

### 3<sup>rd</sup> Grade Science

Power Standard: Identify geographical features of the Earth while comparing and contrasting the layers of the Earth and their various features including volcanoes and earthquakes.		
SC.O.3.2.17	describe how volcanoes and earthquakes affect the Earth.	DOK 2
	<ul style="list-style-type: none"> <li>Describe how volcanoes affect the Earth</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>Describe how earthquakes affect the Earth</li> </ul>	Knowledge
SC.O.3.2.22	identify geographical features using a model or map.	DOK 2
	<ul style="list-style-type: none"> <li>identify geographical features using a model</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>identify geographical features using a map.</li> </ul>	Knowledge
SC.O.3.2.23	compare and contrast the layers of the Earth and their various features.	DOK 1
	<ul style="list-style-type: none"> <li>Compare the layers of the Earth and their various features</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Contrast the layers of the Earth and their various features</li> </ul>	Performance
Power Standard: Given a set of objects, observe their changes, patterns, and interaction with one another.		
SC.O.3.3.01	identify that systems are made of parts that interact with one another.	DOK 1
		Knowledge
SC.O.3.3.02	use models as representations of real things.	DOK 2
		Performance
SC.O.3.3.03	observe that changes occur gradually, repetitively, or randomly within the environment and question causes of changes.	DOK 2
	<ul style="list-style-type: none"> <li>Observe that changes occur gradually within the environment</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Observe that changes occur repetitively within the environment</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Observe that changes occur randomly within the environment</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Question the causes of changes within the environment</li> </ul>	Performance
SC.O.3.3.04	given a set of objects, group or order the objects according to an established scheme.	DOK 1
	<ul style="list-style-type: none"> <li>Given a set of objects, group them according to a scheme</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Given a set of objects, order them according to an established scheme</li> </ul>	Performance
SC.O.3.3.05	given a set of events, objects, shapes, designs, or numbers, formulate	DOK 2

	patterns of constancy or regularity.	
	<ul style="list-style-type: none"> <li>Given a set of events, formulate patterns of constancy or regularity</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Given a set of objects, formulate patterns of constancy or regularity</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Given a set of shapes, formulate patterns of constancy or regularity</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Given a set of designs, formulate patterns of constancy or regularity</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Given a set of numbers, formulate patterns of constancy or regularity</li> </ul>	Performance
Power Standard: Compare, observe, and describe while identifying the structure of living things and their relationships and functions.		
SC.O.3.2.01	identify the structures of living things, including their systems and explain their functions.	DOK 1
	<ul style="list-style-type: none"> <li>Identify the structures of living things</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>Identify systems of living things</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>Explain functions of living things</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Explain systems of living things</li> </ul>	Performance
SC.O.3.2.02	observe, measure and record changes in living things (e.g., growth and development, or variations within species).	DOK 2
	<ul style="list-style-type: none"> <li>observe changes in living things</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>measure changes in living things</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>record changes in living things</li> </ul>	Performance
SC.O.3.2.03	compare physical characteristics and behaviors of living organisms and explain how they are adapted to a specific environment (e.g., beaks and feet in birds, seed dispersal, camouflage, or different types of flowers).	DOK 2
	<ul style="list-style-type: none"> <li>Compare physical characteristics of living organisms</li> </ul>	Reasoning
	<ul style="list-style-type: none"> <li>Explain physical characteristics of living organisms</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Compare behaviors of living organisms</li> </ul>	Reasoning
	<ul style="list-style-type: none"> <li>Explain behaviors of living organisms</li> </ul>	Performance
SC.O.3.2.04	observe and describe relationships among organisms and predict the effect of adverse factors.	DOK 2
	Observe relationships among organisms	Knowledge

	Describe relationships among organisms	Knowledge
	Predict the effect of adverse factors	Performance
Power Standard: none		
SC.O.3.3.07	explain a simple problem and identify a specific solution describing the use of tools and/or materials to solve the problem or to complete the task.	DOK 2
	<ul style="list-style-type: none"> <li>Explain a simple problem describing the use of tools and/or materials to solve the problem or to complete the task</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>Identify a specific solution describing the use of tools or materials and solve the problem</li> </ul>	Performance
Power Standard: Cite examples of the uses of science & technology in the community and describe how tools and appliances impacted daily.		
SC.O.3.3.06	cite examples of the uses of science and technology in common daily events and in the community.	DOK 1
	<ul style="list-style-type: none"> <li>cite examples of the uses of science in common daily events.</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>cite examples of the uses of science in the community.</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>cite examples of the uses of technology in common daily events.</li> </ul>	Knowledge
SC.O.3.3.11	describe how modern tools and appliances have positively and/or negatively impacted their daily lives.	DOK 1
	<ul style="list-style-type: none"> <li>describe how modern tools have positively impacted their daily lives.</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>describe how modern tools have negatively impacted their daily lives.</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>describe how appliances have positively impacted their daily lives.</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>describe how appliances have negatively impacted their daily lives.</li> </ul>	Performance
Power Standard: Develop respect and responsibility for the environment by recycling, waste disposal, etc. and listen to and be tolerant of different viewpoints by engaging in collaborative activities.		
SC.O.3.3.08	recognize that a solution to one scientific problem often creates new problems (e.g., recycling, pollution, conservation, or waste disposal).	DOK 1
		Performance
SC.O.3.3.09	listen to and be tolerant of different viewpoints by engaging in collaborative	DOK 2

