b Identify components in the water cycle, including evaporation, condensation, precipitation, ground water, and runoff. SC.6.E.7.In.c Identify the way elements of weather are measured, including temperature, humidity, wind speed and direction, and precipitation. SC.6.E.7.In.d Recognize that Earth consists of different parts, including air that is over the Earth (atmosphere), water that covers much of the Earth (hydrosphere), and the parts that support all living things on Earth (biosphere). SC.6.E.7.In.e Recognize that there are general patterns of weather that move around Earth, and in North America the patterns typically move from west to east. SC.6.E.7.In.f Identify climate as the expected weather patterns in a region. SC.6.E.7.In.g Identify possible effects of hurricanes and other natural disasters on humans in Florida.	SC.6.E.7.Su.a Recognize that heat can transfer from the Sun to the water, land, and air. Recognize that heat can transfer from the Sun to the water, land, and air. SC.6.E.7.Su.b Recognize parts of the water cycle such as clouds (condensation), rain (precipitation), and evaporation. SC.6.E.7.Su.c Recognize the way temperature and wind speed are measured. SC.6.E.7.Su.d Recognize where living things are found (biosphere) and where the air is found (atmosphere) on Earth. SC.6.E.7.Su.e Recognize that there are patterns of weather that move. SC.6.E.7.Su.f Identify the major characteristics of climate in Florida, including temperature and precipitation. SC.6.E.7.Su.g Recognize possible effects of severe storms, hurricanes, or other natural disasters in Florida.	SC.6.E.7.Pa.a Recognize that the Sun is a source of heat. SC.6.E.7.Pa.b Recognize that rain comes from clouds. SC.6.E.7.Pa.c Recognize different types of weather conditions, including hot/cold, raining/not raining, and windy/calm. SC.6.E.7.Pa.d Recognize that air covers Earth (atmosphere). SC.6.E.7.Pa.e Recognize where to go in severe weather situations or drills at school and at home.

SC.6.E.7.In.h Identify ways humans get ready for severe storms and protect themselves from sun exposure. SC.6.E.7.In.i Identify that the atmosphere protects Earth from radiation from the Sun and regulates the temperature.	SC.6.E.7.Su.h Recognize ways people prepare for severe storms and protect themselves from sun exposure. SC.6.E.7.Su.i Recognize that the air that surrounds Earth (atmosphere) protects living things from the intense heat of the Sun.	

Big Idea 11: Energy Transfer and Transformations

A. Waves involve a transfer of energy without a transfer of matter.

B. Water and sound waves transfer energy through a material.

C. Light waves can travel through a vacuum and through matter.

D. The Law of Conservation of Energy: Energy is conserved as it transfers from one object to another and from one form to another.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.6.P.11.In.a Identify energy as stored (potential) or expressed in motion (kinetic).	SC.6.P.11.Su.a Recognize examples of stored energy, such as in a roller coaster.	SC.6.P.11.Pa.a Distinguish between objects in motion (kinetic energy) and at rest.

Big Idea 12: Motion of Objects

A. Motion is a key characteristic of all matter that can be observed, described, and measured.

B. The motion of objects can be changed by forces.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.6.P.12.In.a Identify that speed describes the distance and time in which an object is moving, such as miles per hour.	SC.6.P.12.Su.a Recognize that speed describes how far an object travels in a given amount of time.	SC.6.P.12.Pa.a Recognize that traveling longer distances takes more time, such as going to the cafeteria takes longer than going across the classroom.

Big Idea 13: Forces and Changes in Motion

A. It takes energy to change the motion of objects.

B. Energy change is understood in terms of forces--pushes or pulls.

C. Some forces act through physical contact, while others act at a distance.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.6.P.13.In.a Identify examples of gravitational and contact forces, such as falling objects or push and pull.	SC.6.P.13.Su.a Distinguish between pushing and pulling forces (contact) and falling (gravitational force) of an object.	SC.6.P.13.Pa.a Recognize that pushing or pulling makes an object move (contact force).
SC.6.P.13.In.b Demonstrate and describe how forces can change the speed and direction of objects in motion.	SC.6.P.13.Su.b Recognize that force can change the speed and direction of an object in motion.	SC.6.P.13.Pa.b Recognize that objects fall unless supported by something.
		SC.6.P.13.Pa.c Recognize the speed (fast or slow) of a moving object.

Big Idea 14: Organization and Development of Living Organisms

A. All living things share certain characteristics.

B. The scientific theory of cells, also called cell theory, is a fundamental organizing principle of life on Earth.

C. Life can be organized in a functional and structural hierarchy.

D. Life is maintained by various physiological functions essential for growth, reproduction, and homeostasis.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.6.L.14.In.a Identify how the major structures of plants and organs of animals work as parts of larger systems, such as the heart is part of the circulatory system that pumps blood.	SC.6.L.14.Su.a Identify the major internal organs of animals and external structures of plants and their functions.	SC.6.L.14.Pa.a Recognize that the human body is made up of various parts.
SC.6.L.14.In.b Identify that the cell is the smallest basic unit of life and most living things are composed of many cells.	SC.6.L.14.Su.b Recognize that there are smaller parts in all living things, too small to be seen without magnification, called cells.	SC.6.L.14.Pa.a Recognize that the human body is made up of various parts.
		SC.6.L.14.Pa.b Identify basic needs of plants and animals.
SC.6.L.14.In.c Identify that cells carry out important functions within an organism, such as using energy from food.	SC.6.L.14.Su.c Recognize that animals, including humans, use energy from food.	SC.6.L.14.Pa.c Recognize body parts related to basic needs, such as mouth for eating.
SC.6.L.14.In.d Recognize that plant and animal cells have different parts and each part has a function.	SC.6.L.14.Su.d Identify ways to prevent infection from bacteria and viruses, such as hand washing.	SC.6.L.14.Pa.d Recognize practices that keep the body free from infection, such as
SC.6.L.14.In.e Recognize that bacteria and		

viruses can infect the human body.		hand washing.

Big Idea 15: Diversity and Evolution of Living Organisms **A. The scientific theory of evolution is the organizing principle of life science.** **B. The scientific theory of evolution is supported by multiple forms of evidence.** **C. Natural Selection is a primary mechanism leading to change over time in organisms.**		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.6.L.15.In.a Classify animals into major groups, such as insects, fish, reptiles, mammals, and birds.	SC.6.L.15.Su.a Sort common animals by their physical characteristics.	SC.6.L.15.Pa.a Match animals based on a given shared characteristic.

GRADE: 7

Big Idea 1: The Practice of Science **A: Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.** **B: The processes of science frequently do not correspond to the traditional portrayal of "the scientific method."** **C: Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.** **D: Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.**		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.7.N.1.In.a Identify a problem from the seventh grade curriculum, use reference materials to gather information, carry out an experiment, collect and record data, and report results. SC.7.N.1.In.b Recognize the relationship between the end product (dependent variable) and in the input	SC.7.N.1.Su.a Recognize a problem from the seventh grade curriculum, use materials to gather information, conduct a simple experiment, and record and share results. SC.7.N.1.Su.b Recognize what is tested in a simple experiment (dependent variable).	SC.7.N.1.Pa.a Recognize a problem related to the seventh grade curriculum, observe and explore objects and activities, and recognize a solution. SC.7.N.1.Pa.b Recognize observable changes in a simple experiment, such as plant growth.

