Grade 3 Science GSE Learning Map

Prioritized Standard: S3E1.a Obtain, evaluate, and communicate information about the physical attributes of rocks and soils. Ask questions and analyze data to classify rocks by their physical attributes (shape, color, texture, luster, and hardness) using simple tests. (Clarification statement: Mohs scale should be studied at this level. Cleavage and streak as well as classification of rocks into sedimentary, igneous, and metamorphic are not addressed at this level.) ***Earth Science***

	Proficiency Scale	DOK	Evidence
4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:** **Learning Target 1**: Use evidence and data from research and investigations to identify an unknown rock or mineral based on their attributes (including the use of higher vocabulary such as cleavage and streak) **Learning Target 2**: Analyze data from investigations to identify the region of Georgia in which different rocks or minerals originated from **Learning Target 3**: Ask questions and investigate why the different regions in Georgia have different rocks and justify their response	DOK 3	**Learning Target 1:** 1 Performance Task (Learning Targets 1-3) **Learning Target 2:** 1 Performance Task (Learning Targets 1-3) **Learning Target 3:** 1 Performance Task (Learning Targets 1-3) **OR** **Personal Communication for any learning target**
3.5	In addition to score 3.0 performance, partial success at score 4.0 content		
3.0	**The student will** **Learning Target 1**: Ask questions to classify rocks by their physical attributes (shape, color, texture, luster, and hardness/Mohs scale) using simple tests **Learning Target 2**: Analyze data to classify rocks by their physical attributes **The student exhibits no major errors or omissions.**	DOK 2	**Learning Target 1:** 1 Constructed Response OR 3 Selected Response **Learning Target 2:** 1 Constructed Response OR 2 Selected Response **OR** **Personal Communication for any learning target**
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0		

Grade 3 Science GSE Learning Map

Prioritized Standard: S3E1.a Obtain, evaluate, and communicate information about the physical attributes of rocks and soils. Ask questions and analyze data to classify rocks by their physical attributes (shape, color, texture, luster, and hardness) using simple tests. (Clarification statement: Mohs scale should be studied at this level. Cleavage and streak as well as classification of rocks into sedimentary, igneous, and metamorphic are not addressed at this level.) ***Earth Science***

	Proficiency Scale	DOK	Evidence
2.0	**There are no major errors or omissions regarding the simpler details and processes.** **The student will recognize or recall specific vocabulary:** **Learning Target 1**: mineral, rock, luster, Mohs scale, properties/attributes, hardness, texture **The student will perform basic processes:** **Learning Target 2**: Describe the physical attributes of rocks such as large/small, heavy/light, smooth/rough, dark/light, dull/shiny, and hard/soft **However, the student exhibits major errors or omissions regarding the more complex ideas and processes.**	DOK 1	**Learning Target 1:** 8 Selected Response **Learning Target 2:** 2 Constructed Response **OR** **Personal Communication for any learning target**
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content		
1.0	With help, partial success at score 2.0 and score 3.0		
0.5	With help, partial success at score 2.0 content but not at score 3.0 content		
0.0	Even with help, no success		
	Scale Notes for Teachers		

Grade 3 Science GSE Learning Map

Prioritized Standard: S3E1.b Obtain, evaluate, and communicate information about the physical attributes of rocks and soils. Plan and carry out investigations to describe properties (color, texture, capacity to retain water, and ability to support growth of plants) of soils and soil types (sand, clay, loam). ***Earth Science***

	Proficiency Scale	DOK	Evidence
4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:** **Learning Target 1**: Research and construct an argument about why certain plants thrive in one region of Georgia but not another. Evidence should include soil types, climate, rainfall	DOK 3	**Learning Target 1:** 1 Performance Task OR 1 Extended Response **OR** **Personal Communication for any learning target**
3.5	In addition to score 3.0 performance, partial success at score 4.0 content		
3.0	**The student will** **Learning Target 1**: Plan investigations to describe properties (color, texture, capacity to retain water, and ability to support growth of plants) of the three main types of soils (sand, clay, loam) **Learning Target 2**: Carry out investigations to describe properties (color, texture, capacity to retain water, and ability to support growth of plants) of the three main types of soils (sand, clay, loam) **The student exhibits no major errors or omissions.**	DOK 2	**Learning Target 1:** 3 Constructed Response OR 3 Selected Response **Learning Target 2:** 3 Selected Response **OR** **Personal Communication for any learning target**
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0		
2.0	**There are no major errors or omissions regarding the simpler details and processes.** **The student will recognize or recall specific vocabulary:** **Learning Target 1**: sediments, soil, sand, loam, clay, capacity **The student will perform basic processes:** **Learning Target 2**: Name the properties of soil (color, texture, capacity to retain water, and ability to support growth of plants) **Learning Target 3**: Identify the three main types of soil (sand, clay, loam) **However, the student exhibits major errors or omissions regarding the more complex ideas and processes.**	DOK 1	**Learning Target 1:** 6 Selected Response **Learning Target 2:** 1 Constructed Response **Learning Target 3:** 1 Constructed Response OR 3 Selected Response **OR** **Personal Communication for any learning target**

