





Year 5/6 - Autumn 2

## What should I already know?

- We need light to be able to see things.
- Light is reflected from surfaces.
- Shadows are formed when the light source is blocked by a solid object.
- Light from the sun can be dangerous and there are ways to protect your eyes.

### What will I learn?

- Light waves travel in straight lines.
- Objects are seen because they give out or reflect light into the eye.
- We see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.
- Shadows have the same shape as the objects that cast them.

### Types of Enquiry

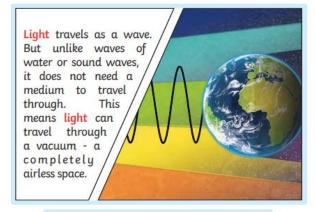
Observing changes over time

Pattern seeking

Identifying, groups & classifying Comparative and Fair testing

Research

| Tier 3 Vocabulary |               |  |  |
|-------------------|---------------|--|--|
| Energy            | Natural Light |  |  |
| Light Source      | Opaque        |  |  |
| Translucent       | Transparent   |  |  |
| Reflection        | Refraction    |  |  |



Isaac Newton shone a light through a transparent prism, separating out light into the colours of the rainbow (red, orange, yellow, green, blue, indigo and violet) - the colours of the spectrum. All the colours together merge and make visible light.



How will I be a scientist?

# **Working Scientifically Skills**

| Plan   | Da  | Record   | Review  |
|--|---|--|---|
| l will decide how to<br>investigate reflective<br>materials and develop a way<br>to test the materials | l will test to see if materials<br>are reflective | l will classify the materials<br>into reflective and not<br>reflective | I will present my findings and<br>suggest which material would<br>be the best to use to create a<br>reflective jacket |