

Platte #1 Curriculum Map

Subject: Science

Department: 5th grade/Science

Unit of Study and Time	Essential Questions/Content	Objectives/ Learning Targets	Resources	Projects/Activities	Assessment	Standard *Bold=Assessed
Quarter 1 - Stars and Planets - Moons and celestial objects - Constellations - Earth's Atmosphere - Tides	What are the two major types of planets? What are the major types of stars? What are constellations? What are the layers of Earth's atmosphere? How is the moon associated with tides?	- I will be able to identify what planets are in our solar system. - I will be able to sort planets into terrestrial and gas giants. - I will be able to identify types of stars - I will be able to label the different layers of Earth's atmosphere. - I will be able to explain what a tide is and how the moon controls them. - I can explain how the night sky changes throughout the year.	Instructional resources that may include textbooks, web sites (hyperlinks), supplementary materials, equipment, and other similar items	Build a model of the planets Shadows lab Constellation Lab IXLs V1-6, W1-4, and Y1-10 (https://www.ixl.com/science/skill-plans/foss-next-generation-grade-5)	Shadows and Constellations DCA	*5.ESS1.2 Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky. 5.ESS1.1 Understanding the brightness of the sun compared to other stars. 5.ESS2.1 Show proficiency in the skill of understanding our Geosphere biosphere hydrosphere atmosphere interaction. 5.ESS2.2 Show proficiency in the skill of understanding our atmosphere and the parts it is made of. 5.PS2.1 Show proficiency in the skill of understanding of gravitational force

Quarter 2 - Food Webs - Food Pyramids - Producers, Consumers, and Decomposers - Ecosystems	What is a food pyramid? What is a food web? What is a food chain? How are food pyramids, webs, and chains related? How do food webs and pyramids represent energy transfer? What is a producer, consumer, and decomposer? What is an ecosystem?	- I can understand the levels of a food pyramid. - I can create a food web and chain for a given ecosystem. - I can show how energy moves through a food web and chain. - I can identify producers, consumers, and decomposers. - I can identify types and features of ecosystems.	Instructional resources that may include textbooks, web sites (hyperlinks), supplementary materials, equipment, and other similar items	Build your own food web and pyramid Decomposition lab Flower dissection lab IXLs M1-7, N1-7, Q1-6, R1-6, and W4 (https://www.ixl.com/science/skill-plans/foss-next-generation-grade-5)	Living Systems DCA	*5.LS2.1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment. *5.PS3.1 Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun. 5.LS1.1 Show proficiency in the skill of being able to Support an argument that plants get the materials they need for growth chiefly from air and water.
Quarter 3 - Conservation - Engineering in Conservation	What is conservation? What is engineering? How do principals of engineering impact experiments? How does engineering impact conservation?	- I can define conservation. - I can conduct an experiment following engineering principals. - I can identify how engineering helps conservationists.	Instructional resources that may include textbooks, web sites (hyperlinks), supplementary materials, equipment, and other similar items	STEM paper chain experiment IXLs S1-2, Z1-2 (https://www.ixl.com/science/skill-plans/foss-next-generation-grade-5)	Conservation and Engineering DCA	*5.ESS3.1 Obtain and combine information about ways individual communities use science ideas to conserve Earth's resources and environment. *5.ETS1.3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

						5.ETS1.2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
Quarter 4 - States of matter - Mixtures and Solutions - Saturation - Extracts and Concentrates	What is a mixture? What is a solution? What is saturation? How are extracts and concentrates made? What are the three major states of matter?	- I can identify solids, liquids, and gases. - I can create a mixture and solution. - I can identify a solvent and a solute. - I can identify ways of separating a mixture. - I can identify extracts and concentrates. - I can explain how substances change between solid, liquid, and gas.	Instructional resources that may include textbooks, web sites (hyperlinks), supplementary materials, equipment, and other similar items IXLs B1-2, C1-6, and D1-6	Salt saturation lab IXLs A1, B1-2, C1-6, and D1-6 (https://www.ixl.com/science/skill-plans/foss-next-generation-grade-5)	Mixtures and Solutions DCA	*5.PS1.4 Conduct an investigation to determine whether the mixing of two or more substances results in new substances. 5.PS1.1 Show proficiency in the skill of understanding Matter is made of particles too small to be seen. 5.PS1.2 Show proficiency in the skill of understanding Total weight of matter conserved regardless of change 5.PS1.3 Show proficiency in the skill of understanding Identify materials based on their properties