Grade 3 Science GSE Learning Map

Prioritized Standard: S3E1.b Obtain, evaluate, and communicate information about the physical attributes of rocks and soils. Plan and carry out investigations to describe properties (color, texture, capacity to retain water, and ability to support growth of plants) of soils and soil types (sand, clay, loam). ***Earth Science***

	Proficiency Scale	DOK	Evidence
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content		
1.0	With help, partial success at score 2.0 and score 3.0		
0.5	With help, partial success at score 2.0 content but not at score 3.0 content		
0.0	Even with help, no success		
Scale Notes for Teachers		Other words to consider: silt- silt is between sand and clay, loam is a combination of sand, silt, clay, and humus	

Grade 3 Science GSE Learning Map

Prioritized Standard: S3E2.a Obtain, evaluate, and communicate information on how fossils provide evidence of past organisms. Construct an argument from observations of fossils (authentic or reproductions) to communicate how they serve as evidence of past organisms and the environments in which they lived. ***Earth Science***

	Proficiency Scale	DOK	Evidence
4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:** **Learning Target 1**: Create a fossil and apply extended vocabulary to construct an explanation of how fossils form (extended vocabulary such as cast, mold, trace, or amber) **Learning Target 2**: Use fossil evidence to construct an explanation supporting the idea that the surface and climate of the earth have changed over time **Learning Target 3**: Construct an explanation for why fossils form differently in various locations in Georgia and/or around the world and justify their responses	DOK 3	**Learning Target 1:** 1 Performance Task **Learning Target 2:** 1 Extended Response **Learning Target 3:** 1 Constructed Response **OR** **Personal Communication for any learning target**
3.5	In addition to score 3.0 performance, partial success at score 4.0 content		
3.0	**The student will** **Learning Target 1**: Construct an argument from observations of fossils (authentic or reproductions) to communicate how they serve as evidence of past organisms and their surrounding environments **The student exhibits no major errors or omissions.**	DOK 2	**Learning Target 1:** 1 Constructed Response OR 3 Selected Response **OR** **Personal Communication for any learning target**
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0		

Grade 3 Science GSE Learning Map

Prioritized Standard: S3E2.a Obtain, evaluate, and communicate information on how fossils provide evidence of past organisms. Construct an argument from observations of fossils (authentic or reproductions) to communicate how they serve as evidence of past organisms and the environments in which they lived. ***Earth Science***

	Proficiency Scale	DOK	Evidence
2.0	**There are no major errors or omissions regarding the simpler details and processes.** **The student will recognize or recall specific vocabulary:** **Learning Target 1**: extinct, fossil, remains, decompose, organisms, carnivore, herbivore, sediments **The student will perform basic processes:** **Learning Target 2**: Describe the sequence and conditions required for an organism to become fossilized **However, the student exhibits major errors or omissions regarding the more complex ideas and processes.**	DOK 2	**Learning Target 1:** 8 Selected Response **Learning Target 2:** 1 Constructed Response **OR** **Personal Communication for any learning target**
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content		
1.0	With help, partial success at score 2.0 and score 3.0		
0.5	With help, partial success at score 2.0 content but not at score 3.0 content		
0.0	Even with help, no success		
Scale Notes for Teachers		Other words to consider: paleontologist and evidence	

Grade 3 Science GSE Learning Map

Prioritized Standard: S3L1.b Obtain, evaluate, and communicate information about the similarities and differences between the habitats found within geographical regions (Blue Ridge Mountains, Piedmont, Coastal Plains, Valley and Ridge, and Appalachian Plateau) of Georgia. Identify external features and adaptations (camouflage, use of hibernation, protection, migration, mimicry) of animals to construct an explanation of how these features/adaptations allow them to survive in their habitat. ***Life Science***

