Our Lady of the Lake Roman Catholic School
Yearly Course Outline
Science
Fifth Grade
2025–2026

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Course Description

I. **Project Lead the Way (PLTW) Launch Curriculum, Grade 5** – Students will study the following PLTW Launch modules:

Module 1 – Infection: Modeling and Simulation – Students investigate models and simulations and discover powerful ideas about computing. In the design problem students to look to model an infectious disease to simulate how an illness spread through their class. Applying their new understanding, students program their own models and collect data by running simulations with different parameters.

Module 2 – Infection: Detection – Students explore transmission of infection, agents of disease, and mechanisms the body uses to stay healthy. Through a simulation, they compare communicable and non-communicable diseases. Students tackle a design problem by examining evidence to deduce the agent of infection, the likely source of the outbreak, and the path of transmission through a school. They design and run an experiment related to limiting the spread of germs and apply results to propose appropriate prevention methods.

Module 3 – Matter: Properties and Reactions – Students learn about the three states of matter. They investigate mixtures of different materials that lead to new substances and conserve mass. Students design a test that demonstrate that an item has the required mechanical properties.

Module 4 – Ecosystems: Flow of Matter and Energy – Students learn about Earth's ecosystems and how energy flows from the Sun to plants, and
from plants to animals. Students create a model to describe photosynthesis and explain how energy from the Sun is introduced into an ecosystem. Students use evidence to defend the claim that plants get the materials they need for growth mainly from air and water. Students learn how energy flows through an ecosystem and explore a simulation about how an ecosystem can become unbalanced. Finally, students use the design process to develop an action plan to protect an ecosystem that has become unbalanced due to human activity.

Module 5 – Patterns in the Universe – Students develop an understanding that stars are balls of hot gas. They learn that our Sun is a star at the center of our planetary system. Students learn about predictable patterns on Earth in relation to its place in the solar system. They design an exhibit that educates others about a concept they have learned throughout the module.

Module 6 – Earth's Water and Interconnected Systems – Students learn about Earth's systems: the atmosphere, hydrosphere, geosphere, and biosphere. Students examine how these systems interact and examine the role of gravity within each system. They take an in-depth

look at how the processes of the water cycle intersect with each of the systems and apply this knowledge to investigate factors that impact the rate of evaporation. Students use the design process to develop a method for producing clean drinking water from samples of contaminated water.

Module 7 – Robotics and Automation – Students explore the ways robots are used in today's world and their impact on society and the environment. Students learn about a variety of robotic components as they build and test mobile robots that may be controlled remotely. Students will be challenged to design, model, and test a mobile robot that solves a specific design problem.

Module 8 – Robotics and Automation: Challenge – Students expand their understanding of robotics as they explore mechanical design and computer programming. This module focuses on developing skills needed to build and program autonomous robots. Students will work with a group to apply their knowledge to design, build, test, and refine a mobile robot that meets a set of design constraints.

Methods of Assessment and Distribution

All test, quiz, activity, and homework grades will be posted on PowerSchool (www.ollpowerschool.org). Please check for postings frequently. Each quarter, four test and four quiz assessments will be administered.

Assessment Weighting

60% Tests
30% Quizzes
10% Homework

Grading Scale

A: 100-94
B: 93-86
C: 85-78
D: 77-70
U: 69 and below

Tentative Course Calendar

***** Dates and course content are subject to change at discretion of teacher or administration. *****

Aug 8th – First day of school 4th -7th

Week	Standards	Objectives (The learner will . . .)	Instructional Materials	Assessments
1st Quarter				
Week 1 ***Aug. 11-15***	NGSS: 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B *Science and Engineering Practices* *5-LS2-1* *5-ESS3-1* **5-PS1-1**	**Infection: Modeling and Simulation** …identify the agents and parameters in a simple system. …explain that changing a parameter while running a simulation uncovers how the parameter affects the model system. …organize and collaborate with group members by assigning roles and taking turns. …use parameters in a preprogrammed simulation to investigate the model system, its agents, and the effects of its parameters.	Launch Logs IPads Red/Blue Construction Paper Health Status Data Sheet	Q1 Quiz 1 (Modeling and Simulation Vocabulary Quiz)
Week 2 ***Aug.18-22***	NGSS: 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B *Science and Engineering Practices*	…identify the agents and parameters in a simple system. …explain that changing a parameter while running a simulation uncovers how the	Launch Logs IPads	Q1 Test 1 : Modes of Transmission