(independent variable) in an experiment. SC.7.N.1.In.c Identify questions that can be answered by scientific investigation, such as can a plant grow without sunlight? SC.7.N.1.In.d Identify ways that science can be used to study different areas, such as life science, earth and space science, and physical science. SC.7.N.1.In.e Identify that scientific knowledge is based on a large body of evidence and observations.	SC.7.N.1.Su.c Recognize a question that can be answered by scientific investigation, such as can a plant grow without sunlight? SC.7.N.1.Su.d Recognize that science includes different areas, such as life science, earth and space science, and physical science. SC.7.N.1.Su.e Recognize that scientific knowledge is based on evidence and observations.	SC.7.N.1.Pa.c Associate objects and activities with science. SC.7.N.1.Pa.c Associate objects and activities with science.

Big Idea 2: The Characteristics of Scientific Knowledge

A: Scientific knowledge is based on empirical evidence, and is appropriate for understanding the natural world, but it provides only a limited understanding of the supernatural, aesthetic, or other ways of knowing, such as art, philosophy, or religion.

B: Scientific knowledge is durable and robust, but open to change.

C: Because science is based on empirical evidence it strives for objectivity, but as it is a human endeavor the processes, methods, and knowledge of science include subjectivity, as well as creativity and discovery.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.7.N.2.In.a Identify an example of a change in scientific knowledge based on new evidence or new interpretations.	SC.7.N.2.Su.a Recognize an example of a change in scientific knowledge based on new evidence.	SC.7.N.2.Pa.a Recognize information related to science.

Big Idea 3: The Role of Theories, Laws, Hypotheses, and Models

The terms that describe examples of scientific knowledge, for example; "theory," "law," "hypothesis," and "model" have very specific meanings and functions within science.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.7.N.3.In.a Identify that scientific theories are explanations and laws describe relationships, and both are supported by evidence. SC.7.N.3.In.b Identify a benefit of using a model to explain how things work.	SC.7.N.3.Su.a Recognize that scientific theories and laws are supported by evidence. SC.7.N.3.Su.b Recognize a benefit of using a model to explain how things work.	SC.7.N.3.Pa.a Recognize that people use science to solve problems. SC.7.N.3.Pa.b Recognize a model of a common activity.

Big Idea 6: Earth Structures

Over geologic time, internal and external sources of energy have continuously altered the features of Earth by means of both constructive and destructive forces. All life, including human civilization, is dependent on Earth's internal and external energy and material resources.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.7.E.6.In.a Identify that Earth has three layers (crust, mantle, and core) and describe the inside (core) as the hottest layer.	SC.7.E.6.Su.a Recognize that the surface of Earth is called the crust.	SC.7.E.6.Pa.a Recognize the ground as the outer surface (crust) of Earth.
SC.7.E.6.In.b Recognize that slow changes, such as mountain-building, and fast changes, such as volcanic eruptions, are caused by shifts below Earth's surface.	SC.7.E.6.Su.b Recognize that mountains change size and shape over a long period of time.	SC.7.E.6.Pa.b Discriminate between surface features of ground on Earth, such as rocky/sandy, flat/hilly, rough/smooth, or solid/liquid.
SC.7.E.6.In.c Demonstrate how older rock layers are deposited at the bottom before younger layers (Law of Superposition).	SC.7.E.6.Su.c Recognize that fossils are remains or imprints of living things from long ago.	SC.7.E.6.Pa.c Recognize that ground on the Earth's surface changes over time.
SC.7.E.6.In.d Identify physical evidence, such as fossils and sedimentary rock, which show how Earth has changed over a very long period of time.	SC.7.E.6.Su.d Recognize the effects of earthquakes and volcanoes.	SC.7.E.6.Pa.d Distinguish between clean and dirty water.
SC.7.E.6.In.e Recognize that humans have had an impact on Earth, such as polluting the air and water and expanding urban areas and road systems.	SC.7.E.6.Su.e Recognize that polluting the air and water can harm Earth.	

Big Idea 10: Forms of Energy

A. Energy is involved in all physical processes and is a unifying concept in many areas of science. B. Energy exists in many forms and has the ability to do work or cause a change.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.7.P.10.In.a Identify that white (visible) light has many colors, such as when viewed with a prism.	SC.7.P.10.Su.a Recognize that white (visible) light contains many colors, such as viewed with a prism or rainbow.	SC.7.P.10.Pa.a Recognize primary colors of a rainbow.
SC.7.P.10.In.b Recognize that light can be reflected or absorbed.	SC.7.P.10.Su.b Recognize that light can be reflected.	SC.7.P.10.Pa.b Recognize reflections of objects.
SC.7.P.10.In.c Identify that light and sound travel in wave patterns.	SC.7.P.10.Su.c Recognize that sound and light travel.	SC.7.P.10.Pa.c Match light and sound to their sources.

Big Idea 11: Energy Transfer and Transformations

A. Waves involve a transfer of energy without a transfer of matter.

B. Water and sound waves transfer energy through a material.

C. Light waves can travel through a vacuum and through matter.

D. The Law of Conservation of Energy: Energy is conserved as it transfers from one object to another and from one form to another.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.7.P.11.In.a Identify that when heat is added or taken away, a temperature change occurs.	SC.7.P.11.Su.a Recognize what happens to the temperature when heat is added.	SC.7.P.11.Pa.a Recognize that a hot object can make a cold object warm when they touch.
SC.7.P.11.In.b Recognize that one form of energy can change to other forms of energy, such as solar panels change light into electricity.	SC.7.P.11.Su.b Recognize that energy can change forms, such as electricity produces light and heat in a lamp.	SC.7.P.11.Pa.b Recognize that electrical devices need energy to work.
SC.7.P.11.In.c Identify examples of the predictable movement of heat, such as hot air rises and heat transfers from hot to cold objects.	SC.7.P.11.Su.c Identify that heat rises.	

Big Idea 15: Diversity and Evolution of Living Organisms

A. The scientific theory of evolution is the organizing principle of life science.

B. The scientific theory of evolution is supported by multiple forms of evidence.

C. Natural Selection is a primary mechanism leading to change over time in organisms.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.7.L.15.In.a Recognize that fossils help people learn about living things that lived a very long time ago.	SC.7.L.15.Su.a Identify fossils as parts of animals and plants that are no longer alive.	SC.7.L.15.Pa.a Recognize that living things can die.
SC.7.L.15.In.b Recognize that physical characteristics of living things are adapted to deal with the conditions of the environment, such as skin color or gills on a fish.	SC.7.L.15.Su.b Recognize that common plants or animals have special features that enable them to live in their environment, such as a as a fish has gills so it can live underwater.	SC.7.L.15.Pa.b Recognize a personal characteristic, such as hair color, that is different from the parents.
SC.7.L.15.In.c Explain extinction and	SC.7.L.15.Su.c Recognize that some plants and animals no longer exist (are	

give examples.	extinct).	

Big Idea 16: Heredity and Reproduction **A. Reproduction is characteristic of living things and is essential for the survival of species.** **B. Genetic information is passed from generation to generation by DNA; DNA controls the traits of an organism.** **C. Changes in the DNA of an organism can cause changes in traits, and manipulation of DNA in organisms has led to genetically modified organisms.**		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.7.L.16.In.a Explain that some characteristics are passed from parent to child (inherited). SC.7.L.16.In.b Recognize that it is possible to predict whether a person is likely to inherit a particular trait from parents. SC.7.L.16.In.c Explain that offspring receive half their genes from each parent in sexual reproduction. SC.7.L.16.In.d Recognize that science processes (biotechnology) have been used to develop new foods and medicines.	SC.7.L.16.Su.a Recognize that offspring have similar characteristics to parents. SC.7.L.16.Su.b Recognize that animals, including humans, inherit some characteristics from one parent and some from the other. SC.7.L.16.Su.c Recognize that science (biotechnology) has been used to develop new products for use in daily life.	SC.7.L.16.Pa.a Recognize a characteristic passed from parents to self, such as eye color. SC.7.L.16.Pa.b Recognize that children are born from two parents. SC.7.L.16.Pa.c Recognize common products, such as medicine, developed through science.

