



# Science

## Light

# Shadow Theatre



# Aim

- I can explain why shadows have the same shape as the object that casts them.

# Success Criteria

- I can explain how a shadow is formed.
- I can explain why shadows are the same shape as the object that casts them.
- I can use my knowledge of Isaac Newton's ideas about light to create a shadow puppet play.

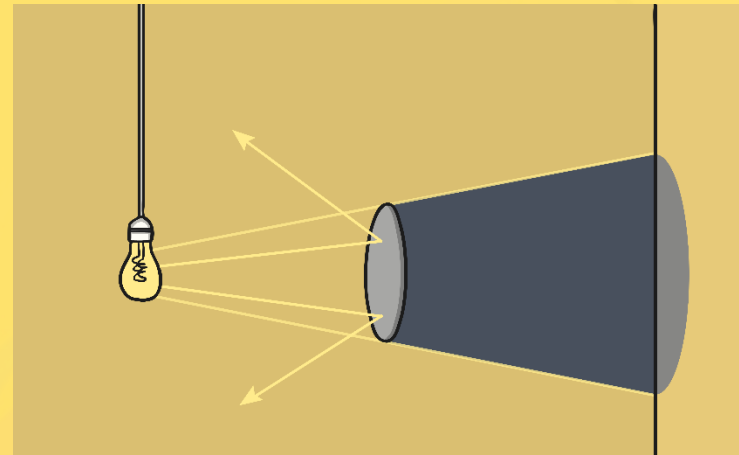
# Shadows

Shadows are formed when an opaque object blocks a ray of light.

Is a shadow always the same shape as the object that casts it?

A shadow can change size depending on the distance the object casting it is from the light source. Shadows can also be elongated or shortened depending on the angle of the light source.

However, a shadow is always the same shape as the object that casts it. This is because when an object is in the path of light travelling from a light source, it will block the light rays that hit it, while the rest of the light can continue travelling. Therefore, the shadow it casts is exactly the same shape.



# Shadow Theatre



Use cardboard and straws or craft sticks to make your shadow puppets.

Remember, your puppets will not need to have features or detail as your audience will only see their shadows in the performance.

You will have chance to perform your puppet show at the end of the lesson or at a later time.



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