

DOPPLER EFFECT

The change in wavelength of a wave that is emitted from a source that is moving away or toward an object.

SOUND

Doppler Demo:

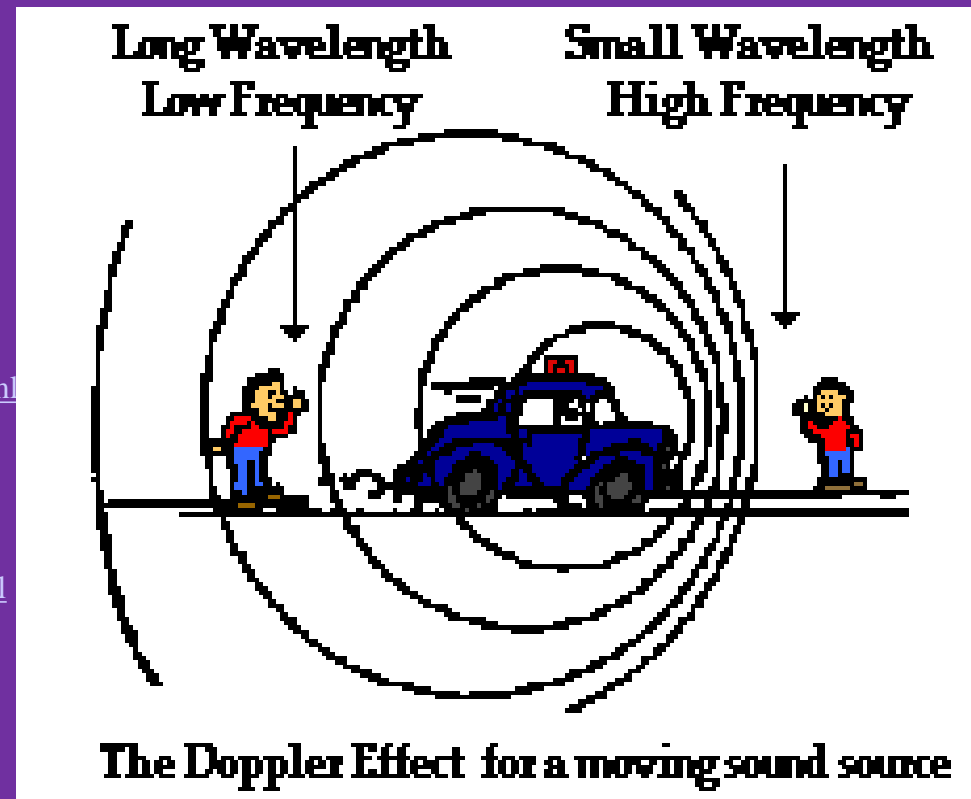
<http://www.kettering.edu/~drussell/Demos/doppler/doppler.html>

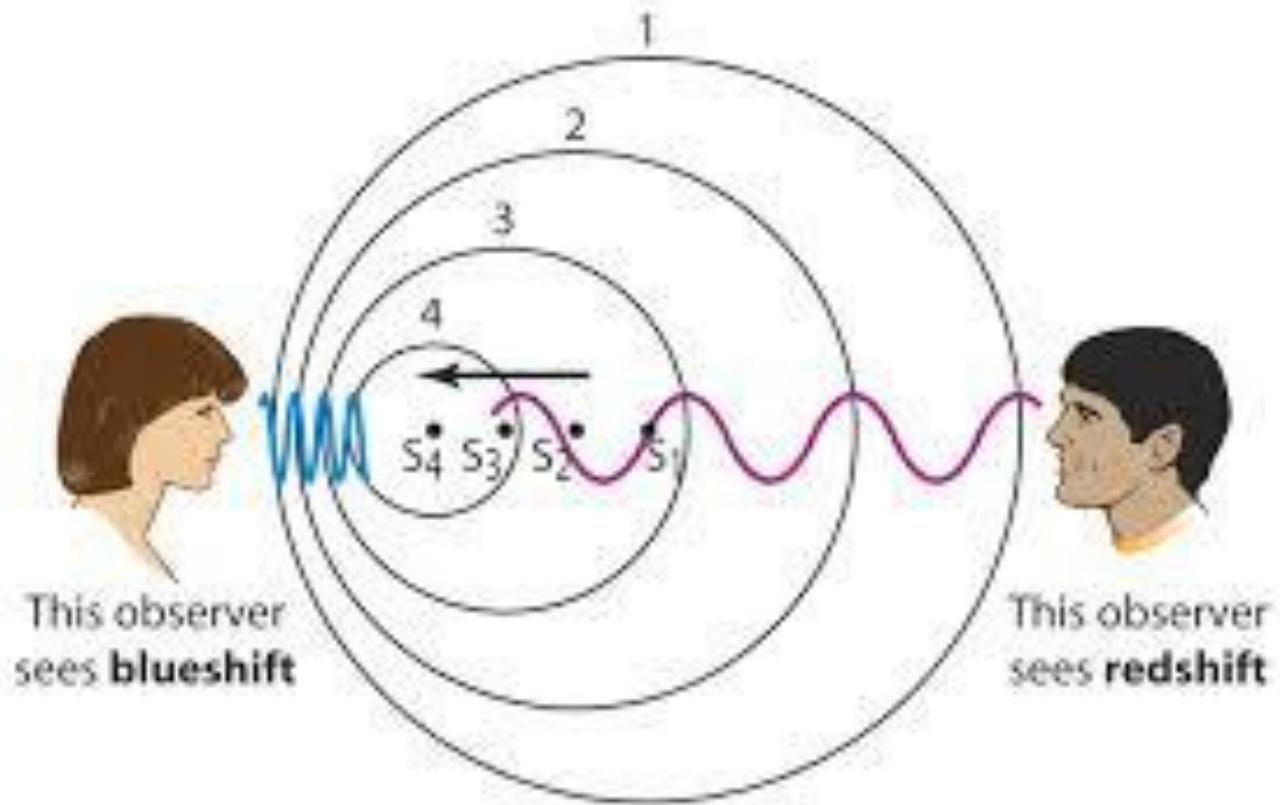
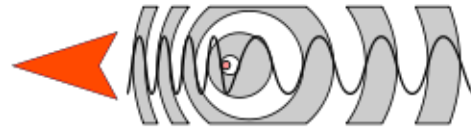
Siren Sound:

