Science Scope and Sequence

Unit	Unit Name	Phenomenon/ Essential Question	Science and Engineering Practices (Skills)	Essential Vocabulary	NE State Standards	Assessment(s)	Materials - for a class of 15 students * means to order
Unit 1 approximately **3 weeks**	Structure and Function of Living Things https://docs.google.com/document/d/17HPAF5Y-c1naE2xrA649-_oRKXKFICCv8aAo-ugs5Qc/edit?usp=sharing **Add in the TPT unit for SC.1.6.2.A Solving Problems by Mimicking Nature {Biomimicry} NGSS Grade 1–LS1-1 standard file:///Users/kjohnson/Downloads/SolvingProblemsbyMimickingNatureBiomi	What are some ways plants and animals meet their needs so they can survive and grow? How are parents and their children similar and different? How can we solve human problems by mimicking animals?	Create a Model Claim, Evidence, Reasoning Observation Construct an explanation Conduct an investigation Analyze results Construct arguments using evidence Obtain information Evaluate and Communicate the information Carry out an investigation Make an argument Design a solution	Camouflage Traits Survival Predators Prey Similarity Different Rescue Experts Notice In-common Hide Mimic	SC.1.6.2.A SC.1.6.2.B SC.1.6.2.C SC.1.6.2.D	N/A **Extension opportunities:** Within each lesson on Mystery Science is a section called “Extend this lesson”. It provides additional texts, activities, slides, and videos.	***Animal SuperPowers*** **Lesson 1** *24 envelopes Baby bird printout **Lesson 2** *Dried black beans *30 dixie cups *Elbow macaroni *masking tape *15 straws Bird Beaks printout **Lesson 3** none **Lesson 4** *24 glue dots multiple printouts **Lesson 5** *15 envelopes multiple printouts ***Plant SuperPowers*** **Lesson 1** Look for clues printout **Lesson 2** *15 dixie cups *90 dot stickers *30 pipe cleaners

Science Scope and Sequence

	micryNGSS Grade1LS11 standard-1.pdf						*1 sheet of posterboard Playdoh Umbrella top printout **Lesson 3** knife scotch tape cardboard box *soft-stemmed plant? *Aluminum foil
Unit 2 approximately **6 days**	Space Systems https://docs.google.com/document/d/1SeJ34hYsBp4l_xTNSqKijvR98SMcXpdfbn2rF26TTqQ/edit?usp=sharing	What objects are in the sky and how do they seem to move? What are their patterns? What are seasonal daylight patterns?	Develop and use a Model Observation Conduct an investigation Analyze Interpret data Construct an explanation Construct an argument using evidence Obtain, evaluate, and communicate information Carry out an investigation	Shadow Orbit Constellations Universe Solar System Planet Phase Gravity Gravitational Pull Pattern Cause and Effect Season Daylight	SC.1.11.3.A SC.1.11.3.B	N/A **Extension opportunities:** Within each lesson on Mystery Science is a section called “Extend this lesson”. It provides additional texts, activities, slides, and videos.	***Day Patters-Sun and Shadows*** **Lesson 1** paper gnomes printout Shadow patterns printout 1 blank paper scotch tape 7 LED flashlights *batteries for flashlights? **Lesson 2** *colored chalk **Lesson 3** Sun finder printouts 3 hole punch *15 paper fasteners **Lesson 4** Summer sunshine reader printout ***Night Patterns-Moon and Stars***

Science Scope and Sequence

							Lesson 1 Moon book printout *15 pipe cleaners **Lesson 2** Big dipper star pictures printout Sky Sheet printout 16 flashlights *15 dot stickers *15 paper cups *15 push pins **Lesson 3** 4 sheets blank paper 1 globe (borrow)? *1 compass
Unit 4 approximately **2 weeks**	Waves https://docs.google.com/document/d/1GY9uF4FCtk_lqUwYLZY4fw9Ljf7Ti7SUOQsLTtWsKwk/edit?usp=sharing	What happens when materials vibrate? What happens when there is no light? How could we communicate without using noise?	Create a Model Observation Design and Build a Solution Carry out investigations Construct an explanation Investigate Design a solution Obtain information Analyze	Vibrate Opaque Translucent Transparent Illumination Communicate	SC.1.2.1.A SC.1.2.1.B SC.1.2.1.C SC.1.2.1.D	N/A **Extension opportunities:** Within each lesson on Mystery Science is a section called “Extend this lesson”. It provides additional texts, activities, slides, and videos.	**Lesson 1** 15 rulers **Lesson 2** yarn **Lesson 3** Flower shape printout Sorting sheets printout Cardboard *Aluminum Foil *tissue paper *wax paper *Glad press and seal *24 sheets of Colored Tissue paper Plastic bag Clear sheet protectors

Science Scope and Sequence

							<u>Lesson 4</u> Dark box printout Dark box messages printout How to play dark box printout *16 sheets of black cardstock *64 paperclips **<u>Lesson 5</u>** Color Codes printout 16 LED flashlights **<u>Lesson 6</u>** *75 index cards

Science Scope and Sequence