

Edexcel GCSE Physics

Topic 5.7-5.14 - The Electromagnetic Spectrum

Flashcards

What types of waves are electromagnetic waves?

What types of waves are electromagnetic waves?

Transverse

What do electromagnetic waves transfer?

What do electromagnetic waves transfer?

Energy (**not** matter).

What type of spectrum do
electromagnetic waves form?

What type of spectrum do electromagnetic waves form?

A continuous spectrum.

List the order of the electromagnetic spectrum in order of increasing wavelength

List the order of the electromagnetic spectrum in order of increasing wavelength

Gamma, X Ray, UV, Visible, Infrared,
Microwaves, Radio

What is the highest frequency
electromagnetic wave?

What is the highest frequency electromagnetic wave?

Gamma waves

What is the highest energy
electromagnetic wave?

What is the highest energy electromagnetic wave?

Gamma waves

What properties are shared by all
electromagnetic waves?

What properties are shared by all electromagnetic waves?

- They are all transverse waves
- They all travel at the same speed
(3×10^8 m/s)
- They can travel through a vacuum

What range of frequencies of
electromagnetic waves can be detected
by the human eye?

What range of frequencies of electromagnetic waves can be detected by the human eye?

400-700 nanometres

How do the speeds of EM radiation differ
in a vacuum and in air?

How do the speeds of EM radiation differ in a vacuum and in air?

Electromagnetic waves all travel at the same speed in a vacuum and in air.

What can happen when radiation strikes an object?

What can happen when radiation strikes an object?

It can be...

- transmitted
- reflected
- absorbed