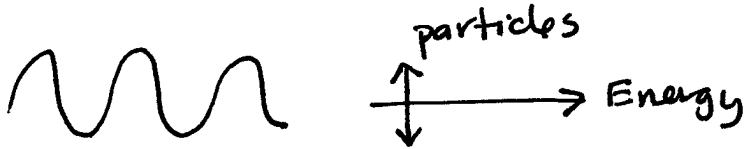
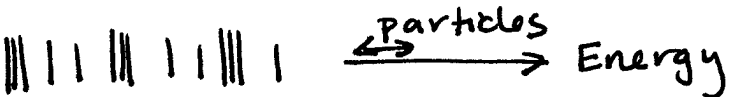


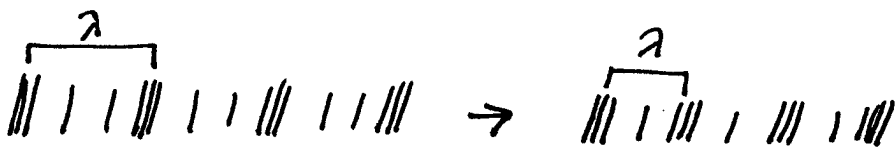
# Sound Notes

Transverse wave: 

Longitudinal Wave: (compression) 

Sound is a longitudinal wave

- a vibrating medium causes air to compress.
- compression travel outward & cause the eardrum to vibrate.



compressions closer together = increased frequency  
= increased pitch

increased amplitude = increased volume 

## Speed of sound

343 m/s at sea-level, in dry air, at 20°C

temperature effect: warmer air molecules are moving faster  $\therefore \uparrow \text{temp} = \uparrow \text{speed}$

density effect: the closer molecules are, the faster energy can be transmitted from one to the other.

vacuum	air	liquid	solid
↑	(slow)	→	(fast)
sound cannot travel			