Second Grade Science

Curriculum Guide

Dunmore School District

Dunmore, PA

Second Grade Science

Prerequisite:

- Completion of First Grade

Course Description:
The Second Grade Science course is designed to provide students with a conceptual understanding of second grade science concepts as they pertain to the Pennsylvania State Core Standards. The course content gives students an introduction into various disciplines such as Physical, Life, and Earth Science. Students will delve deeper into these areas to further explore topics that include but are not limited to matter being understood as types of atoms present and the interactions both between and within atoms, how and why organisms interact with their environment and what are the effects of these interactions, and discover how and why Earth if constantly changing.

Special Education:
After a student has been evaluated and found to be eligible for specially designed instruction under one of the 13 disability categories, an individualized education plan will be developed to help the student succeed through a more intense intervention program. Special Education is the practice of educating students in a way that addresses their individual differences and needs. The purpose of special education is to provide equal access to education for children ages birth through 21 by providing specialized services that will lead to school success in general education. Our goal for each student is for him/her to be educated in his/her least restrictive environment with additional supports by way of specially designed instruction. After all interventions in the general education setting have been exhausted and the student is still not making progress, students can receive direct instruction in a special education classroom. Direct instruction provides more intense intervention and replacement instruction in order to minimize skill deficits. In our special education classrooms, students will have access to the standards-based general education curriculum, as well as using various research-based intervention programs. Resources and activities will be adjusted based on individual student needs. Suggested time found within the curriculum will be adjusted as needed per individual student's needs.

Special Education Strategies can be located in the IEP Enhancements table located in Appendix: A at the end of this document.

Dunmore School District
Curriculum Guide

Year-at-a-glance

Subject: Second Grade Science	Grade Level: 2	Date Completed: 3/28/2019

1st Quarter

Topic	Resources	Standards
Introduction to Second Grade-Physical Science- Matter	***Science*, Chapter 8: Lessons 1 thru 4, online resources**	**3.4.4A, 3.2.4C**

2nd Quarter

Topic	Resources	Standards
Physical Science- Matter	***Science,* Chapter 8: Lessons 1 thru 4, online resources**	**3.4.4A, 3.2.4C**

3rd Quarter

Topic	Resources	Standards
Life Science- Plants and Animals	***Science,* Chapter 1 Lessons 1 thru 6**	**3.3.4A, 3.3.4B, 3.3.4C**
	***Science,* Chapter 3 Lessons 1 thru 5**	**3.3.4A, 3.3.4B, 3.3.4C**
	***Science,* Chapter 2 Lessons 1 thru 6**	**3.3.4A, 3.3.4B, 3.3.4C**

4th Quarter

Topic	Resources	Standards
Earth and Space Science-Erosion, Weathering, Landforms	***Science,* Chapter 5 Lessons 1 thru 5, online resources**	**3.5.4A**
	***Science,* Chapter 6 Lessons 1 thru 7, online resources**	**3.5.4D**

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Introduction to Second Grade-Physical Science-Matter Matter can be understood in terms of the types of atoms present and the interactions both between and within atoms.	**Anchor Descriptor:** **S4.C.1.1** Describe observable physical properties of matter. **PA Academic Standards:** **3.4.4.A** Recognize basic concepts about the structure and properties of matter. • Describe properties of matter (e.g., hardness, reactions to simple chemical tests). • Know that combining two or more substances can make new materials with different properties. • Know different material characteristics (e.g., texture, state of matter, solubility).	**Eligible Content:** **S4.C.1.1.1** Use physical properties [e.g., mass, shape, size, volume, color, texture, magnetism, state (i.e., solid, liquid, and gas), conductivity (i.e., electrical and heat)] to describe matter. **S4.C.1.1.2** Categorize/group objects using physical characteristics **Essential Knowledge/Skills:** **Different kinds of matter exist in various states.** Observe, describe, and classify matter by properties and uses (e.g., size, shape, weight, texture, flexibility, hardness, color, etc). **Vocabulary:** Classify Describe Gas Liquid Matter Patterns	**Approved textbook *Science,* Chapter 8: Lessons 1 thru 4**	**Teacher-based observations**	**2 weeks**