	5-PS1-1 *5-PS1-3*	parameter affects the model system. …use parameters in a preprogrammed simulation to investigate the model system, its agents, and the effects of its parameters.		
Week 3 ***Aug. 25- Aug. 29***	NGSS: 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B *Science and Engineering Practices* *5-PS1-4* *5-PS3-1*	…identify parts of a computational solution that can be abstracted and modularized in order to make the solution efficient and generalizable. …identify events that drive a program's behavior such as external user interaction and internal variable counters. …use variables appropriately as part of a computational solution. …implement a loop when appropriate to make a program repeat a section of code until an ending condition is reached. …program actors to respond to both internal and	Launch Logs IPads	Q1 Quiz 2 **<u>Activity 1: Germs, Germs Everywhere!</u>**

		external event triggers. … demonstrate persistence in the cycle of testing, finding, and fixing problems in computer programs.		
Week 4 ***Sept. 1-Sept. 05*** Labor Day 09/01 (No School)	NGSS: 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B *Science and Engineering Practices* *5-PS3-1* *5-ESS1-2* **5-PS3-1** **5-LS2-1**	… explain that changing a parameter while running a simulation uncovers how the parameter affects the model system. … explain in simple terms how to clone an object to make a variable number of copies as determined at program runtime. … decompose a problem and use a predefined set of commands to write an algorithm that will solve the problem. … construct a class of objects with inherited properties and methods to create a variable number of agents in a program. … construct a computer program using age-appropriate tools to model a simple system and to	Launch Logs IPads	Q1, Test 2 (Modeling and Simulation Launch Log)

		simulate how it works. …demonstrate persistence in the cycle of testing, finding, and fixing problems in computer programs.		
Week 5 ***Sept. 08-12*** (9/8 no bus)	NGSS: LS2.A ETS1-1 ETS1-2 ETS1.A ETS1.B *Science and Engineering Practices* *5-ESS1-2* *5-PS1-3* *5-PS2-1* **5-PS1-3**	**Infection Detection** …recognize that germs can make a person sick, and that bacteria and viruses are germs. …describe the various ways germs can be passed from person to person. …identify behaviors that promote good health. …maintain a notebook to document work. …share findings and conclusions with others. …organize and analyze medical data to determine a likely source of an infection. …demonstrate the spread of infection using a graphical organizer and justify connections between infected individuals.	Simulated germ powder UV flashlights Launch Logs IPads Colored pencils Popplet Lite Lensoo Create	
Week 6 ***Sept. 15-19*** Spirit Week	NGSS: LS2.A ETS1-1	…identify behaviors that	Simulated germ lotion UV flashlight Disposable transfer pipettes	Q1 Quiz 3 (Infection

	ETS1-2 ETS1.A ETS1.B *Science and Engineering Practices* *5-PS1-3* *5-LS1-1* *5-PS1-2* **5-PS1-4**	promote good health. …perform an investigation in order to draw conclusions. …maintain a notebook to document work. …share findings and conclusions with others.	Various soaps (bar soap, liquid hand soap, antibacterial liquid hand soap, foaming antibacterial soap) Launch Logs IPads Colored pencils Rulers Scientific Inquiry Process resource sheets Experiments Resource Sheets Experiment Data Sheets	Detection Vocabulary Quiz)
Week 7 ***Sept. 22-26***	NGSS: LS2.A ETS1-1 ETS1-2 ETS1.A ETS1.B *Science and Engineering Practices* *5-PS1-1* *5-PS2-1*	…identify the ways that the body protects and defends itself against infection. …maintain a notebook to document work. …share findings and conclusions with others.	Battle with the Bugs: An Imaginative Journey Through the Immune System Launch Logs IPads Body's Defenses Against Infection presentation Body Outline Colored pencils	Q1 Test 3 (Interview with a Healthcare Provider)
Week 8 ***Sept. 29- Oct. 03*** 10/02 no bus 10/03 No School	NGSS: LS2.A ETS1-1 ETS1-2 ETS1.A ETS1.B *Science and Engineering Practices* *5-PS1-1* *5-ESS1-2*	…recognize that germs can make a person sick, and that bacteria and viruses are germs. …recognize that bacteria and viruses are microscopic in size and that they cannot be seen with the naked eye. …use scientific tools to examine cells or organisms that are microscopic. …maintain a notebook to document work. …share findings and conclusions with others.	Launch Logs IPads Colored pencils Disease cards (1 print per group) Microorganisms PDF Microorganisms Resource Sheet (1 per student) Patient Information Resource Sheet (1 print per group)	Q1 Quiz 4 (Infection Fighters)

