

GLOSSARY

A

amplitude the maximum displacement from equilibrium (446)

antinode a point in a standing wave, halfway between two nodes, at which the largest amplitude occurs (463)

C

constructive interference interference in which individual displacements on the same side of the equilibrium position are added together to form the resultant wave (460)

crest the highest point above the equilibrium position (454)

D

destructive interference interference in which individual displacements on opposite sides of the equilibrium position are added together to form the resultant wave (461)

F

frequency the number of cycles or vibrations per unit of time (446)

L

longitudinal wave a wave whose particles vibrate parallel to the direction of wave motion (455)

M

mechanical wave a wave that propagates through a deformable, elastic medium (452)

medium the material through which a disturbance travels (452)

N

node a point in a standing wave that always undergoes complete destructive interference and therefore is stationary (463)

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P

period the time it takes to execute a complete cycle of motion (446)

periodic wave a wave whose source is some form of periodic motion (453)

pulse wave a single nonperiodic disturbance (453)

S

simple harmonic motion vibration about an equilibrium position in which a restoring force is proportional to the displacement from equilibrium (439)

standing wave a wave pattern that results when two waves of the same frequency, wavelength, and amplitude travel in opposite directions and interfere (463)

T

transverse wave a wave whose particles vibrate perpendicular to the direction of wave motion (454)

trough the lowest point below the equilibrium position (454)

W

wavelength the distance between two adjacent similar points of the wave, such as from crest to crest or from trough to trough (454)