		Solid Weight Mass Property Mixture			

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Physical Science-Matter Matter can be understood in terms of the types of atoms present and the interactions both between and within atoms.	**Anchor Descriptor:** **S4.C.1.1** Describe observable physical properties of matter. **PA Academic Standards:** **3.4.4.A** Recognize basic concepts about the structure and properties of matter. • Describe properties of matter (e.g., hardness, reactions to simple chemical tests). • Know that combining two or more substances can make new materials with different properties. • Know different material characteristics (e.g., texture, state of matter, solubility).	**Eligible Content:** **S4.C.1.1.1** Use physical properties [e.g., mass, shape, size, volume, color, texture, magnetism, state (i.e., solid, liquid, and gas), conductivity (i.e., electrical and heat)] to describe matter. **S4.C.1.1.2** Categorize/group objects using physical characteristics. **Essential Knowledge/Skills:** **Matter can be described and classified by its observable properties.** Observe, describe, and classify matter by properties and uses (e.g., size, shape, weight, texture, flexibility, hardness, color, etc). **Vocabulary:** Color Flexibility Gas Liquid Matter	**Approved textbook *Science,* Chapter 8: Lessons 1 thru 4**	**Teacher-based observations**	**2 weeks**

		Properties Solid Texture Weight			

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Physical Science-Matter Matter can be understood in terms of the types of atoms present and the interactions both between and within atoms.	**Anchor Descriptor:** **S4.C.1.1** Describe observable physical properties of matter. **PA Academic Standards:** **3.4.4.A** Recognize basic concepts about the structure and properties of matter. • Describe properties of matter (e.g., hardness, reactions to simple chemical tests). • Know that combining two or more substances can make new materials with different properties. • Know different material characteristics (e.g., texture, state of matter, solubility).	**Eligible Content:** **S4.C.1.1.1** Use physical properties [e.g., mass, shape, size, volume, color, texture, magnetism, state (i.e., solid, liquid, and gas), conductivity (i.e., electrical and heat)] to describe matter. **Essential Knowledge/Skills:** **Different kinds of matter exist in various states, depending on temperature.** Plan and carry out investigations to test the idea that warming some materials causes them to change from solid to liquid and cooling causes them to change from liquid to solid. **Vocabulary:** Investigations Liquid Solid	**Approved textbook *Science,* Chapter 8: Lessons 1 thru 4**	**Teacher-based observations**	**2 weeks**

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Physical Science-Matter Matter can be understood in terms of the types of atoms present and the interactions both between and within atoms.	**Anchor Descriptor:** **S4.C.1.1** Describe observable physical properties of matter. **PA Academic Standards:** **3.4.4.A** Recognize basic concepts about the structure and properties of matter. • Describe properties of matter (e.g., hardness, reactions to simple chemical tests). • Know that combining two or more substances can make new materials with different properties. • Know different material characteristics (e.g., texture, state of matter, solubility).	**Eligible Content:** **S4.C.1.1.1** Use physical properties [e.g., mass, shape, size, volume, color, texture, magnetism, state (i.e., solid, liquid, and gas), conductivity (i.e., electrical and heat)] to describe matter. **Essential Knowledge/Skills:** **Matter can be described and classified by its observable properties.** Plan and carry out investigations to test the idea that warming some materials causes them to change from solid to liquid and cooling causes them to change from liquid to solid. **Vocabulary:** Liquid Solid	**Approved textbook *Science,* Chapter 8: Lessons 1 thru 4**	**Teacher-based observations**	**2 weeks**

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Physical Science-Matter Matter can be understood in terms of the types of atoms present and the interactions both between and within atoms.	**Anchor Descriptor:** **S4.C.1.1** Describe observable physical properties of matter. **PA Academic Standards:** **3.4.4.A** Recognize basic concepts about the structure and properties of matter. • Describe properties of matter (e.g., hardness, reactions to simple chemical tests). • Know that combining two or more substances can make new materials with different properties. • Know different material characteristics (e.g., texture, state of matter, solubility).	**Eligible Content:** **S4.C.1.1.1** Use physical properties [e.g., mass, shape, size, volume, color, texture, magnetism, state (i.e., solid, liquid, and gas), conductivity (i.e., electrical and heat)] to describe matter. **Essential Knowledge/Skills:** **Heating or cooling a substance may cause changes that can be observed. Sometimes these changes are reversible, and sometimes they are not.** Construct an argument and provide evidence that some changes caused by heating or cooling can be reversed and some cannot. **Vocabulary:** Boiling Freezing Melting Reversing	**Approved textbook *Science,* Chapter 8: Lessons 1 thru 4** **Online resources**	**Teacher-based observations**	**2 weeks**

