

# We are starting to look at...

The difference between a real source of light

And what is just a reflector

And that light can ONLY TRAVEL IN  
STRAIGHT LINES 

This week we are going to  
look more at....

# Reflections and mirrors

# Mirrors

- Mirrors are made of a flat piece of glass which is **transparent**.
- On the back is an extremely thin coating of silver which is shiny. Light bounces off this very well.
- This is called a **reflection**.
- But look carefully at your mirror now! The image in a mirror is **always the other way round!**

This week you can have fun  
doing some investigating with  
mirrors.

(I hope you're able to find some mirrors  
and a light source (torch) around your  
house?)

# Investigations 1 and 2: Predicting Reflections.

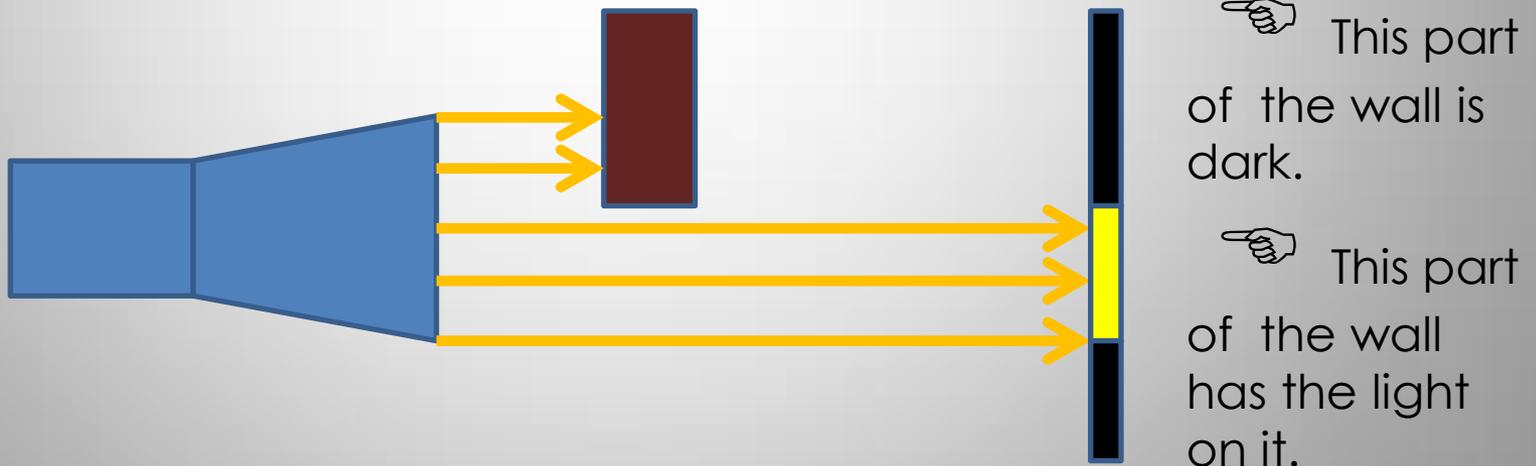
- Now that you know that mirror images are the other way round you are going to draw a reflection of yourself in a mirror.
- You are also going to see how the position of a mirror can change the reflection of a drawing of a different object.

# Reflections

- Surfaces that are shiny reflect light well and produce reflections.
- Surfaces that are dull reflect only a little light or none at all.

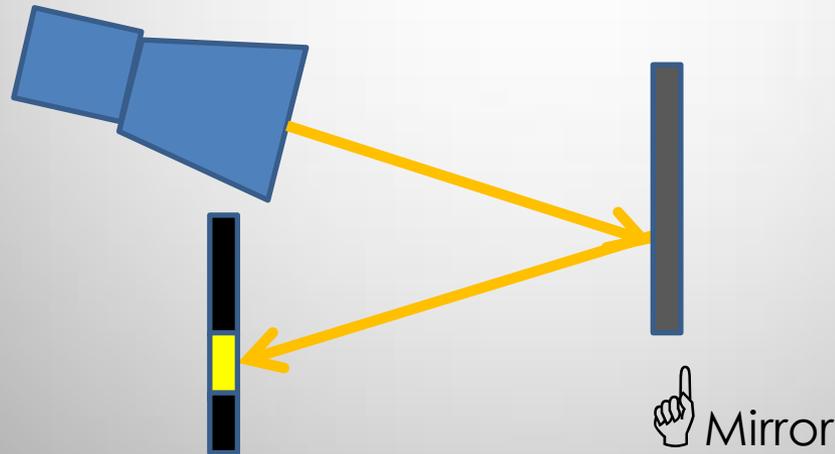
# Light travels from a source in straight lines

