

Catholic Identity: Integration of Our Faith

2.1A	display a deep sense of wonder and delight about the natural universe *
2.1B	describe the unity of faith and reason *
2.1C	describe relationships, elements, underlying order, harmony, and meaning *
2.1D	share concern and care for the environment as part of God’s creation *

Learning Process Standards

2.2 The student uses scientific practices during laboratory and scientific investigations and uses critical thinking and scientific problem solving to make informed decisions. The student will **explain how science properly limits** its focus to “how” things physically exist and is not designed to answer issues of meaning, the value of things, or the mysteries of the human person. * The student will list the basic contributions of significant Catholics to science. *

Tools to Know	Ways to Show
2.2A plan and conduct investigations	2.2C record and organize data and observations
2.2B collect information using appropriate scientific tools	2.2D communicate observations about investigations

Properties of Matter

2.3 Matter and energy. The student knows that matter has physical properties and those properties determine how it is described, classified, changed, and used.

Applied Standards	Supporting Standards
2.3A classify matter by physical properties, including relative temperature, texture, flexibility, and whether material is a solid or liquid	2.3A.1 compare changes in materials caused by heating and cooling 2.3A.2 demonstrate that things can be done to materials such as cutting, folding, sanding, and melting to change their physical properties

Force, Motion, and Energy

2.4 Force, motion, and energy. The student knows that forces cause change and energy exists in many forms.

2.4A investigate the effects on objects by increasing or decreasing amounts of light, heat, and sound energy such as how the color of an object appears different in dimmer light or how heat melts butter	
2.4B observe and identify how magnets are used in everyday life	
2.4C trace and compare patterns of movement of objects such as sliding, rolling, and spinning over time	

Earth’s Materials

2.5 Earth and space. The student knows that the natural world includes earth materials, shares concern and care for the environment as a part of God’s creation. *

2.5A observe, describe, and compare rocks by size, texture, and color	
2.5B identify and compare the properties of natural sources of freshwater and saltwater	
2.5C explain the processes of conservation, preservation, overconsumption, and stewardship in relation to caring for that which God has given us. *	

Patterns in the Natural World		
2.5	Earth and space. The student knows that there are recognizable patterns in the natural world and among objects in the sky and describes God’s relationship with man and nature. *	
2.5D	observe, describe, and record patterns of objects in the sky, including the appearance of the Moon	
2.5E	measure, record, and graph weather information, including temperature, wind conditions, precipitation, and cloud coverage, in order to identify patterns in the data	2.5E.1 identify the importance of weather and seasonal information to make choices in clothing, activities, and transportation
Basic Needs of Plants and Animals		
2.6	Organisms and environments. The student knows that plants and animals have basic needs and depend on the living and nonliving things around them for survival and explains how creation is an outward sign of God’s love. *	
2.6A	compare the ways living organisms depend on each other and on their environments such as through food chains	2.6A.1 identify factors in the environment, including temperature and precipitation, that affect growth and behavior such as migration, hibernation, and dormancy of living things
2.6B	identify the basic needs of plants and animals	
Characteristics of Plants and Animals		
2.6	Organisms and environments. The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments.	
2.6C	observe, record, and compare how the physical characteristics and behaviors of animals help them meet their basic needs	2.6C.1 investigate and record some of the unique stages that insects such as grasshoppers and butterflies undergo during their life cycle
2.6D	observe, record, and compare how the physical characteristics of plants help them meet their basic needs such as stems carry water throughout the plant	