	activities and be willing to modify ideas when new and valid information is presented.	
	<ul style="list-style-type: none"> <li>Listen to different viewpoints by engaging in collaborative activities</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Be tolerant of different viewpoints by engaging in collaborative activities</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Be willing to modify ideas when new information is presented</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Be willing to modify ideas when valid information is presented</li> </ul>	Performance
SC.O.3.3.10	develop respect and responsibility for the environment by engaging in conservation practices.	DOK 1
	<ul style="list-style-type: none"> <li>develop respect for the environment by engaging in conservation practices.</li> </ul>	Reasoning
	<ul style="list-style-type: none"> <li>develop responsibility for the environment by engaging in conservation practices.</li> </ul>	Reasoning
Power Standard: Investigate and relate the reflection and refraction of light by objects.		
SC.O.3.2.09	investigate the reflection and refraction of light by objects.	DOK 1
	<ul style="list-style-type: none"> <li>investigate the reflection of light by objects.</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>investigate the refraction of light by objects.</li> </ul>	Performance
SC.O.3.2.10	relate how the color of an object is based upon the reflection of light.	DOK 2
		Knowledge
Power Standard: Identify and explain by explaining igneous, sedimentary, and metamorphic rocks and their relation to minerals and how they are effected by water and wind.		
SC.O.3.2.15	identify fossils as a record of time.	DOK 1
		Knowledge
SC.O.3.2.21	explain how igneous, sedimentary and metamorphic rocks are formed.	DOK 1
	<ul style="list-style-type: none"> <li>explain how igneous rocks are formed.</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>explain how sedimentary rocks are formed.</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>explain how metamorphic rocks are formed.</li> </ul>	Performance
SC.O.3.2.20	identify properties of minerals and recognize that rocks are composed of different minerals.	DOK 1

	<ul style="list-style-type: none"> <li>identify properties of minerals</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>recognize that rocks are composed of different minerals.</li> </ul>	Knowledge
SC.O.3.2.16	explore erosion of different materials by water and wind (e.g., sand, soil, or rocks).	DOK 1
	<ul style="list-style-type: none"> <li>Explore erosion of different materials by water</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Explore erosion of different materials by wind</li> </ul>	Performance
Power Standard: Identify and recognize while examining examples of potential and kinetic energy and the relationship between speed, distance, and time.		
SC.O.3.2.11	recognize that it takes work to move objects over a distance.	DOK 1
		Knowledge
SC.O.3.2.12	examine the relationships between speed, distance, and time.	DOK 2
	<ul style="list-style-type: none"> <li>examine the relationships between speed.</li> </ul>	Reasoning
	<ul style="list-style-type: none"> <li>examine the relationships between distance.</li> </ul>	Reasoning
	<ul style="list-style-type: none"> <li>examine the relationships between time.</li> </ul>	Reasoning
SC.O.3.2.13	recognize that the greater a force is exerted on an object, the greater the change of its motion.	DOK 1
		Knowledge
SC.O.3.2.14	identify examples of potential and kinetic energy.	DOK 1
	<ul style="list-style-type: none"> <li>Identify examples of potential energy</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>Identify examples of kinetic energy</li> </ul>	Performance
Power Standard: Investigate & identify physical and chemical properties of matter and how they are affected by temperature.		
SC.O.3.2.05	relate the buoyancy of an object to its density.	DOK 2
		Reasoning
SC.O.3.2.06	identify physical and chemical properties.	DOK 1
	<ul style="list-style-type: none"> <li>Identify physical properties</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>Identify chemical properties</li> </ul>	Knowledge
SC.O.3.2.07	relate changes in states of matter to changes in temperature.	DOK 1

