

SCIENCE · GRADE 3

# Light and Shadows

How shadows are made

## Three useful words

1

**Opaque**Light **CAN'T** pass through. Makes a strong shadow.*Example: Wood, metal, your body.*

2

**Translucent**

SOME light passes through, but you can't see clearly through it.

*Example: Frosted glass, thin paper, a curtain.*

3

**Transparent**

Light passes through clearly. Hardly any shadow.

*Example: Clear glass, clean water, plastic wrap.*

## Quick experiment

Hold a small object (a pencil, a toy) in front of a wall. Shine a flashlight at it. Move the flashlight **CLOSER** — does the shadow get bigger or smaller? Move it further **AWAY** — what happens? Move the **OBJECT** closer to the wall — what happens to the shadow?

## What did you find?

1. When the **LIGHT** moves closer to the object, the shadow gets \_\_\_\_\_.
2. When the **OBJECT** moves closer to the wall, the shadow gets \_\_\_\_\_.
3. Why does an opaque object make a darker shadow than a translucent one?



4. What time of day are shadows longest? Why?

