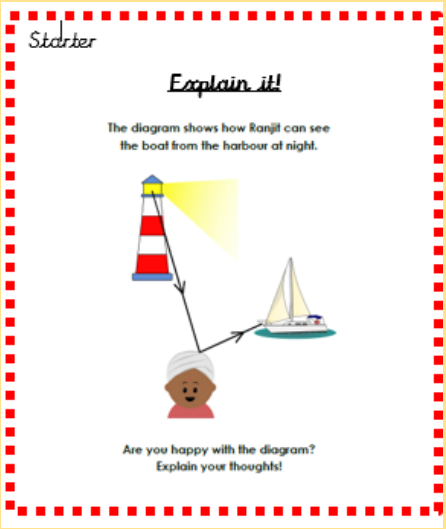
Starter

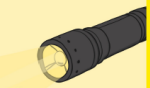


Answer in full sentences.

LO: to identify the process of reflection.

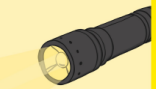
Reflection Explanation 1

Reflection is the process of light bouncing off an object or surface. Only shiny objects like metal reflect light. If the shiny object is in the Sun, it will reflect light well. Rough and dull objects do not reflect light.



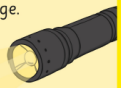
Reflection Explanation 2

Reflection is when light bounces off an object or surface. All objects reflect light when they are held at the correct angle. Light can bounce off any object or surface, but they need to be at a special angle.



Reflection Explanation 3

Reflection is the name for light bouncing off objects or surfaces. Smooth and shiny surfaces reflect light clearly, but all objects reflect light. Dull and rough surfaces scatter the reflected rays so they do not create a clear image.



Reflection Explanation 4

Reflection is when light is blocked by an object and a shadow is formed. The light cannot get through some objects, so reflection causes a darker area behind the object. Not all objects reflect light to make a shadow, just opaque ones.



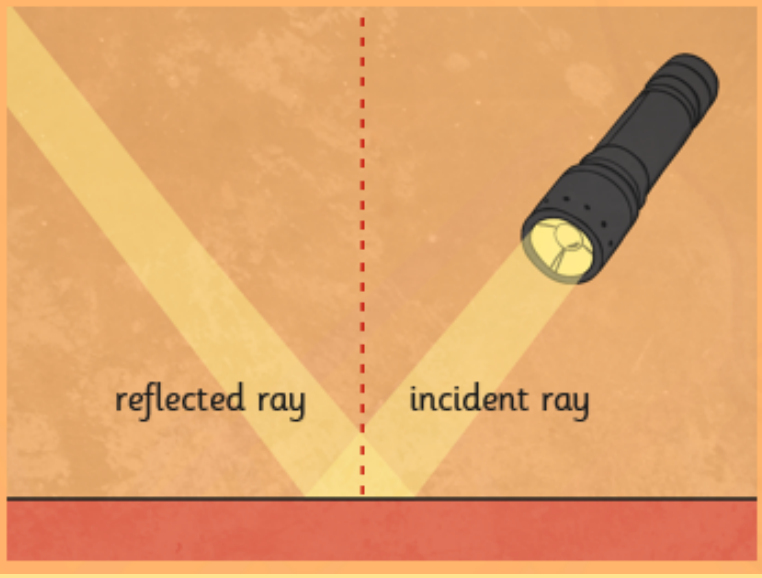
Which one is correct?

LO: to identify the process of reflection.

Read (print)

Reflection is when light bounces off a surface, changing the direction of a ray of light. All objects reflect light; smooth and shiny surface reflect all the rays of light at the same angle, rather than scattering the rays of light like rough or dull surfaces.

The light ray that hits the mirror or other object is described as the incident ray, and the ray of light that bounces off is known as the reflected ray.

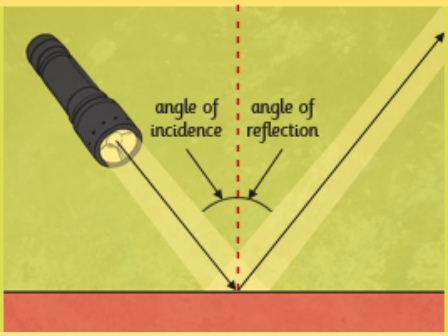


LO: to identify the process of reflection.

When rays of light reflect, they obey the law of reflection: The angle of incidence always equals the angle of reflection.

The red dashed line is called the 'normal' line. It is drawn at a right angle, or perpendicular to the reflector.

The angle of incidence is the angle between the normal line and the incident ray of light.



The angle of reflection is the angle between the normal line and the reflected ray of light.

