

Vocabulary Cards

# Wave

a back-and-forth or up-and-down motion that travels from one place to another with velocity (speed and direction)

## Mechanical wave

a wave that travels through matter

# Amplitude

the up or down, back or forth motion of a wave from its resting place

# Wavelength

the distance from a point on the wave to the same point on the next wave

# Crest

highest peak of the wave

# Trough

lowest point of the wave

# Frequency

number of times the wave moves up and down in a certain amount of time

# Hertz

one wavelength per second  
(used to measure frequency)

# Wave speed

distance a wave travels in a  
certain amount of time  
(velocity)

# Sound

waves of frequency between  
about 20 and 20,000 hertz

# Vibrate

a fast movement to and from  
or from side to side

# Oscillate

a fast movement to and from  
or from side to side

# Soundproof

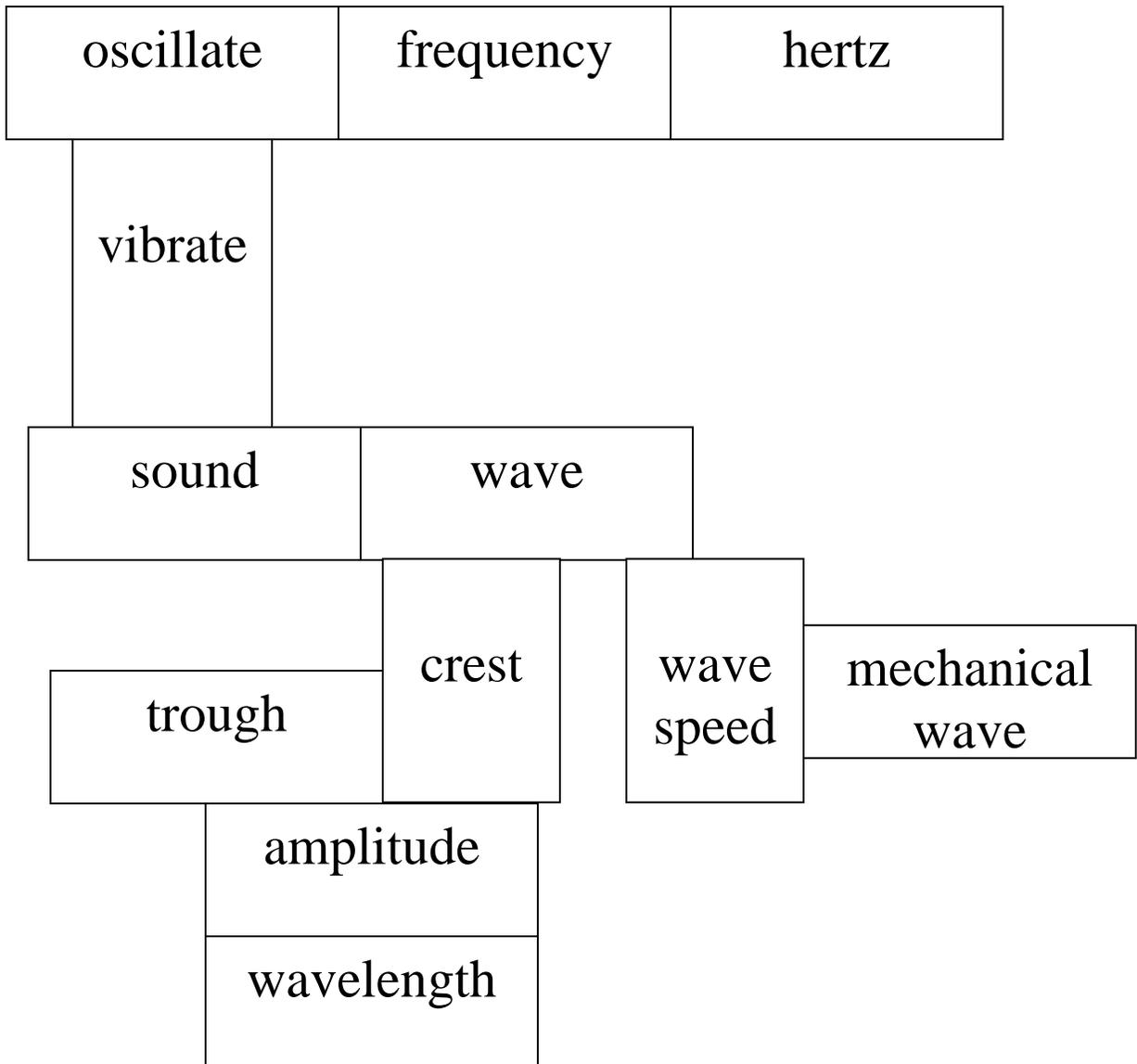
to insulate in order to stop the passage of sound waves

# Media

any *material* used to move a force or effect

# We Are Related

(example)



1. Sound is a wave. We hear sound because of the vibrations that touch our eardrums. Oscillate means the same as vibrate. Frequency is the number of oscillations in a given time. Frequency is measured in hertz.
2. Wave speed is the distance a wave travels in a given time. Mechanical waves are waves that travel through matter and waves travel at different speeds through different types of matter.
3. The crest is the highest point of a wave. The trough is the opposite of crest. Amplitude is how high or how low the crest or trough is. Ways to measure wavelength is from trough to trough or from crest to crest.