

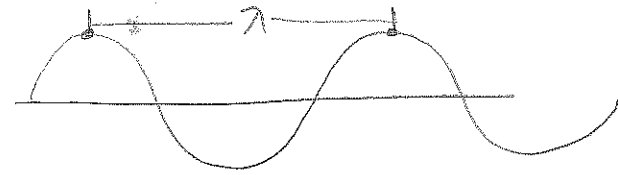
Physics II
Unit 7.3
Reflections

Review

- Light is a form of electromagnetic radiation with a specific wavelength

Wavelength (λ)

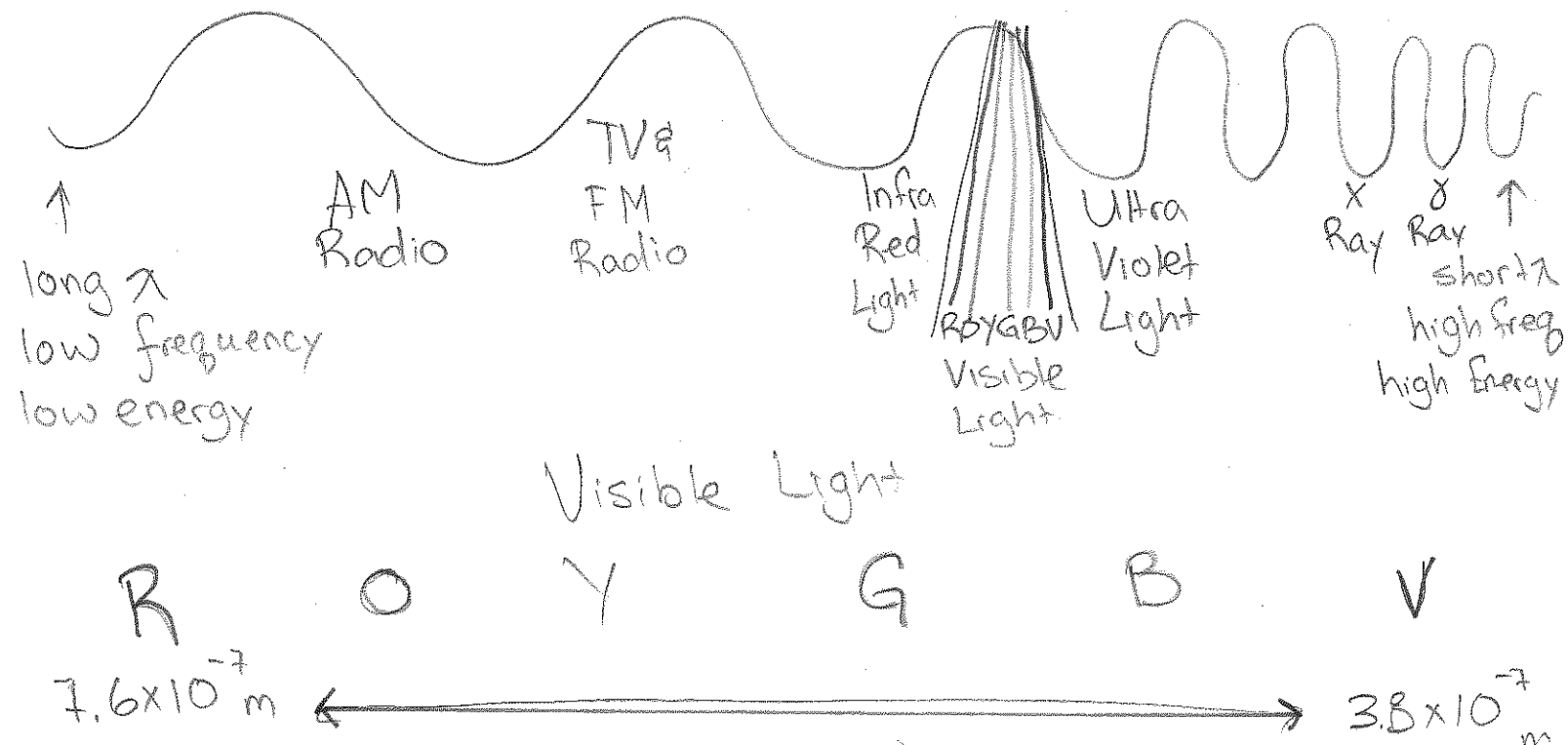
crest to crest
trough to trough



- Electromagnetic radiation is radiant energy that travels at the speed of light (3×10^8 m/s)

