

Watch the video and answer the following questions:

How did the greeks think we see?

How does light travel?

Can light bend?

How do we actually see?

Is light instantaneous or does it travel at a certain speed?

What did Newton use to separate light?

How do we see colour?

Is light a wave or particle? Explain.

Name _____ Class _____ Date _____

1 Write S (for sound) or L (for light) next to each of these statements.

- | | |
|--|--|
| a can travel through empty space _____ | d travels at 300 000 000 m/s in air _____ |
| b travels at 330 m/s in air _____ | e can travel through all solid objects _____ |
| c transverse wave _____ | f longitudinal wave _____ |

2 Draw lines to match the words to their meanings.

absorbed

a material that lets light pass through without scattering

transparent

a material that scatters the light passing through it

transmitted

when light bounces off a material

translucent

when light passes through a material

reflected

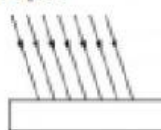
a material that light cannot pass through

opaque

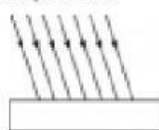
when light is taken into a material

3 Complete these diagrams to show what happens when light hits different materials.

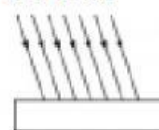
a opaque



b transparent



c translucent



4 a Label the pinhole camera using words from the box.

image pinhole screen

b Draw lines to show how the image is formed. One line has been started for you.

