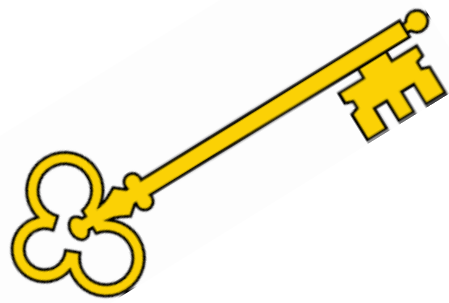




Our Learning Keys

Light

Science

Year 3

Spring 2



Questions

- What is a light source?
- Why do we need light?
- Is the moon a source of light?
- How does light travel?
- What is a shadow?
- What affects the size and shape of shadows?

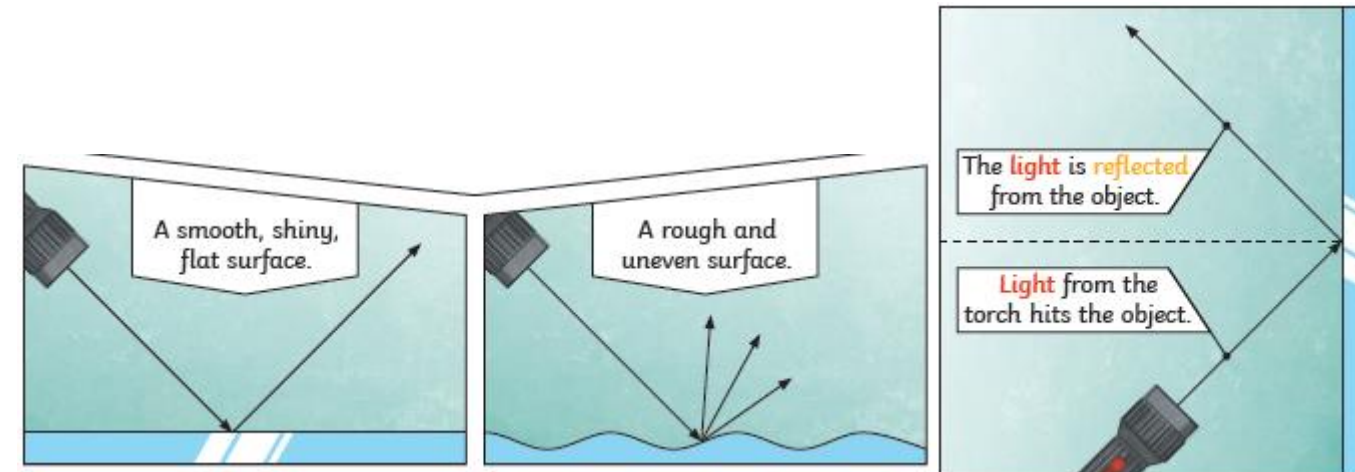


Vocabulary

light	a form of energy, which can be seen
light source	an object which creates light
reflect	to bounce off a surface
reflection	the process where light bounces from the surface of an object
reflective	a property of a material, where light reflects well
ray	a wave of light
shadow	an area of darkness, where light has been blocked
dark	the absence of light
emit	to produce something, i.e., to emit light is to produce light
torch	a small source of light, often using batteries
bright	a light which is strong
dim	a light which is not strong



Images



Facts

- We need light to be able to see objects.
- Light travels in straight lines.
 - We see an object when light reflects off it and hits our eyes.
 - When it is dark, there is no light (or very little light) to reflect, so we do not see objects as clearly, or at all.
- Some objects reflect light well and create a clear image (such as mirrors and water)
- Other objects do not reflect light well.
- A shadow is created when an opaque or translucent object blocks light from a source.
 - If the object is closer to the source, the shadow will be larger
 - If the object is further from the source, the shadow will be smaller
- We create reflective objects to help keep people safe - for example, cats eyes in the road, high visibility coats, reflective surfaces on road signs and reflectors on bikes.
- The moon is not a source of light. It reflects light from the sun, rather than emitting light itself.
- Many light sources emit light through burning, such as bulbs, the sun and matches.

Previously...

In Key Stage 1, we learned that our main source of light is the sun, and that many plants use sunlight to make food. We also learned that some materials reflect light.

Now

Next...

In Year 5, we learn about space and the solar system, and how our planet orbits the sun.



Links

- Maths - understanding angles and reflection of shapes.
- History - the development of electricity and electric lighting

Doors this will open...

Engineer

Electrical technician

Light Engineer

Film Director

Artist

Photographer