

1st Grade

Waves: Light and Sound

- 1-PS4-1 Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.
- 1-PS4-2 Make observations to construct an evidence-based account that objects can be seen only when illuminated.
- 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.
- 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.*

Structure, Function, and Information Processing

- 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.*
- 1-LS1-2 Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.
- 1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

Space Systems: Patterns and Cycles

- 1-ESS1-1 Use observations of the sun, moon, and stars to describe patterns that can be predicted.
- 1-ESS1-2 Make observations at different times of year to relate the amount of daylight to the time of year.**

Engineering Design

- 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.
- 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.
- 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.

* - Integrates traditional science content with engineering.  - Includes a Michigan specific performance expectation.

** - Allow for local, regional, or Michigan specific contexts or examples in teaching and assessment.