Big Idea 17: Interdependence **A. Plants and animals, including humans, interact with and depend upon each other and their environment to satisfy their basic needs.** **B. Both human activities and natural events can have major impacts on the environment.** **C. Energy flows from the sun through producers to consumers.**		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.7.L.17.In.a Identify that in a simple food chain, energy transfers from the Sun to plants (producers), to animals (consumers), and to organisms that cause decay (decomposers).	SC.7.L.17.Su.a Identify different types of consumers in a food chain, including animals that eat plants, animals that eat other animals, and animals that eat plants and animals.	SC.7.L.17.Pa.a Recognize that humans eat vegetables and fruits (plants) and meat (animals).

SC.7.L.17.In.b Describe how organisms interact with other organisms in an ecosystem to help each other (mutualism), to obtain food (predation), and to benefit at the expense of the other (parasitism). SC.7.L.17.In.c Recognize that living things compete with each other to get the things they need to live in their local environment.	SC.7.L.17.Su.b Recognize how living things affect each other in their habitat (ecosystem). SC.7.L.17.Su.c Identify how a lack of food, water, or shelter affects plants and animals in their habitats.	SC.7.L.17.Pa.b Recognize a mutual relationship between people and other living things. SC.7.L.17.Pa.c Recognize what happens when animals don't get food and water.

GRADE: 8

Big Idea 1: The Practice of Science

A: Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

B: The processes of science frequently do not correspond to the traditional portrayal of "the scientific method."

C: Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.

D: Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.

Access Point for Students with Significant Cognitive Disabilities

Independent	***Supported***	***Participatory***
SC.8.N.1.In.a Identify a problem from the eighth grade curriculum, use reference materials to gather information, carry out an experiment, collect and record data, and report results. SC.8.N.1.In.b Identify a possible explanation (hypothesis) for a science problem. SC.8.N.1.In.c Identify methods used in different areas of science, such as life science, earth and space science, and physical science. SC.8.N.1.In.d Identify that the process used in scientific investigations involves asking a research question, forming a hypothesis, reviewing what is already known, collecting evidence through observations or experiments,	SC.8.N.1.Su.a Recognize a problem from the eighth grade curriculum, use materials to gather information, conduct a simple experiment, and record and share results. SC.8.N.1.Su.b Recognize a possible explanation (hypothesis) for a science problem. SC.8.N.1.Su.c Recognize methods used in different areas of science, such as life science, earth and space science, and physical science. SC.8.N.1.Su.d Recognize that the basic process used in scientific	SC.8.N.1.Pa.a Recognize a problem related to the eighth grade curriculum, observe and explore objects and activities, and recognize a solution. SC.8.N.1.Pa.b Recognize science as a way to solve problems about the natural world.

determining results, and reaching conclusions.	investigations involves questioning, observing, and recording and sharing results.	

Big Idea 2: The Characteristics of Scientific Knowledge

A: Scientific knowledge is based on empirical evidence, and is appropriate for understanding the natural world, but it provides only a limited understanding of the supernatural, aesthetic, or other ways of knowing, such as art, philosophy, or religion.

B: Scientific knowledge is durable and robust, but open to change.

C: Because science is based on empirical evidence it strives for objectivity, but as it is a human endeavor the processes, methods, and knowledge of science include subjectivity, as well as creativity and discovery.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.8.N.2.In.a Identify that scientific knowledge must be supported by evidence.	SC.8.N.2.Su.a Recognize examples of evidence that supports scientific knowledge.	SC.8.N.2.Pa.a Recognize an example of observable evidence related to science.

Big Idea 3: The Role of Theories, Laws, Hypotheses, and Models

The terms that describe examples of scientific knowledge, for example; "theory," "law," "hypothesis," and "model" have very specific meanings and functions within science.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.8.N.3.In.a Identify models used in the context of one's own study of science.	SC.8.N.3.Su.a Recognize models used in the context of one's own study of science.	SC.8.N.3.Pa.a Associate a model with an activity used in the context of one's own study of science.
SC.8.N.3.In.b Identify that scientific theories can change.	SC.8.N.3.Su.b Recognize that scientific theories can change.	SC.8.N.3.Pa.b Observe and recognize a cause-effect relationship related to a science topic.

Big Idea 4: Science and Society

As tomorrows citizens, students should be able to identify issues about which society could provide input, formulate scientifically investigable questions about those issues, construct investigations of their questions, collect and evaluate data from their investigations, and develop scientific recommendations based upon their findings.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*

SC.8.N.4.In.a Identify ways that science processes can be used to make informed decisions in the community, state, and nation.	SC.8.N.4.Su.a Recognize that science processes can be used to help people in the community and state make wise choices.	SC.8.N.4.Pa.a Recognize a way science is used in the community.

Big Idea 5: Earth in Space and Time

The origin and eventual fate of the Universe still remains one of the greatest questions in science. Gravity and energy influence the formation of galaxies, including our own Milky Way Galaxy, stars, the planetary systems, and Earth. Humankind's need to explore continues to lead to the development of knowledge and understanding of the nature of the Universe.

Access Point for Students with Significant Cognitive Disabilities

Independent	***Supported***	***Participatory***
SC.8.E.5.In.a Compare the distances of the Moon, the Sun, and other stars from the Earth.	SC.8.E.5.Su.a Identify the relative positions of the Sun and the Moon from Earth.	SC.8.E.5.Pa.a Recognize that the Moon is closer to Earth than the Sun.
SC.8.E.5.In.b Identify that the Earth and Sun are a part of the Milky Way galaxy.	SC.8.E.5.Su.b Recognize that the Solar System is part of a galaxy.	SC.8.E.5.Pa.b Recognize the Sun and stars as objects in space.
SC.8.E.5.In.c Identify Earth's position in the Solar System, and its size relative to the Moon and Sun.	SC.8.E.5.Su.c Identify that there are planets and moons in the Solar System.	SC.8.E.5.Pa.c Recognize the four seasons.
SC.8.E.5.In.d Identify gravity as the force that holds orbiting planets in place in the Solar System.	SC.8.E.5.Su.d Recognize that the Sun is the closest star to Earth and appears large and bright.	SC.8.E.5.Pa.d Recognize a technology tool created for space exploration and adapted for personal use, such as computers, telescopes, or satellites.
SC.8.E.5.In.e Identify differences in physical properties of stars, such as brightness, color, and size.	SC.8.E.5.Su.e Recognize that the Sun is made of gases that are on fire.	
SC.8.E.5.In.f Describe the Sun as a mass of hot, burning gases that produces very high temperatures.	SC.8.E.5.Su.f Recognize that conditions on other planets in the Solar System are different than those on Earth.	
SC.8.E.5.In.g Compare conditions on other planets in the Solar System to those on Earth, such as gravity, temperature, and atmosphere.	SC.8.E.5.Su.g Recognize that Earth revolves around the Sun creating the four seasons.	
SC.8.E.5.In.h Identify that long ago people thought the Sun traveled around Earth (geocentric model) until scientists proved otherwise.	SC.8.E.5.Su.h Recognize that scientists use special tools to examine objects in space.	
SC.8.E.5.In.i Recognize that the four seasons are related to Earth's position as it travels (revolves) around the Sun.	SC.8.E.5.Su.i Identify an effect space exploration has had on Florida's economy.	
SC.8.E.5.In.j Recognize that the		

Moon's revolution around the Earth takes about thirty days. SC.8.E.5.In.k Identify technology used by scientists to locate, view, and study objects in space. SC.8.E.5.In.l Recognize that technology allows special cameras and satellites to take pictures of objects in space. SC.8.E.5.In.m Identify effects of space research and exploration on Florida's economy.		

