

Waves

1 Match the words to the descriptions.

These objects do not make their own light. We see them because they reflect light. The Moon and planets are this.

light

These objects are sources of light. They make their own light. Stars are this.

luminous

Objects that do not transmit light, such as walls, trees and humans.

non-luminous

This travels in straight lines. Its speed is 300 000 000 m/s.

reflected

It is a light source.

Sun

opaque

Light that has bounced off an object is....

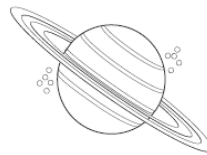
2 Look at these objects.



Moon



mug of tea



Saturn



torch



window



stars



bonfire



fireworks



cat

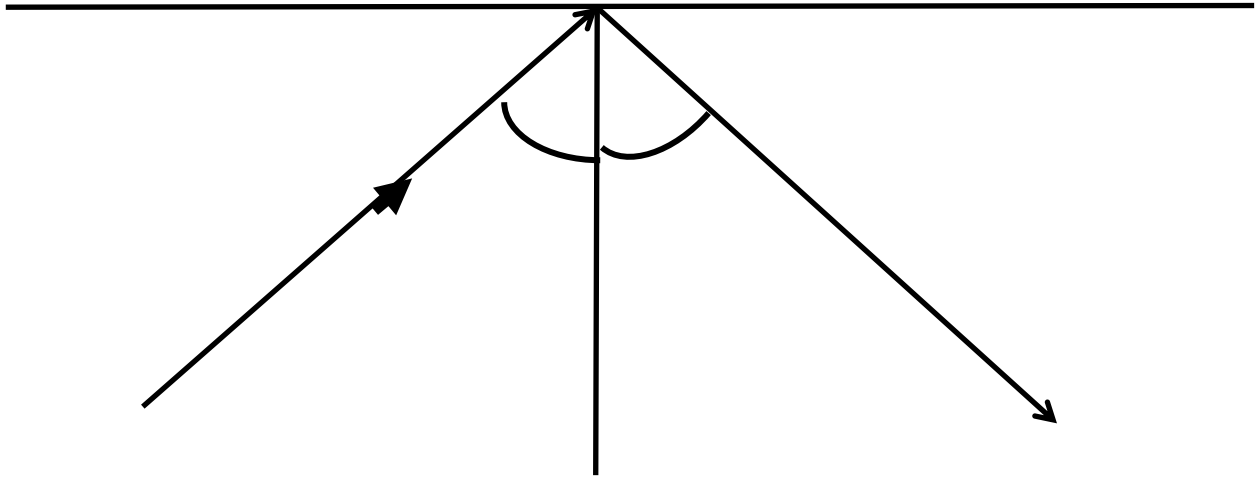
- Which are luminous objects? Colour them in yellow.
- Which are non-luminous objects? Shade them in grey.
- Which objects are opaque? Circle them in green.
- Which objects are transparent? Circle them in red.

Waves

Reflection and ray diagrams

Watch the clip - https://www.youtube.com/watch?v=V0Z_nk5JS_E

Label the diagram below and state the rule for reflection on a smooth surface like a mirror.



Key words

mirror

incident ray

angle of incidence

reflected ray

angle of reflection

normal

Rule of Reflection

The rule for reflection on a smooth surface is _____

Questions

1 A clear image of the light bulb is seen on the white surface if there is specular reflection. State the surface(s) that gave specular reflection.

2 You cannot see a clear image if there is diffuse reflection. State the surface(s) that gave diffuse reflection.

