

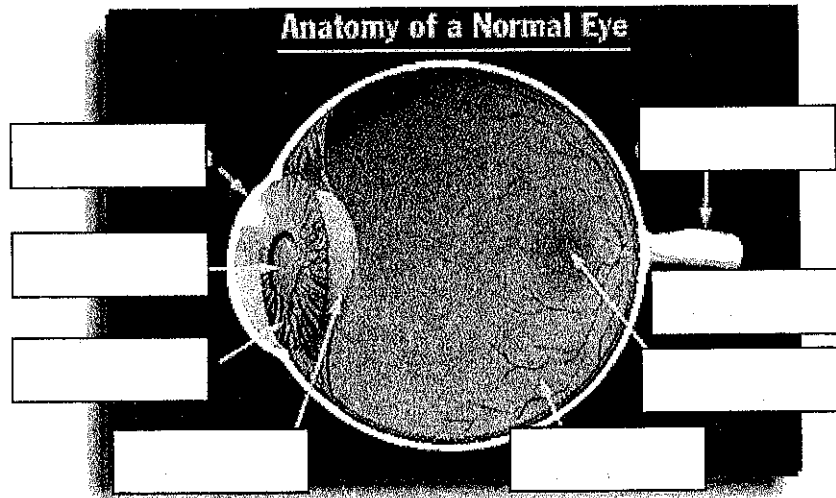
Waves

- 1) Draw and identify a transverse wave and a longitudinal wave.
  
- 2) Label the transverse wave above: resting point, crest, trough, wavelength, amplitude
- 3) Label the longitudinal wave above: compression, rarefaction, wavelength
- 4) Describe a wave.
  
- 5) Describe frequency. Draw a transverse wave with high frequency vs a transverse wave with low frequency.
  
- 6) Describe and give an example (should be a "real-life example) of each:

Term	Description	Real-life Example
Absorption		
Diffraction		
Reflection		
Refraction		
Scatter		
Transmission		

- 7) As you get older, your ability to hear all frequencies \_\_\_\_\_.
- 8) Sound travels as a \_\_\_\_\_ wave.
- 9) Sound travels fastest through \_\_\_\_\_ and slowest in a \_\_\_\_\_.
- 10) Sound can NOT travel through a \_\_\_\_\_ or \_\_\_\_\_ space.
- 11) What is sound reflection called? \_\_\_\_\_ How is sound intensity measured? \_\_\_\_\_
- 12) Explain how the ear works. Be sure to include the following terms: eardrum, pinna, ear canal, outer ear, middle ear, hammer, anvil, stirrup, inner ear, cochlea, cilia, vibrations, auditory nerve (underline each word as you use it). Drawing is fine but MUST BE LABELED and must include the sound waves!

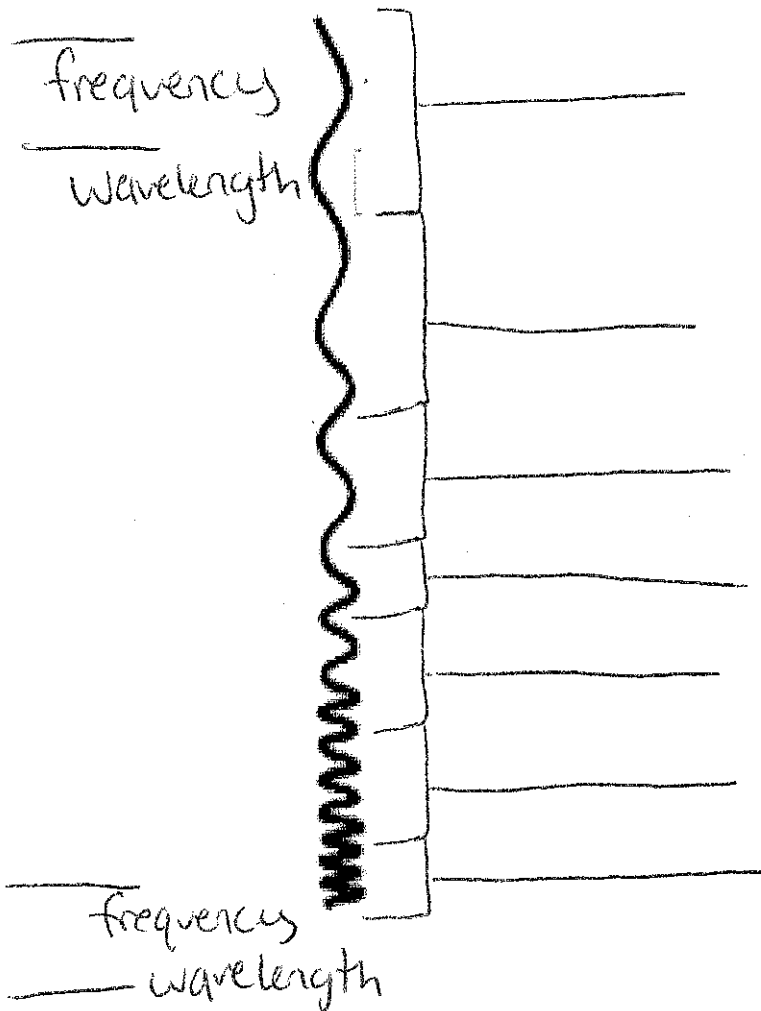
13) Label and briefly describe each part of the eye:



14) Describe photons.

15) The electromagnetic spectrum is arranged by \_\_\_\_\_ and \_\_\_\_\_.

16) Label the electromagnetic spectrum below (be sure to also label high/low frequency and long/short wavelengths).



Please write the colors from lowest frequency to highest frequency:

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