

Wave Properties

Physics

The quantities describing any wave, and how they relate.

The defining quantities.

Quantity	Is	Unit
Wavelength λ	Distance between identical points	m
Frequency f	Cycles per second	Hz
Period T	Time for one cycle	s
Amplitude A	Maximum displacement	m
Speed v	$v = f\lambda$	m/s
Phase difference	Fraction of a cycle apart	rad or $^{\circ}$

When a wave enters a new medium, frequency stays the same and wavelength changes. Speed changes with the medium.