

How Light Travels – Teacher Notes

LO: To understand that light cannot travel through some materials and that this creates a shadow.

To know that light travels from a source.

To understand that objects let different amounts of light pass through them.

To know different types of light sources.

Activity:

The main activity is broken down into 4 mini-experiments, designed to be carried out in small groups.

When differentiating, bear in mind that the distance variables (distance from light source and wall) are less scientifically and technically demanding than the angle and translucency variables.

Equipment:

- Tables set up against a blank wall
- A dimly lit working environment
- Torches
- Objects to cast shadows
- Translucent gels
- Rulers
- Light meters
- Large protractors
- Worksheets and results tables

Specialist Equipment:

Please note that a large protractor (or scaled-up image of one) is necessary for investigating the angle of the light source. A light meter (often found on data loggers) is also required to read levels of light in the translucency experiment.