

Year 2 Week 6 - Topic Task

LI: To test translucent, transparent and opaque materials

Key Vocabulary: source, brightness, shadow, opaque, translucent, transparent

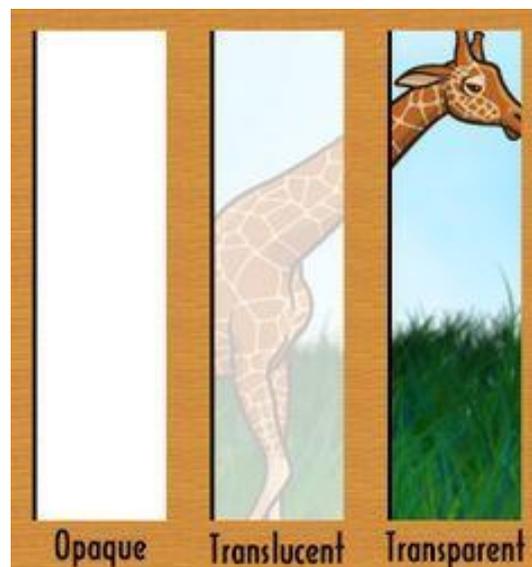
Watch the clip to recap light sources transparent and opaque materials.

<https://www.bbc.co.uk/bitesize/topics/z3hhvcw/articles/zp23r82>

Opaque materials - block the light and cast a shadow. You cannot see through them.

Translucent materials - block some light. You can see through them a little.

Transparent materials - allow light to pass through. You can see through them.



Task 1: Test some objects from around your house to find out if they are opaque, translucent or transparent. Hold the object up to the light and try looking through it.

- Can you see through? Can you see through it clearly or only partly?
- Does it cast a shadow?

You could use:

- a torch (if you have one)
- the light from a lamp or phone
- the light from the window

Here are some ideas for objects to test:

- paper
- plastic bottle
- tinfoil
- a glass
- cling film
- tissue
- a plate
- cardboard
- clothes/fabric
- tissue
- a mug
- plastic bag

Create a table showing what you found out.

Opaque	Translucent	Transparent

Task 2:

Watch the video on shadows: <https://www.youtube.com/watch?v=IOIGOT88Aqc>

Opaque objects create a shadow because they are blocking the light but is the shadow always the same?

Investigate: How does the shadow change when the distance between the light source and the object is increased or decreased?

- Choose one of the objects that you found to be opaque.
- Using the same light source as the previous investigation, observe if the shadow is different when the light source is very close, further away and far away from the object.
- You may want to measure the distance between the light source and object each time.
- Remember to keep it a fair test, use the same light source and object each time.

Write your observations in a table like the one below.

Distance from the object	What does the shadow look like?