- We have learnt that light can only travel in straight lines.
- If we block the light it can't bend round the object.



# Using reflection to bend light

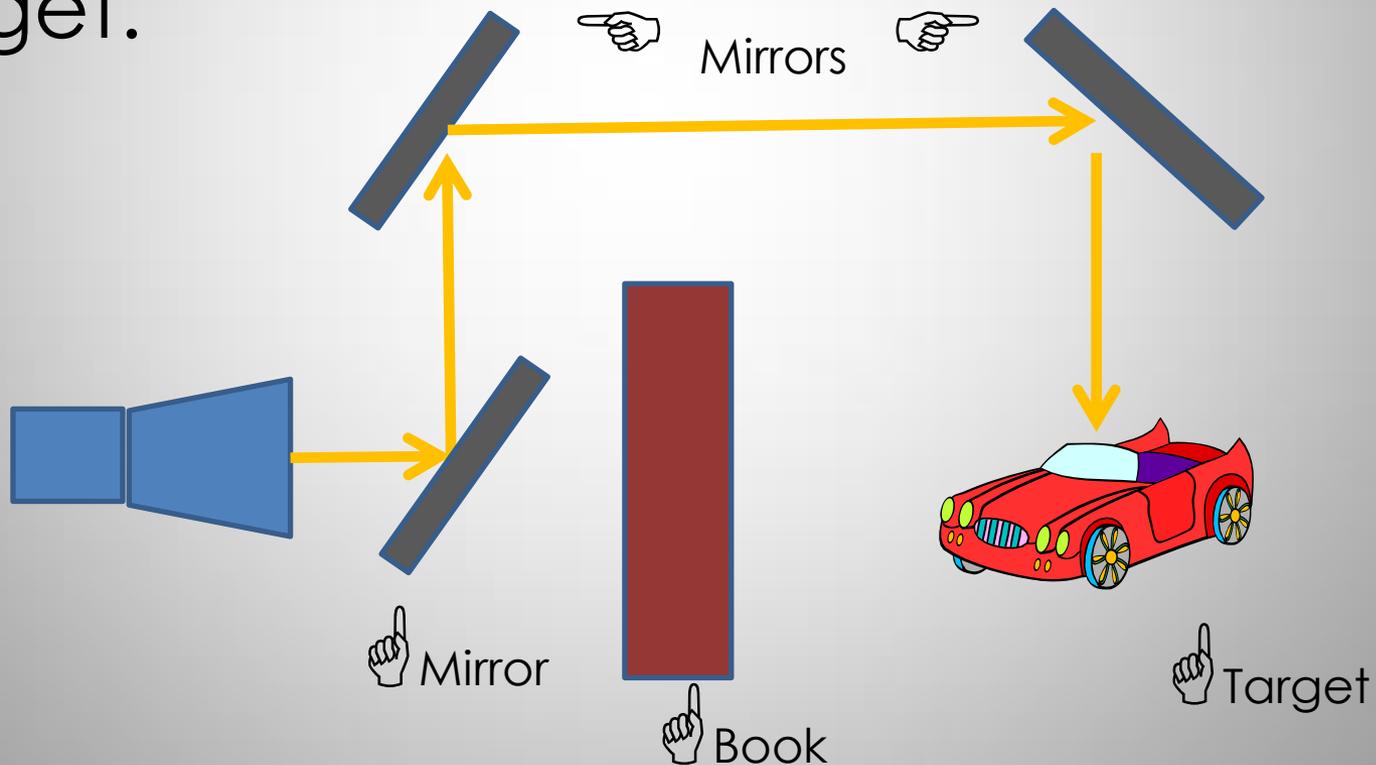
- You are going to use mirrors to bend the light!
- Actually, the light reflection will be bouncing off the mirrors, still in straight lines.