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Physical Science-Matter Matter can be understood in terms of the types of atoms present and the interactions both between and within atoms.	**Anchor Descriptor:** **S4.C.1.1** Describe observable physical properties of matter. **PA Academic Standards:** **3.4.4.A** Recognize basic concepts about the structure and properties of matter. • Describe properties of matter (e.g., hardness, reactions to simple chemical tests). • Know that combining two or more substances can make new materials with different properties. • Know different material characteristics (e.g., texture, state of matter, solubility).	**Eligible Content:** **S4.C.1.1.1** Use physical properties [e.g., mass, shape, size, volume, color, texture, magnetism, state (i.e., solid, liquid, and gas), conductivity (i.e., electrical and heat)] to describe matter. **Essential Knowledge/Skills:** **Different properties are suited for different purposes.** Analyze data from testing objects made from different materials to determine if a proposed object functions as intended. **Vocabulary:** Data Functions Test	**Online resources and teacher-created lessons**	**Teacher-based observations**	**2 weeks**

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Physical Science-Matter Matter can be understood in terms of the types of atoms present and the interactions both between and within atoms.	**Anchor Descriptor:** **S4.C.1.1** Describe observable physical properties of matter. **PA Academic Standards:** **3.2.4.C** Recognize and use the elements of scientific inquiry to solve problems. • Generate questions about objects, organisms and/or events that can be answered through scientific investigations. • Design an investigation. • Conduct an experiment. • State a conclusion that is consistent with the information.	**Eligible Content:** **N/A** **Essential Knowledge/Skills:** **A great variety of objects can be built up from a small set of pieces.** Design an object built from a small set of pieces to solve a problem and compare solutions designed by peers given the same set of pieces. Make observations of how an object made of small set of pieces can be disassembled and made into a new object. **Vocabulary:** Construct Design Engineer Disassemble Problem solving Solutions	**Online resources and teacher-created lessons**	**Teacher-based observations**	**2 weeks**

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Life Science- Plants and Animals Organisms grow, reproduce, and perpetuate their species by obtaining necessary resources through interdependent relationships with other organisms and the physical environment.	**Anchor Descriptors:** **S4.B.1.1** Identify and describe similarities and differences between living things and their life processes. **S4.B.2.1** Identify and explain how adaptations help organisms to survive **PA Academic Standards:** **3.3.4.A** Know the similarities and differences of living things. • Identify life processes of living things (e.g., growth, digestion, react to environment). • Know that some organisms have similar external characteristics (e.g., anatomical characteristics; appendages, type of covering, body segments) and that similarities and differences are related to environmental habitat. • Describe basic needs of plants and animals.	**Eligible Content:** **S4.B.1.1.1** Identify life processes of living things (e.g., growth, digestion, respiration). **S4.B.1.1.5** Describe the life cycles of different organisms (e.g., moth, grasshopper, frog, seed-producing plant). **S4.B.2.1.1** Identify characteristics for plant and animal survival in different environments (e.g., wetland, tundra, desert, prairie, deep ocean, forest). **Essential Knowledge/Skills:** **Animals can move around, but plants cannot, and they often depend on animals for pollination or seed dispersal.** Develop a model to demonstrate different modes of seed dispersal. Plan and investigate effectiveness of different types of seed dispersal.	**Approved textbook *Science,* Chapter 1 Lessons 1 thru 6**	**Teacher-based observations**	**2 weeks**

