

P1 Fact Sheet – Waves

Name.....

Question	Answer
Waves transfer...	Energy
Waves may be either...	transverse or longitudinal
Electromagnetic waves are...	transverse
Sound waves are...	longitudinal
Mechanical waves can be...	(either) transverse or longitudinal
The number of wave peaks in one second is the...	frequency
The distance from one wave peak to the next is the...	wavelength
The height of a wave peak from the mid-line is the...	amplitude
Sound waves cause...	vibrations
Longitudinal waves, like sound show areas of...	Compression and rarefaction
The frequency of a sound wave determines its...	pitch
The amplitude of a sound wave determines its...	loudness
The wave equation is...	$v = fw$
The wave equation is obeyed by...	all waves
What can you say about the speed of all types of electromagnetic wave?	They travel at the same speed through a vacuum
Electromagnetic waves form a continuous...	spectrum
Write the names of the types of radiation which make up the EM Spectrum in order from longest to shortest wavelength:	<ul style="list-style-type: none"> i) radio waves ii) microwaves iii) infra-red radiation iv) visible light v) ultraviolet vi) x-rays vii) gamma rays

The four types of electromagnetic wave that can be used for communication are...	<ul style="list-style-type: none"> i) radio waves ii) microwaves iii) visible light iv) infra-red waves
What type of wave is used in mobile phone communication?	microwave
List two ways that the direction of a wave can be changed.	<ul style="list-style-type: none"> refraction reflection
One thing that causes a wave to spread out is...	diffraction
Where does refraction happen?	At an interface between two materials of different density
A line drawn perpendicular to a reflecting surface from the point of incidence is called...	the normal
The angle of reflection is always equal to what?	the angle of incidence
A reflected sound wave is called...	An echo
The image produced in a plane mirror is...	<ul style="list-style-type: none"> i) virtual ii) upright iii) laterally inverted