New

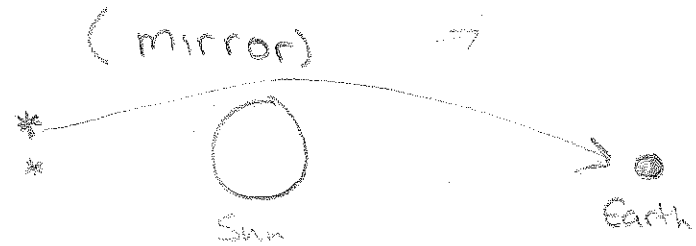
Electromagnetic Spectrum



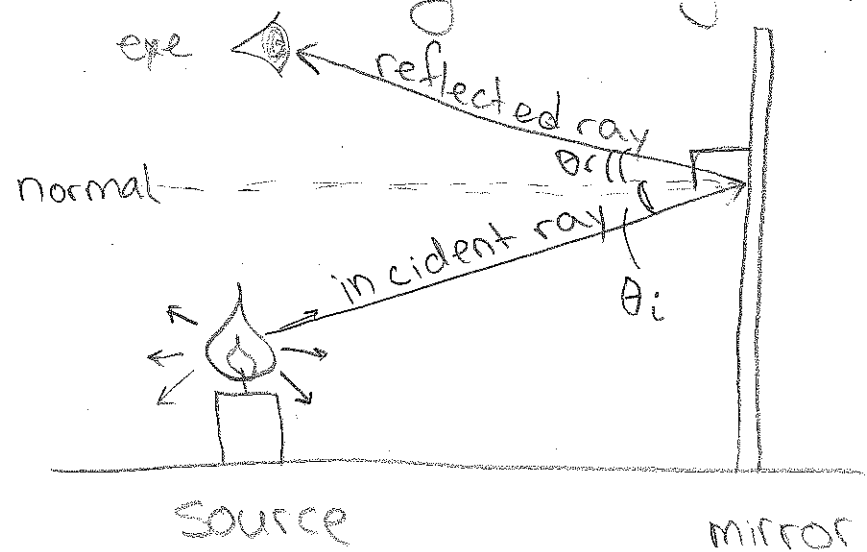
• Light mostly travels in straight lines across one medium (e.g. air, water) across short distances.

Things that alter the path of light:

- Refraction (a straw in water)
- Reflection (mirror)
- Gravity



Reflection Ray Diagrams



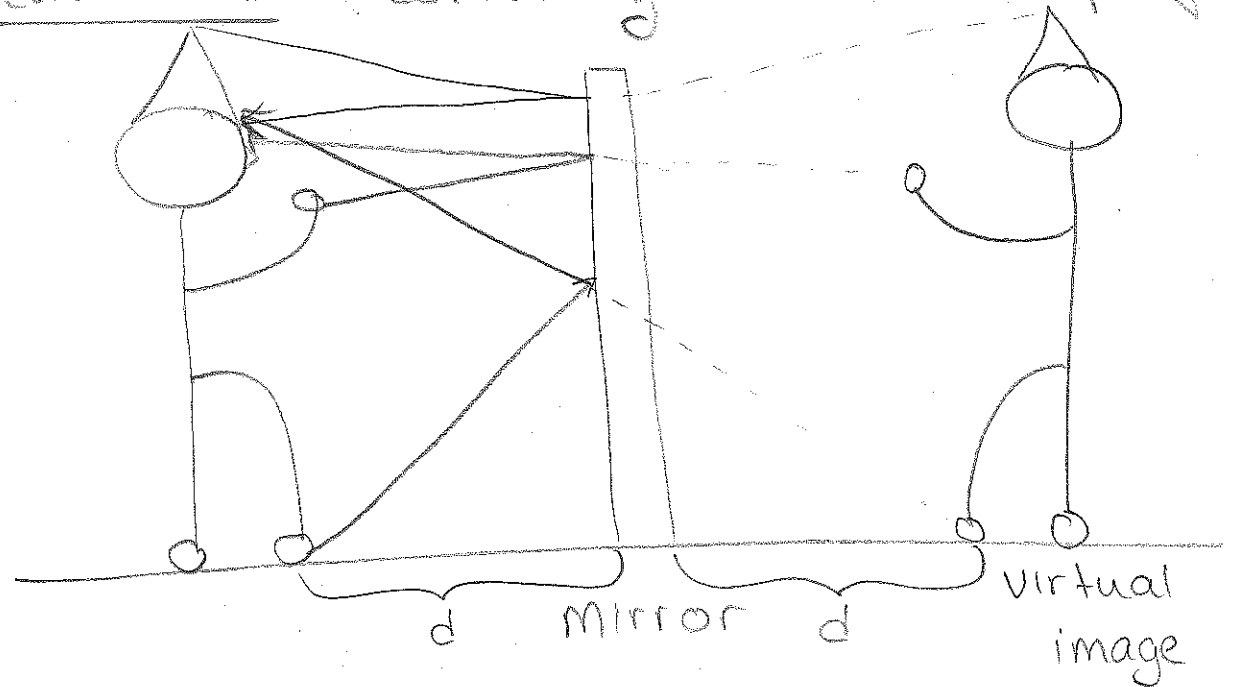
θ_i = angle of incidence

θ_r = angle of reflection

Law of Reflection

$$\theta_i = \theta_r$$

• The image you see in a mirror is called a virtual image. It is reversed from a real image (something that can be projected)



The image is

- the same size
- upright
- appear same distance away

Q2

~~frequencies~~ → wavelengths

Q4