	Proficiency Scale	DOK	Evidence
4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:** **Learning Target 1**: Investigate factors that contribute to the threatened or endangered status of plants or animals **Learning Target 2**: Develop an argument supported by evidence to make claims about the reasons one species has a more successful population than another similar species	DOK 3	**Learning Target 1:** 1 Performance Task **Learning Target 2:** 1 Performance Task **OR** **Personal Communication for any learning target**
3.5	In addition to score 3.0 performance, partial success at score 4.0 content		
3.0	**The student will** **Learning Target 1**: Identify external features and adaptations (camouflage, use of hibernation, protection, migration, mimicry) of animals **Learning Target 2**: Construct an explanation of how features/adaptations allow animals to survive in their habitat **The student exhibits no major errors or omissions.**	DOK 2	**Learning Target 1:** 5 Selected Response **Learning Target 2:** 1 Constructed Response **OR** **Personal Communication for any learning target**
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0		

Grade 3 Science GSE Learning Map

Prioritized Standard: S3L1.b Obtain, evaluate, and communicate information about the similarities and differences between the habitats found within geographical regions (Blue Ridge Mountains, Piedmont, Coastal Plains, Valley and Ridge, and Appalachian Plateau) of Georgia. Identify external features and adaptations (camouflage, use of hibernation, protection, migration, mimicry) of animals to construct an explanation of how these features/adaptations allow them to survive in their habitat. ***Life Science***

	Proficiency Scale	DOK	Evidence
2.0	**There are no major errors or omissions regarding the simpler details and processes.** **The student will recognize or recall specific vocabulary:** **Learning Target 1**: adaptation, camouflage, hibernation, migration, mimicry, thrive, ecosystem, environment, habitat, survive **The student will perform basic processes:** **Learning Target 2**: Identify plants and animals that live in different habitats of Georgia (Blue Ridge Mountains, Piedmont, Coastal Plains, Valley and Ridge, and Appalachian Plateau) **Learning Target 3**: Identify how different animals and plants survive in different climates **Learning Target 4**: Ask questions to differentiate between plants, animals, and habitats found within Georgia's geographic regions (S3L1a) **However, the student exhibits major errors or omissions regarding the more complex ideas and processes.**	DOK 1	**Learning Target 1:** 8 Selected Response **Learning Target 2:** 2 Constructed Response OR 5 Selected Response **Learning Target 3:** 2 Constructed Response OR 3 Selected Response **Learning Target 4:** 2 Constructed Response OR 3 Selected Response **OR** **Personal Communication for any learning target**
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content		
1.0	With help, partial success at score 2.0 and score 3.0		
0.5	With help, partial success at score 2.0 content but not at score 3.0 content		
0.0	Even with help, no success		
	Scale Notes for Teachers		

Grade 3 Science GSE Learning Map

Prioritized Standard: S3L2.a Obtain, evaluate, and communicate information about the effects of pollution (air, land, and water) and humans on the environment. Ask questions to collect information and create records of sources and effects of pollution on the plants and animals of Georgia. *Life Science*

	Proficiency Scale	DOK	Evidence
4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:** **Learning Target 1**: Plan and carry out experiments that will address and reduce different types of pollution (including but not limited to light, noise, visual, thermal) in various Georgia communities. Analyze data and write an evidence-based argument or explanation to justify the results	DOK 3	**Learning Target 1:** 1 Performance Task **OR** **Personal Communication for any learning target**
3.5	In addition to score 3.0 performance, partial success at score 4.0 content		
3.0	**The student will** **Learning Target 1**: Ask questions to collect information and create records of sources and effects of pollution (air, land, and water) on the plants and animals of Georgia **The student exhibits no major errors or omissions.**	DOK 2	**Learning Target 1:** 1 Performance Task OR 1 Constructed Response OR 3 Selected Response **OR** **Personal Communication for any learning target**
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0		
2.0	**There are no major errors or omissions regarding the simpler details and processes.** **The student will recognize or recall specific vocabulary:** **Learning Target 1**: pollution **The student will perform basic processes:** **Learning Target 2**: Identify the types of pollution (air, water, and land) that affect plants and animals in Georgia **Learning Target 3**: Identify sources of pollution such as littering, oil spills, factory smoke, and human interaction **Learning Target 4**: Explain what will happen to an organism if the habitat is changed by pollution **However, the student exhibits major errors or omissions regarding the more complex ideas and processes.**	DOK 2	**Learning Target 1:** 3 Selected Response **Learning Target 2:** 5 Selected Response **Learning Target 3:** 1 Constructed Response **Learning Target 4:** 1 Constructed Response **OR** **Personal Communication for any learning target**
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content		