		Vocabulary: Pollination Seed dispersal			

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Life Science- Plants and Animals Organisms grow, reproduce, and perpetuate their species by obtaining necessary resources through interdependent relationships with other organisms and the physical environment.	**Anchor Descriptor:** **S4.B.2.1** Identify and explain how adaptations help organisms to survive. **S4.B.2.2** Identify that characteristics are inherited and, thus, offspring closely resemble their parents. **PA Academic Standards:** **3.3.4.A** Know the similarities and differences of living things. • Identify life processes of living things (e.g., growth, digestion, react to environment). • Know that some organisms have similar external characteristics (e.g., anatomical characteristics; appendages, type of covering, body segments) and that similarities and differences are related to environmental habitat. • Describe basic needs of plants and animals.	**Eligible Content:** **S4.B.2.1.1** Identify characteristics for plant and animal survival in different environments (e.g., wetland, tundra, desert, prairie, deep ocean, forest). **S4.B.2.2.1** Identify physical characteristics (e.g., height, hair color, eye color, attached earlobes, ability to roll tongue) that appear in both parents and could be passed on to offspring. **Essential Knowledge/Skills:** **Different plants survive better in different settings because they have varied needs for water, minerals, and sunlight.** Plan and carry out investigations to test whether plants from different settings have different needs for water, sunlight, and type of soil. **Vocabulary:** Soil	**Approved textbook *Science,* Chapter 1 Lessons 1 thru 6**	**Teacher-based observations**	**2 weeks**

		Sunlight Minerals Water Nutrients Roots Stems Leaves Flower			

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Life Science- Plants and Animals Organisms grow, reproduce, and perpetuate their species by obtaining necessary resources through interdependent relationships with other organisms and the physical environment.	**Anchor Descriptor:** **S4.B.2.1** Identify and explain how adaptations help organisms to survive. **PA Academic Standards:** **3.3.4.C** Know that characteristics are inherited and, thus, offspring closely resemble their parents. • Identify characteristics for animal and plant survival in different climates. • identify physical characteristics that appear in both parents and offspring and differ between families, strains or species.	**Eligible Content:** **S4.B.2.1.**1 Identify characteristics for plant and animal survival in different environments (e.g., wetland, tundra, desert, prairie, deep ocean, forest). **S4.B.2.1.2** Explain how specific adaptations can help a living organism survive (e.g., protective coloration, mimicry, leaf sizes and shapes, ability to catch or retain water). **Essential Knowledge/Skills:** **Organisms obtain the materials they need to grow and survive from their environment.** Obtain, evaluate, and communicate information that in any particular environment, some kinds of organisms survive well and some do not. **Vocabulary:** Environment	**Approved textbook *Science,* Chapter 1 Lessons 1 thru 6**	**Teacher-based observations**	**2 weeks**

		Survive Adapted Prairie			

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Life Science- Plants and Animals Organisms grow, reproduce, and perpetuate their species by obtaining necessary resources through interdependent relationships with other organisms and the physical environment.	**Anchor Descriptor:** **S4.B.2.1** Identify and explain how adaptations help organisms to survive. **PA Academic Standards:** **3.3.4.A** Know the similarities and differences of living things. • Identify life processes of living things (e.g., growth, digestion, react to environment). • Know that some organisms have similar external characteristics (e.g., anatomical characteristics; appendages, type of covering, body segments) and that similarities and differences are related to environmental habitat. • Describe basic needs of plants and animals.	**Eligible Content:** **S4.B.2.1.1** Identify characteristics for plant and animal survival in different environments (e.g., wetland, tundra, desert, prairie, deep ocean, forest). **S4.B.2.1.2** Explain how specific adaptations can help a living organism survive (e.g., protective coloration, mimicry, leaf sizes and shapes, ability to catch or retain water). **Essential Knowledge/Skills:** **Plants depend on water and light to grow.** Plan and conduct an investigation to determine if plants need sunlight and water to grow. **Vocabulary:** Minerals Soil Sunlight Water	**Approved textbook *Science*, Chapter 1 Lessons 1 thru 6**	**Teacher-based observations**	**2 weeks**

