Chapter 3: Electromagnetic Waves Study Guide

1. What does an EM wave transfer energy through?

2. Where do most of the visible EM waves on Earth come from?

3. What happens when an EM wave travels in a vacuum?

4. Which EM waves have the highest frequency? Lowest frequency?

5. Cell phones and radar both use what type of EM wave?

6. How does fire produce light?

7. How does a fluorescent light bulb work?

8. What kind of light hits a clear, or transparent window?

9. What do polarized sunglasses do?

10. How do we see colors?

11. How are the properties of EM waves different from mechanical waves?

12. What is the difference between incandescence and bioluminescence?

13. How do primary colors combine to make new colors? You may draw a picture. Be sure to use the terms *primary colors, wavelength, and additive* in your response.