Light: Rainbow

Grade Level

All grades

Learning Objective

To explain how rainbows are formed.

Science Unit

Energy and forces: light

Skills Development

Observing

Materials Needed

- Flashlight or daylight on a sunny day
- Shallow bowl of water
- Small mirror
- Modelling clay

Steps

- 1. Place the mirror in the bowl at an acute angle (30°).
- 2. Hold the mirror in place using modelling clay.
- 3. Shine the flashlight or daylight onto the mirror.

What's Happening?

A rainbow will be created on the ceiling.

Scientific Principles

A rainbow is a spectrum of light. When it passes through a prism, the spectrum is split into seven different colours. If light enters a prism, it slows down and changes direction. The process when light slows down and changes direction is called refraction. When it is separated into different colours, this process is called dispersion.