		…organize and analyze medical data to determine a likely source of an infection.		
Week 9 ***Oct. 06-10*** 10/10 ½ Day	NGSS: LS2.A ETS1-1 ETS1-2 ETS1.A ETS1.B *Science and Engineering Practices* *5-PS1-1* *5-ESS1-2*	…recognize that germs can make a person sick, and that bacteria and viruses are germs. …recognize that bacteria and viruses are microscopic in size and that they cannot be seen with the naked eye. …use scientific tools to examine cells or organisms that are microscopic. …maintain a notebook to document work. …share findings and conclusions with others. …organize and analyze medical data to determine a likely source of an infection.	Launch Logs IPads Colored pencils Disease cards (1 print per group) Microorganisms PDF Microorganisms Resource Sheet (1 per student) Patient Information Resource Sheet (1 print per group)	Q1, Test 4 (Infection Detection Launch Log)
2nd Quarter				
Week 10 ***Oct. 13-17***	*5-ESS1-1* *3-5-ETS1*	**Patterns in the Universe** …use scientific reasoning to ask questions, make observations, and investigate ideas to acquire knowledge and solve problems.	Introduction Story: A Shooting Star Launch Logs IPads Inkling Star Chart Stars in the Sky Video Pencils or colored pencils for sketching Chart paper Markers	Q2 Quiz 1 (Patterns in the Universe Vocabulary)

		…compare and contrast the Sun to other stars. …understand the universe includes all the natural bodies in space. …apply mathematical thinking to solve problems. …collaborate effectively on a diverse and multidisciplinary team. …communicate effectively for specific purposes and settings. …practice ethical behavior in all settings.		
Week 11 ***Oct. 20-24*** 10/24 Faculty Inservice	*5-ESS1-1* *3-5-ETS1*	…use scientific reasoning to ask questions, make observations, and investigate ideas to acquire knowledge and solve problems. …identify the observable patterns that occur related to Earth. …apply mathematical thinking to solve problems. …collaborate effectively on a diverse and multidisciplinary team. …communicate effectively for specific purposes and settings.	Launch Logs IPads Inkling Compass SmartCompass Camera • Model tree and shrub kit • Card stock • Flashlights (15) • Measuring tapes (9) • Compass • Modeling clay Pencils or colored pencils for sketching Grid chart paper (1 piece) Markers Resealable plastic bag	Q2 Quiz 2 (Part 1: Shadow Exploration)

		…practice ethical behavior in all settings.		
Week 12 ***Oct. 27-Oct. 31*** 10/31 Fun Run Reward Day	*5-ESS1-1* *3-5-ETS1*	…use scientific reasoning to ask questions, make observations, and investigate ideas to acquire knowledge and solve problems. …compare and contrast the Sun to other stars. …understand the universe includes all the natural bodies in space. …identify the observable patterns that occur related to Earth. …apply mathematical thinking to solve problems. …collaborate effectively on a diverse and multidisciplinary team. …communicate effectively for specific purposes and settings. …practice ethical behavior in all settings.	Launch Logs IPads Our World: Moon Phases video Our World:Sun's Position video • Inkling • Star Chart • What Causes the Seasons? by NASA Space Place • *The Next Time You See a Sunset* by Emily Morgan (2) • *The Moon Book* by Gail Gibbons (2) • Blue modeling clay • Gray modeling clay • Wooden dowels • Rounded toothpicks • Flashlights (4) □ Pencils or colored pencils for sketching □ Resealable plastic bags (2)	Q2 Test 1 (Predicitable Patterns Investigations 1 – 4: Constellations, Day and Night, Moon Phases, Eartrh's Orbit) Q2 Test 2 (Patterns in the Universe Launch Log)
Week 13 ***Nov. 03- 07***	*5-PS2-1* *5-ESS2-1* *5-ESS2-2* *5-ESS3-1* *3-5-ETS1*	**Earth's Water and Interconnected Systems** …use scientific reasoning to ask questions, make observations, and investigate ideas to	Introduction Story: The Big Hike Launch Logs IPads Inkling □ Pencils or colored pencils for sketching □ Chart paper □ Markers □ Index cards	Q2 Quiz 3 (Earth's Water and Interconnected Systems Vocabulary