Big Idea 8: Properties of Matter

A. All objects and substances in the world are made of matter. Matter has two fundamental properties: matter takes up space and matter has mass which gives it inertia.

B. Objects and substances can be classified by their physical and chemical properties. Mass is the amount of matter (or "stuff") in an object. Weight, on the other hand, is the measure of force of attraction (gravitational force) between an object and Earth.

The concepts of mass and weight are complicated and potentially confusing to elementary students. Hence, the more familiar term of "weight" is recommended for use to stand for both mass and weight in grades K-5. By grades 6-8, students are expected to understand the distinction between mass and weight, and use them appropriately.

Access Point for Students with Significant Cognitive Disabilities

Independent	***Supported***	***Participatory***
SC.8.P.8.In.a Compare properties of solids, liquids, and gases. SC.8.P.8.In.b Recognize that the weight of an object is related to the pull of gravity. SC.8.P.8.In.c Observe and compare the density of various materials. SC.8.P.8.In.d Observe and compare substances based on their physical properties, such as thermal and electrical conductivity, solubility, or magnetic properties. SC.8.P.8.In.e Recognize that common elements combine in different ways to make up all living and nonliving things.	SC.8.P.8.Su.a Recognize three states of matter, including solids, liquids, and gases. SC.8.P.8.Su.b Compare the weight of different sized objects. SC.8.P.8.Su.c Recognize that smaller objects can weigh more than bigger objects because of density. SC.8.P.8.Su.d Observe and compare substances by physical properties, such as weight, size, boiling and melting points, and magnetic properties. SC.8.P.8.Su.e Recognize that parts	SC.8.P.8.Pa.a Recognize examples of the gaseous state of matter, such as steam or smoke. SC.8.P.8.Pa.b Recognize the heavier of two objects. SC.8.P.8.Pa.c Recognize substances by physical properties, such as weight (heavy and light), size (big and small), and temperature (hot and cold). SC.8.P.8.Pa.d Recognize common acids as safe or harmful. SC.8.P.8.Pa.e Separate a mixture into its parts.

SC.8.P.8.In.f Identify common elements, such as oxygen, iron, and carbon. SC.8.P.8.In.g Identify that matter is made of small particles called atoms. SC.8.P.8.In.h Identify common acids, such as lemon juice and vinegar, and bases, such as baking soda and ammonia, and their hazardous properties. SC.8.P.8.In.i Identify common materials as pure substances or mixtures.	of matter can be separated in tiny particles. SC.8.P.8.Su.f Recognize examples of common elements, such as carbon or iron. SC.8.P.8.Su.g Recognize common acids, such as vinegar, and bases, such as ammonia, and their hazardous properties. SC.8.P.8.Su.h Recognize examples of pure substances and mixtures.	

Big Idea 9: Changes in Matter

A. Matter can undergo a variety of changes.

B. When matter is changed physically, generally no changes occur in the structure of the atoms or molecules composing the matter.

C. When matter changes chemically, a rearrangement of bonds between the atoms occurs. This results in new substances with new properties.

Access Point for Students with Significant Cognitive Disabilities

Independent	***Supported***	***Participatory***
SC.8.P.9.In.a Observe and classify changes in matter as physical (reversible) or chemical (irreversible). SC.8.P.9.In.b Observe and identify how temperature influences chemical changes.	SC.8.P.9.Su.a Observe and recognize physical changes in matter as able to change back (reversible), such as water to ice, and chemical changes of matter as unable to change back (irreversible), such as cake to cake batter. SC.8.P.9.Su.b Observe and recognize changes caused by heat on substances.	SC.8.P.9.Pa.a Recognize an example of a physical change, such as ice changing to water. SC.8.P.9.Pa.b Recognize that heat influences changes (chemical) in matter, such as cooking. SC.8.P.9.Pa.b Recognize that heat influences changes (chemical) in matter, such as cooking.

Big Idea 18: Matter and Energy Transformations

A. Living things all share basic needs for life.

B. Living organisms acquire the energy they need for life processes through various metabolic pathways (photosynthesis and cellular respiration).

C. Matter and energy are recycled through cycles such as the carbon cycle.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.8.L.18.In.a Identify structures in plants that enable them to use the energy from the Sun to make their own food through a process called photosynthesis.	SC.8.L.18.Su.a Recognize that plants make their own food through a process called photosynthesis.	SC.8.L.18.Pa.a Recognize that plants need water and light to grow.
SC.8.L.18.In.b Recognize that cells break down food to release energy.	SC.8.L.18.Su.b Recognize that plants and animals get energy from food.	SC.8.L.18.Pa.b Recognize that food provides energy.
SC.8.L.18.In.c Illustrate a model that shows how carbon is cycled between plants and animals.	SC.8.L.18.Su.c Recognize that plants use the carbon dioxide that animals breathe out.	
SC.8.L.18.In.d Identify the flow of energy from the Sun as it is transferred along a food chain.	SC.8.L.18.Su.d Recognize that plants get energy from the Sun and that energy is transferred to the animals that eat the plants.	

GRADE: 912

Body of Knowledge: LIFE SCIENCE

Standard 14: Organization and Development of Living Organisms

A. Cells have characteristic structures and functions that make them distinctive.

B. Processes in a cell can be classified broadly as growth, maintenance, reproduction, and homeostasis.

C. Life can be organized in a functional and structural hierarchy ranging from cells to the biosphere.

D. Most multicellular organisms are composed of organ systems whose structures reflect their particular function.

Access Point for Students with Significant Cognitive Disabilities

Independent	*Supported*	*Participatory*
SC.912.L.14.In.a Identify that all living things are made of cells and cells function in similar ways (cell theory).	SC.912.L.14.Su.a Identify that the cell is the smallest basic unit of life and that all living things are made of cells.	SC.912.L.14.Pa.a Match parts of common living things to their functions.
SC.912.L.14.In.b Identify the major parts of plant and animal cells, including the cell membrane, nucleus, and cytoplasm, and their basic functions.	SC.912.L.14.Su.b Recognize that cells have different parts and each has a function.	SC.912.L.14.Pa.b Recognize that small parts of a living thing can work together.
	SC.912.L.14.Su.c Recognize common	SC.912.L.14.Pa.c Identify ways

SC.912.L.14.In.c Identify that parts of cells (organelles) can combine to work together. SC.912.L.14.In.d Describe common human health issues. SC.912.L.14.In.e Describe the general processes of food production, support, water transport, and reproduction in the major parts of plants.	human health issues. SC.912.L.14.Su.d Relate parts of plants, such as leaf, stem, root, seed, and flower, to the functions of food production, support, water transport, and reproduction.	to prevent infection from bacteria and viruses, such as hand washing and first aid. SC.912.L.14.Pa.d Recognize major plant parts, such as root, stem, leaf, and flower.

