

Physics - Light, Shadows, and Reflection

Class 6, Science, NCERT

Light is a form of energy that allows us to see objects. It travels in straight lines and can be reflected, refracted, and absorbed. Shadows are areas where light is blocked by an object. Reflection is the process by which light bounces off a surface.

1. Light

Light is a form of energy that travels in waves. It is made up of tiny particles called photons. Light travels at a speed of 300,000 kilometers per second. It is the fastest thing in the universe.

2. Shadows

Shadows are areas where light is blocked by an object. When an object is placed in the path of light, it creates a shadow. The size and shape of the shadow depend on the size and shape of the object.

3. Reflection

Reflection is the process by which light bounces off a surface. When light strikes a surface, some of the light is absorbed and some of the light is reflected. The amount of light that is reflected depends on the type of surface.

4. Laws of Reflection

The laws of reflection state that:

- ° The incident ray, the reflected ray, and the normal to the surface at the point of incidence all lie in the same plane.
- ° The angle of incidence is equal to the angle of reflection.

5. Uses of Reflection

Reflection is used in a variety of applications, including:

- ° Mirrors
- ° Telescopes
- ° Microscopes
- ° Lasers

Light, shadows, and reflection are all important concepts in physics. They play a role in many everyday phenomena, such as seeing objects, creating shadows, and using mirrors. By understanding these concepts, we can better understand the world around us.