

How we know that light is a wave

wave interference movie

light interference pattern

Oct 6-7:58 AM

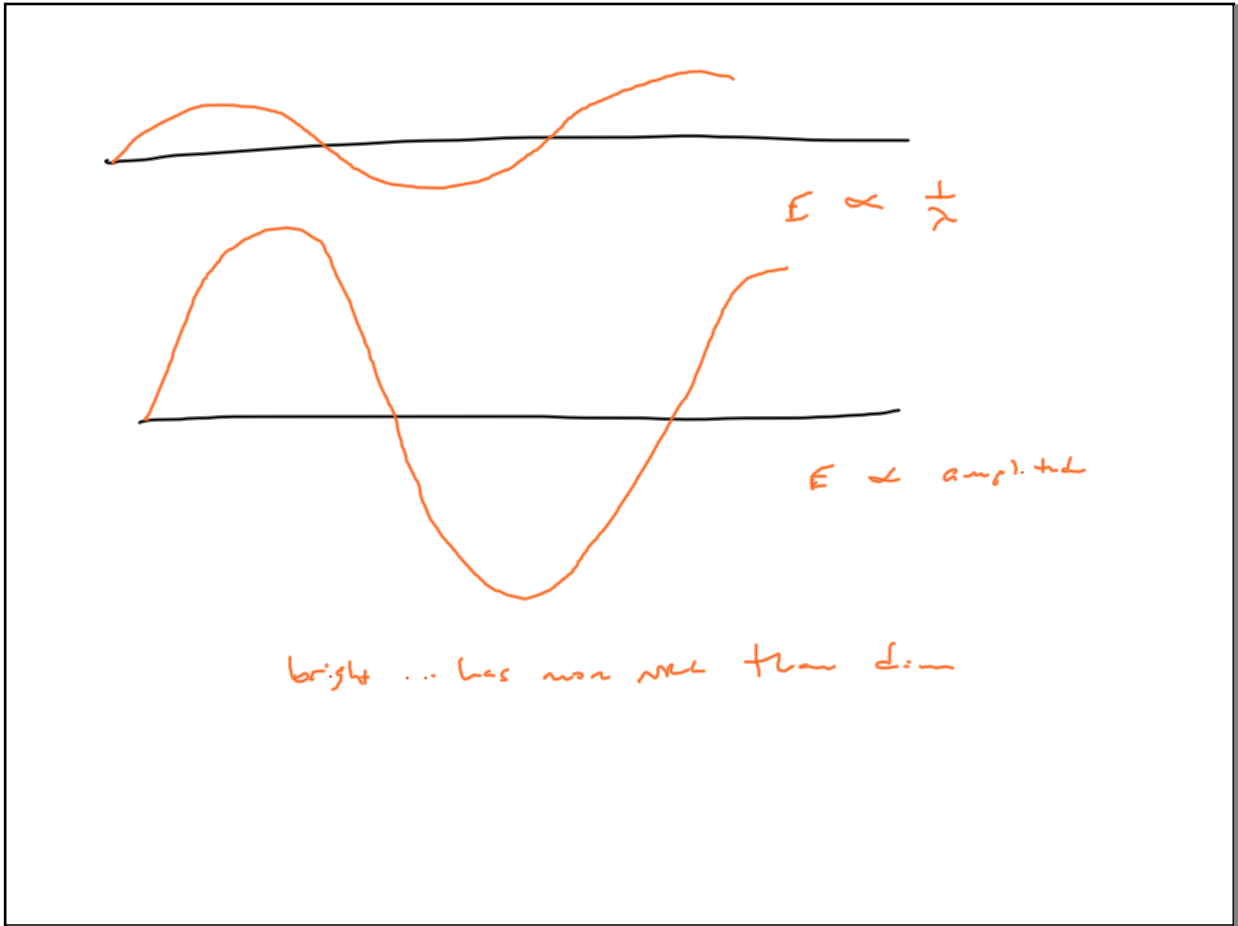
The Photoelectric Effect

turn voltage down until just stops working

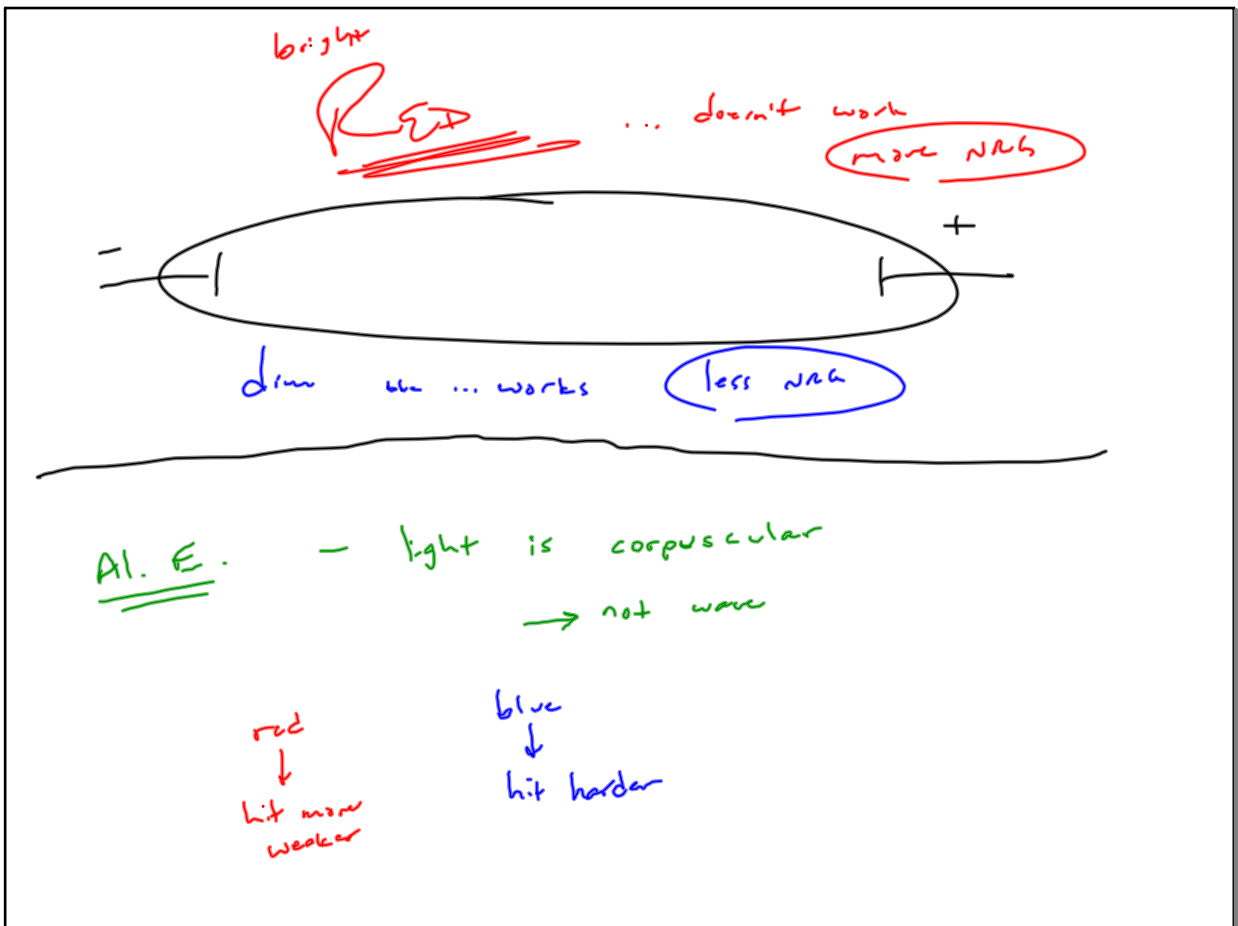
if light ... works
(extra work from light)

but... works w/ blue, not w/ red light
(red has less work, longer λ)

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Oct 7-7:56 AM



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de Broglie

$$\lambda = \frac{h}{p}$$

Planck's const

m · v

Waves = particles

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Heisenberg - uncertainty principle

$$\Delta x \cdot \Delta p \geq \frac{h}{2\pi}$$

position

m · v

uncertainty in the measurement of

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