Grade: 3 Subject: Science

### **Standard A** Science Connections that reveal God's creation

### DIOCESAN REQUIREMENTS CONCEPTS, SKILLS, & CATHOLIC FAITH CONNECTIONS

- 1. Discuss ecosystems in balance and habitat relationships the dependency of living things. Earth resources and the environment reveal God's order and design.
- 2. Study God's plan of systems, order, and organization.

LOCAL LEVEL SCHOOL ELEMENTS									
Text		Quarter / Date Taught							
Alignment	1	2	3	4	Assessment				

EMPHASIS & RESOURCES	ACTIVITIES	COMMON CORE STANDARDS
Religious Emphasis:	A. Talk about how God created order in time,	Life Science
Students are taught that God created the	minutes, hours, days, months, and years.	Core Idea 3: Organisms and
world out of nothing. All man-made creations are made from the resources given by God. Students are taught that there is a distinction between animal reproduction and	<ul><li>B. Discuss God's plan for the interdependency of the food web.</li><li>C. Talk about how using Earth resources effect</li></ul>	populations of organisms obtain necessary resources from their environment which includes other organisms and physical factors.
human reproduction. All living creatures receive life from God, but humans also	the environment. Discuss how we can take good care of the world God gave us.	<ul><li>A. Independent relationships in ecosystems.</li><li>C. Ecosystems dynamics, stability,</li></ul>
receive an immortal soul from God that will live forever.	D. Identify Gods plan for creation and the maintenance of life.	and resilience.
Religious Resources:	Prayer:	
CCC: 41, 32, 302 God created all.	Remember to thank God for giving us Earth's	
<b>B:</b> Gen 1:14-19 God creates days and years. Psalm 104:19 Setting time, months	resources to use responsibly.	
Ecclesiastes 3:1-8 A time for everything RC: # 1 God created us.	Thank God for our ecosystem and everything we need that is part of His plan for us.	
Talk about Blessed Kateri Tekakwitha, Patron of Environmentalists		

**CCC**: Catechism of the Catholic Church

B: Bible

CC: Catechism Compendium

Grade:	3	Subject:	Science
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### **Standard B** The Nature of Science as created by God and discovered by man

### DIOCESAN REQUIREMENTS CONCEPTS, SKILLS, & CATHOLIC FAITH CONNECTIONS 1. Identify vocations in the field of Science. 2. Name some famous scientists and how they contributed to history.

LOCAL LEVEL SCHOOL ELEMENTS									
Text	Quarter / Date Taught								
Alignment	1 2 3 4 Assessment								

EMPHASIS & RESOURCES	ACTIVITIES	COMMON CORE STANDARDS
Religious Emphasis:		Engineering and Technology
Students are taught that God created the	A. Talk about the life of scientists and how they	Core Idea 2: Engineering design is a
world out of nothing. All man-made	use their God-given skills and talents to	creative and iterative process for
creations are made from the resources given	contribute to the field of science.	identifying and solving problems in
by God.		the face of various constraints.
Religious Resources:	B. Identify the responsibility of scientists to	A. Defining and researching
CCC: 2293 Research, Experiments,	report information accurately and truthfully in	technological problems.
Inventions.	accord with God's commandments.	
<b>CCC</b> : 340 Creation depends on other things		
or creatures.	Prayer:	
RC: # 4 God loves us. RC: # 9 God created us in his image.	Ask God for people to choose careers in science, who will help us in the future.	
Talk about St. Catherine of Siena-Patron of nurses.	science, who will help us in the future.	
Talk about St. Albert the Great-Patron of scientists.	Thank God for the scientist who discovered ways to make us healthier.	

**CCC**: Catechism of the Catholic Church

B: Bible

CC: Catechism Compendium

Grade: 3	Subject:	ct: Science
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### **Standard C** Science Inquiry that reflects God's created order

#### **DIOCESAN REQUIREMENTS** CONCEPTS, SKILLS, & CATHOLIC FAITH CONNECTIONS

- 1. Solve a problem through Scientific Inquiry Experimentation, Observation, Measurement, Data Collection, Form and Function.
- 2. Using the intellectual gifts God gave you, predict, compare, and classify.
- 3. Use Scientific Tools of Measurement that were invented by creative and talented scientists.

LOCAL LEVEL SCHOOL ELEMENTS								
Text	Quarter / Date Taught							
Alignment	1	2	3	4	Assessment			

EMPHASIS & RESOURCES	ACTIVITIES	COMMON CORE STANDARDS
Religious Emphasis: Students are taught that God created the		Engineering and Technology
world out of nothing. All man-made creations are made from the resources given by God	A. Answer a scientific question by using data to construct a graph or pictorial representation using the talents and skills God gave you.	Core Idea 2: Engineering design is a creative and iterative process for identifying and solving problems in
	B. Choose standard tools to measure matter (balance, graduated cylinders, scales).	the face of various constraints.  A. Defining and researching
	Make predictions about the weight and volume	technological problems.
	of various objects and measure to determine	-
	accuracy.	
Religious Resources:	Prayer:	
CCC: 299 The Universe is ordered.	Thank God for our ability to use scientific tools	
	so we can learn about the world He gave us.	
CCC: 2415 Research, Experiments,		
Inventions	Praise God for our ability to think so that we	
	can predict and compare things in the Universe.	
Diocesan Virtues Program - Fortitude		

