Drawing Soundwaves

Frequency = **how often** the waves go by. This will determine the **pitch** of the sound.

Low Frequency = Low Pitch	Medium Frequency = Medium Pitch	High Frequency = High Pitch
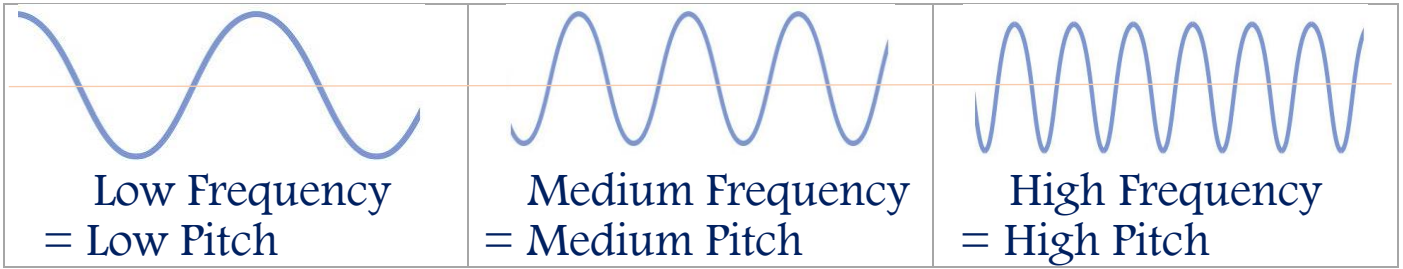
Amplitude = **size** of the sound wave. It shows how much **energy** the wave is carrying.

You can think of it as **wave height**. This will determine the **volume** of the sound.

low amplitude
= quiet sound

medium amplitude
= medium volume

high amplitude
= loud sound
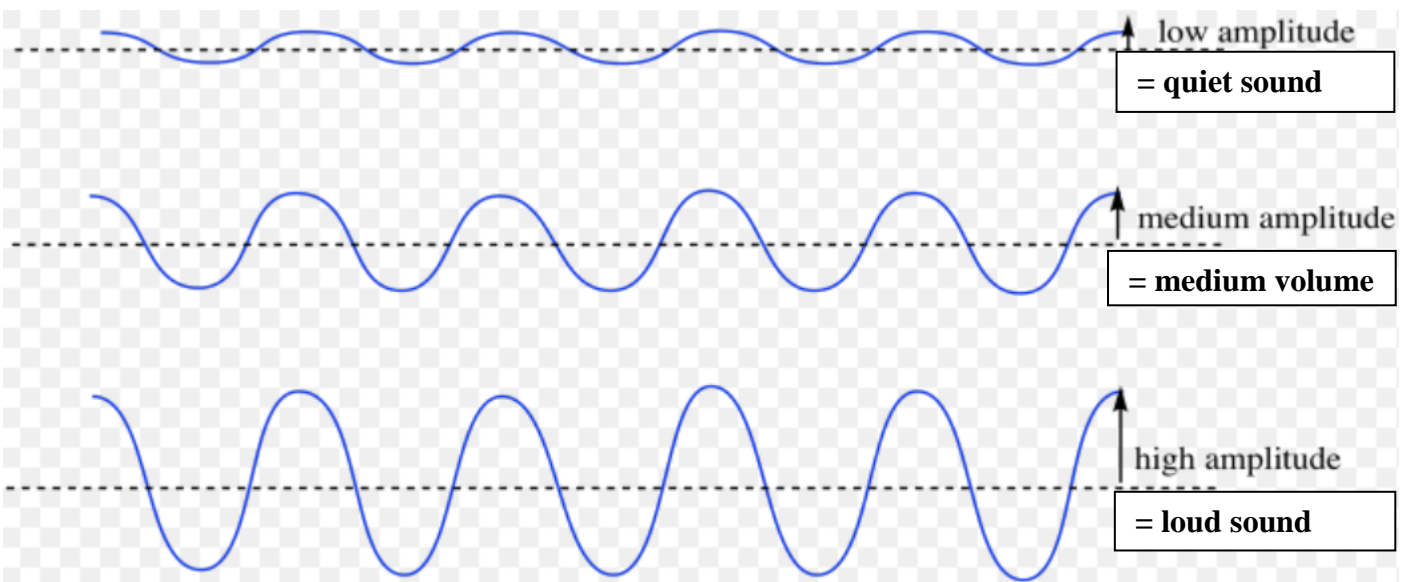
Experiment making a ruler vibrate over the edge of a desk.