Standard 15: Diversity and Evolution of Living Organisms

A. The scientific theory of evolution is the fundamental concept underlying all of biology.

B. The scientific theory of evolution is supported by multiple forms of scientific evidence.

C. Organisms are classified based on their evolutionary history.

D. Natural selection is a primary mechanism leading to evolutionary change.

Access Point for Students with Significant Cognitive Disabilities

Independent	***Supported***	***Participatory***
SC.912.L.15.In.a Identify that prehistoric plants and animals changed over time (evolved) or became extinct. SC.912.L.15.In.a Identify that prehistoric plants and animals changed over time (evolved) or became extinct. SC.912.L.15.In.b Classify living organisms into their kingdoms. SC.912.L.15.In.c Identify that there are scientific explanations of the origin of life on Earth. SC.912.L.15.In.d Recognize ways that the appearance of humans, their language, and their tools have changed over time. SC.912.L.15.In.e Recognize that some living things produce very large numbers of offspring to ensure that enough survive to continue the species (a condition for natural	SC.912.L.15.Su.a Match fossils to related species. SC.912.L.15.Su.b Match organisms to the animal, plant, and fungus kingdoms. SC.912.L.15.Su.c Recognize that there are scientific explanations of how life began. SC.912.L.15.Su.d Recognize that humans have changed in appearance over a very long period of time. SC.912.L.15.Su.e Recognize that some living things, such as fish and turtles, produce very large numbers of offspring because most will die as a result of dangers in the environment before they grow up. SC.912.L.15.Su.f Recognize that characteristics of the offspring of living things are sometimes different from their parents.	SC.912.L.15.Pa.a Recognize that plants and animals change as they age. SC.912.L.15.Pa.b Sort common living things into plant and animal kingdoms. SC.912.L.15.Pa.c Recognize that animals produce offspring. SC.912.L.15.Pa.d Recognize differences in physical characteristics within a species of animals, such as different types of dogs.

selection). SC.912.L.15.In.f Recognize that changes in the genes of a species can affect the characteristics of their offspring.		

Standard 16: Heredity and Reproduction

A. DNA stores and transmits genetic information. Genes are sets of instructions encoded in the structure of DNA.

B. Genetic information is passed from generation to generation by DNA in all organisms and accounts for similarities in related individuals.

C. Manipulation of DNA in organisms has led to commercial production of biological molecules on a large scale and genetically modified organisms.

D. Reproduction is characteristic of living things and is essential for the survival of species.

Access Point for Students with Significant Cognitive Disabilities

Independent	***Supported***	***Participatory***
SC.912.L.16.In.a Identify that genes are sets of instructions that determine which characteristics are passed from parent to offspring.	SC.912.L.16.Su.a Recognize characteristics (traits) that offspring inherit from parents.	SC.912.L.16.Pa.a Recognize similar characteristics (traits) between a child and parents, such as hair, eye, and skin color, or height.
SC.912.L.16.In.b Identify traits that plants and animals, including humans, inherit.	SC.912.L.16.Su.b Recognize that all organisms have a substance called DNA with unique information.	SC.912.L.16.Pa.b Recognize similarities in characteristics of plants and animals of the same type (species).
SC.912.L.16.In.c Recognize that a substance called DNA carries genetic information in all organisms, and changes (mutations) in DNA can be helpful or harmful to an organism.	SC.912.L.16.Su.c Recognize that cancer may result when cells change or grow too fast.	SC.912.L.16.Pa.c Recognize that illness can result when parts of our bodies are not working properly.
SC.912.L.16.In.d Identify that cancer can result when cells change or grow uncontrollably.	SC.912.L.16.Su.d Recognize that new medicines and foods can be developed by science (biotechnology).	SC.912.L.16.Pa.d Recognize a food.
SC.912.L.16.In.e Identify ways that biotechnology has impacted society and the environment, such as the development of new medicines and farming techniques.	SC.912.L.16.Su.e Recognize major phases in the process of human development from fertilization to birth.	SC.912.L.16.Pa.e Recognize the sequence of human development from baby to child to adult.
SC.912.L.16.In.f Describe the basic process of human development from fertilization to birth.	SC.912.L.16.Su.f Recognize that cells reproduce by dividing.	SC.912.L.16.Pa.f Recognize that living things produce offspring (reproduce).
SC.912.L.16.In.g Recognize that cells reproduce by dividing to produce new cells that are identical (mitosis) or new cells that		

are different (meiosis).		

Standard 17: Interdependence

A. The distribution and abundance of organisms is determined by the interactions between organisms, and between organisms and the non-living environment.

B. Energy and nutrients move within and between biotic and abiotic components of ecosystems via physical, chemical and biological processes.

C. Human activities and natural events can have profound effects on populations, biodiversity and ecosystem processes.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.912.L.17.In.a Recognize that living things in oceans and fresh water are affected by the location, availability of light, depth of the water, and temperature.	SC.912.L.17.Su.a Recognize that living things in bodies of water are affected by the location and depth of the water.	SC.912.L.17.Pa.a Recognize common living things in bodies of water.
SC.912.L.17.In.b Identify that living things in an ecosystem are affected by changes in the environment, such as changes to the food supply, climate change, or the introduction of predators.	SC.912.L.17.Su.b Recognize how animals and plants in an ecosystem may be affected by changes to the food supply or climate.	SC.912.L.17.Pa.b Recognize what happens to plants and animals when they don't get enough food or water.
SC.912.L.17.In.c Identify relationships among organisms, including helping each other (mutualism); obtaining food (predation); benefiting at the expense of the other (parasitism); and competing with each other for food, space, or shelter (competition).	SC.912.L.17.Su.c Recognize that organisms can interact with other organisms in an ecosystem to help each other (mutualism), to obtain food (predation), and to benefit at expense of the other (parasitism).	SC.912.L.17.Pa.c Recognize examples of mutual relationships between people and other living things.
SC.912.L.17.In.d Recognize possible changes in an ecosystem (biodiversity) that can result from natural catastrophic events, changes in climate, and human activity.	SC.912.L.17.Su.d Recognize changes in living things (biodiversity) that can result from natural catastrophic events and human activity.	SC.912.L.17.Pa.d Recognize actions that are harmful to living things.
SC.912.L.17.In.e Identify the components of a food web, including sunlight, producers, consumers, and decomposers, and trace the flow of energy from the Sun.	SC.912.L.17.Su.e Identify producers, consumers, and decomposers in a simple food chain.	SC.912.L.17.Pa.e Recognize that animals (consumers) eat animals and plants for food.
SC.912.L.17.In.f Identify the contributions of non-living elements, such as carbon and oxygen, to maintaining life in an ecosystem.	SC.912.L.17.Su.f Identify that clean water and air are important for supporting life in an ecosystem.	SC.912.L.17.Pa.f Recognize the importance of clean water for living things.
SC.912.L.17.In.g Identify types of renewable and nonrenewable natural resources and explain the need for conservation.	SC.912.L.17.Su.g Identify a way to conserve a familiar, nonrenewable, natural resource.	SC.912.L.17.Pa.g Recognize a way to help the local environment.
SC.912.L.17.In.h Describe ways the	SC.912.L.17.Su.h Identify ways individuals can help the environment.	

lifestyles of individuals and groups can help or hurt the environment.		

Standard 18: Matter and Energy Transformations

A. All living things are composed of four basic categories of macromolecules and share the same basic needs for life.

B. Living organisms acquire the energy they need for life processes through various metabolic pathways (primarily photosynthesis and cellular respiration).