CCC: Catechism of the Catholic Church

**CC: Catechism Compendium RC: Religion Curriculum** B: Bible

Grade:	3	Subject:	Science
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### **Standard D** Physical Science as created by God

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	DIOCESAN REQUIREMENTS				EL	SCI	HOC	L ELEMENTS
	CONCEPTS, SKILLS,			Quarter / Date Taught				Date Taught
	& CATHOLIC FAITH CONNECTIONS				2	3	4	Assessment
Inve	stigate God's laws of:							
1.	Matter, Energy, Sound.							
2.	Forces in Motion.							
3.	Electricity, Magnetism.							

EMPHASIS & RESOURCES	ACTIVITIES	COMMON CORE STANDARDS
Religious Emphasis: Students are taught that God created the world out of nothing. All man-made creations are made from the resources given by God.	<ul> <li>A. Explore and describe different ways God has given us to produce heat (friction, burning, mixing).</li> <li>B. Demonstrate tones of different pitch and volume. Describe God's plan of how sound travels.</li> <li>C. Use toy cars on ramps at different levels to discuss the forces in motion that reveal God's order and design.</li> <li>D. Push and pull magnets to observe God's order and design on forces in motion.</li> </ul>	Physical Science  Core Idea 3: Transfers of energy within and between systems never change the total amount of energy but energy tends to become more dispersed; energy availability regulates what can occur in any process.  C. Relationship between energy and forces.
Religious Resources: B: Mark 4:23-24 Ears listen, practice what you hear. Talk about St Cecilia-Patron Saint of Musicians	Prayer: Remember to thank God for our ears and the gift of sound to hear and communicate. Remember to thank God for the gift electricity to make our lives easier.	

**CCC**: Catechism of the Catholic Church

B: Bible

CC: Catechism Compendium RC: Religion Curriculum

Grade:	3	Subject:	Science

### **Standard E** Earth and Space Science as created by God

# CONCEPTS, SKILLS, & CATHOLIC FAITH CONNECTIONS 1. How does God's gifts of weather and climate affect rocks and minerals? 2. Explore God's Universe through objects in Space. 3. Study God's gifts of Ocean/Water, Land/Soil, and Forces that Shape the Earth.

LOCAL LEVEL SCHOOL ELEMENTS						
Text	Quarter / Date Taught					
Alignment	1	2	3	4	Assessment	

EMPHASIS & RESOURCES	ACTIVITIES	COMMON CORE STANDARDS
Religious:		Earth and Space Science
Students are taught that God created the	A. Discuss God's plan of how the moon affects	Core Idea 1: Humans are a small part
world out of nothing.	Earths' oceans.	of a vast Universe; planet Earth is part
	B. Make a model of the Earth to describe why	of the Solar System, which is part of
	God's plan gives Wisconsin 4 seasons.	the Milky Way galaxy, which is one
	C. Study models of the planets to discuss size	hundreds of billions of galaxies in the
	and position in relation to the sun.	Universe.
	D. Discuss the properties of soil and rocks and	C. Earth and Solar System
	describe how erosion affects them.	Core Idea 3: Earth's surface
Religious Resources:	Prayer:	continually changes from the cycling
	Remember to thank God for the gift of order as	of water and rock driven by sunlight
<b>CCC:</b> 2415 Use resources for common good.	He gives us everything we need to live on	and gravity.
	Earth and in Heaven.	B. Formation and alteration of
<b>CCC</b> : 373 Humans are stewards of the Earth.	Remember to thank God for our intelligence to	rocks and landforms.
	explore, investigate and understand this	C. Weather and Climate
<b>CCC:</b> 341 The universe is beautiful.	beautiful Earth He gave us.	
<b>CCC:</b> 302 The universe is journeying.		

CCC: Catechism of the Catholic Church

B: Bible

CC: Catechism Compendium

Grade: 3 Subject: Science

### **Standard F** Life and Environmental Science as created by God

# DIOCESAN REQUIREMENTS CONCEPTS, SKILLS, & CATHOLIC FAITH CONNECTIONS 1. Study God's creations of: Plants and Animals. 2. Identify characteristics of Plants. 3. Identify characteristics of Animals. 4. Study the Life Cycle of Organisms according to God's plan. 5. Identify Organisms and their Environments.

