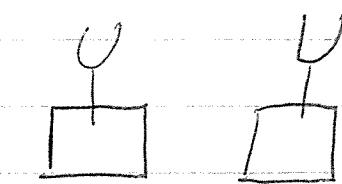
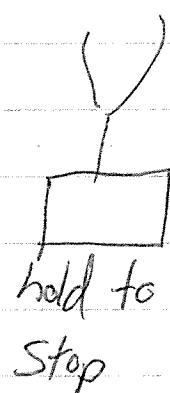
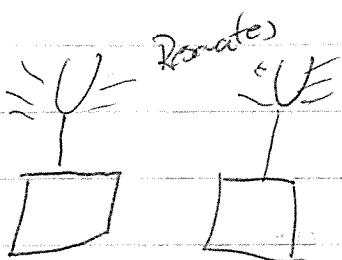
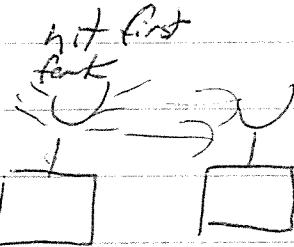


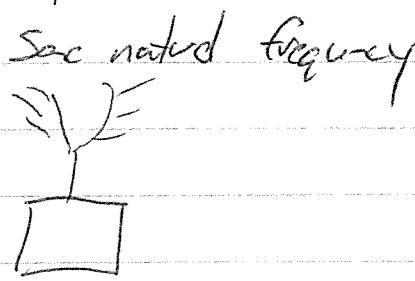
Resonance - When one object vibrating at the same natural frequency of a second object, forces the second object into vibration.



Neither Tuning fork  
vibrating



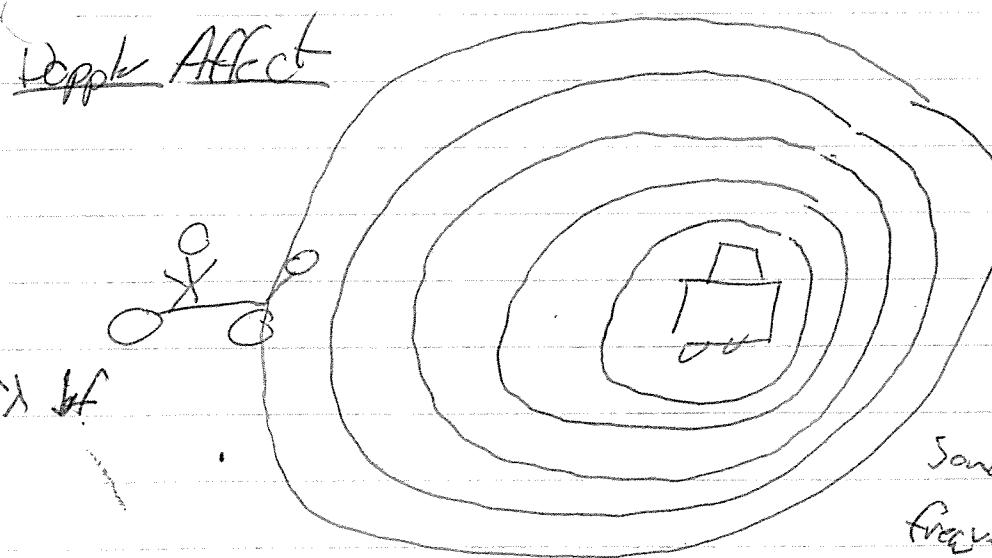
hold to  
Stop



!

OVER

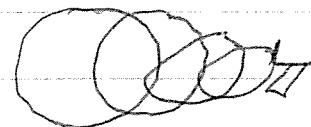
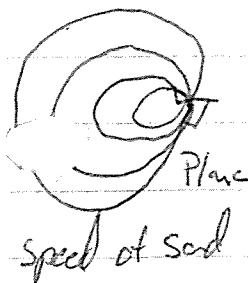
Doppler Effect



small rf

Sound waves reaching me  
front "High Pitch"

Shock Wave - Source moves faster than the wave itself



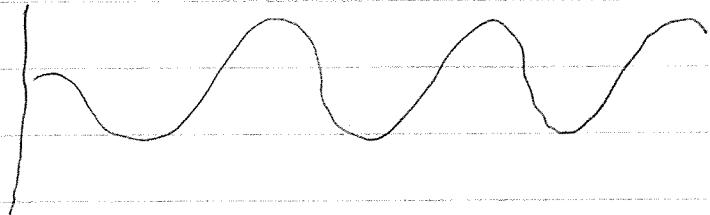
Plane

speed of sound

Aircraft moving faster than the speed of  
sound.

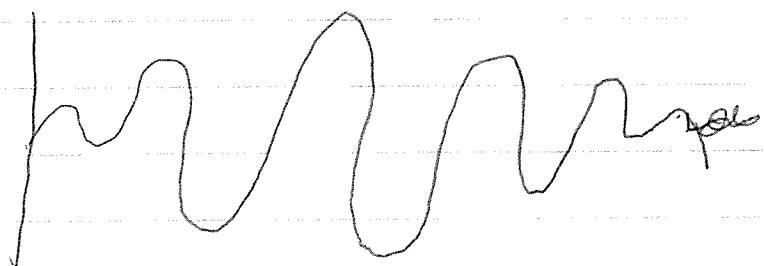
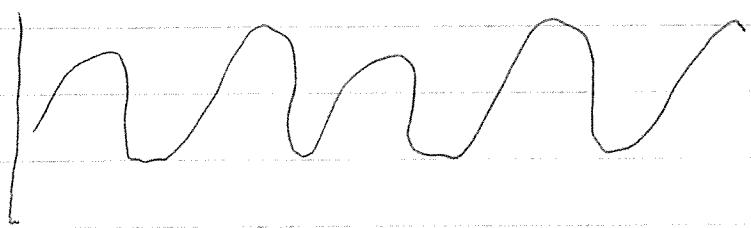
Beat Occurs as a result of superposition of two sound freq.  
at slightly different freq.

Has an amplitude that oscillates in intensity



Musical instruments

tuned against a standard note, so ~~the~~ beat disappears



Listener hears a pulsing variation in pitch.