Year 9 – Physics Revision List

Density Topic

Volume = length x width x height

Density = mass ÷ volume

Arrangement of atoms in solids liquids and gases

Heating and cooling terms

Melting

Freezing

Boiling

Condensation

Evaporation

Motion

Speed = Distance ÷ Time

Rearrange this equation using triangle

Use distance time graphs to recognise when a car is at rest or moving and to read distance travelled.

Tell by the slope of the line when the car is travelling fastest or at rest.

Light

Reflection Summary

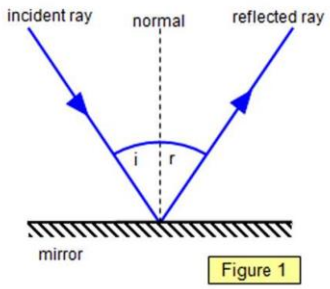


Figure 1

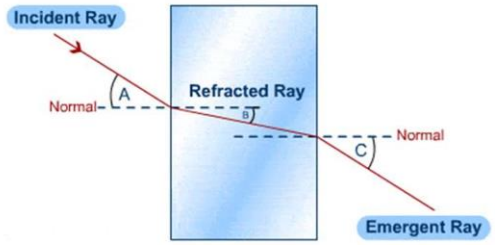
The ray of light travelling towards the mirror is called the incident ray.
The perpendicular to the mirror where the incident ray strike it is called the normal.
The ray that travels away from the mirror is called the reflected ray.
The angle between the incident ray and the normal is called the angle of incidence (i).
The angle between the reflected ray and the normal is called the angle of reflection (r).

Law of reflection – the angle of incidence equals the angle of reflection.

Refraction

Refraction is the change in direction of a beam of light as it travels from one material to another due to a change in the speed of light in the different materials.

The greater the change in speed the greater the angle bends.



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

The angle between the normal and the refracted ray is called the angle of refraction.

The angle between the normal and the emergent ray is called the angle of emergence.