<http://hea-www.harvard.edu/~efortin/thesis/html/Doppler.shtml>

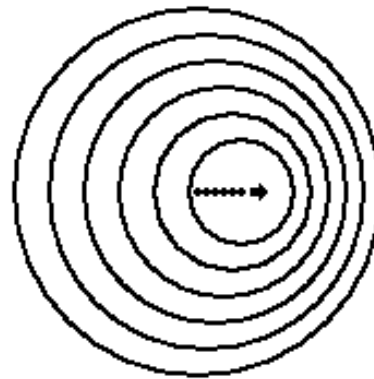
Moving Ambulance:

<http://www.walter-fendt.de/ph11e/dopplereff.htm>





OBJECT RECEDING:
LONG RED WAVES

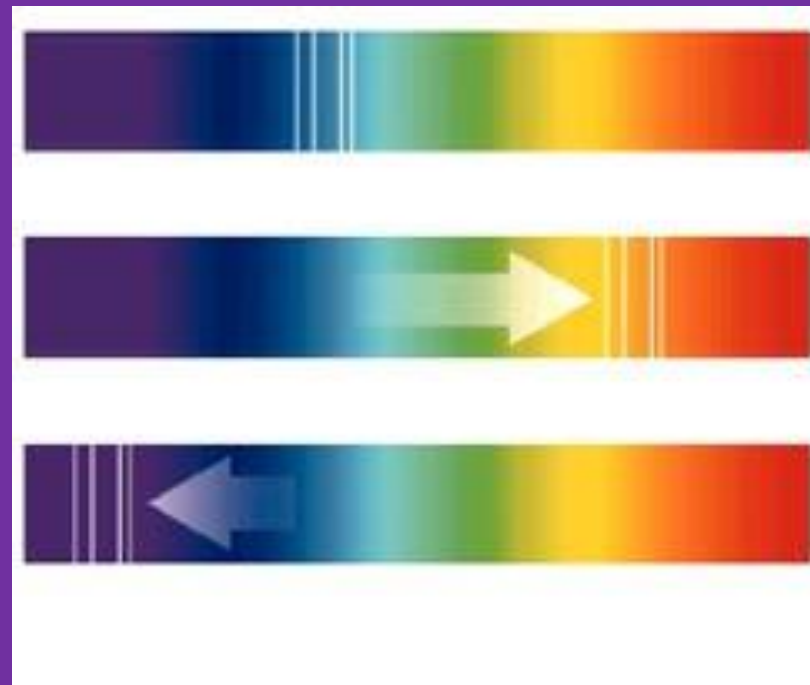


OBJECT APPROACHING:
SHORT BLUE WAVES

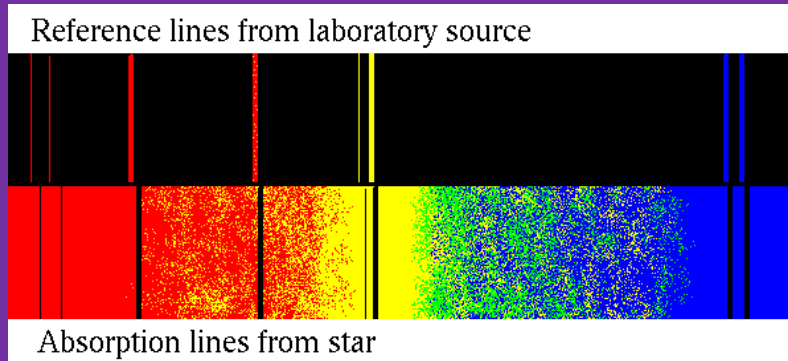


LIGHT

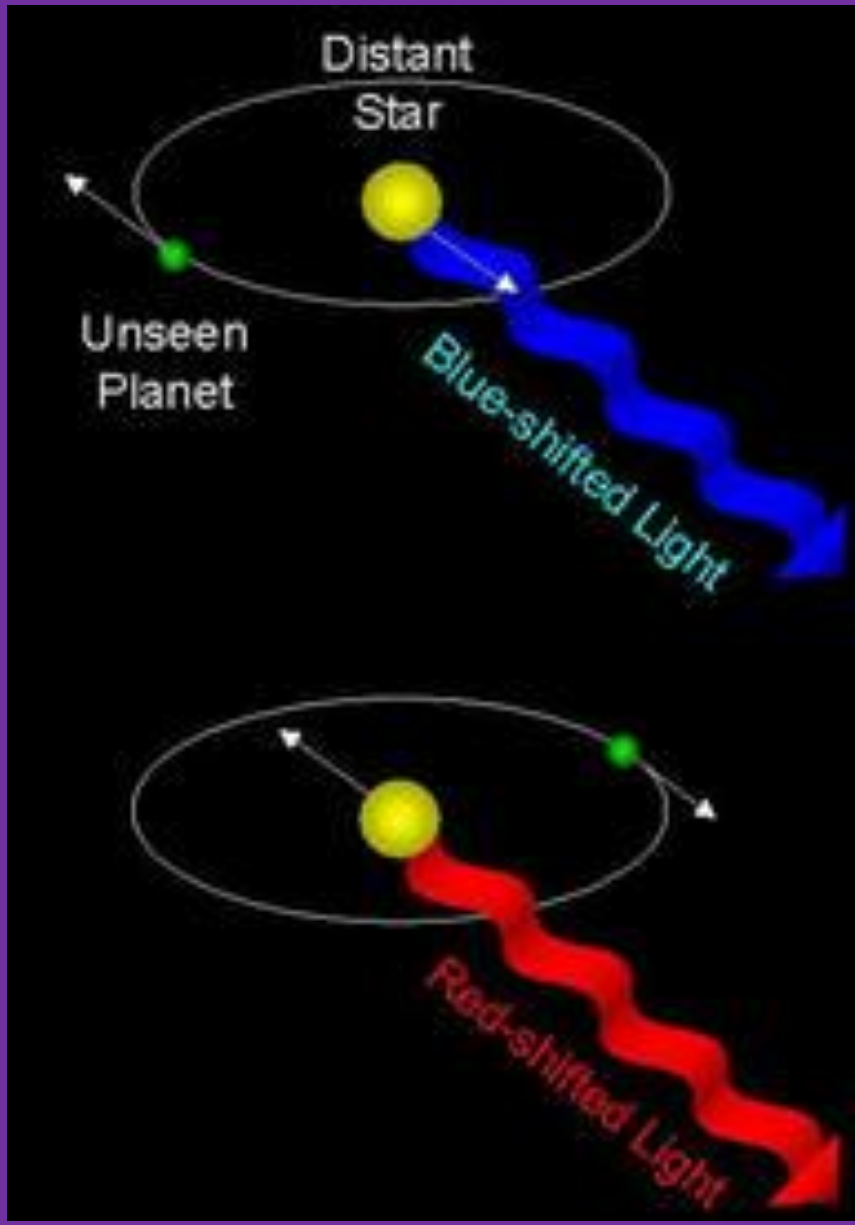
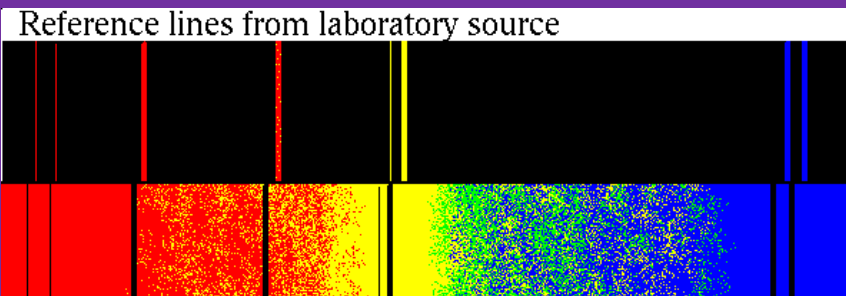
- In Astronomy, the Doppler effect is used to determine whether a star is **moving** away from or toward Earth
- Movement is determined by the **length** and **color** of the wave



- Moving **toward** → appears more **blue** because wavelength is **shorter**....BLUE SHIFT



- Moving **away** → appears more **red** because wavelength is **longer**.....RED SHIFT



STAR

