

Name: _____

Topic 3.1 Questions

How does electromagnetic radiation shape your world?

1.

Type of Electromagnetic Radiation:	Applications:
Radio waves	
Microwaves	
Infrared	
Visible light	
Ultraviolet	
X-ray radiation	
Gamma-ray radiation	

2. a) Identify two natural sources of electromagnetic radiation.

b) Identify two artificial (human-made) sources of electromagnetic radiation.

3. Describe two ways in which electromagnetic radiation can cause harm to living things.

4. Your eyes can sense light, and your skin can sense infrared. Describe a way that technology allows you to sense another type of electromagnetic radiation

5. A criminal investigator testifies in court that traces of blood were found at a scene of a crime, even after the suspect tried to clean it up. Describe a technique the investigator could have used to find the evidence.
6. These two images were made using electromagnetic radiation



- a. State the type of radiation you think was used to make each image. Justify your response
- b. Which image do you think would give a doctor more information? Explain your reasoning.
- c. Why might a doctor choose to use the imaging technology that produces a less detailed view?
7. Many tools/equipment/jobs use a combination of electromagnetic radiation. List the types used for the following:
- a) MRI (magnetic resonance imaging): _____
- b) Weather satellites: _____
- c) Art forgery investigators: _____