		acquire knowledge and solve problems. … analyze interactions between two Earth systems at a time. … collaborate effectively on a diverse and multidisciplinary team. … communicate effectively for specific purposes and settings. … practice ethical behavior in all settings.		
Week 14 ***Nov. 10-14***	*5-PS2-1* *5-ESS2-1* *5-ESS2-2* *5-ESS3-1* *3-5-ETS1*	… use scientific reasoning to ask questions, make observations, and investigate ideas to acquire knowledge and solve problems. … analyze interactions between two Earth systems at a time. … understand how the water cycle connects the hydrosphere to the other spheres. … collaborate effectively on a diverse and multidisciplinary team. … communicate effectively for specific purposes and settings. … practice ethical behavior in all settings.	Launch Logs IPads • Inkling • Camera • Aquarium/terrarium, plastic, without cover, 1 ½ gallon (8) • Petri dishes (8) • Plastic wrap • Ice cube tray • Large rubber bands (8) • *A Drop Around the World* by Barbara Shaw McKinney • Plastic cups Pencils or colored pencils for sketching Chart paper Markers Fast-growing seeds, such as: • Alfalfa • Radish • Chia • Lettuce • Basil • Marigold	Q2 Quiz 4 (Building a Terrarium, Hydrosphere, The Water Cycle: Participation and Questions)

			• Morning glory ▯ Potting soil ▯ Water ▯ Spray bottle	

Week 15
Nov. 17-Nov. 21
	5-PS2-1
	5-ESS2-1
	5-ESS2-2
	5-ESS3-1
	3-5-ETS1
		… use scientific reasoning to ask questions, make observations, and investigate ideas to acquire knowledge and solve problems.
		… analyze the fractional amounts of salt water, fresh water, and accessible fresh water.
		… apply mathematical thinking to solve problems.
		… collaborate effectively on a diverse and multidisciplinary team.
		… communicate effectively for specific purposes and settings.
		… practice ethical behavior in all settings.
			Launch Logs
			IPads
			
			• Inkling
			• Calculator
			• Presentation app, such as:
			  ○ Popplet Lite
			  ○ Mindomo
			  ○ ShowMe Interactive Whiteboard
			• WaterSense for Kids
			• AuthaGraph world map
			• Map cut into eight pieces
			• Transparencies, with grid
			• Dry-erase markers (1 package per group)
			
			Pencils or colored pencils for sketching
				Q2 Test 3 (Grid/AuthaGraph World Map + Written Assessment on Salt Water and Fresh Water)

Thanksgiving Holidays ***Nov. 24-28***				
Week 16 ***Dec. 01-Dec. 05***	*5-PS2-1* *5-ESS2-1* *5-ESS2-2* *5-ESS3-1* *3-5-ETS1*	… use scientific reasoning to ask questions, make observations, and investigate ideas to acquire knowledge and solve problems.	Launch Logs IPads Inkling • 300-watt incandescent clamp light • 250-watt incandescent lamp bulb • Petri dishes (16) • Fan with clamp	Q2 Test 4 (Earth's Water and Interconnected Systems Launch Log)

		…analyze interactions between two Earth systems at a time. …understand how the water cycle connects the hydrosphere to the other spheres. …collaborate effectively on a diverse and multidisciplinary team. …communicate effectively for specific purposes and settings. …practice ethical behavior in all settings.	• Dry-erase markers (8) Pencils or colored pencils for sketching Water Terrariums from Activity 2	
Week 17 ***Dec. 08-12*** **Week 18** ***Dec. 15-19*** 12/19 ½ day 11:15 dismissal	*5-PS2-1* *5-ESS2-1* *5-ESS2-2* *5-ESS3-1* *3-5-ETS1*	…use scientific reasoning to ask questions, make observations, and investigate ideas to acquire knowledge and solve problems. …analyze interactions between two Earth systems at a time. …understand how the water cycle connects the hydrosphere to the other spheres. …collaborate effectively on a diverse and multidisciplinary team. …communicate effectively for specific purposes and settings.	Launch Logs IPads Inkling • 300-watt incandescent clamp light • 250-watt incandescent lamp bulb • Petri dishes (16) • Fan with clamp • Dry-erase markers (8) Pencils or colored pencils for sketching Water Terrariums from Activity 2	

