WHAT YOU KNOW WORKSHEET…#6

1. What is an oscillation?

Movement back and forth of energy at a regular speed.

1. Similarities of Electromagnetic waves:
2. All move at the speed of light/same speed
3. Carry energy
4. Differences of Electromagnetic waves:
5. All have different frequencies
6. All travel different distances
7. Are Radio Waves the longest wavelength? Is the frequency high or low?

Yes, radio waves are the longest and have the lowest frequency

1. What wavelength has the shortest wavelength? Is the frequency high or low?

Gamma rays have the shortest wavelength. The frequency is high.

1. What other uses does radio waves have aside from radio and television?

Radar systems and satellites.

1. Aside from cooking, where else are microwaves used for?

Microwaves are used also for aircraft, radar and scientific research.

1. Are Infrared (IR) waves longer than visible light?

Yes, they are longer than visible light.

1. What are some examples of Infrared (IR) waves?

Here are some examples: meteorology, night vision devices, communication, and astronomy.

1. What are colors of the visible light that we can see?

**RED ORANGE YELLOW GREEN BLUE INDIGO VIOLET**

1. What mnemonic or short word can you use to remember the 7 colors of the visible light?

ROY G. BIV

1. How is a rainbow formed?

Visible light from the sun reflects on droplets of water that act as small prisms which bend the light. The human eye sees this as a rainbow.

1. What is the significant source of UV light?

The Sun is a significant source of UV light.

1. UV light is harmful to humans, what is used for the sterilization of medical instruments?

The UV is used to sterilized medical instruments

1. What does sterilization means?

The process of making something free from bacteria or other living microorganisms

1. What is X-rays most familiar application?

X-rays most familiar application is for the examination of bones.

1. Why are gamma rays bad for living things?

Gamma rays are very high energy and penetrate most matter.

1. What are gamma rays used for?

Gamma rays can be used to destroy harmful cells as cancerous tumors.