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Life Science- Plants and Animals Biological evolution explains both the unity and diversity of species and provides a unifying principle for the history and diversity of life on Earth.	**Anchor Descriptor:** **S4.B.2.1** Identify and explain how adaptations help organisms to survive. **PA Academic Standards:** **3.3.4.A** Know the similarities and differences of living things. • Identify life processes of living things (e.g., growth, digestion, react to environment). • Know that some organisms have similar external characteristics (e.g., anatomical characteristics; appendages, type of covering, body segments) and that similarities and differences are related to environmental habitat. • Describe basic needs of plants and animals. **3.3.4.B** Know that living things are made up of parts that have specific	**Eligible Content:** **S4.B.2.1.2** Explain how specific adaptations can help a living organism survive (e.g., protective coloration, mimicry, leaf sizes and shapes, ability to catch or retain water). **Essential Knowledge/Skills:** **Living things can survive only where their needs are met.** Construct an explanation about why living things can only survive where their needs are met. **Vocabulary:** Biodiversity Microorganisms Needs Organism Survive Producer Consumer Food chain Predator Prey	**Approved textbook *Science,* Chapter 3 Lessons 1 thru 5**	**Teacher-based observations**	**2 weeks**

	functions. • Identify examples of unicellular and multicellular organisms. • Determine how different parts of a living thing work together to make the organism function.	Food web			

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Life Science- Plants and Animals Biological evolution explains both the unity and diversity of species and provides a unifying principle for the history and diversity of life on Earth.	**Anchor Descriptor:** **S4.B.2.1** Identify and explain how adaptations help organisms to survive. **PA Academic Standards:** **3.3.4.A** Know the similarities and differences of living things. • Identify life processes of living things (e.g., growth, digestion, react to environment). • Know that some organisms have similar external characteristics (e.g., anatomical characteristics; appendages, type of covering, body segments) and that similarities and differences are related to environmental habitat. • Describe basic needs of plants and animals. **3.3.4.B** Know that living things are made up of parts that have specific functions. • Identify examples of unicellular and multicellular	**Eligible Content:** **S4.B.2.1.2** Explain how specific adaptations can help a living organism survive (e.g., protective coloration, mimicry, leaf sizes and shapes, ability to catch or retain water). **Essential Knowledge/Skills:** **There are many different kinds of living things in any area, and they exist in different places on land and in water.** Observe and compare the different kinds of living things that are found in different habitats. **Vocabulary:** Habitats Land Living Things Water Mammal Bird Fish Reptile Amphibian	**Approved textbook *Science,* Chapter 2 Lessons 1 thru 6**	**Teacher-based observations**	**2 weeks**

	organisms. • Determine how different parts of a living thing work together to make the organism function.	Camouflage Gills Insect			

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Earth and Space Science-Erosion, Weathering, Landforms The Earth is a complex and dynamic set of interconnected systems (e.g. geosphere, hydrosphere, atmosphere, biosphere) that interact over a wide range of temporal and spatial scales.	**Anchor Descriptor:** **S4.D.1.2** Identify the types and uses of Earth's resources. **PA Academic Standards:** **3.5.4.A** Know basic landforms and earth history. • Describe earth processes (e.g., rusting, weathering, erosion) that have affected selected physical features in students' neighborhoods. • Identify various earth structures (e.g., mountains, faults, drainage basins) through the use of models. • Identify the composition of soil as weathered rock and decomposed organic remains. • Describe fossils and the type of environment they lived in (e.g., tropical, aquatic, desert).	**Eligible Content:** **S4.D.1.2.2** Identify the types and uses of Earth materials for renewable, nonrenewable, and reusable products (e.g., human-made products: concrete, paper, plastics, fabrics). **Essential Knowledge/Skills:** **Earth has changed over time with some changes being rapid and others being slow. Sometimes changes occur over a longer period of time than one may be able to observe.** Make observations from multiple sources to provide evidence that Earth's events can occur quickly or slowly. **Vocabulary:** Erosion Weathering	**Approved textbook *Science,* Chapter 5 Lessons 1 thru 5**	**Teacher-based observations**	**2 weeks**

