

PHYSICS
Unit 6 (Part 2) Study Guide

What is an electromagnetic (EM) wave?	
Is light a wave or a particle? (wave-particle duality)	
According to the wave model, what is an EM wave made of?	
According to the particle model, what is an EM wave made of?	
What is the relationship between EM wave energy and frequency?	
What is the EM spectrum?	
What is the proper ordering of the EM spectrum by frequency? What is the proper ordering of the EM spectrum by energy? What is the proper ordering of the EM spectrum by wavelength?	
What is the visible light spectrum?	

What is the speed of an EM wave in vacuum?	
Compare the speed of EM waves in solids, liquids, and gases.	
What happens with light to give an object its particular color?	
What is the difference between black and white objects?	
What is incandescence?	
What's the difference between transparent, translucent, and opaque objects?	
What is refraction?	
What is the index of refraction? How is it calculated?	

When does light bend toward the normal? Away from the normal?	
What do converging and diverging lenses do to parallel light rays? What shape do converging and diverging lenses have?	
What is the law of reflection?	
What is diffraction?	
What happens when waves pass through an opening in a barrier? When they meet a barrier?	
What is polarized light?	
What happens when you look through two polarizing filters and rotate one 90 degrees?	