



Second Grade Science

Waves

Dear Families,

Here is what your child is learning in Second Grade, during the study of Waves with some specific ways you can help. Look for additional newsletters for upcoming units.

Waves

Students need to:

- Know that sounds are made from vibrations.
- Design simple tests to gather evidence to support or refute ideas about causes.
- Know that objects can be seen in light if they give off their own light.
- Make observations in order to construct an evidence-based account for natural phenomena.
- Design simple tests to gather evidence to support or refute opinions about causes.
- Know that mirrors can be used to redirect a light beam.
- Know that a material changes the direction of the light and can light up the surrounding space in a different direction.
- Collaboratively investigate to produce evidence to answer a question.
- Use tools and materials provided to design a device that solves a specific problem.
- Know that people also use a variety of devices to communicate over long distances.

Key Vocabulary

Absorb: take in or soak up by chemical or physical action.

Illuminate: lighting or light.

Light: the natural agent that stimulates sight and makes things visible.

Light Beam: directional projection of light energy radiating from a light source.

Light Path: the path a beam of light follows.

Man Made Light: light produced by man-made products.

Natural Light: light produced by natural resources.

Opaque: not able to be seen through; not transparent.

Reflect: a surface or body throws back heat, light, sound without absorbing it.

Semaphore: a system of sending messages by holding the arms or two flags or poles in certain positions according to an alphabetic code.

Signal: a gesture, action, or sound that is used to convey information or instructions, typically by prearrangement between the parties concerned.

Sound: vibrations that travel through the air or another medium and can be heard when they reach a person's or animal's ear.

Translucent: allowing light, but not detailed shapes, to pass through; semitransparent

Transmit: cause something to pass on from one place or person to another.

Transparent: allowing light to pass through so that objects behind can be distinctly seen.

Vibrations: (vibrate: move or cause to move continuously and rapidly to and fro) an instance of vibrating

Visible: able to be seen

Ways FAMILIES Can Help

- Use the Discovery Education link to find more information ([see the following page for log-in information](#)).
- Make your own musical instrument using vibration to make sound.
- Look for ways light and sound are used to communicate (traffic lights, phone rings, neon sign (open), etc.)
- Experiment with ways to make a flashlight reflect from one surface to another.
- Experiment with how blocking light can create a variety of shadows.
- Create stained glass using tissue paper (in many layers and write observations in a journal about what happens when light travels through it).