Our Lady of the Lake Roman Catholic School

Yearly Course Outline
Science
Fifth Grade
2023–2024

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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-, four quiz-, and two activity-weighted 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. *****

Week	Standards	Objectives (The learner will . . .)	Instructional Materials	Assessments
1st Quarter				
Week 1 ***Aug. 14-18*** 8/18 Summer reading due	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	Launch Logs IPads Red/Blue Construction Paper Health Status Data Sheet	Q1 Quiz 1 (Modeling and Simulation Vocabulary Quiz)

		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.		
Week 2 ***Aug. 21-25***	NGSS: 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B *Science and Engineering Practices* *5-PS1-1* *5-PS1-3*	…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. …use parameters in a preprogrammed simulation to investigate the model system, its agents, and the effects of its parameters.	Launch Logs IPads	Q1 Test 1 : Modes of Transmission
Week 3 ***Aug. 28- Sept. 01***	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	Launch Logs IPads	Q1 Quiz 2 **<u>Activity 1: Germs, Germs Everywhere!</u>**

		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 external event triggers. …demonstrate persistence in the cycle of testing, finding, and fixing problems in computer programs.		
Week 4 ***Sept. 04-Sept. 08*** Labor Day 09/04 (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	Launch Logs IPads	Q1, Test 2 (Modeling and Simulation Launch Log)

		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 simulate how it works. …demonstrate persistence in the cycle of testing, finding, and fixing problems in computer programs.		
Week 5 ***Sept. 11-15*** 9/12 Middle of Quarter 9/14 Parent/Teacher Conferences	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	Simulated germ powder UV flashlights Launch Logs IPads Colored pencils Popplet Lite Lensoo Create	

		spread of infection using a graphical organizer and justify connections between infected individuals.		
Week 6 ***Sept. 18-22*** 9/22 Birthday Brunch	NGSS: LS2.A ETS1-1 ETS1-2 ETS1.A ETS1.B *Science and Engineering Practices* *5-PS1-3* *5-LS1-1* *5-PS1-2* **5-PS1-4**	…identify behaviors that promote good health. …perform an investigation in order to draw conclusions. …maintain a notebook to document work. …share findings and conclusions with others.	Simulated germ lotion UV flashlight Disposable transfer pipettes 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	Q1 Quiz 3 (Infection Detection Vocabulary Quiz)
Week 7 ***Sept. 25-29*** Spirit Week 9/29 – Fun Run Kickoff	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 ***Oct. 02-06*** 10/06 No Bus	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	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)

		document work. …share findings and conclusions with others. …organize and analyze medical data to determine a likely source of an infection.		
Week 9 ***Oct. 09-13*** 10/13 ½ Day Fun Run (11:15 dismissal)	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. 16-20*** 1:00pm Living Rosary Report Cards Emailed	*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. …compare and contrast the Sun to other stars. …understand the	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)

		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. 23-27*** 10/24 Honor Roll 10/27 CFR 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. …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 • 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)
Week 12 ***Oct. 30-Nov. 03*** 11/2 – 11/3 7:30 Saints Alive	*5-ESS1-1* *3-5-ETS1*	…use scientific reasoning to ask questions, make observations, and investigate ideas to	Launch Logs IPads Our World: Moon Phases video Our World:Sun's Position video	Q2 Test 1 (Predicitable Patterns Investigations 1 – 4: Constellations,

		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.	• 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)	Day and Night, Moon Phases, Eartrh's Orbit) Q2 Test 2 (Patterns in the Universe Launch Log)
Week 13 ***Nov. 06- 10*** 11/6 No School (Formation Day) 11/7 Election Day: Virtual Learning Day 11/10 Virtual Learning Day (OLL Festival)	*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 acquire knowledge and solve problems. …analyze interactions between two Earth systems at a time. …collaborate effectively on a diverse and multidisciplinary team. …communicate	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

		effectively for specific purposes and settings. …practice ethical behavior in all settings.		
Week 14 ***Nov. 13-17*** 11/14 Middle of Quarter	*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 • Morning glory • Potting soil • Water • Spray bottle	Q2 Quiz 4 (Building a Terrarium, Hydrosphere, The Water Cycle: Participation and Questions)
Thanksgiving Holidays ***Nov. 20-24***				
Week 15 ***Nov. 27-Dec. 01*** 12/01 Birthday Brunch	*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	Launch Logs IPads • Inkling • Calculator • Presentation app, such as: o Popplet Lite o Mindomo o ShowMe Interactive	Q2 Test 3 (Grid/AuthaGraph World Map + Written Assessment on Salt Water and Fresh Water)