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Earth and Space Science-Erosion, Weathering, Landforms The Earth is a complex and dynamic set of interconnected systems (e.g. geosphere, hydrosphere, atmosphere, biosphere) that interact over a wide range of temporal and spatial scales.	**Anchor Descriptor:** **S4.D.1.3** Describe Earth's different sources of water or describe changes in the form of water. **S4.D.2.1** Identify basic weather conditions and how they are measured. **PA Academic Standards:** **3.5.4.A** Know basic landforms and earth history. • Describe earth processes (e.g., rusting, weathering, erosion) that have affected selected physical features in students' neighborhoods. • Identify various earth structures (e.g., mountains, faults, drainage basins) through the use of models. • Identify the composition of soil as weathered rock and decomposed organic remains. • Describe fossils and the type of environment they lived in (e.g., tropical, aquatic, desert).	**Eligible Content:** **S4.D.1.3.4** Explain the role and relationship of a watershed or a wetland on water sources (e.g., water storage, groundwater recharge, water filtration, water source, water cycle). **S4.D.2.1.2** Identify weather patterns from data charts or graphs of the data (e.g., temperature, wind direction, wind speed, cloud types, precipitation). **Essential Knowledge/Skills:** **Wind and water change the shape of the landscape.** Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land. **Vocabulary:** Earth materials Erosion Landform Weathering	**Approved textbook *Science,* Chapter 5 Lessons 1 thru 5**	**Teacher-based observations**	**2 weeks**

		Natural resource Boulder Sand Minerals Pollution Recycle			

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Earth and Space Science-Erosion, Weathering, Landforms The Earth is a complex and dynamic set of interconnected systems (e.g. geosphere, hydrosphere, atmosphere, biosphere) that interact over a wide range of temporal and spatial scales.	**Anchor Descriptor:** **S4.D.1.1** Describe basic landforms in Pennsylvania. **S4.D.1.3** Describe Earth's different sources of water or describe changes in the form of water. **PA Academic Standards:** **3.5.4.D** Recognize the earth's different water resources. • Know that approximately three-fourths of the earth is covered by water. • identify and describe types of fresh and salt-water bodies. • Identify examples of water in the form of solid, liquid and gas on or near the surface of the earth. • Explain and illustrate evaporation and condensation. • Recognize other resources available from water (e.g., energy, transportation, minerals, food).	**Eligible Content:** **S4.D.1.1.2** Identify various Earth structures (e.g., mountains, watersheds, peninsulas, lakes, rivers, valleys) through the use of models. **S4.D.1.3.3** Describe or compare lentic systems (i.e., ponds, lakes, and bays) and lotic systems (i.e., streams, creeks, and rivers). **Essential Knowledge/Skills:** **Maps display different land and water features and help show patterns in the distribution of rocks and other geological and geographical features.** Describe kinds and shapes of patterns of landforms and bodies of water. **Vocabulary:** Geographic	**Online resources and teacher-created lessons**	**Teacher-based observations**	**2 weeks**

		Geological Lentic Lotic map Pennsylvania features			

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Earth and Space Science-Erosion, Weathering, Landforms The Earth is a complex and dynamic set of interconnected systems (e.g. geosphere, hydrosphere, atmosphere, biosphere) that interact over a wide range of temporal and spatial scales.	**Anchor Descriptor:** **S4.D.1.1** Describe basic landforms in Pennsylvania. **PA Academic Standards:** **3.5.4.D** Recognize the earth's different water resources. • Know that approximately three-fourths of the earth is covered by water. • identify and describe types of fresh and salt-water bodies. • Identify examples of water in the form of solid, liquid and gas on or near the surface of the earth. • Explain and illustrate evaporation and condensation. • Recognize other resources available from water (e.g., energy, transportation, minerals, food).	**Eligible Content:** **S4.D.1.1.2** Identify various Earth structures (e.g., mountains, watersheds, peninsulas, lakes, rivers, valleys) through the use of models. **Essential Knowledge/Skills:** **Maps show where things are located. One can map the shapes and kinds of land and water in an area.** Develop a model to represent the shapes and kinds of land and bodies of water in an area. **Vocabulary:** Model	**Online resources and teacher-created lessons**	**Teacher-based observations**	**2 weeks**