LOCAL LEVEL SCHOOL ELEMENTS						
Text	Quarter / Date Taught					
Alignment	1	1 2 3 4 Assessment				

EMPHASIS & RESOURCES	ACTIVITIES	COMMON CORE STANDARDS
Religious Emphasis:  Students are taught that God created the world out of nothing. Students are taught that there is a distinction between animal reproduction and human reproduction. All living creatures receive life from God, but humans also receive an immortal soul from God that will live forever.	<ul> <li>A. Discuss God's plan of how animal behavior can adapt to different environments.</li> <li>B. Discuss God's plan of survival advantages for some species.</li> <li>C. Discuss likenesses/differences of life cycles in God's plan.</li> <li>D. Describe the parts of a simple plant and what the parts do for the plant that reveal God's order</li> </ul>	Life Science Core Idea 1: Organisms have structures and functions that facilitate their life processes, growth, and reproduction. A. Structure and function B. Growth and Development Core Idea 3: Organisms and populations of organisms obtain
Religious Resources: CCC:41, 32, 302 God created all. B: 1 Corinthians 6:13, 20 Food is for the stomach and the stomach for food. Diocesan Virtues Program - Respect Acts 4:32-37 Everything was shared, no one claimed private ownership. Talk about St. Isidore –Patron of Farmers	Ask God for the gift He gave human people to be able to adapt to different environments.	necessary resources from their environment which includes other organisms and physical factors.  B. Flow of matter and energy transfer in Ecosystems  Core Idea 4: Biological evolution explains the unity and diversity of species.  C. Natural selection and adaptation

**CCC**: Catechism of the Catholic Church

B: Bible

CC: Catechism Compendium RC: Religion Curriculum

Grade: 3 Subject: Scien	cience
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### **Standard G**

Science Applications that reflect God's goodness

### DIOCESAN REQUIREMENTS CONCEPTS, SKILLS, & CATHOLIC FAITH CONNECTIONS 1. How do machines make our work easier? 2. Using the gifts God gave you, problem solve using simple machines.

LOCAL LEVEL SCHOOL ELEMENTS						
Text	Quarter / Date Taught					
Alignment	1	2	3	4	Assessment	

EMPHASIS & RESOURCES	ACTIVITIES	COMMON CORE STANDARDS
Religion Emphasis:	A. Using God's gift of intelligence, plan and	Engineering Technology
Students are taught that God created the	conduct a simple experiment and problem solve	Core Idea 1: The study of the
world out of nothing. All man-made products	by asking questions and devising ways to	designed world is the study of
and inventions are made from the resources	answer them.	designed systems, processes,
given by God.		materials, and products of the
Religious Resources:	B. Using God's gifts of creativity and	technologies and scientific principles
CCC: 2293 Research Experiments and	intelligence, invent simple machines using	by which they function.
Inventions	rubber bands and other household materials,	A. Nature of technology
	then talk about the work they could do.	B. Using tools and materials
<b>B:</b> Genesis: 6,7,8 Noah Building and Ark	Prayer:	Core Idea 2: Engineering design is a
	Thank God for the simple machines that make	creative and iterative process for
Talk about St. Stephen of Hungry-Patron of	our lives easier.	identifying and solving problems in
builders.	our rives easier.	the face of constraints.
	Praise God for our reasoning ability to solve	A. Defining and researching
	problems.	technological problems.
		B. Generating and evaluating
		solutions
		C. Optimizing and making
		tradeoffs

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Grade: 3 Subject: Science

### **Standard H** Personal, Social, and Moral Aspects of Science

# CONCEPTS, SKILLS, & CATHOLIC FAITH CONNECTIONS 1. Identify the value of machinery, tools, and technology in our lives. 2. Discuss the benefits of good nutrition and healthy diets. 3. Identify the gifts God gave us for growing food. 4. Identify the gifts God gave us for raising cattle.

LOCAL LEVEL SCHOOL ELEMENTS						
Text	Quarter / Date Taught					
Alignment	1	2	3	4	Assessment	

EMPHASIS & RESOURCES	ACTIVITIES	COMMON CORE STANDARDS
Religious Emphasis:  Students are taught that God created the world out of nothing. All man-made creations are made from the resources given by God. Students are taught that there is a distinction between animal reproduction and human reproduction. All living creatures receive life from God, but humans also receive an immortal soul from God that will live forever.	A. Discuss how technology, machinery, and transportation have influenced the growth of crops and the way we get food to the market. Identify God-given talents necessary to grow the food, transport the food, and sell the food.  B. Experiment with rotting fruit. In God's plan, how long does the fruit last before rotting? How long can it take to get the food the market?  C. Describe a nutritious diet. Using the intellectual gifts God gave us, make simple menus of nutritious foods.	Life Science Core Idea 1: Organisms have structure and functions that facilitate their life processes, growth, and reproduction.  A. Structure and function C. Organization for matter and energy flow in organisms Core Idea 3: Organisms and populations of organisms obtain necessary resources from their environment which includes other organisms and physical factors.
Religious Resources:  B: Luke 9:10-17 Loaves and Fishes-God gives us what we need.  Talk about St. Martha-Patron of Nutritionists	Prayer: Thank God for the food we eat and for the people who make that happen from the farms to the stores. Thank God for our Health.	<ul> <li>A. Interdependent relationships in ecosystems.</li> <li>B. Flow of matter and energy transfer in ecosystems.</li> <li>C. Ecosystems dynamics, stability, and resilience.</li> </ul>

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