

Light and Sound

By Jaclyn Jaycox

Dashing for Dessert!

Emily and her mother are looking through old photographs on the porch one hot afternoon. While giggling at some photos of her mother playing the saxophone, Emily hears a familiar melody coming from down the street. As this symphony of sounds grows louder, Emily knows that means the ice cream truck is on its way!



Emily dashes into the house to grab change from her piggy bank. She races past the television to her bedroom, dumps out her piggy bank, and quickly grabs some change. Emily rushes back outside, only to discover the truck has passed by. As she watches the truck drive away, the music slowly starts to fade.

Suddenly, bright red brake lights catch Emily's eye, and she realizes the truck is stopping. She takes off down the sidewalk as fast as she can. Emily reaches it just in time, and she enjoys her ice cream treat.

Sights and Sounds All Around

Lights and sounds talk to you each and every day.

Whether you are near or far, they help show you the way.

Stoplights tell you when to go and also, to slow down.

They help to keep you safe when driving around town.

Alarm clocks buzz to wake you up so that you aren't late.

Ambulances' sirens and lights say: "Move! We just can't wait!"

A doorbell dings to let you know there's someone at the door.

A phone lights up and plays a tune, it's you they're calling for.

Animals too use light and sound to help each other out.

Monkeys sense that danger's near, and start to scream or shout.

Fireflies light up the sky, they put on quite a show.

Their light helps people see them whether they're high up or down low.



Waves of Energy

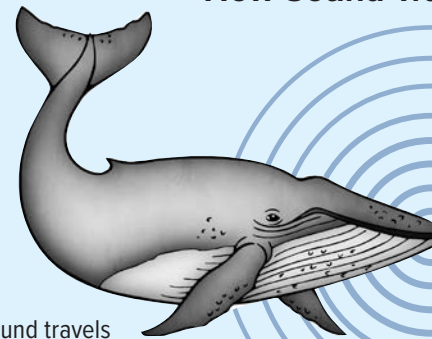
Both light and sound are types of energy that move in waves. Light comes from a natural source, like the Sun, or a source people make, like a light bulb. Light waves are fast. They continue through space until they reflect off objects and into your eyes so you can see.

Sound needs a conductor, like a liquid, solid, or gas, to bounce off of to cause vibrations. These vibrations move in waves in all directions. You can hear sound waves that vibrate through the air and into your ears.

Because light and sound waves can travel very far, they are helpful when communicating over long distances. A lighthouse casts a bright beam of light that reflects across the sea, helping to guide ships at night. A loud foghorn will signal over large bodies of water to warn ships sailing in bad weather.

Using light and sound can also make communication easier because people everywhere recognize their meaning.

How Sound Travels in Water



Sound waves

Sound travels faster through water than through air. This is because the particles in water are much closer together than those in air. Sound waves move more quickly when particles are closer together.

How far sound travels in the ocean is determined by water temperature and pressure.