C. Chemical reactions in living things follow basic rules of chemistry and are usually regulated by enzymes.

D. The unique chemical properties of carbon and water make life on Earth possible.

Access Point for Students with Significant Cognitive Disabilities

Independent	***Supported***	***Participatory***
SC.912.L.18.In.a Identify that carbohydrates, fats, proteins, and nucleic acids (macromolecules) are important for human organisms.	SC.912.L.18.Su.a Recognize that humans use proteins, carbohydrates, and fats.	SC.912.L.18.Pa.a Recognize that humans need different kinds of food.
SC.912.L.18.In.b Identify the products and function of photosynthesis.	SC.912.L.18.Su.b Recognize that the function of photosynthesis is to produce food for plants.	SC.912.L.18.Pa.b Recognize that plants need water, light, and air to grow.
SC.912.L.18.In.c Identify that cells release energy from food so the organism can use it (cellular respiration).	SC.912.L.18.Su.c Recognize that cells get energy from food.	SC.912.L.18.Pa.c Identify that food is a source of energy.
SC.912.L.18.In.d Recognize that plants give off oxygen that is used by animals and animals give off carbon dioxide that is used by plants.	SC.912.L.18.Su.d Recognize that people and animals breathe in the oxygen that plants give off.	SC.912.L.18.Pa.d Recognize that saliva helps people eat when they chew.
SC.912.L.18.In.e Recognize that energy is stored in cells.	SC.912.L.18.Su.e Recognize that food is broken down in digestion (use of enzymes).	SC.912.L.18.Pa.e Recognize that plants and animals use water to live.
SC.912.L.18.In.f Recognize that enzymes break down food molecules during the digestive process.	SC.912.L.18.Su.f Identify the important role of water in sustaining life of plants and animals.	
SC.912.L.18.In.g Identify that special properties of water, such as the ability to moderate temperature and dissolve substances, help to sustain living things on Earth.		

Body of Knowledge: PHYSICAL SCIENCE

Standard 8: Matter

A. A working definition of matter is that it takes up space, has mass, and has measurable properties. Matter is comprised of atomic, subatomic, and elementary particles.

B. Electrons are key to defining chemical and some physical properties, reactivity, and molecular structures. Repeating (periodic) patterns of physical and chemical properties occur among elements that define groups of elements with similar properties. The periodic table displays the repeating patterns, which are related to the atom's outermost electrons. Atoms bond with each other to form compounds.

C. In a chemical reaction, one or more reactants are transformed into one or more new products. Many factors shape the nature of products and the rates of reaction.

D. Carbon-based compounds are building-blocks of known life forms on earth and numerous useful natural and synthetic products.

Access Point for Students with Significant Cognitive Disabilities

Independent	***Supported***	***Participatory***
SC.912.P.8.In.a Classify states of matter as solid, liquid, and gaseous.	SC.912.P.8.Su.a Identify examples of states of matter as solid, liquid, and gaseous.	SC.912.P.8.Pa.a Select an example of a common solid, liquid, and gas.
SC.912.P.8.In.b Compare characteristics of physical and chemical changes of matter.	SC.912.P.8.Su.b Identify examples of physical and chemical changes.	SC.912.P.8.Pa.b Recognize a common chemical change, such as cooking, burning, rusting, or decaying.
SC.912.P.8.In.c Identify the nucleus as the center of an atom.	SC.912.P.8.Su.c Recognize that atoms are tiny particles in materials, too small to see.	SC.912.P.8.Pa.c Recognize that the parts of an object can be put together to make a whole.
SC.912.P.8.In.d Recognize that the periodic table includes all known elements.	SC.912.P.8.Su.d Recognize examples of common elements, such as oxygen and hydrogen.	SC.912.P.8.Pa.c Recognize that the parts of an object can be put together to make a whole.
SC.912.P.8.In.e Identify that compounds are made of two or more elements.	SC.912.P.8.Su.e Recognize examples of common compounds, such as water and salt.	SC.912.P.8.Pa.d Match common compounds to their names or communication symbols.
SC.912.P.8.In.f Identify formulas for common compounds, such as H2O and CO2.	SC.912.P.8.Su.f Match common chemical formulas to their common name, such as H2O to water.	SC.912.P.8.Pa.e Recognize that some acids and bases can be dangerous and identify related hazard symbols.
SC.912.P.8.In.g Identify properties of common acids and bases.	SC.912.P.8.Su.g Categorize common materials or foods as acids or bases.	
SC.912.P.8.In.h Identify that carbon is found in all living things.	SC.912.P.8.Su.h Recognize that carbon is found in all living things.	

Standard 10: Energy

A. Energy is involved in all physical and chemical processes. It is conserved, and can be transformed from one form to another and into work. At the atomic and nuclear levels energy is not continuous but exists in discrete amounts. Energy and mass are related through Einstein's equation $E=mc^2$.

B. The properties of atomic nuclei are responsible for energy-related phenomena such as radioactivity, fission and fusion.

C. Changes in entropy and energy that accompany chemical reactions influence reaction paths. Chemical reactions result in the release or absorption of energy.

D. The theory of electromagnetism explains that electricity and magnetism are closely related. Electric charges are the source of electric fields. Moving charges generate magnetic fields.

E. Waves are the propagation of a disturbance. They transport energy and momentum but do not transport matter.

Access Point for Students with Significant Cognitive Disabilities

Independent	***Supported***	***Participatory***
SC.912.P.10.In.a Identify examples of energy being transformed from one form to another (conserved quantity).	SC.912.P.10.Su.a Recognize energy transformations that occur in everyday life, such as solar energy to electricity.	SC.912.P.10.Pa.a Observe and recognize examples of the transformation of electrical energy to light and heat.
SC.912.P.10.In.b Identify power as work done in a certain amount of time using measurable terms, such as watts or horsepower.	SC.912.P.10.Su.b Recognize the relationship between work and power, such as power is how fast a person or machine does work.	SC.912.P.10.Pa.b Recognize that work requires energy.
SC.912.P.10.In.c Relate the transfer of heat to the states of matter, including gases result from heating, liquids result from cooling a gas, and solids result from further cooling a liquid.	SC.912.P.10.Su.c Observe and recognize ways that heat travels, such as through space (radiation), through solids (conduction), and through liquids and gases (convection).	SC.912.P.10.Pa.c Recognize the source and recipient of heat transfer.
SC.912.P.10.In.d Describe a process that gives off heat (exothermic), such as burning, and a process that absorbs heat (endothermic), such as water coming to a boil.	SC.912.P.10.Su.d Recognize common processes that give off heat (exothermic), such as burning, and processes that absorb heat (endothermic), such as water coming to a boil.	SC.912.P.10.Pa.d Identify materials that provide protection (insulation) from heat.
SC.912.P.10.In.e Identify fundamental forces, including gravitational and electromagnetic.	SC.912.P.10.Su.e Recognize that nuclear power plants generate electricity and can be dangerous.	SC.912.P.10.Pa.e Recognize the universal symbols for radioactive and other hazardous materials.
SC.912.P.10.In.f Identify that atoms can be changed to release energy, such as in nuclear power plants, and recognize one related safety issue.	SC.912.P.10.Su.f Recognize fundamental forces, such as gravitational.	SC.912.P.10.Pa.f Recognize that an object falls unless stopped (gravity).
SC.912.P.10.In.g Identify common conductors and insulators of electricity.	SC.912.P.10.Su.g Recognize common objects that conduct electricity (conductors) and objects that do not conduct electricity (insulators).	SC.912.P.10.Pa.g Recognize safe and unsafe practices related to the use of electricity, such as keeping foreign objects out of electrical sockets and not using electrical devices around water.
		SC.912.P.10.Pa.h Demonstrate opening and closing an electrical circuit to turn an electrical device on and off.
		SC.912.P.10.Pa.i Recognize how magnets are used in real-world

		situations.
SC.912.P.10.In.h Identify that some electrical devices use different types of power sources and explain what might happen if incorrect electrical components are used. SC.912.P.10.In.i Identify common applications of electromagnetic waves moving through different media, such as radio waves, microwaves, x-rays, or infrared.	SC.912.P.10.Su.h Recognize that some electrical devices use different types of power sources. SC.912.P.10.Su.i Observe and identify the effects of magnetic attraction on iron. SC.912.P.10.Su.j Recognize examples of electromagnetic waves moving through different media, such as microwave ovens, radios, and x-rays.	SC.912.P.10.Pa.j Recognize primary and secondary colors in visible light.

