ELIZABETH PUBLIC SCHOOLS
Every child, Achieving Excellence

Marking Period 1 (MP1)	Science Curriculum Pacing Guide Grade 1
MP1 **Standards for Science Content**	K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. (U1) K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem. (U1) K-2-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs. (U1) 1-PS4-1 Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate. (U2) 1-PS4-2 Make observations to construct an evidence-based account that objects can be seen only when illuminated. (U2) 1-PS4-3 Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light. (U2) 1-PS4-4 Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance. (U2)
MP1 **Topics**	Unit 1- Engineering Design Process Unit 2- Light and Sound
MP1 **Skills/Concepts**	▪ Problems can be solved through engineering. (U1) ▪ Ask questions to determine a problem. (U1) ▪ Before designing a solution, it is important to understand the problem. (U1) ▪ Designs can be conveyed through sketches, drawings, or physical models. (U1) ▪ It is useful to compare and test designs. (U1) ▪ The shape and stability of structures of natural and designed objects are related to their functions. (U1) ▪ Objects can be seen if light is available to illuminate them or if they give off their own light. (U2) ▪ Simple tests can be designed to gather evidence to support or refute student ideas about causes. (U2) ▪ Some materials allow light to pass through them, others allow only some light through, and others block all the light and create a dark shadow on any surface beyond them, where the light cannot reach. Mirrors can be used to redirect a light beam. (U2) ▪ Sound can make matter vibrate. (U2) ▪ People use a variety of devices to communicate. (U2) ▪ A situation that people want to change or create can be approached as a problem to be solved through engineering. (U2) ▪ People depend on various technologies in their lives; human life would be very different without technology. (U2)
MP1 **Core Materials**	HMH Into Science

Marking Period 2 (MP2)	Science Curriculum Pacing Guide Grade 1
MP2 **Standards for Science Content**	1-PS4-4 Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance. (U2L3) 1-ESS1-1 Children make a model of the moon and then use the model to explore the phases of the moon. (U5L1) 1-ESS1-2 Children observe the growth patterns of plants exposed to different amounts of sunlight and collect and analyze data that explain how seasonal patterns of daylight affect plant growth. (U5L2)
MP2 **Topics**	Unit 2– Light and Sound Unit 5- Objects and Patterns in the Sky
MP2 **Skills/Concepts**	▪ Sound can make matter vibrate. (U2) ▪ People use a variety of devices to communicate. (U2) ▪ Patterns of the motion of the sun, moon, and stars in the sky can be observed, described, and predicted. (U5) ▪ Patterns in the natural world can be observed, used to describe phenomena, and used as evidence. (U5) ▪ Seasonal patterns of sunrise and sunset can be observed, described, and predicted. (U5) ▪ Patterns in the natural world can be observed, used to describe phenomena, and used as evidence. (U5) ▪ Science assumes natural events happen today as they happened in the past. Many events are repeated. (U5)
MP2 **Core Materials**	HMH Into Science

Marking Period 3 (MP3)	Science Curriculum Pacing Guide Grade 1
MP3 **Standards for Science Content**	1-LS1-1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs. U3L1 1-LS3-1 Make observations to construct an evidence-based account that young plants and animals like, but not exactly like, their parents. U3L2 K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change. U3L1 1 -PS2- 1 Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. U4L1 1-PS2- 2 Make observations to describe patterns of motion that can be predicted. U4L1 1-ESS1-1 User observations of the Sun, Moon, and stars to describe patterns that can be predicted. U5L2 1-ESS1- 2 Make observations at different times of year to relate the amount of daylight to the time of year. U5L2
MP3 **Topics**	Unit 3 - Plant Parts Unit 4 – Animal Parts Unit 5 – Objects and Patterns in the Sky
MP3 **Skills/Concepts**	Plants have different parts that help them survive and grow. U3L1 A situation that people want to change or create can be approached as a problem to be solved. U3L1 The shape and stability of structures of natural and designed objects are related to their function(s). U3L1 Every human made product is designed by applying some knowledge of the natural world. U3L1 Young animals are very much, but not exactly like, their parents. U3L2 Individuals of the same kind of plant or animals are recognizable as similar but can vary in many ways. U3L2 Patterns in the natural world can be observed, used to describe phenomena, and used as evidence. U3L2 Objects move in different ways, and their motion can change when they are pushed or pulled. U4L1 The Sun’s position in the sky appears to change throughout the day, creating predictable patterns such as the length and direction of shadows. U5L2
MP3 **Core Materials**	HMH Into Science

Marking Period 4 (MP4)	**Science Curriculum Pacing Guide Grade 1**
MP4	1-LS1-1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs. U5L1 1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents. U5L2 1-LS1-2 Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive. U5L3
MP4 **Topics**	Unit 4- Animal Parts
MP4 **Skills/Concepts**	All organisms have external parts. (U4L1) Different animals use their body parts in different ways. (U4L1) Animals have body parts that capture and convey different kinds of information needed for growth and survival. (U4L1) The shape and stability of structures of natural and designed objects are related to their function(s). (U4L1) Every human-made product is designed by applying some knowledge of the natural world and is built by using natural materials. (U4L1) Adult plants and animals can have young. (U4L2) In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive. (U4L3) Young animals are very much, but not exactly, like their parents. (U4L2) Individuals of the same kind of animal are recognizable as similar but can also vary in many ways. (U4L2) Patterns in the natural world can be observed, used to describe phenomena, and used as evidence. (U4L2)
MP4 **Core Materials**	HMH Into Science