Grade 3 Science GSE Learning Map

Prioritized Standard: S3L2.a Obtain, evaluate, and communicate information about the effects of pollution (air, land, and water) and humans on the environment. Ask questions to collect information and create records of sources and effects of pollution on the plants and animals of Georgia. ***Life Science***

	Proficiency Scale	DOK	Evidence
1.0	With help, partial success at score 2.0 and score 3.0		
0.5	With help, partial success at score 2.0 content but not at score 3.0 content		
0.0	Even with help, no success		
Scale Notes for Teachers			

Grade 3 Science GSE Learning Map

Prioritized Standard: S3L2.b Obtain, evaluate, and communicate information about the effects of pollution (air, land, and water) and humans on the environment. Explore, research, and communicate solutions, such as conservation of resources and recycling materials, to protect plants and animals of Georgia. ***Life Science***

	Proficiency Scale	DOK	Evidence
4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:** **Learning Target 1**: Identify an endangered species in a Georgia habitat, and construct an explanation of how the sources of pollution are causing the decline in its population. Design a solution for reducing pollution and explain the impact on the population	DOK 3	**Learning Target 1:** 1 Extended Response **OR** **Personal Communication for any learning target**
3.5	In addition to score 3.0 performance, partial success at score 4.0 content		
3.0	**The student will** **Learning Target 1**: Explore and research solutions, such as conservation of resources and recycling materials, to protect plants and animals of Georgia **Learning Target 2**: Communicate solutions, such as conservation of resources and recycling materials, to protect plants and animals of Georgia **The student exhibits no major errors or omissions.**	DOK 2	**Learning Target 1:** 2 Constructed Response **Learning Target 2:** 1 Performance Task OR 1 Extended Response **OR** **Personal Communication for any learning target**
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0		
2.0	**There are no major errors or omissions regarding the simpler details and processes.** **The student will recognize or recall specific vocabulary:** **Learning Target 1**: reduce, reuse, recycle, renewable resources, nonrenewable resources, conservation **The student will perform basic processes:** **Learning Target 2**: Explain the effects of pollution on the environment **However, the student exhibits major errors or omissions regarding the more complex ideas and processes.**	DOK 2	**Learning Target 1:** 6 Selected Response **Learning Target 2:** 2 Constructed Response **OR** **Personal Communication for any learning target**
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content		

Grade 3 Science GSE Learning Map

Prioritized Standard: S3L2.b Obtain, evaluate, and communicate information about the effects of pollution (air, land, and water) and humans on the environment. Explore, research, and communicate solutions, such as conservation of resources and recycling materials, to protect plants and animals of Georgia. *Life Science*

	Proficiency Scale	DOK	Evidence
1.0	With help, partial success at score 2.0 and score 3.0		
0.5	With help, partial success at score 2.0 content but not at score 3.0 content		
0.0	Even with help, no success		
Scale Notes for Teachers		**This could be a sample task: Students will educate others through a campaign (posters, pamphlets, videos, speeches, etc) about how to prevent water, air, land, noise and light pollution and revive the animal's population. (This is a sample task for 4.0)**	

Grade 3 Science GSE Learning Map

Prioritized Standard: S3P1.b Obtain, evaluate, and communicate information about the ways heat energy is transferred and measured. Plan and carry out an investigation to gather data using thermometers to produce tables and charts that illustrate the effect of sunlight on various objects. (Clarification statement: The use of both Fahrenheit and Celsius temperature scales is expected.) ***Physical Science***

	Proficiency Scale	DOK	Evidence
4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:** **Learning Target 1**: Develop and use a model to describe the differences between the three types of heat transfer: conduction, convection, and radiation **Learning Target 2**: Plan and carry out an investigation using conductors and insulators to design a device that will keep hot water from cooling **Learning Target 3**: Plan and carry out an investigation using conductors and insulators to design a device that will keep an ice cube from melting	DOK 3	**Learning Target 1:** 1 Performance Task OR 1 Constructed Response **Learning Target 2:** 1 Performance Task OR 1 Constructed Response **Learning Target 3:** 1 Performance Task OR 1 Constructed Response **OR** **Personal Communication for any learning target**
3.5	In addition to score 3.0 performance, partial success at score 4.0 content		
3.0	**The student will** **Learning Target 1**: Plan and carry out an investigation to gather data using thermometers to produce tables and charts that illustrate the effect of sunlight on various objects **The student exhibits no major errors or omissions.**	DOK 2	**Learning Target 1:** 1 Constructed Response OR 3 Selected Response **OR** **Personal Communication for any learning target**
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0		

