*****The Math unit that is tied into science is taught first in unison with Unit 1**

UNIT	GRADE:	
	Math Unit Data and Coordinates is taught in unison **Unit Teaching Window: 8/27-9/21** **Test Window: 9/24-9/27** **Mastery Connect Window: 9/24-10/8**	**Math Data and Coordinates Benchmarks 5.28-5.30**
Unit 1: **28 Teaching Days**	**Unit Teaching Window:** **August 20 to October 1** **Unit Assessment and Mastery Connect Window:** **October 2nd to October 16**	**Discovery Techbook Resource Alignment**
Topic/Genre: Investigations and Engineering **Essential Question:** How do engineers and scientists define problems	**I Can Statements**	
	I can define a problem that includes criteria for successes and constraints (materials, time, cost). (5.ETS1.A.1)	**Videos explaining each of the Engineering Practices** **Science and Engineering Practices** **Engineering Process Questioning** **Engineering Go For It - click on For Teachers tab**

Revised:

and design fair tests for possible solutions?	I can generate and compare how likely multiple solutions are to solve a problem given the criteria and constraints (5.ETS1.B.1)	Hands on Lab Catapult Engineering Lesson Plan
	I can plan, carry out, and evaluate fair tests using the appropriate tools and equipment. (5.ETS1.C.1)	Virtual labs with handouts Virtual Lab- Too Hot to Handle Orion Capsule Engineering Investigation
	I can analyze quantitative and qualitative data as support for reasonable explanations (5.ETS1.C.1)	STEM Careers Qualitative vs Quantitative
Unit 2: 23 Teaching Days	**Unit Teaching Window: October 8th to November 9th Unit Assessment and Mastery Connect Window:**	**Discovery Techbook Resource Alignment**

Science Scope & Sequence for 2018-2019 School Year

	November 8th to November 29th	
Topic/Genre: Matter Matters **Essential Questions:** What are the different ways matter can be changed?		
	I can conduct an investigation to determine whether the combining of two or more substances will result in a new substance (5.PS1.B.2)	Prep Hands on Activity Hands on Chemical Changes STEM Careers STEM Projects
	I can plan and conduct an investigation to separate the components of a mixture/solution by their physical properties (5.PS1.B.1)	Prep for Mixture Hands on Activity Hands on with Mixtures STEM Careers STEM Projects

Revised:

	I can measure and graph the total weight of matter as it changes physical states (heated, cooled, solid, liquid). (5.PS1.A.2)	Changes in Matter Heat and Matter
	I can analyze and interpret data to construct explanations on the conservation of matters total weight. (5.PS1.A.2)	Conservation What is the Conservation of Matter? The Man Who stopped the Desert (reading passage)
	I can develop a model to demonstrate that matter is made up of particles too small to be seen (5.PS1.A.1)	The Building Blocks of Matter (Engage)

Unit 3: **30 Teaching Days**	**Unit Teaching Window:** **November 26 to January 22** **Unit Assessment and Mastery Connect Window:** **January 18 to February 5**	**Discovery Techbook Resource Alignment**
Topic/Genre: Earth's Spheres **Essential Question:** How do Earth's multiple spheres interact and depend on one another?	**I Can Statements**	Break Down
	I can create a model and explain Earth's water distribution taking into account quantitative and qualitative data (5.ESS2.C.1)	Hands-On Activity: Earth's Available Water
	I can define major bodies of surface water (lakes, rivers, ocean, glaciers) as fresh or salt water, flowing or stationary, large or small, solid or liquid, surface or groundwater (5.ESS2.C.1)	Waters of the Earth Teacher's Background Information Oceans Map Earth as it Appears from Space How Much of Earth is Covered with Water- Video

Revised:

How does human impact affect the Earth's spheres?		Bodies of Water Board Techbook Glossary
	I can use models to explain the structure and function of the biosphere, hydrosphere, atmosphere, and geosphere (5.ESS2.B.1)	Hands-On Activity: Modeling Geosphere and Hydrosphere Interactions Interactive site Us a nature walk to model the interactions
	I can model the interactions between two Earth's systems (5.ESS2.B.1)	Hands-On Activity: Modeling Hydrosphere and Atmosphere Interactions
	I can explain the water cycle and contrast weather/climate (5.ESS2.B.1)	Water's Three States The Many Uses of Water Precipitation
	I can carry out investigations on the human impact on Earth's systems (5.ESS3.C.1)	Hands-On Activity: Developing Wetlands Video: Impacts on Earth
	I can construct explanations about how depleting resources affects our renewal (5.ESS3.C.1)	Importance of Water on the Earth

