



A Level Physics Online

Eduqas Physics – Component 3

Module 1: The nature of waves

This topic covers the basic properties of transverse and longitudinal waves and the differences between them. It introduces the wave equation and gives learners the basic ideas and skills they need to study both electromagnetic and sound waves.

You should be able to demonstrate and show your understanding of:	Progress and understanding:			
	1	2	3	4
The idea that a progressive wave transfers energy without any transfer of matter				
The difference between transverse and longitudinal waves				
The term polarisation				
The terms in phase and in antiphase				
The terms displacement, amplitude, wavelength, frequency, period and velocity of a wave				
Graphs of displacement against time, and displacement against position for transverse waves only				
The equation $c = f\lambda$				
The idea that all points on wavefronts oscillate in phase, and that wave propagation directions (rays) are at right angles to wavefronts				
SPECIFIED PRACTICAL WORK				
Measurement of the intensity variations for polarisation				

