Light travels in straight lines. When light hits an object, it is reflected (bounces off) and enters our eyes. This is how we see the object.

<https://www.bbc.co.uk/bitesize/topics/zbssgk7/articles/zp7f8mn>

Why shadows have the same shape as the object that cast them

Shadows are formed when an **\_\_\_\_\_\_** object blocks a ray of light. A shadow can change size depending on the \_\_\_\_\_\_ the object casting it is from the light source. Shadows can also be \_\_\_\_\_\_ or \_\_\_\_\_\_\_ depending on the \_\_\_\_\_ of the light source. However, a shadow is always the same \_\_\_\_\_ 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 \_\_\_\_\_ the light rays that hit it, while the rest of the light can continue \_\_\_\_\_\_\_. Therefore, the shadow it casts is \_\_\_\_\_\_\_\_\_\_\_ shape.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| opaque | elongated | Light source | block | angle |
| shape | distance | Exactly the same | shortened | travelling |