	I can define a problem and create a solution to reduce the human impact on an environment (5.ESS3.C.1)	Reduce, Reuse, Recycle Powerpoint
	I can carry out an investigation to model how science is helping in the conservation and management of our Earth's resources and environment (5.ESS3.C.1)	STEM Project Starters
Unit 4: **30 Teaching Days**	**Unit Teaching Window:** **February 4th to March 26** **Unit Assessment and Mastery Connect Window:** **March 11 to March 29th**	**Discovery Techbook Resource Alignment**
Topic/Genre: Sun, Earth and Moon **Essential Question:** How do the predictable movements of the	**I Can Statements**	
	I can describe the patterns that can be observed in the changes in the number of hours or visible sunlight throughout the year (5.ESS1.B.1)	The Cycle of Day & Night (Engage) Planetary Rotation and Revolution: Days and Years Video Segment Describing Night and Day Video Segment The Night Sky Video Segment
	I can represent data in graphical displays to reveal patterns to relate the changes in the length and position of a shadow to the time of day	The Cycle of Night & Day (Explore)

Earth and moon affect the daily lives of humans?	and apparent position of the sun in the sky as determined by the Earth's rotation. (5.ESS1.B.2)	
	I can describe the Earth's gravity as a force that pulls objects on or near the Earth toward the Earth without touching the object (5.PS2.B.1)	StudyJams! Gravity & Inertia Gravity (Engage) Gravity (Explore) Gravity (Explain)
	I can model that objects can be seen only when light is reflected off the or when they produce their own light (5.PS4.A.1)	Hands-On Lab: Shedding Light on Sundials Hands-On Lab: Investigating Shadows over the Course of a Day
	I can observe and identify that Earth is one of several planets within the solar system that orbits the sun (5.ESS1.A.1)	Seasons: Earth, Moon, and Sun simulations
	I can explain that stars are separated from one another by vast and different distances, which causes stars to appear smaller than the Sun (5.ESS1.A.1)	Constellations (Engage) Constellations (Explore) Constellations (Explain)
Unit 5: 25 Teaching Days	**Unit Teaching Window: April 1 to May 3 Unit Assessment and Mastery Window: May 1 to the 14th**	**Discovery Techbook Resource Alignment**

Science Scope & Sequence for 2018-2019 School Year

Topic/Genre: Life Science **Essential Questions:** How do the living organisms adapt, interact, and rely on the living and nonliving elements of their ecosystem for survival?	**I Can Statements**	
	I can interpret models to show how plants and animals are involved in the recycling and exchange of gases as well as understanding that the water cycle is another important matter cycle (5.LS2.B.1)	Getting to Know Food and Oxygen Reading Passage
	I can engage in arguments from evidence what the essential needs of plants are (ex. not all plants need soil) (5.LS1.A.2)	Basic Needs of Plants Scientific Question About Needs of Plants Reaching for Sunlight Video Sunflower in Bloom Video
	I can explain what adaptations allows a plant to grow in a given ecosystem (5.LS1.A.2)	Plant Adaptations- Study Jams Plant Adaptations Brainpop on Youtube I
	I can compare/contrast the external structures and organs of different vertebrate classes (5.LS1.A.1)	Venn Diagram to compare and contrast external structures and organs of different vertebrate class

Revised:

		animals. Ex: rabbit's body covering versus a lizard's body covering
	I can compare/contrast the adaptations of different vertebrate classes (5.LS1.A.1)	Iguana Greg- Vertebrates
	I can create a model to show the flow of energy from the sun to all organisms in a food chain and a food web (5.PS3.D.1)	Dramatic Food Chain Lesson Plan
	I can explain the relationship between producers and consumers (5.PS3.D.1)	Interactive Games on Food chains Food Chain Activity