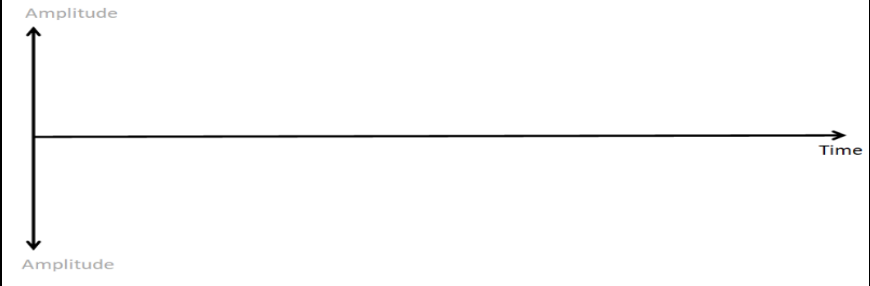Observe how the ruler moves and sounds when different lengths are allowed to vibrate.

When does it have a high frequency?
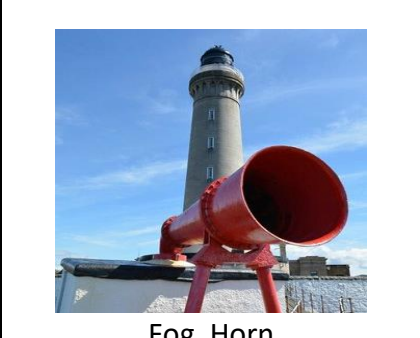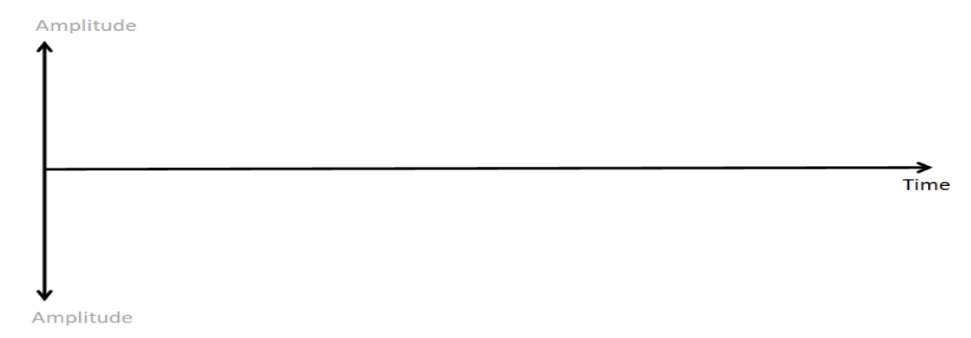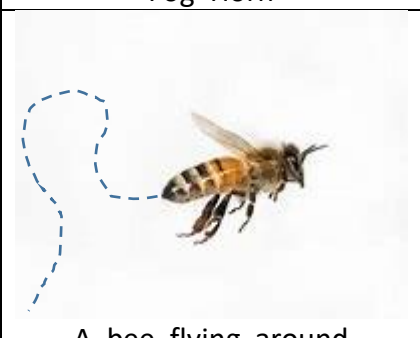When does it have a low frequency ?

When does it have a high amplitude?
When does it have a low amplitude?

Draw the sound waves that you would hear. Think about the sound's frequency (pitch) and amplitude (volume).

Amplitude ↑ ——————————→ Time ↓ Amplitude	4 inch
Amplitude ↑ ——————————→ Time ↓ Amplitude	6 inch
Amplitude ↑ ——————————→ Time ↓ Amplitude	11 inch

Referee's whistle	Amplitude ↑ ——————————→ Time ↓ Amplitude
Fog Horn	Amplitude ↑ ——————————→ Time ↓ Amplitude
A bee flying around	Amplitude ↑ ——————————→ Time ↓ Amplitude