

Physical Properties of Matter	Unit	CHECKPOINT		
		1	2	3
5.3 Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used. The student will explain what it means to say that God created the world and all matter out of nothing at a certain point in time.*				

Catholic Identity Standards (Ways to Grow)			
5.1A	recognize that every human life is sacred because each person is created and loved by God*		
5.1B	describe ways to take part in/be responsible to the community by discerning and using our God-given gifts*		
5.1C	recognize and oppose unjust social structures and work toward justice for all*		
5.1D	see God at work in all things and as expressed in the sacraments*		
5.1E	connect scripture, tradition, and the models of Mary and the saints to guide, grow, and deepen faith*		

Learning Process Standards (Tools to Know)	Unit	CHECKPOINT		
		1	2	3
5.2A plan and conduct investigations				
5.2B collect information using appropriate scientific tools				

Content	Unit	CHECKPOINT		
		1	2	3
Properties of Matter				
5.3A classify matter based on measurable, testable, and observable physical properties, including mass, magnetism, physical state (solid, liquid, and gas), relative density (sinking and floating using water as a reference point), solubility in water, and the ability to conduct or insulate thermal energy or electric energy				
5.3A.1 demonstrate that some mixtures maintain physical properties of their ingredients such as iron filings and sand and sand and water				
5.3A.2 identify changes that can occur in the physical properties of the ingredients of solutions such as dissolving salt in water or adding lemon juice to water				

Learning Process Standards (Ways to Show)	Unit	CHECKPOINT		
		1	2	3
5.2C record and organize data and observations				
5.2D communicate observations about investigations				
5.2E represent the natural world using models				

Force, Motion, and Energy		Unit	CHECKPOINT		
			1	2	3
5.4	Force, motion, and energy. The student knows that energy occurs in many forms and can be observed in cycles, patterns, and systems.				

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Learning Process Standards (Tools to Know)		Unit	CHECKPOINT		
			1	2	3
5.2A	plan and conduct investigations				
5.2B	collect information using appropriate scientific tools				

Content		Unit	CHECKPOINT		
			1	2	3
Uses of Energy					
5.4A	explore the uses of energy, including mechanical, light, thermal, electrical, and sound energy				
Electricity					
5.4B	demonstrate that the flow of electricity in closed circuits can produce light, heat, or sound				
Light					
5.4C	demonstrate that light travels in a straight line until it strikes an object and is reflected or travels through one medium to another and is refracted				
Force					
5.4D	design a simple experimental investigation that tests the effect of force on an object				

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			1	2	3
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5.2E	represent the natural world using models				

Natural Resources and Changes to Earth’s Surface		Unit	CHECKPOINT		
			1	2	3
5.5	Earth and space. The student knows that Earth consists of useful resources and its surface is constantly changing. The student will accept the premise that nature should not be manipulated simply at man’s will or only viewed as a thing to be used, but that man must cooperate with God’s plan for himself and for nature.*				

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5.1C	recognize and oppose unjust social structures and work toward justice for all*				
5.1D	see God at work in all things and as expressed in the sacraments*				
5.1E	connect scripture, tradition, and the models of Mary and the saints to guide, grow, and deepen faith*				

Learning Process Standards (Tools to Know)		Unit	CHECKPOINT		
			1	2	3
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5.2B	collect information using appropriate scientific tools				

Content		Unit	CHECKPOINT		
			1	2	3
Resources and Landforms					
5.5A	explore the processes that led to the formation of fossil fuels				
5.5A.1	recognize how landforms such as deltas, canyons, and sand dunes are the result of changes to Earth’s surface by wind, water, or ice				
5.5A.2	identify and classify Earth’s renewable resources, including air, plants, water, and animals; and nonrenewable resources, including coal, oil, and natural gas; and the importance of conservation				
5.5A.3	explain the processes of conservation, preservation, overconsumption, and stewardship in relation to caring for that which God has given us*				

Learning Process Standards (Ways to Show)		Unit	CHECKPOINT		
			1	2	3
5.2C	record and organize data and observations				
5.2D	communicate observations about investigations				
5.2E	represent the natural world using models				

Weather	Unit	CHECKPOINT		
		1	2	3
5.5 Earth and space. The student knows that there are recognizable patterns in the natural world among the Sun, Earth, and Moon system and describes God’s relationship with man and nature.* The student will explain how creation is an outward sign of God’s love and goodness and, therefore, is “sacramental” in nature.*				

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Learning Process Standards (Tools to Know)	Unit	CHECKPOINT		
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Content	Unit	CHECKPOINT		
		1	2	3
Weather				
5.5B use data to predict changes in weather				
5.5B.1 differentiate between weather and climate				

Water Cycle				
5.5C explain how the Sun and the ocean interact in the water cycle				
5.5C.1 describe and illustrate the continuous movement of water above and on the surface of Earth through the water cycle and explain the role of the Sun as a major source of energy in this process				

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Unit Map – Grade 5 Science

Space		Unit	CHECKPOINT		
			1	2	3
5.5	Earth and space. The student displays a sense of wonder about the universe and an understanding that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system.*				

Catholic Identity Standards (Ways to Grow)

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- 5.1C recognize and oppose unjust social structures and work toward justice for all*
- 5.1D see God at work in all things and as expressed in the sacraments*
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Content		Unit	CHECKPOINT		
			1	2	3
Earth's Movement					
5.5D	demonstrate that Earth rotates on its axis once approximately every 24 hours causing the day/night cycle and the apparent movement of the Sun across the sky				
5.5D.1	list the basic contributions of significant Catholics to science such as Galileo, Copernicus, and others*				

Sun, Earth, and Moon		Unit	1	2	3

Learning Process Standards (Ways to Show)		Unit	CHECKPOINT		
			1	2	3
5.2C	record and organize data and observations				
5.2D	communicate observations about investigations				
5.2E	represent the natural world using models				

Organisms and Environments		Unit	CHECKPOINT		
			1	2	3
5.6	Organisms and environments. The student knows that there are relationships, systems, and cycles within environments and explains these as outward signs of God’s love.*				

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Learning Process Standards (Tools to Know)		Unit	CHECKPOINT		
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Content		Unit	CHECKPOINT		
			1	2	3
Interactions in Ecosystems					
5.6A	observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving components				
5.6A.1	predict the effects of changes in ecosystems caused by living organisms, including humans, such as the overpopulation of grazers or the building of highways				
5.6A.2	identify fossils as evidence of past living organisms and the nature of the environments at the time using models				

Food Webs					
5.6B	describe the flow of energy within a food web, including the roles of the Sun, producers, consumers, and decomposers				

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			1	2	3
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Adaptations and Behaviors		Unit	CHECKPOINT		
			1	2	3
5.6	Organisms and environments. The student knows that organisms have structures and behaviors that help them survive within their environments and explains these as examples of the beauty evident in God’s creation.*				

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Learning Process Standards (Tools to Know)		Unit	CHECKPOINT		
			1	2	3
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Content		Unit	CHECKPOINT		
			1	2	3
Adaptations					
5.6C	compare the structures and functions of different species that help them live and survive in a specific environment such as hooves on prairie animals or webbed feet in aquatic animals				
5.6C.1	list the basic contributions of significant Catholics to science such as Mendel and others*				

Inherited Traits and Learned Behaviors					
5.6D	differentiate between inherited traits of plants and animals such as spines on a cactus or shape of a beak and learned behaviors such as an animal learning tricks or a child riding a bicycle				

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