

**Physical Science Electromagnetic Waves: Light Worksheet I Name \_\_\_\_\_ Per \_\_\_\_\_**

Visible Light is only a small portion of the electromagnetic spectrum (see page 539). Prior to visible light are radio waves, microwaves, and infrared light. Visible light is composed of ROYGBIV. After visible light are ultraviolet, x-rays and gamma rays. Visible light is composed of little packets of energy called Photons. Each Photon has a different frequency of wave embedded in it. Each frequency is a different color. Different Photons have different energy, frequency and color. What are the specific characteristics of each of the following waves on the electromagnetic spectrum:

Kind of wave	Properties and description of wave
Radio	
Microwave	
Infrared	
Visible	
Ultraviolet	
X-ray	
Gamma	

How do we produce Visible Light: page 548 \*\*\* How do they work and give an example \*\*\*

1. Incandescent lights: \_\_\_\_\_
2. Fluorescent Lights: \_\_\_\_\_
3. Neon Lights: \_\_\_\_\_
4. Tungsten-Halogen Lights: \_\_\_\_\_
5. Bioluminescence: \_\_\_\_\_
6. LED Lights: \_\_\_\_\_

What is meant by: \*\*\* Define and give an example \*\*\*

1. Transparent: \_\_\_\_\_
2. Translucent: \_\_\_\_\_
3. Opaque: \_\_\_\_\_