		…practice ethical behavior in all settings.		
Christmas Holidays ***Dec. 22- Jan. 02***				
3rd Quarter				
Week 19 ***Jan. 05-09*** (1/5 no bus)	*5-PS1-1* *5-PS1-2* *5-PS1-3* *3-5-ETS1*	**Matter: Properties and Reactions** …follow a step-by-step method to solve a problem. …use scientific reasoning to ask questions, make observations, and investigate ideas to make sense of phenomena and solve problems. …conduct investigations to develop an understanding of the properties of matter. …make observations to describe materials based on their mechanical properties. …apply mathematical thinking to solve problems. …apply measurement and data to solve problems. …apply geometry to solve problems. …collaborate effectively on a diverse and	Introduction Story: Testing Things Out Launch Logs IPads Inkling PhET® States of Matter: Basics simulation Ice cube tray 100 mL beakers (2) Vanilla scents (2) Colored pencils Water Chart paper markers	Q3 Quiz 1: Matter: Properties and Reactions Vocabulary

		multidisciplinary team. … communicate effectively for specific purposes and settings. … practice al behavior in all settings.		
Week 20 ***Jan. 12-16*** **<u>Week 21</u>** **<u>Jan 19 - 23</u>** (No school 1/19)	*5-PS1-1* *5-PS1-2* *5-PS1-3* *3-5-ETS1*	… use scientific reasoning to ask questions, make observations, and investigate ideas to make sense of phenomena and solve problems. … conduct investigations to develop an understanding of the properties of matter. … apply mathematical thinking to solve problems. … apply measurement and data to solve problems. … apply geometry to solve problems. … collaborate effectively on a diverse and multidisciplinary team. … communicate effectively for specific purposes and settings. … practice al behavior in all settings.	Launch Logs IPads • Inkling • ShowMe Interactive Whiteboard • 50 mL graduated cylinders (16) • 100 mL beakers (10) • Stir sticks (10) • Tablespoons (8) • Digital scales (4) • Disposable transfer pipettes (30) • Sponges (9) • Test tube brushes (10) • Safety glasses (31) • Coarse kosher salt □ Pencils or colored pencils for sketching □ Pure cane granulated sugar (1 lb) □ Iodized salt (26 oz) □ Water □ Rubbing alcohol (32 fl oz) □ All-purpose flour (5 lb) □ Liquid dish soap (1 bottle) □ Chart paper □ Markers	Q3 Quiz 2 (Conservation: It's the Law! Mixtures Worksheet

Week 22
Jan. 27-31
Catholic Schools Week
1/31 Pep Rally
	5-PS1-1
	5-PS1-2
	5-PS1-3
	3-5-ETS1
		…use scientific reasoning to ask questions, make observations, and investigate ideas to make sense of phenomena and solve problems.
		…conduct investigations to develop an understanding of the properties of matter.
		…apply mathematical thinking to solve problems.
		…apply measurement and data to solve problems.
		…collaborate effectively on a diverse and multidisciplinary team.
		…communicate effectively for specific purposes and settings.
		…practice al behavior in all settings.
			• Launch Log
			• IPads
			• Device applications:
			  ○ Inkling
			  ○ Stopwatch
			  ○ ShowMe Interactive Whiteboard
			• Pencils or colored pencils for sketching
			• 50 mL graduated cylinders (16)
			• 100 mL beakers (10)
			• Disposable transfer pipettes (30)
			• Tablespoons (8)
			• Stir sticks (10)
			• Safety glasses (31)
			• Sponges (9)
			• Test tube brushes (10)
			• Paper clips (8)
			• Cooking oil (16 fl oz)
			• Water
			• Sand
			• Iodized salt (26 oz)
			• Baking soda (1 lb)
			• Distilled white vinegar (32 oz)
			• Liquid dish soap (1 bottle)
			• Chart paper
			• Markers
				Q3 Test 1 (Mixing Matter/New Substances)

