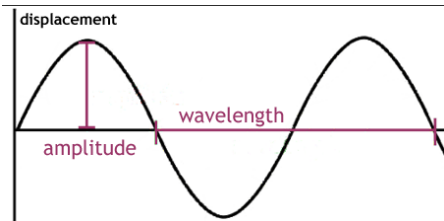
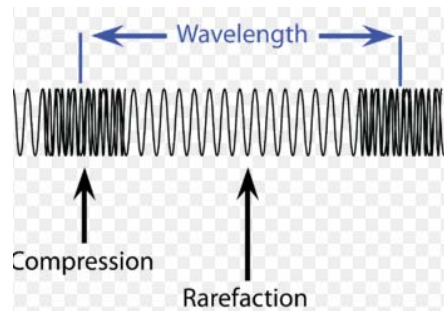


Y7 - Knowledge organiser – 7.9 – Sound & Light



Types of wave 1

- Longitudinal



Sound 2

- Made when particles are forced to vibrate.
- Sound is a **longitudinal wave**.
- Medium: the material the sound travels through.
- The denser the medium, the faster sound travels.
- Sounds do not travel through a vacuum.

Sound keywords 3

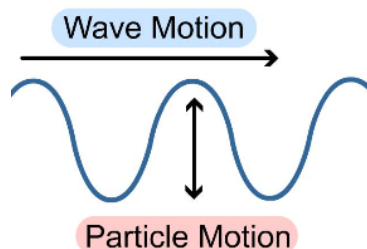
- **Amplitude**: the maximum amount of vibration measured from the middle position.
- **Wavelength**: distance between two of the same point on the wave.
- **Frequency**: the number of waves produced in one second.

Oscilloscopes 4

- Oscilloscopes are devices used to see patterns of sound waves.
- The **amplitude** of the wave tells us the **volume**.
- The **frequency** of the wave tells us the **pitch**.

Light 5

- Light is a **transverse** wave.
- When light hits an object, some is absorbed and some is reflected.

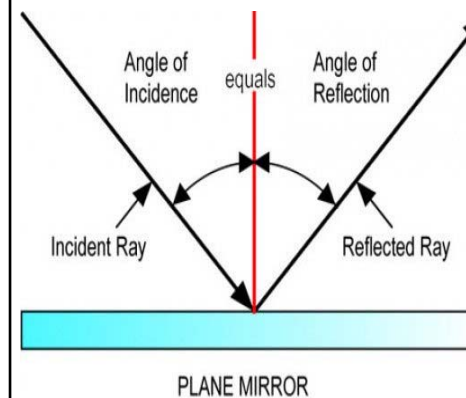


Ray diagrams 6

- **Incident ray**: the incoming ray
- **Reflected ray**: the outgoing ray
- **Normal line**: a line drawn at right angles to the surface, where angles are measured from.

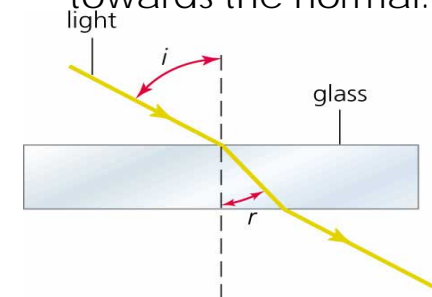
Reflection 7

- **Reflection**: Light bounces off a medium.



Refraction 8

- **Refraction**: change in direction of light going from one material to another.
- Entering more dense medium – bends towards the normal.



K.O. Quiz

1. Define solvent.
2. Define solution.
3. What unit do we measure speed in?
4. Write down the triangle for calculating speed.
5. What is relative motion?
6. Draw a diagram to show reflection.
7. Label this diagram.
8. Draw a diagram to show refraction.
9. Label this diagram.
10. What is the 90degree line called?