LO: to identify the process of reflection.

I do

True or false?

All objects reflect light.

LO: to identify the process of reflection.

we do

True or false?

The light ray that hits a mirror is a reflected ray.

LO: to identify the process of reflection.

you do

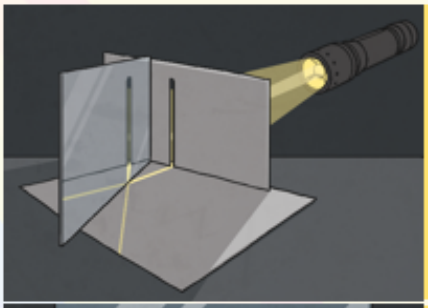
True or false?

The light ray that hits a mirror is a reflected ray.

All objects reflect light.

LO: to identify the process of reflection.

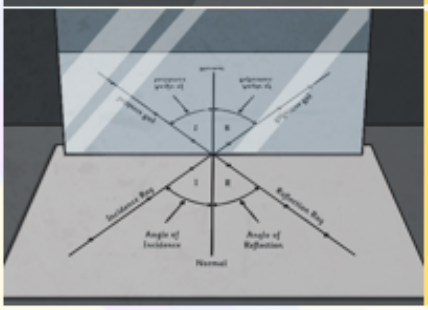
Look around your house to see if you can find any objects that would allow you to do the experiment.



Use modelling clay to stand a mirror up on a piece of white paper.

Make a very narrow slit in a piece of card.

Dim the lights and shine a torch through the slit towards the mirror.



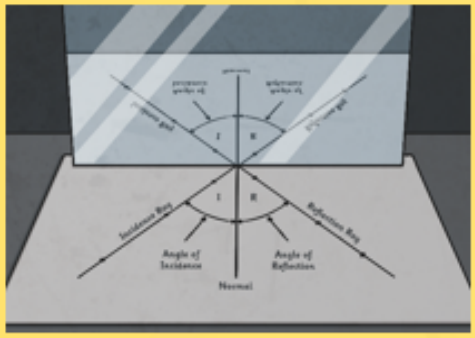
On the white paper, look for the incident ray and the reflected ray of light. You may have to play around with the angle of the torch and the distance you hold it from the mirror.

LO: to identify the process of reflection.

Use a pencil and ruler to draw the incident and reflected rays on the paper.

Draw a dashed line perpendicular to the mirror, from the point where the incident and reflected rays meet. This is the normal line.

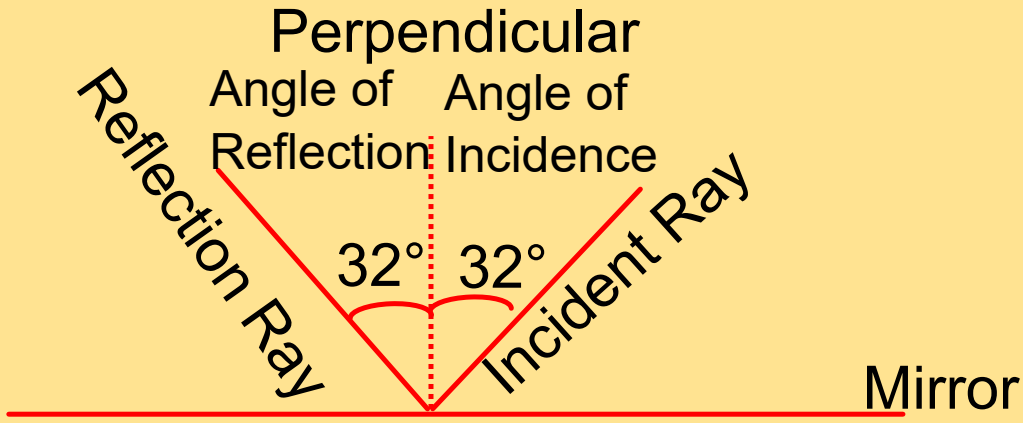
Use a protractor to measure the angle formed between the incident ray and the normal line.



On the white paper, look for the incident ray and the reflected ray of light. You may have to play around with the angle of the torch and the distance you hold it from the mirror.

Model

-Make sure you have a labelled diagram from the experiment. If not, draw one now:



-Write an explanation of what you found out:

When we shone the torch at the mirror, it created two lines: an incident ray (from the torch) and a reflection ray (from the mirror). We drew a perpendicular line from the mirror, and measured the angles. We discovered that the angle of incidence is equal to the angle of reflection.We found out that when rays of light reflect, they obey the laws of reflection.

Our experiment was/wasn't successful because....