Science Scope & Sequence for 2018-2019 School Year 3rd Grade

Unit 1:	**Unit Teaching Window: Q1** **Aug. 20 - Sept. 21** **Unit Assessment Window: Sept. 24 - 27** **MasteryConnect Window: Sept. 24 - Oct. 5**	**Discovery Techbook Resource Alignment** **Unit**: Climate **Concept**: About Climate Model Lesson in Techbook **Unit**: Weather **Concepts**: About Weather, Protection from Severe Weather Model Lesson in Techbook (About Weather) Model Lesson in Techbook (Severe Weather)
Topic/Genre: *Climate and Weather* **Essential Question:** How are climates different around the world? How do natural hazards affect individuals and societies?	**I Can Statements**	**Climate Articles:** Factors that Affect Climate What is Climate? Can it be measured? Earth's Changing Climate
	ESS2.D.2: Obtain and combine information to describe climates in different regions of the world.	**Climate Videos:** Climate Weather and Climate Where Can You Find Deserts What is Climate?
	*I can use multiple sources to describe climates in different regions of the world.	**Climate Explorations:** About Climate Regional Climates
	ESS2.D.1: Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.	**Hands on Activities for Climate:** World City Match and Teacher's Guide World City Match
	*I can represent data in tables and graphs to describe typical weather conditions expected during a particular season.	**Climate Pictures:** Global Climates
	ESS3.B: Make a claim about the merit of an existing design solution (levies, tornado shelters, sea walls, etc.) that reduces the impacts of weather-related hazard.	**Weather Videos:** Congo Weather: Storms Discovery Science Alliance: What Day Comes After Today?

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		The Weather is Different From Day to Day and Place to Place How the Sun Affects Weather Weather Meteorology Precipitation Measuring Weather
	*I can make a claim using evidence that existing designs reduce the impact of weather-related hazards.	**Weather Articles:** Getting to Know: About Weather Storm Safety Tools and Inventions Weather Measure the Weather Getting to Know: Weather Data
		Weather Explorations/Virtual Labs: About Weather What Shall We Do Tomorrow
		Hands on Activities for Weather: Build a Barometer
		Severe Weather Videos: Storms on the Plains Hail Tornado How Thunderstorms are Formed How Tornadoes and Hurricanes Form Wildfires in the Northwest Severe Storm Safety Flood Preparing a Severe Weather Kit
		Severe Weather Explorations: Hurricanes
		Severe Weather Articles: Storm Chasers Hurricane Katrina

		Dangers of Severe Storms Thunderstorms: Fact vs. Fiction Tornado Alley

Unit 2:	**Unit Teaching Window: Q2** **Oct. 1 - 29** **Unit Assessment Window: Oct. 30 - Nov. 2** **MasteryConnect Window: Oct 30 - Nov. 13**	**Discovery Techbook Resource Alignment** **Unit**: Properties and Interactions of Matter **Concept**: Changes in Matter Model Lesson in Techbook
Topic/Genre: *Matter* **Essential Questions:** How can we explain the structure, properties, and interactions of matter?	**I Can Statements**	**Boards** Comparing and Contrasting
	PS1.A: Predict and investigate that water can change from a liquid to a solid (freeze), and back again (melt), or from a liquid to a gas (evaporation), and back again (condensation) as the result of temperature changes	**Interactive Video** States and Properties of Matter
	*I can explain how temperature changes affect the state of matter a liquid takes.	**Changes in Matter Videos** Heat Changes Things (Applesauce) Observing Changes (Applesauce) On Penguin Pond (Song about reversible change) Melt the Ice Baking the Cake and the Big Escape Full Video: The Magic School Bus: Gets Ready, Set, Dough
	PS1.B: Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.	
	*I can construct an argument with evidence that some changes caused by temperature can be reversed and some cannot.	

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Unit 3:	**Unit Teaching Window: Q2** **Nov. 14 - Dec. 11** **Unit Assessment Window: Dec. 12 - 17** **MasteryConnect Window: Dec. 12 - 20**	**Discovery Techbook Resource Alignment** **Unit**: Magnetism and Electricity **Concepts**: Magnets, Magnets and Electricity (Supplemental) Model Lesson in Techbook (Magnets) Model Lesson in Techbook (Magnets and Electricity)
Topic/Genre: *Magnetism* **Essential Questions:** How can we explain and predict the interactions between objects within systems?	**I Can Statements**	Stations Board
	PS2.B: Plan and conduct investigations to determine the cause and effect relationship of electric or magnetic interactions between two objects not in contact with each other.	**Magnets Videos:** Using Magnets Introduction to Magnetism Kinds of Magnets and Uses of Magnets Attraction and Repulsion Earth as a Magnet Magnets Around Us Magnetic Fields What are Magnets? Can Magnets Attract All Metals? Magnetism in Medical Science
	*I can determine the cause and effect relationship of electric or magnetic interactions between two objects.	**Magnets Exploration:** The Attraction is Mutual Magnets
		Hands on Activity: Magnetic Poles
		Magnetic Articles: A Floating Train Cow Magnets An Ancient Compass