Standard 12: Motion

A. Motion can be measured and described qualitatively and quantitatively. Net forces create a change in motion. When objects travel at speeds comparable to the speed of light, Einstein's special theory of relativity applies.

B. Momentum is conserved under well-defined conditions. A change in momentum occurs when a net force is applied to an object over a time interval.

C. The Law of Universal Gravitation states that gravitational forces act on all objects irrespective of their size and position.

D. Gases consist of great numbers of molecules moving in all directions. The behavior of gases can be modeled by the kinetic molecular theory.

E. Chemical reaction rates change with conditions under which they occur. Chemical equilibrium is a dynamic state in which forward and reverse processes occur at the same rates.

Access Point for Students with Significant Cognitive Disabilities

Independent	***Supported***	***Participatory***
SC.912.P.12.In.a Recognize that scalar quantities describe the magnitude of the measurement, such as size, weight, volume, area, temperature, or speed. SC.912.P.12.In.b Identify acceleration as a change in speed or direction. SC.912.P.12.In.c Recognize various situations that show Newton's third law of motion: for every action there is an equal and opposite reaction. SC.912.P.12.In.d Identify examples of how gravity attracts other objects,	SC.912.P.12.Su.a Recognize that speed is expressed as distance moved in a certain time, such as miles per hour or feet per second. SC.912.P.12.Su.b Recognize that acceleration generally involves a change in speed. SC.912.P.12.Su.c Recognize the action and reaction in a situation that show Newton's third law of motion: for every action there is an equal and opposite reaction. SC.912.P.12.Su.d Identify that gravity is a force that attracts objects.	SC.912.P.12.Pa.a Recognize that objects travel at different speeds. SC.912.P.12.Pa.b Identify the speed and direction of a moving object, including fast and slow, up and down, round and round, straight line. SC.912.P.12.Pa.c Identify the source of the force moving an object. SC.912.P.12.Pa.d Recognize that things fall down toward Earth unless stopped or held up (gravity).

such as people to Earth or orbits of planets in the Solar System. SC.912.P.12.In.e Recognize that the speed of light is always the same. SC.912.P.12.In.f Identify that gases exert pressure in a closed surface, such as pressure inside a basketball or a hot air balloon.	SC.912.P.12.Su.e Recognize that light travels very fast. SC.912.P.12.Su.f Recognize that a gas can exert pressure, such as in balloons, car tires, or pool floats.	SC.912.P.12.Pa.e Recognize ways to stop light from traveling, such as closing a door. SC.912.P.12.Pa.f Recognize that some objects contain air, such as balloons, tires, and balls.

Body of Knowledge: EARTH AND SPACE SCIENCE

Standard 5: Earth in Space and Time

The origin and eventual fate of the Universe still remains one of the greatest questions in science. Gravity and energy influence the development and life cycles of galaxies, including our own Milky Way Galaxy, stars, the planetary systems, Earth, and residual material left from the formation of the Solar System. Humankind's need to explore continues to lead to the development of knowledge and understanding of the nature of the Universe.

Access Point for Students with Significant Cognitive Disabilities

Independent	***Supported***	***Participatory***
SC.912.E.5.In.a Recognize that the Milky Way is part of the expanding universe. SC.912.E.5.In.b Identify stars as giant masses of burning gases that are changing. SC.912.E.5.In.c Describe the Sun as a medium-sized star with sunspots and storms that can affect weather and radio transmissions on Earth. SC.912.E.5.In.d Recognize that there are other planetary systems in the universe besides the Solar System. SC.912.E.5.In.e Recognize a lunar eclipse, a solar eclipse, and the effect of the Moon on tides on Earth. SC.912.E.5.In.f Identify major contributions and research from space exploration that affected Florida's economy and culture. SC.912.E.5.In.f Identify major contributions and research from space exploration that affected Florida's economy and culture.	SC.912.E.5.Su.a Recognize that the universe consists of many galaxies, including the Milky Way. SC.912.E.5.Su.b Recognize that stars are made of burning gases. SC.912.E.5.Su.c Describe observable effects of the Sun on Earth, such as changes in light and temperature. SC.912.E.5.Su.d Recognize that there are planetary systems in the Universe. SC.912.E.5.Su.e Recognize an eclipse. SC.912.E.5.Su.f Identify major contributions related to space exploration that affected Florida. SC.912.E.5.Su.f Identify major contributions related to space exploration that affected Florida. SC.912.E.5.Su.g Recognize examples of tools that use radiation for observation purposes, such as x-	SC.912.E.5.Pa.a Recognize that when objects move away from each other, the distance between them expands. SC.912.E.5.Pa.b Recognize that stars are bright. SC.912.E.5.Pa.c Observe and recognize effects of the Sun on Earth, such as temperature changes. SC.912.E.5.Pa.d Recognize that Earth is a planet. SC.912.E.5.Pa.e Recognize items, such as freeze-dried food and space blankets, developed because of space exploration. SC.912.E.5.Pa.f Recognize a tool that uses radiation for personal reasons, such as x-rays.

SC.912.E.5.In.g Identify tools that use different types of radiation, such as radio waves, ultraviolet radiation, and infrared waves.	rays and infrared night goggles.	

Standard 6: Earth Structures

The scientific theory of plate tectonics provides the framework for much of modern geology. Over geologic time, internal and external sources of energy have continuously altered the features of Earth by means of both constructive and destructive forces. All life, including human civilization, is dependent on Earth's internal and external energy and material resources.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.912.E.6.In.a Describe the three layers of Earth (core, mantle, and crust).	SC.912.E.6.Su.a Recognize the three layers of Earth (core, mantle, and crust).	SC.912.E.6.Pa.a Identify a surface feature of Earth, such as a hill.
SC.912.E.6.In.b Describe examples of surface features, such as glaciers, valleys, canyons, and dried riverbeds, which are caused by wind and erosion (surface processes).	SC.912.E.6.Su.b Identify types of surface features, such as hills and valleys.	SC.912.E.6.Pa.b Recognize that the surface of Earth can change.
SC.912.E.6.In.c Relate a cause and effect of movements in Earth's crust (plate tectonics), such as fault lines in the plates causing earthquakes.	SC.912.E.6.Su.c Recognize that Earth's crust is broken into parts (plates) that move and cause mountains and volcanoes.	
SC.912.E.6.In.d Identify natural geological processes that change the land and water in Florida, including beach erosion and sinkholes.	SC.912.E.6.Su.d Recognize examples of natural changes to Florida's land and water, such as beach erosion.	

Standard 7: Earth Systems and Patterns

The scientific theory of the evolution of Earth states that changes in our planet are driven by the flow of energy and the cycling of matter through dynamic interactions among the atmosphere, hydrosphere, cryosphere, geosphere, and biosphere, and the resources used to sustain human civilization on Earth.

Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.912.E.7.In.a Identify cycles that occur on Earth, such as the water and carbon cycles, and the role energy plays in them.	SC.912.E.7.Su.a Recognize the phases of the water cycle that occur on Earth and the role energy plays in the water cycle.	SC.912.E.7.Pa.a Recognize that clouds release rain (part of the water cycle).
SC.912.E.7.In.b Recognize that there are circular movements of ocean water (surface and deep-water currents) which move cold water from the poles toward the tropics and vice versa.	SC.912.E.7.Su.b Recognize that currents move the ocean water around Earth.	SC.912.E.7.Pa.b Recognize waves in the ocean. SC.912.E.7.Pa.c Recognize that humans, plants, and

SC.912.E.7.In.c Describe the interactions among the atmosphere, hydrosphere, and biosphere, including how air, water, and land support living things and how air temperature affects water and land temperatures. SC.912.E.7.In.d Describe variations in climate due to geological locations, such as on mountains and the nearness to large bodies of water. SC.912.E.7.In.e Identify weather conditions using weather data and weather maps. SC.912.E.7.In.f Compare weather conditions in different types of severe storms, including hurricanes, tornadoes, and thunderstorms. SC.912.E.7.In.g Recognize that global climate change is related to conditions in the atmosphere and oceans. SC.912.E.7.In.h Describe how atmospheric and hydrologic conditions, such as hurricanes, drought, wildfires, and sinkholes, affect human behavior. SC.912.E.7.In.i Recognize that the ocean absorbs most of the solar energy reaching Earth and loses heat primarily by evaporation.	SC.912.E.7.Su.c Recognize components of the atmosphere, the hydrosphere, and the biosphere. SC.912.E.7.Su.d Identify the climate conditions in different parts of the world. SC.912.E.7.Su.e Identify weather conditions, including temperature, wind speed, and humidity. SC.912.E.7.Su.f Recognize conditions in severe storms, such as hurricanes, tornadoes, and thunderstorms. SC.912.E.7.Su.g Recognize that global climate change occurs over a long period of time. SC.912.E.7.Su.h Identify how weather and water conditions affect humans in Florida. SC.912.E.7.Su.i Recognize that the ocean absorbs heat from the Sun and then warms the air.	animals live on the Earth (biosphere). SC.912.E.7.Pa.d Recognize that weather (climate) is different in different locations. SC.912.E.7.Pa.e Recognize the weather conditions, including severe weather, in Florida. SC.912.E.7.Pa.f Recognize that the Sun heats the water in the ocean.

Body of Knowledge: NATURE OF SCIENCE

Standard 1: The Practice of Science

A: Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.

B: The processes of science frequently do not correspond to the traditional portrayal of "the scientific method."

C: Scientific argumentation is a necessary part of scientific inquiry and plays an important role in the generation and validation of scientific knowledge.

D: Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations.

Access Point for Students with Significant Cognitive Disabilities

Independent	***Supported***	***Participatory***

SC.912.N.1.In.a Identify a problem based on a specific body of knowledge, including life science, earth and space science, or physical science, and do the following: 1. Identify a scientific question 2. Examine reliable sources of informtion to identify what is already known 3. Develop a possible explanation (hypothesis) 4. Plan and carry out an experiment 5. Gather data based on measurement and observations 6. Evaluate the data 7. Use the data to support reasonable explanations, inferences, and conclusions. SC.912.N.1.In.b Describe the processes used in scientific investigations, including posing a research question, forming a hypothesis, reviewing what is known, collecting evidence, evaluating results, and reaching conclusions. SC.912.N.1.In.c Identify that scientific investigations are sometimes repeated in different locations. SC.912.N.1.In.d Identify that scientists use many different methods in conducting their research.	SC.912.N.1.Su.a Recognize a problem based on a specific body of knowledge, including life science, earth and space science, or physical science, and do the following: 1. Recognize a scientific question 2. Use reliable information and identify what is already known 3. Create possible explanation 4. Carry out a planned experiment 5. Record observations 6. Summarize results 7. Reach a reasonable conclusion. SC.912.N.1.Su.b Identify the basic process used in scientific investigations, including questioning, observing, recording, determining, and sharing results. SC.912.N.1.Su.c Recognize that scientific investigations can be repeated in different locations. SC.912.N.1.Su.d Recognize that scientists use a variety of methods to get answers to their research questions.	SC.912.N.1.Pa.a Recognize a problem related to a specific body of knowledge, including life science, earth and space science, or physical science, and do the following: 1. Observe objects and activities 2. Follow planned procedures 3. Recognize a solution. SC.912.N.1.Pa.b Recognize a process used in science to solve problems, such as observing, following procedures, and recognizing results. SC.912.N.1.Pa.c Recognize that when a variety of common activities are repeated the same way, the outcomes are the same. SC.912.N.1.Pa.d Recognize that people try different ways to complete a task when the first one does not work.

Standard 2: The Characteristics of Scientific Knowledge

A: Scientific knowledge is based on empirical evidence, and is appropriate for understanding the natural world, but it provides only a limited understanding of the supernatural, aesthetic, or other ways of knowing, such as art, philosophy, or religion.

B: Scientific knowledge is durable and robust, but open to change.

C: Because science is based on empirical evidence it strives for objectivity, but as it is a human endeavor the processes, methods, and knowledge of science include subjectivity, as well as creativity and discovery.

Access Point for Students with Significant Cognitive Disabilities

Independent	***Supported***	***Participatory***
SC.912.N.2.In.a Identify examples of investigations that involve science. SC.912.N.2.In.b Distinguish between questions that can be answered by science and observable information and questions that can't be answered by science and observable information.	SC.912.N.2.Su.a Identify questions that can be answered by science. SC.912.N.2.Su.b Recognize that what is known about science can change based on new information.	SC.912.N.2.Pa.a Recognize an example of work by scientists. SC.912.N.2.Pa.b Recognize a variety of cause-effect relationships related to

SC.912.N.2.In.c Recognize that scientific knowledge can be challenged or confirmed by new investigations and reexamination. SC.912.N.2.In.d Identify major contributions of scientists.	SC.912.N.2.Su.c Recognize major contributions of scientists.	science.

Standard 3: The Role of Theories, Laws, Hypotheses, and Models The terms that describe examples of scientific knowledge, for example: "theory," "law," "hypothesis" and "model" have very specific meanings and functions within science.		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.912.N.3.In.a Recognize that a scientific theory is developed by repeated investigations of many scientists and agreement on the likely explanation.	SC.912.N.3.Su.a Recognize that scientific theories are supported by evidence and agreement of many scientists.	SC.912.N.3.Pa.a Recognize examples of cause-effect descriptions or explanations related to science.
SC.912.N.3.In.b Identify examples of scientific laws that describe relationships in the natural world, such as Newton's laws.	SC.912.N.3.Su.b Recognize examples of scientific laws that describe relationships in nature, such as Newton's laws.	SC.912.N.3.Pa.b Recognize a model used in the context of one's own study of science.
SC.912.N.3.In.c Identify ways models are used in the study of science.	SC.912.N.3.Su.c Recognize ways models are used in the study of science.	

Standard 4: Science and Society As tomorrows citizens, students should be able to identify issues about which society could provide input, formulate scientifically investigable questions about those issues, construct investigations of their questions, collect and evaluate data from their investigations, and develop scientific recommendations based upon their findings.		
Access Point for Students with Significant Cognitive Disabilities		
Independent	***Supported***	***Participatory***
SC.912.N.4.In.a Identify ways scientific knowledge and problem solving benefit people.	SC.912.N.4.Su.a Recognize ways scientific knowledge and problem solving benefit people.	SC.912.N.4.Pa.a Recognize science information that helps people.
SC.912.N.4.In.b Identify that costs and benefits must be considered when choosing a strategy for solving a problem.	SC.912.N.4.Su.b Recognize that some strategies may cost more to solve a problem.	SC.912.N.4.Pa.b Recognize a local problem that can be solved by science.

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