		Reasoning
SC.O.3.2.08	investigate the dissolving of solids in liquids.	DOK 2
		Performance
Power Standard: Explore the careers of scientists and their everyday use of technology and materials in the communities.		
SC.O.3.1.01	recognize that scientific explanations may lead to new discoveries (e.g., new knowledge leads to new questions).	DOK 1
	<ul style="list-style-type: none"> <li>Recognize that scientific explanations may lead to new discoveries</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>Recognize that new knowledge leads to new questions</li> </ul>	Knowledge
SC.O.3.1.02	study the lives and discoveries of scientists of different cultures and backgrounds.	DOK 1
	<ul style="list-style-type: none"> <li>study the lives and discoveries of scientists of different cultures</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>study the lives and discoveries of scientists of different backgrounds.</li> </ul>	Knowledge
SC.O.3.1.03	explore science careers in the community.	DOK 1
		Reasoning
SC.O.3.1.04	demonstrate curiosity, initiative and creativity by planning and conducting simple investigations.	DOK 3
	<ul style="list-style-type: none"> <li>demonstrate curiosity by planning simple investigations.</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>demonstrate initiative by planning simple investigations.</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>demonstrate creativity by planning simple investigations.</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>demonstrate curiosity by conducting simple investigations.</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>demonstrate initiative by conducting simple investigations.</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>demonstrate creativity by conducting simple investigations.</li> </ul>	Performance
SC.O.3.1.07	use scientific instruments, technology, and everyday materials to investigate the natural world.	DOK 1
	<ul style="list-style-type: none"> <li>use scientific instruments to investigate the natural world.</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>use scientific technology to investigate the natural world.</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>use everyday materials to investigate the natural world.</li> </ul>	Performance
Power Standard: Recognize the movement of the earth in relation to the sun and describe similarities and differences among planets.		

SC.O.3.2.18	recognize the relative movement of the Earth and moon in relation to the sun.	DOK 2
	<ul style="list-style-type: none"> <li>recognize the relative movement of the Earth in relation to the sun.</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>recognize the relative movement of the moon in relation to the sun.</li> </ul>	Knowledge
SC.O.3.2.19	describe the similarities and differences among the planets.	DOK 1
	Describe the similarities among the planets	Reasoning
	Describe the differences among the planets	Reasoning
Power Standard: None		
SC.O.3.1.05	recognize that developing solutions to problems takes time, patience and persistence through individual and cooperative ventures.	DOK 1
	<ul style="list-style-type: none"> <li>recognize that developing solutions to problems takes time through individual ventures.</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>recognize that developing solutions to problems takes patience through individual ventures.</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>recognize that developing solutions to problems takes persistence through individual ventures.</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>recognize that developing solutions to problems takes time through cooperative ventures.</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>recognize that developing solutions to problems takes patience through cooperative ventures.</li> </ul>	Knowledge
	<ul style="list-style-type: none"> <li>recognize that developing solutions to problems takes persistence through cooperative ventures.</li> </ul>	Knowledge
Power Standard: None		
SC.O.3.1.06	support statements with facts found through research from various sources, including technology.	DOK 2
		Performance

Power Standard: None		
SC.O.3.1.08	use safe and proper techniques for handling, manipulating and caring for science materials (e.g., follow safety rules, maintain a clean work area, or treat living organisms humanely).	DOK 1
	<ul style="list-style-type: none"> <li>• Use safe techniques for handling</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>• Use proper techniques for handling</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>• Use safe techniques for manipulating science materials</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>• Use proper techniques for manipulating science materials</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>• Use safe techniques for caring for science</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>• Use proper techniques for caring for science</li> </ul>	Performance
Power Standard: None		
SC.O.3.1.09	apply mathematical skills and use metric units in measurements.	DOK 1
	<ul style="list-style-type: none"> <li>• Apply mathematical skills in measurements</li> </ul>	Reasoning/Performance
	<ul style="list-style-type: none"> <li>• Use metric units in measurements</li> </ul>	Performance
Power Standard: None		
SC.O.3.1.10	interpret data presented in a table, graph, map or diagram and use it to answer questions and make predictions and inferences based on patterns of evidence.	DOK 3
	<ul style="list-style-type: none"> <li>• Interpret data presented in a table</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>• Interpret data presented in a graph</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>• Interpret data presented in a map</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>• Interpret data presented in a diagram</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>• Use data to answer questions based on patterns of evidence</li> </ul>	Performance
	<ul style="list-style-type: none"> <li>• Use data to make predictions based on patterns of evidence</li> </ul>	Performance
Power Standard: None		
SC.O.3.1.11	Identify and control variables.	DOK 3
	<ul style="list-style-type: none"> <li>• Identify variables</li> </ul>	Knowledge

	<ul style="list-style-type: none"><li>• Control variables</li></ul>	Reasoning
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