You can move the torch (light source) to change the direction of the reflected light.

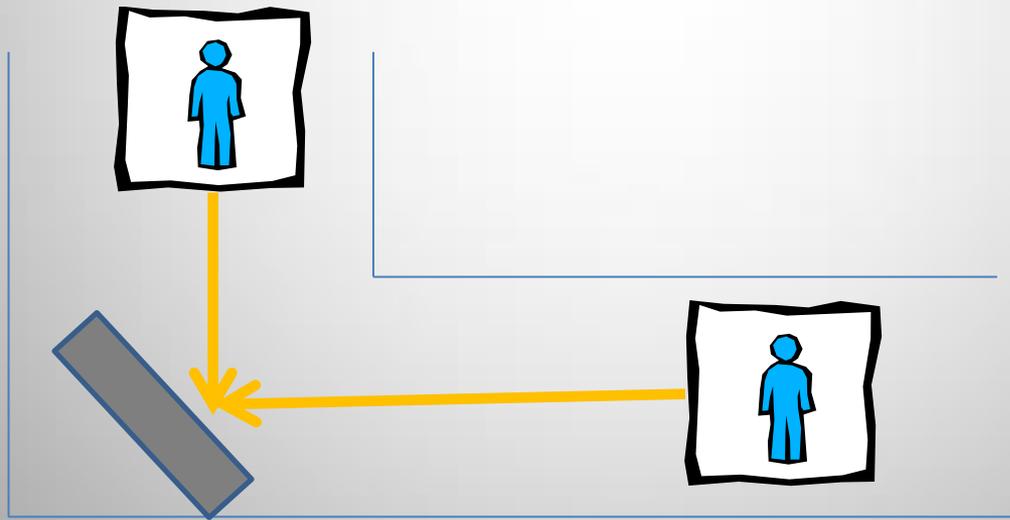
# Investigation 3: Round the bend!

- You will use mirrors to bounce a beam of light around a book so it will hit a target.



# Investigation 4: Seeing round corners

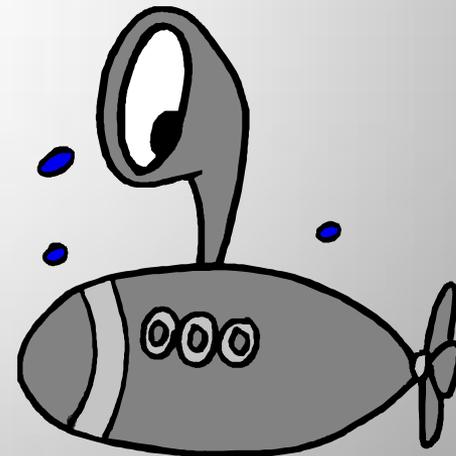
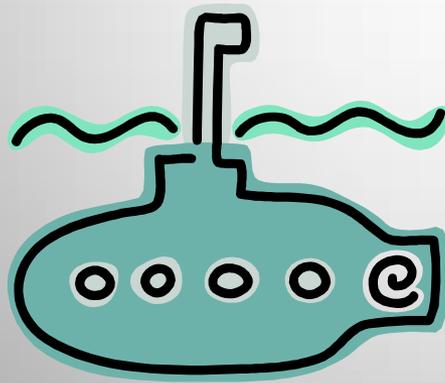
- You are also going to go into the corridor and use a mirror to see around corners. Use string to mark the light path.



What do you notice about the angle formed between the lines?

# Why would we need to bend light?

- Can you think of an object that uses this effect to see round corners and out of water?
- Yes, a Periscope!



# Scientific recording

- Remember light is always drawn as a straight line with an arrow.....USE A RULER!!



- A mirror is always drawn as a thin rectangle. USE A RULER!!

