Light travels from a light source, such as a torch, in a straight line.

If you put a solid object (like a rat) in the way of the light, the light cannot pass through and a shadow is made behind the object, where there is no light.

Let’s make some shadows!

**YOU WILL NEED:**
- Thick paper or card – a cereal packet would be good.
- Scissors.
- Sticky tape.
- A pencil or stick.
- A torch, bike light or even the flashlight on your phone.

**INSTRUCTIONS**
1. Cut out the rat shape or copy onto paper or card and then cut out. If you prefer, you can draw your own design. Just remember to keep it simple.
2. Using sticky tape, attach this onto a pencil or stick so that you can hold it easily.

**NOW LET’S TRY SOME EXPERIMENTS**

Hold your rat near to a wall and shine a torch at it to make a shadow on the wall.

What happens to the shadow if:
- You move the light nearer to the rat?
- You move the light further away from the rat?
- You move the light from side to side?

Play time
You could make up a story, create some shadow puppets like the rat, and put on a show!