Week 23
Feb.03-Feb. 07
	5-PS1-1
	5-PS1-2
	5-PS1-3
	3-5-ETS1
		…use scientific reasoning to ask questions, make observations, and investigate ideas to make sense of phenomena and solve problems.
		…conduct investigations to develop an understanding of the properties of matter.
			• Launch Log
			• IPads
			• Device applications:
			  ○ Inkling
			  ○ Stopwatch
			  ○ ShowMe Interactive Whiteboard
			• Pencils or colored pencils for sketching
			• 50 mL graduated cylinders (16)
			• 100 mL beakers (10)
			• Disposable transfer pipettes (30)
				Q3 Test 2 (Matter: Properties and Reactions Launch Log)

		…apply mathematical thinking to solve problems. …apply measurement and data to solve problems. …collaborate effectively on a diverse and multidisciplinary team. …communicate effectively for specific purposes and settings. …practice al behavior in all settings.	• Tablespoons (8) • Stir sticks (10) • Safety glasses (31) • Sponges (9) • Test tube brushes (10) • Paper clips (8) • Cooking oil (16 fl oz) • Water • Sand • Iodized salt (26 oz) • Baking soda (1 lb) • Distilled white vinegar (32 oz) • Liquid dish soap (1 bottle) • Chart paper • Markers	
Week 24 ***Feb. 10-Feb. 14***	*5-PS3-1* *5-LS1-1* *5-LS2-1* *3-5-ETS1*	**Ecosystems: Flow of Matter and Energy** …follow a step-by-step method to solve a problem. …use scientific reasoning to ask questions, make observations, and investigate ideas to make sense of phenomena and solve problems. …analyze how plants grow. …describe how matter and energy flow among living things. …evaluate the delicate balance of interactions within an ecosystem. …apply mathematical	Introduction Story: The Coyote Mystery Launch Logs IPads • Inkling • Camera • Pipe cleaners • Pom-poms • Tacky glue • Masking tape • Colored paper □ Pencils or colored pencils for sketching □ Chart paper □ Markers □ Optional materials for the photosynthesis models: • Colorful beads • Poster board Photosynthesis Key Element cards	Q3 Quiz 3 (Eco systems: Flow of Matter and Energy Vocabulary Quiz)

		thinking to solve problems. … apply geometry to solve problems. … collaborate effectively on a diverse and multidisciplinary team. … communicate effectively for specific purposes and settings. … practice ethical behavior in all settings.		
Week 25 ***Feb. 17-21*** 2/21 Eve Parade	*5-PS3-1* *5-LS1-1* *5-LS2-1* *3-5-ETS1*	… use scientific reasoning to ask questions, make observations, and investigate ideas to make sense of phenomena and solve problems. … analyze how plants grow. … collaborate effectively on a diverse and multidisciplinary team. … communicate effectively for specific purposes and settings. … practice ethical behavior in all settings.	Launch Logs IPads Inkling Camera Observation Charts Worksheet • Seed sprouter inner trays (10) • Seed sprouter bottom trays (10) • Alfalfa seeds • Plastic wrap • Seed paper • 2-cup measuring cup • Digital scale Pencils or colored pencils for sketching Chart paper Markers Permanent marker Bowl Tablespoon Water Optional: Grid chart paper (1 piece)	Q3 Test 3 (What Do Plants Need to Grow? Observation Charts Worksheet)
Week 26 ***Feb. 24-March 28*** 02/28 ½ Day: Grandparents Day	*5-PS3-1* *5-LS1-1* *5-LS2-1* *3-5-ETS1*	… use scientific reasoning to ask questions, make observations, and investigate ideas to	Launch Logs IPads Inkling Food Web Game	Q3 Quiz 4 (Food Web Game Questions)

		make sense of phenomena and solve problems. … analyze how plants grow. … describe how matter and energy flow among living things. … apply mathematical thinking to solve problems. … communicate effectively for specific purposes and settings. … practice ethical behavior in all settings.	• *Pass the Energy, Please* by Barbara Shaw McKinney • Tokens • Labels • Resealable plastic bags Pencils or colored pencils for sketching Chart paper Markers Bucket, bin, or hat labeled "Soil"	
Mardi Gras Holidays March 3 - 7				
Week 27 ***March 10- 14*** 03/14 ½ Day	*5-PS3-1* *5-LS1-1* *5-LS2-1* *3-5-ETS1*	… describe how matter and energy flow among living things. … evaluate the delicate balance of interactions within an ecosystem. … communicate effectively for specific purposes and settings. … practice ethical behavior in all settings.	Launch Logs IPads Inkling The Habitable Planet: Ecology Lab, Pencils or colored pencils for sketching Simulation Worksheet	Q3 Test 4 (Ecosystems: Flow of Matter and Energy Launch Log)
4th Quarter				
Week 28 ***March 17-21***	*5-PS3-1* *5-LS1-1* *5-LS2-1* *3-5-ETS1*	… describe how matter and energy flow among living things. … evaluate the delicate balance of interactions within an ecosystem.	Launch Logs IPads Inkling The Habitable Planet: Ecology Lab, Pencils or colored pencils for sketching Simulation Worksheet	

