

WJEC England GCSE Physics

6.4 - Colour and Frequency

Flashcards

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What determines the colour of visible light waves?



What determines the colour of visible light waves?

The wavelength and frequency of the light waves.



What colour of visible light has the highest frequency?



What colour of visible light has the highest frequency?

Blue.



What colour of visible light has the largest wavelength?



What colour of visible light has the largest wavelength?

Red.



How does a red colour filter work?



How does a red colour filter work?

It absorbs all wavelengths other than red; only red light is emitted so only red light can be seen by viewers.



What is meant by the term ‘specular reflection’?



What is meant by the term ‘specular reflection’?

Rays are reflected from a smooth surface in a single direction.



What is meant by the term 'diffuse reflection'?



What is meant by the term 'diffuse reflection'?

Reflection from a rough surface which causes scattering.



What governs the colour of an opaque object?



What governs the colour of an opaque object?

- Different objects reflect different wavelengths of light by different amounts.
- The wavelengths that are most strongly reflected determine the colour.



What happens to the wavelengths of light that aren't reflected by an opaque object?



What happens to the wavelengths of light that aren't reflected by an opaque object?

Any wavelengths that aren't reflected are absorbed by the object.



What colour does an object appear if all wavelengths are reflected by equal amounts?



What colour does an object appear if all wavelengths are reflected by equal amounts?

White.



What colour does an object appear if all wavelengths are absorbed?



What colour does an object appear if all wavelengths are absorbed?

Black.