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Earth and Space Science-Erosion, Weathering, Landforms The Earth is a complex and dynamic set of interconnected systems (e.g. geosphere, hydrosphere, atmosphere, biosphere) that interact over a wide range of temporal and spatial scales.	**Anchor Descriptor:** **S4.D.1.3** Describe Earth's different sources of water or describe changes in the form of water. **PA Academic Standards:** N/A	**Eligible Content:** **S4.D.1.3.2** Explain how water goes through phase changes (i.e., evaporation, condensation, freezing, and melting). **S4.D.1.3.4** Explain the role and relationship of a watershed or a wetland on water sources (e.g., water storage, groundwater recharge, water filtration, water source, water cycle). --- **Essential Knowledge/Skills:** **Water is found in the ocean, rivers, lakes, ponds, and as groundwater beneath the surface. Water exists as solid ice, in liquid form, and as a vapor.** Investigate and represent the various forms of water in their local environment, on Earth, and also on other planets and moons. Use observations to construct explanations that water exists	**Approved textbook *Science,* Chapter 6 Lessons 1 thru 7** **Online resources**	**Teacher-based observations**	**2 weeks**

		in different forms in natural landscapes. **Vocabulary:** Accumulation Condensation Earth Evaporation Water Cycle Groundwater Precipitation Lightning Tornado Hurricane			

General Topic	Anchor Descriptor PA Academic and Core Standards	Eligible Content, Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time (In Days)
Earth and Space Science-Erosion, Weathering, Landforms The Earth's processes affect and are affected by human activities.	**Anchor Descriptor:** **S4.D.1.2** Identify the types and uses of Earth's resources. **PA Academic Standards:** N/A	**Eligible Content:** **S4.D.1.2.1** Identify products and by-products of plants and animals for human use (e.g., food, clothing, building materials, paper products). **S4.D.1.2.2** Identify the types and uses of Earth materials for renewable, nonrenewable, and reusable products (e.g., human-made products: concrete, paper, plastics, fabrics). **Essential Knowledge/Skills:** **All materials, energy, and fuels that humans use are derived from natural sources, and their use affects the environment in multiple ways.** Investigate what resources are used in the construction of buildings, preparation of food, transportation, and other aspects of the community. **Vocabulary:** Community	**Online resources and teacher-created lessons**	**Teacher-based observations**	**2 weeks**

		Energy Materials Resources Transportation			

Appendix: A			
IEP Enhancements			
General Topic:	**Specially Designed Instruction:**	**Additional Vocabulary:**	**Assessments/Suggested Time:**
Introduction to second Grade- Physical Science-Matter **Matter can be understood in terms of the types of atoms present and the interactions both between and within atoms.** **Different kinds of matter exist in various states.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**	• **Conclusion**	**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Physical Science-Matter **Matter can be understood in terms of the types of atoms present and the interactions both between and within atoms.** **Matter can be described and classified by its observable properties.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**	• **Conclusion** • **Balance** • **Measure** • **Mass** • **Volume**	**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Physical Science-Matter **Matter can be understood in terms of the types of atoms present and the interactions both between and within atoms.** **Different kinds of matter exist in various states, depending on temperature.** **Matter can be described and classified by its observable properties.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/ Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**	• **Separate** • **Mixture** • **Evaporate** • **Observe**	**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student per general topic**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Physical Science-Matter **Matter can be understood in terms of the types of atoms present and the interactions both between and within atoms.** **Heating or cooling a substance may cause changes that can be observed. Sometimes these changes are reversible, and sometimes they are not.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**	• **Observe** • **Temperature** • **Thermometer**	**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Physical Science-Matter **Matter can be understood in terms of the types of atoms present and the interactions both between and within atoms.** **Different properties are suited for different purposes.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/ Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**		**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Introduction to Second Grade- Physical Science-Matter **Matter can be understood in terms of the types of atoms present and the interactions both between and within atoms.** **A great variety of objects can be built up from a small set of pieces.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/ Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**		**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Life Science- Plants and Animals **Organisms grow, reproduce, and perpetuate their species by obtaining necessary resources through interdependent relationships with other organisms and the physical environment.** **Animals can move around, but plants cannot, and they often depend on animals for pollination or seed dispersal.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/ Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**	• **Predict** • **Nutrients** • **Roots** • **Stems** • **Leaves** • **Flower** • **Desert** • **Marsh**	**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Life Science- Plants and Animals **Organisms grow, reproduce, and perpetuate their species by obtaining necessary resources through interdependent relationships with other organisms and the physical environment.** **Different plants survive better in different settings because they have varied needs for water, minerals, and sunlight.** **Organisms obtain the materials they need to grow and survive from their environment.** **Plants depend on water and light to grow.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/ Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**		**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Life Science- Plants and Animals **Biological evolution explains both the unity and diversity of species and provides a unifying principle for the history and diversity of life on Earth.** **Living things can survive only where their needs are met.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/ Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**	• **Habitat** • **Grassland**	**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Life Science- Plants and Animals **Biological evolution explains both the unity and diversity of species and provides a unifying principle for the history and diversity of life on Earth.** **There are many different kinds of living things in any area, and they exist in different places on land and in water.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/ Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**	• **Adapt**	**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Earth and Space **Science- Erosion, Weathering, Landforms** **The Earth is a complex and dynamic set of interconnected systems (e.g. geosphere, hydrosphere, atmosphere, biosphere) that interact over a wide range of temporal and spatial scales.** **Earth has changed over time with some changes being rapid and others being slow. Sometimes changes occur over a longer period of time than one may be able to observe.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/ Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**		**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Earth and Space **Science- Erosion, Weathering, Landform** **The Earth is a complex and dynamic set of interconnected systems (e.g. geosphere, hydrosphere, atmosphere, biosphere) that interact over a wide range of temporal and spatial scales.** **Wind and water change the shape of the landscape.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/ Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**		**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Earth and Space **Science- Erosion, Weathering, Landform** **The Earth is a complex and dynamic set of interconnected systems (e.g. geosphere, hydrosphere, atmosphere, biosphere) that interact over a wide range of temporal and spatial scales.** **Maps display different land and water features and help show patterns in the distribution of rocks and other geological and geographical features.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/ Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**		**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Earth and Space **Science- Erosion, Weathering, Landform** **The Earth is a complex and dynamic set of interconnected systems (e.g. geosphere, hydrosphere, atmosphere, biosphere) that interact over a wide range of temporal and spatial scales.** **Maps show where things are located. One can map the shapes and kinds of land and water in an area.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/ Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**		**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Earth and Space **Science- Erosion, Weathering, Landform** **The Earth is a complex and dynamic set of interconnected systems (e.g. geosphere, hydrosphere, atmosphere, biosphere) that interact over a wide range of temporal and spatial scales.** **Water is found in the ocean, rivers, lakes, ponds, and as groundwater beneath the surface. Water exists as solid ice, in liquid form, and as a vapor.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/ Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**	• **Migrate** • **Hibernate** • **Infer** • **Drought**	**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**

