Physics

Name:

Waves and Sound – Wave Comparisons

Date:

Objective: Compare the three types of waves studied in the course and identify similarities and differences between the three. Complete the table with appropriate terms or diagrams

	Water	Sound	Light (EM spectrum)
Source(s) [what causes]	wind, earthquakes, (disturbances)	Vibrations- changes in air pressure	Sun -chemical rxns photons
Type of wave [direction of particle movement]	longitudinal water-surface wave	longitudinal	transverse
Relative Speed	slow	700 m/hr	400–700 nm fastest
Relative Wavelengths	long	shorter	shortest
Relative Frequencies	low	middle vary	Very high
Medium required	solid, liquid, gas	solid, liquid, gas	no medium
Increasing Amplitude is perceived as _____	taller wave	louder loudness	brightness
Increased frequency is perceived as _____	more waves	pitch high pitch high frequency	changes color