		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.	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	
Week 16 ***Dec. 04-Dec. 08*** 12/08 10am – 7th Grade Nativity	*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 • 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	Q2 Test 4 (Earth's Water and Interconnected Systems Launch Log)
Week 17 ***Dec. 11-15***	*5-PS2-1* *5-ESS2-1* *5-ESS2-2*	…use scientific reasoning to ask questions, make	Launch Logs IPads Inkling	

Week 18 ***Dec. 18-20*** 12/20 ½ day 11:15 dismissal	*5-ESS3-1* *3-5-ETS1*	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.	• 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	
Christmas Holidays ***Dec. 19- Jan. 02***				
3rd Quarter				
Week 19 ***Jan. 08-12*** 01/12 Report Cards Emailed	*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	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

		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 multidisciplinary team. …communicate effectively for specific purposes and settings. …practice al behavior in all settings.		
Week 20 ***Jan. 15-19*** 01/15 MLK Day (No School) 01/16 7:30 Honor Roll 01/17 5th Grade Retreat	*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.	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)	Q3 Quiz 2 (Conservation: It's the Law! Mixtures Worksheet

		…collaborate effectively on a diverse and multidisciplinary team. …communicate effectively for specific purposes and settings. …practice al behavior in all settings.	• Water • Rubbing alcohol (32 fl oz) • All-purpose flour (5 lb) • Liquid dish soap (1 bottle) • Chart paper • Markers	

Week 21
Jan. 22-26
01/26 Birthday Brunch
	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 22 ***Jan. 29-Feb. 2*** Catholic Schools Week 02/02 Pep Rally	*5-PS1-1* *5-PS1-2* *5-PS1-3* *3-5-ETS1*	…use scientific reasoning to ask questions, make observations, and	• Launch Log • IPads • Device applications: ○ Inkling	Q3 Test 2 (Matter: Properties and Reactions Launch

		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.	○ 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	Log)
Week 23 ***Feb. 05-Feb. 09*** 02/06 Middle of the Quarter 02/09 11:15 Dismissal Grandparents' Day	*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	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:	Q3 Quiz 3 (Eco systems: Flow of Matter and Energy Vocabulary Quiz)

		things. …evaluate the delicate balance of interactions within an ecosystem. …apply mathematical 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.	• Colorful beads • Poster board Photosynthesis Key Element cards	
Mardi Gras Holidays Feb. 12-Feb. 16				
Week 24 ***Feb. 19-23***	*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	Q3 Test 3 (What Do Plants Need to Grow? Observation Charts Worksheet)

			piece)	
Week 25 ***Feb. 26-March 01*** 03/01 7:30 Stations of the Cross	*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. …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.	Launch Logs IPads • Inkling Food Web Game • *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"	Q3 Quiz 4 (Food Web Game Questions)
Week 26 ***March 04- 08*** 03/08 7:30 Stations of the Cross	*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)
Week 27 ***March 11-15*** 3/15 No Bus End of Quarter	*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.		
4th Quarter				
Week 28 ***March 18-22*** 03/21 1:00 7th Grade Passion Play 03/22 Report Cards Emailed	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 29 ***March 25-29*** 03/26 Honor Roll 03/29 No School: 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*	…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)

	5-ESS1-2			
Week 30 ***April 08-12***	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 31 ***April 15-19*** 4/16 PTCC Meeting 6:00pm	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 10-14***				
Week 32 ***April 22-26*** 04/23 Middle of Quarter 04/26 Birthday Brunch	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* *5-ESS2-2*	…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)
Week 33 ***April 29-May 3*** 05/03 Field Day (7:30 – 11:30)	NGSS: 3-5-ETS1-1 3-5-ETS1-2 3-5-ETS1-3 ETS1.A ETS1.B	Robotics and Automation: Challenge …identify inputs and outputs within a	Launch Logs IPads	Q4 Quiz 3 (R & A Challenge Vocabulary Quiz)

	Science and Engineering Practices *5-PS1-3* *5-ESS2-2*	robotic system. …identify software and hardware within a robotic system.		
Week 34 ***May 06-10*** 8:30 May Crowning	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 35 ***May 13-17*** **Week 36** ***May 20-23*** 5/21 Colonial Day 5/23 End of Quarter 7:30 Awards 9:00 Gabby Walk 11:15 Dismissal	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)