

LIGHT ON THE MOVE

1

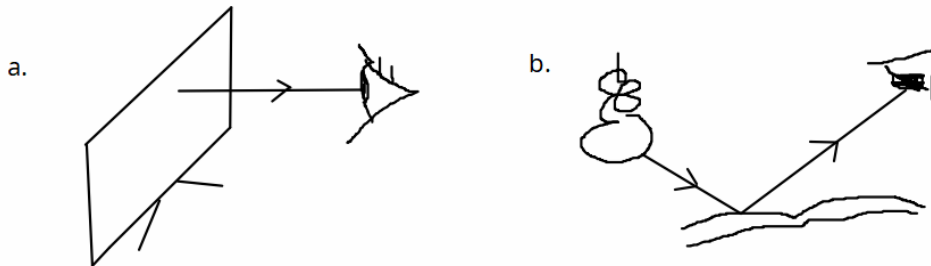
Look at photo A. Explain why you see the flashes before you hear the bangs.

1 Light travels faster than sound, so if the light and sound are made at the same time, the light reaches us before the sound.

2

Draw a sketch with light rays on to show how you can see:

a| a programme on TV b| the pages of a book.



- a. TV screen is a luminous object: an object that emits its own light.
Ex: The Sun, stars, fire, light bulb, glow worm, firefly.
- b. The book is a non-luminous object: an object that doesn't emit its own light, it needs a source of light to be seen.
Ex: a table, humans, planets, the moon.

3

Look at diagram D. Which material (X, Y or Z) is:

a| translucent

b| opaque?

Explain your answers.

3 a Z (it is letting most of the light pass through it, but the direction of the light is changed)

b Y (it is reflecting or absorbing all the light that hits it: no light can pass through)

5

Someone is singing in another room with the door closed. Explain why you can hear them but not see them.

5 Sound can pass through the materials that the door/wall is made of, but light cannot.