General Topic:	Specially Designed Instruction:	Additional Vocabulary:	Assessments/Suggested Time:
Earth and Space **Science- Erosion, Weathering, Landform** **The Earth's processes affect and are affected by human activities** **All materials, energy, and fuels that humans use are derived from natural sources, and their use affects the environment in multiple ways.**	• **Graphic Organizer** • **Hard copy of notes** • **Extended time for instruction** • **Directions could be broken down with only one directive given at a time. Once the first directive is completed, the second directive could be given and so on** • **Additional work space** • **Frequent breaks to help student remain motivated towards, focused on, and attentive to classroom activities** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** • **Directions read allowed** • **Preferential Seating** • **Multi-Modality instruction including modeling, explicit instruction, repetition, rephrasing, visual cues, and chunking of material** • **Guided Reading Strips/ Overlay** • **Visual Aids (posters)** • **Small group reteach** • **Individual assistance as needed** • **Special lined paper for writing assignments** • **Writing samples provided** • **Study Guides** • **Be given an outline of the lesson** • **Use sensory tools such as a theraband so fidgety students get kick it to get their energy out** • **Wait time after a question is asked to give student time to process the question** • **Use of Assistive Technology** • **Use of a highlighter** • **Shortened classroom assignments** • **Copy of textbook to keep at home**	• **Migrate** • **Hibernate** • **Infer** • **Drought**	**Assessments:** • **Extended time to complete** • **Elimination of 1-2 Answer Choices** • **Questions Answer Choices read aloud** • **Use of highlighter to highlight important details** • **Frequent breaks to maintain focus** • **Modified Assessments** • **Provide Study Guides** • **Change testing location** • **Chunking tests into more manageable sections** • **Fewer test questions** • **Modified assignments (examples but not limited to; less problems on page, reduction of questions/answers, larger font on typed worksheets, vocabulary words defined, problem starters, rewording of questions)** **Suggested Time:** **2 weeks as specified in the curriculum with additional time as needed per student**