Physical Science

Light Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are the two most common models used to describe waves?
2. Describe how light can be modeled as a wave.
3. What is the problem with describing light as a wave? (What is an experiment that disproved it?)
4. Describe how Light can be modeled as a stream of particles.
5. Predict how the medium a light wave travels through affects the speed of light.
6. Describe how the speed of light through different mediums is responsible for refraction. For example: when you look at a straw in a glass of water, why does it look like the straw is “bent” in the water compared to the part sticking out of the water?
7. How does intensity affect light?
8. What is the electromagnetic spectrum?
9. Describe a use for each kind of light in the electromagnetic spectrum.
   1. Ultraviolet light-
   2. X-rays and gamma rays-
   3. Infrared light-
   4. Microwaves-
   5. Radio waves-