

Which materials reflect light?

Aim: To see what type of materials are the best at reflecting light.

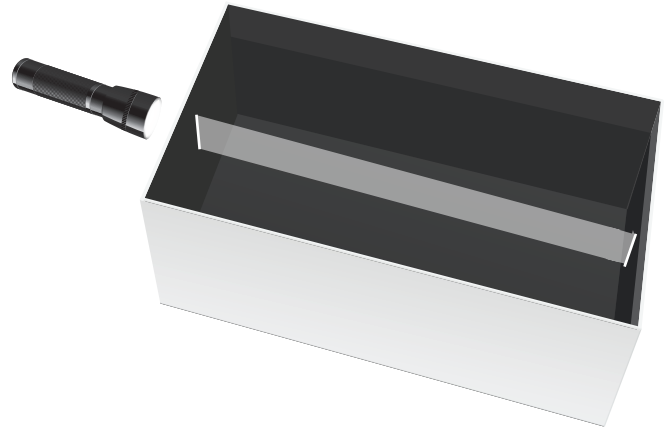
Equipment:

Cardboard box (shoeboxes are ideal)

Black paper or cardboard

Torch/flashlight

Modelling clay



A selection of objects made from various materials such as plastic, wood, paper, cardboard, glass, metal and cloth.

Method:

- 1) Line the inside of a cardboard box with black paper. Cut a slit in one end of the cardboard box just wide enough to allow a narrow beam of light to shine through to the other side.
- 2) Place the box in a darkened room and turn on the torch/flashlight lamp. Describe the light you can see. Is it straight?
- 3) Place a reflective object in front of the beam of light at the far end of the box. What happens to the beam of light? Try moving the object so the light hits it at a different angle. What happens to the path of the light beam now?
- 4) Try some objects made of different materials. Which ones change the path of the light? Record your results. Draw diagrams to show what happened.
- 5) Sort the objects into those that reflect and those that do not. Which objects made the clearest reflected light beams?
- 6) Make a statement about the types of materials that reflect light.