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Unit 4:	**Unit Teaching Window: Q3** **Jan. 8 - Feb.4** **Unit Assessment Window: Feb. 5 - 8** **MasteryConnect Window: Feb. 5 - 19**	**Discovery Techbook Resource Alignment** **Unit**: Life Cycles of Organisms **Concepts**: Plant Life Cycles, Animal Life Cycles Model Lesson in Techbook (Plants) Model Lesson in Techbook (Animals)
Topic/Genre: *Life Cycles of Plants and Animals* **Essential Question:** What are the similarities and differences in the life cycles of plants and animals?	**I Can Statements**	**Plant Life Cycle Videos:** How Do Plants Grow? Plants Come From Seeds The Plant Life Cycle and Us Life Cycle of Flowering Plants Plants Without Seeds Seed Dispersal Seeds Parts of a Plant Plant Life Cycle: Beans
	LS1.B: Develop a model to compare and contrast observations on the life cycle of different plants and animals.	**Hands on Activity:** From a Seed to a Plant Plant Life Cycle Mobiles
	*I can develop a model to compare and contrast observations on the life cycle of different plants and animals.	**Plant Life Cycle Exploration and Skill Builders:** Life Cycle Stages Apple Tree Life Cycle Pumpkin Life Cycle Lima Bean Life Cycle Sunflower Life Cycle
		Plant Life Cycle Articles: What is a Seed? Grow Your Own Roots The Life Cycle of Plants Trees and Flowers

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Unit 5:	**Unit Teaching Window: Q3** **Feb. 11 - Mar. 15** **Unit Assessment Window: Mar. 25 - 28** **MasteryConnect Window: Mar. 25 - April 8** **NOTE: UNIT 5 STARTS IN QUARTER 3, BUT OVERLAPS INTO QUARTER 4 AND WILL BE ASSESSED ON 4TH QUARTER REPORT CARDS**	**Discovery Techbook Resource Alignment** **Unit**: Ecosystems **Concept**: Interactions in Ecosystems Model Lesson in Techbook
Topic/Genre: *Interactions in Ecosystems* **Essential Questions:** How do the similarities and differences of organisms affect them in their environment?	**I Can Statements**	
	LS3.D: Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.	
	Animals live in a variety of habitats and change in those habitats affects the organisms living there	
	*I can explain/describe a variety of habitats.	
	*I can explain how the changes in a habitat can affect the organisms that live there.	

Unit 6:	**Unit Teaching Window: Q4** **Mar. 29 - Apr. 23** **Unit Assessment Window: Apr. 24 - 29** **MasteryConnect: Apr. 24 - May 1**	**Discovery Techbook Resource Alignment** **Unit**: Traits and Inheritance **Concept**: Similarities of Parents and Offspring Model Lesson in Techbook
Topic/Genre: *Inheritance of Traits* **Essential Question:** How do organisms get their features?	**I Can Statements**	
	LS3.A: Construct scientific arguments to support claims that some characteristics of organisms are inherited from parents and some are influenced by the environment.	
	* I can use evidence to support that characteristics of organisms are influenced by the environment.	

	*I can use evidence to support that characteristics of organisms are inherited from parents.	
Unit 7:	**Unit Teaching Window: Q4** **Apr. 29 - May 13** **Unit Assessment Window: May 14 - 17** **MasteryConnect Window: May 14 - May 21**	**Discovery Techbook Resource Alignment** **Unit**: Traits and Inheritance **Concept**: Adaptation Model Lesson in Techbook
Topic/Genre: *Adaptations* **Essential Questions:** How to organisms adapt to survive in their environment?	**I Can Statements**	
	LS3.B: Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving and finding mates	**Videos:** Adaptations for Different Environments
	*I can explain how the variations of plants help them survive in their environment.	Runts of a litter!
	*I can explain how the variations of animals help them survive in their environment.	
	LS3.C: Construct an argument with evidence that in a particular ecosystem some organisms-- based on structural adaptations or behaviors-- can survive well, some survive less well, and some cannot.	
	*I can construct an argument with evidence why some organisms can survive better based on behaviors or adaptations.	