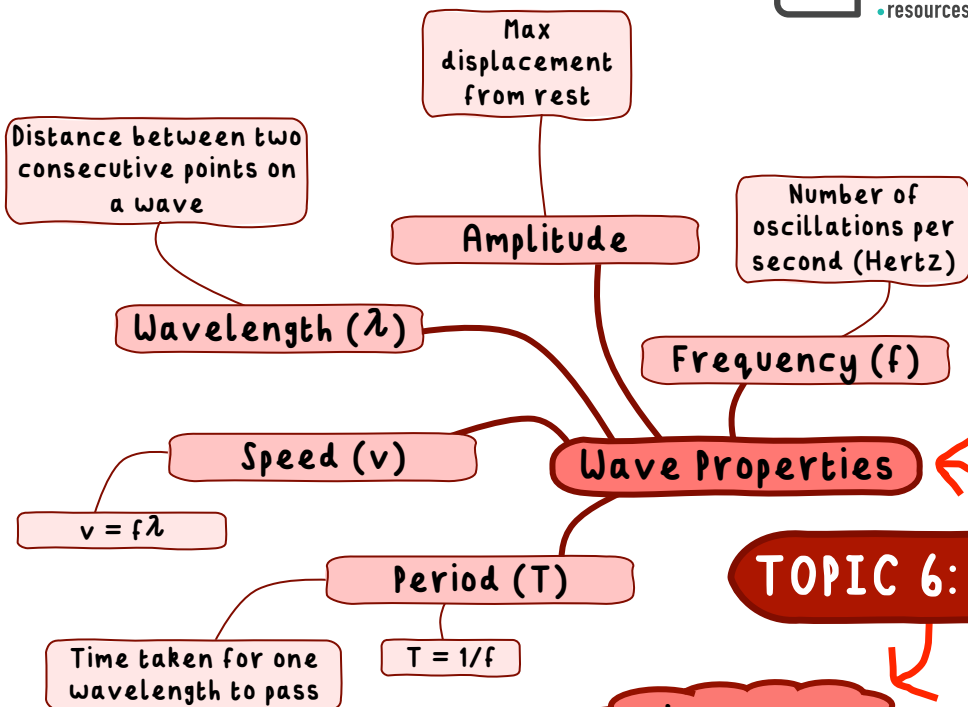
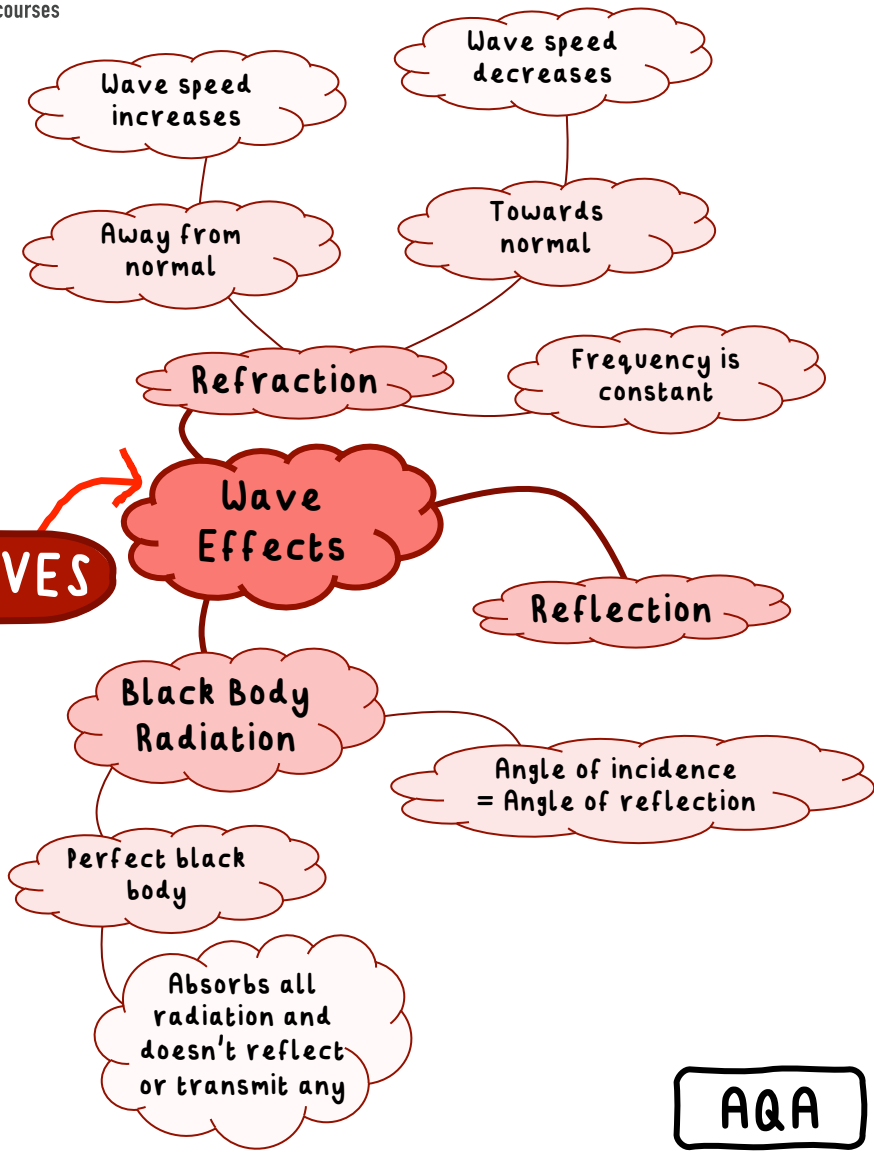


TOPIC 6: WAVES

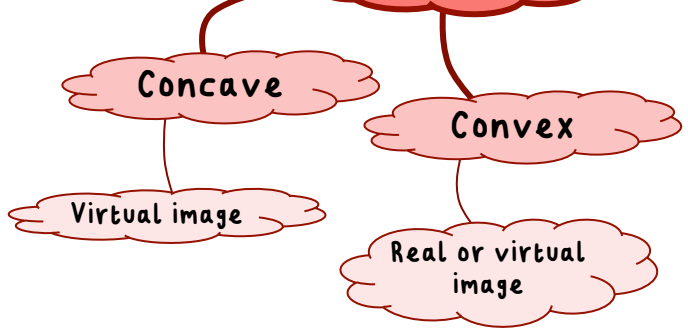
Wave Properties



Wave Effects



Lenses



KEY
'Physics only'
written in clouds.

AQA





TOPIC 6: TYPES OF WAVES

Oscillations perpendicular to direction of propagation

Oscillations parallel to energy transfer

Transverse

Longitudinal

Sound

Sound causes vibrations in the eardrum

Ultrasound

Above the frequency of human hearing

Used in foetal scanning, ultrasound is emitted

Seismic Waves

P-waves

S-waves

Solids and liquids

Solids only

Audible range: 20 Hz - 20kHz

Water Waves

Electromagnetic Waves

Continuous Spectrum

High Frequency / Short Wavelength

Gamma Rays

Originate from changes in an atom's nucleus

X-Rays

Ionising radiation which can cause mutations in cells and lead to cancer

Ultraviolet

Increases risk of skin cancer

Light (Visible)

The range of wavelengths we can see with our eyes

Infrared

Heaters and infrared cameras

Fibre optic communications

Microwaves

Cooking food and communications

Radio Waves

Television and radio

Low Frequency / Long Wavelength

KEY
'Higher tier only' written in green.
'Physics only' written in clouds.

To remember order: Giant Xylophones Usually Live In Music Rooms

AQA