		…communicate effectively for specific purposes and settings. …practive ethical behavior in all settings.		
Week 29 ***March 24-28***	NGSS: 5-ESS3-1 ESS3.C 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B *Science and Engineering Practices* *5-LS1-1* *5-ESS3-1*	**Robotics and Automation** …explain what happens at each step of the design process. …state questions that engineers may ask when gathering information about a situation people want to change. …identify the differences between invention and innovation. …identify application of robot technology used to complete dangerous tasks. …share findings and conclusions with an audience. …draw evidence from informational texts to support analysis, reflection, and research on robotics.	Launch Logs IPads Robots for IPad Lensoo Create Popplet Lite Optional: National Geographic Readers: Robots DK Eyewitness Books: Robot TIME for Kids Explorers: Robots	
Week 30 ***March 31-April 04***	NGSS: 5-ESS3-1 ESS3.C 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B	…identify inputs and outputs within a robotic system.	Launch Logs IPads Inventor Publisher files VEX IQ Robot Design Kits	Q4 Quiz 1 (Robotics and Automation Vocabulary)

	Science and Engineering Practices *5-ESS1-2*			
Week 31 ***April 07-12***	NGSS: 5-ESS3-1 ESS3.C 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B Science and Engineering Practices 5-ESS2-1	…identify the differences between invention and innovation.	Launch Logs IPads VEX IQ Construction Kits	Q4 Test 1 (Introduction to Robotics – Research and Presentation)
Week 32 ***April 14-17*** 4/17 Passion Play 4/18 Good Friday	NGSS: 5-ESS3-1 ESS3.C 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B Science and Engineering Practices 5-ESS2-1	…identify the differences between invention and innovation.	Launch Logs IPads VEX IQ Construction Kits	Q4 Quiz 2 (Inputs and Outputs)
Easter Break ***April 21-25***				
Week 33 ***April 28-May 2*** 05/02 Field Day ½ Day	NGSS: 5-ESS3-1 ESS3.C 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B *Science and Engineering Practices* *5-ESS2-1* *5-PS1-3*	…use motors and sensors to solve robotic problems. …design a control system to use sensor feedback to make decisions.	Launch Logs IPads VEX IQ Design Kits Colored blocks Inventor Publisher	Q4 Test 2 (Robotics and Automation Launch Log)

	5-ESS2-2			
Week 34 ***May05-May 09*** 05/06 May Crowning	NGSS: 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B *Science and Engineering Practices* 5-PS1-3 5-ESS2-2	Robotics and Automation: Challenge …identify inputs and outputs within a robotic system. …identify software and hardware within a robotic system.	Launch Logs IPads	Q4 Quiz 3 (R & A Challenge Vocabulary Quiz)
Week 35 ***May 12-16***	NGSS: 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B *Science and Engineering Practices* 5-PS3-1 5-PS1-3 5-ESS2-2	…identify inputs and outputs within a robotic system. …identify software and hardware within a robotic system. …apply basic commands used to program a robotic system.	Launch Logs IPads VEX IQ Robot Design Kit Inventor Publisher files Rulers Colored tape Classroom computer Inventor Publisher Modkit for VEX	Q4 Quiz 4 (Activity 3: Input Output Programming)
Week 36 ***May 19-22*** 05/21 05/22 ½ Day	NGSS: 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B *Science and Engineering Practices* 5-PS1-3 5-ESS1-2 5-ESS2-2	…apply basic commands used to program a robotic system. …design a control system to use sensor feedback to make decisions.	Launch Logs IPads VEX IQ PLTW Launch chassis built in Activity 3 VEX IQ Robot Design Kit, remaining parts VEX IQ field, configured in 2 half-fields 3 Blocks per team Modkit for VEX	Q4 Test 3 Project: Programming Challenge (Design Process) Q4 Test 4 (Robotics and Automation: Challenge Launch Log)