

## 4.5 Formation of shadows

1. Light travels in  lines.
2. Anything which  the path of light will cast a shadow.
3. A shadow is always formed  the object.
4. A light shadow is formed when light is  blocked.
5. A dark shadow is formed when light is  blocked.

### Shapes of shadows

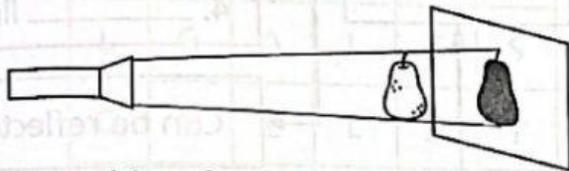
6. A shadow resembles the  of an object but it may not be of similar size as the object.
7. The shadows of an object can be different depending on the  of the object with respect to the light source.

### Sizes of shadows

8. The size of a shadow depends on the  of the object from the light source.

9. If the object is  from the light source, there will be a smaller shadow.

10. If the object is nearer to the light source, there will be a  shadow.



Object further from the light source

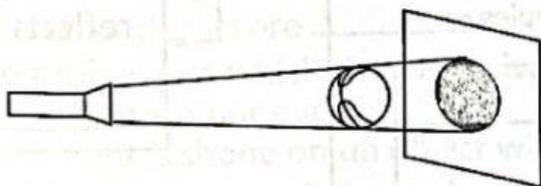


Object nearer to the light source

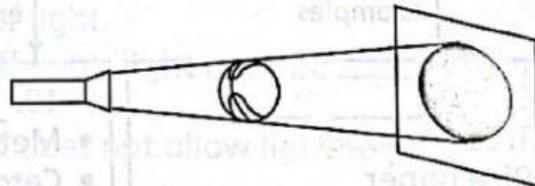
11. The size of a shadow also depends on the  of the object from the screen.

12. If the object is nearer to the screen, there will be a  shadow.

13. If the object is  from the screen, there will be a bigger shadow.



Object nearer to the screen



Object further from the screen

1. Light is a form of \_\_\_\_\_.
2. Plants make food in the presence of \_\_\_\_\_.
3. Objects which give off light on their own are known as \_\_\_\_\_ of light.
4. The Sun and stars are \_\_\_\_\_ sources of light.
5. To see an object which does not give off light, light must be \_\_\_\_\_ from the object into our eyes.
6. When light is shone on an object which does not allow light to pass through it, a \_\_\_\_\_ is formed.
7. Light travels in \_\_\_\_\_ lines.
8. The \_\_\_\_\_ of a shadow changes when the distance between the light source and the object changes.
9. When a light source is shining at different sides of an object, the \_\_\_\_\_ of the shadows formed will be different.
10. When light is shone on a book, a \_\_\_\_\_ shadow is formed.