Grade 3 Science GSE Learning Map

Prioritized Standard: S3P1.b Obtain, evaluate, and communicate information about the ways heat energy is transferred and measured. Plan and carry out an investigation to gather data using thermometers to produce tables and charts that illustrate the effect of sunlight on various objects. (Clarification statement: The use of both Fahrenheit and Celsius temperature scales is expected.) ***Physical Science***

	Proficiency Scale	DOK	Evidence
2.0	**There are no major errors or omissions regarding the simpler details and processes.** **The student will recognize or recall specific vocabulary:** **Learning Target 1**: heat energy, friction, burning, thermometer, Fahrenheit, Celsius **The student will perform basic processes:** **Learning Target 2**: Ask questions to identify sources of heat energy such as sunlight, friction, and burning (S3P1a) **Learning Target 3**: Gather data using thermometers in both Fahrenheit and Celsius **Learning Target 4**: Organize data into tables and charts **However, the student exhibits major errors or omissions regarding the more complex ideas and processes.**	DOK 1	**Learning Target 1:** 6 Selected Response **Learning Target 2:** 1 Constructed Response OR 2 Selected Response **Learning Target 3:** 1 Constructed Response OR 2 Selected Response **Learning Target 4:** 1 Constructed Response **OR** **Personal Communication for any learning target**
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content		
1.0	With help, partial success at score 2.0 and score 3.0		
0.5	With help, partial success at score 2.0 content but not at score 3.0 content		
0.0	Even with help, no success		
Scale Notes for Teachers		Clarification statement: The use of both Fahrenheit and Celsius temperature scales is expected.	

Grade 3 Science GSE Learning Map

Prioritized Standard: S3P1.c Obtain, evaluate, and communicate information about the ways heat energy is transferred and measured. Use tools and every day materials to design and construct a device/structure that will increase/decrease the warming effects of sunlight on various materials. (Clarification statement: Conduction, convection, and radiation are taught in upper grades, and should not be taught at this grade level.) ***Physical Science***

	Proficiency Scale	DOK	Evidence
4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:** **Learning Target 1**: Construct an argument to defend their choice of materials to build a sample oven. Use higher vocabulary such as conductors and insulators to explain their model. Compare and contrast the properties of the materials for insulating or conducting heat energy. Redesign their oven to make improvements using data from the first trial	DOK 3	**Learning Target 1:** 1 Extended Response **OR** **Personal Communication for any learning target**
3.5	In addition to score 3.0 performance, partial success at score 4.0 content		
3.0	**The student will** **Learning Target 1**: Use tools and every day materials to design and construct a device/structure that will increase/decrease the warming effects of sunlight on various materials.(Clarification statement: Conduction, convection, and radiation are taught in upper grades) **The student exhibits no major errors or omissions.**	DOK 2	**Learning Target 1:** 1 Performance Task OR 3 Selected Response **OR** **Personal Communication for any learning target**
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0		
2.0	**There are no major errors or omissions regarding the simpler details and processes.** **The student will recognize or recall specific vocabulary:** **Learning Target 1**: Fahrenheit, Celsius, temperature, heat **The student will perform basic processes:** **Learning Target 2**: Read a thermometer with Fahrenheit and Celsius temperature scales **Learning Target 3**: Identify materials that hold heat well versus tools that do not hold heat well **However, the student exhibits major errors or omissions regarding the more complex ideas and processes.**	DOK 1	**Learning Target 1:** 4 Selected Response **Learning Target 2:** 2 Selected Response **Learning Target 3:** 1 Constructed Response OR 3 Selected Response **OR** **Personal Communication for any learning target**

Grade 3 Science GSE Learning Map

Prioritized Standard: S3P1.c Obtain, evaluate, and communicate information about the ways heat energy is transferred and measured. Use tools and every day materials to design and construct a device/structure that will increase/decrease the warming effects of sunlight on various materials. (Clarification statement: Conduction, convection, and radiation are taught in upper grades, and should not be taught at this grade level.) ***Physical Science***

	Proficiency Scale	DOK	Evidence
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content		
1.0	With help, partial success at score 2.0 and score 3.0		
0.5	With help, partial success at score 2.0 content but not at score 3.0 content		
0.0	Even with help, no success		
Scale Notes for Teachers		Essential vocabulary: Fahrenheit, Celsius, thermometer, heat Other words to consider: metric, standard, temperature, scales, cause, effect The development of a solar oven is an appropriate task to meet the 3.0 level.	