

**Canberra Primary School**  
**Primary 4**  
**Science Notes**



Name: \_\_\_\_\_ (    )

Class: Teamwork \_\_\_\_\_

Date: \_\_\_\_\_

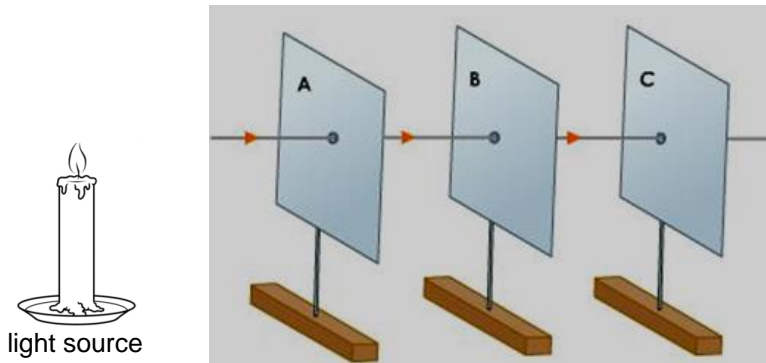
## Chapter 4 - Light

### **Essential Learning Points**

- ✓ Light helps us to see.
- ✓ Things that give off light are known as sources of light.
- ✓ An object can be seen when it reflects light or when it is a source of light.
- ✓ Some materials allow more light to pass through than other materials.
- ✓ Some materials do not allow light to pass through.
- ✓ Light sensors are used to measure the brightness of light.
- ✓ A shadow is formed when light is completely or partially blocked by an object.
- ✓ An object can form shadows of different shapes and sizes.
- ✓ The position of an object can change the shape of the shadow formed by the object.
- ✓ The position of the light source can change the size of the shadow formed by the object.

Canberra Primary School  
Chapter 4: Light

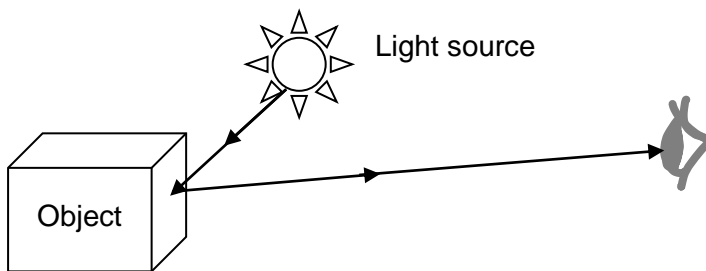
1. Light is a form of **energy**.
2. Light travels in **straight line**.



3. **Examples of sources of light**

- Sun
- Star
- Lighted candle

4. We are only able to see the object when light that falls on the object is **reflected**.

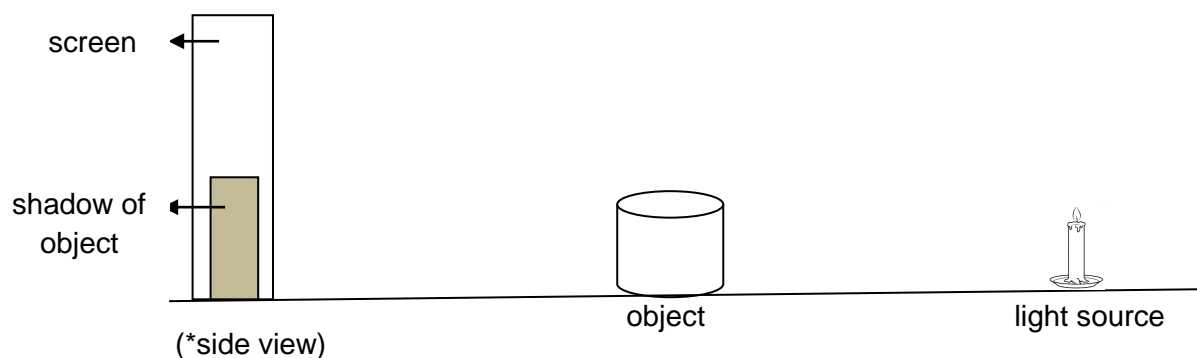


5. An object can be
  - a) Transparent (It allows **most light** to pass through)
  - b) Translucent (It allows **some light** to pass through)
  - c) Opaque (It **does not allow** light to pass through)
6. Objects with smooth and shiny surfaces **reflect light specularly**.
7. Objects with rough or uneven surfaces **reflect light diffusely**.

8. Objects that appear black **absorbs** most of the light and did not allow light to be reflected.
9. Objects that appear white **reflects** most of the light that shines on it.
10. How well can light pass through **different types of materials**?

	Transparent	Translucent	Opaque
Amount of light that can pass through	Allows <b>most of the light</b> to pass through.	Allows <b>some of the light</b> to pass through.	<b>Does not allow light</b> to pass through.
Examples of objects	-Clear plastic -Clear glass	-Frosted glass	-Ball -Cup

11. A shadow is formed when light is **blocked** by an object.
12. The objects are arranged as shown below. A shadow of the object can be seen on the screen.



- a) State two ways to increase the length of the shadow.
  - (i) Move the object nearer to the light source.
  - (ii) Move the light source nearer to the object.

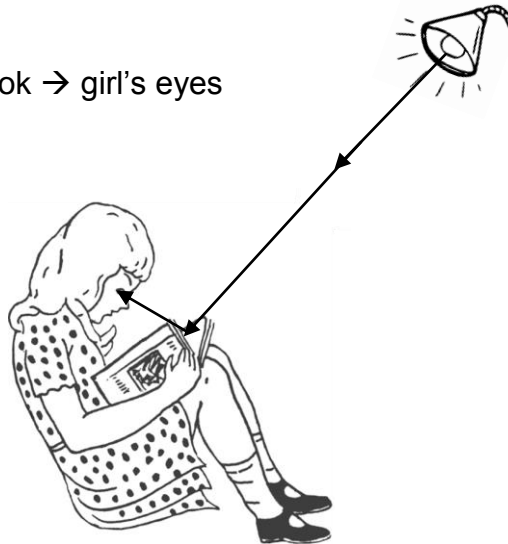
b) State two ways to decrease the length of the shadow.

(i) Move the object further from the light source.

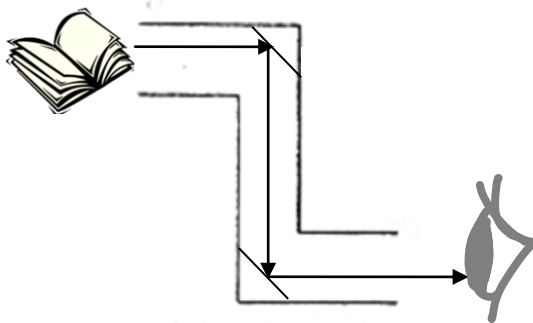
(ii) Move the light source further from the object.

### Examples of light paths

1. light from lamp → book → girl's eyes



2. Light path in a periscope



### 3. Light travels in a straight line

