

Electromagnetic Radiation Classwork/Homework June 6 due June 7

c = speed of light $c = 300,000,000$ m/s

1. What are some sources of electromagnetic radiation?
2. What is meant by the term “medium” and why can electromagnetic waves travel through outer space?
3. What speed do all electromagnetic waves travel at in vacuum?
4. When electromagnetic waves travel through matter, what happens to their speed?
5. Which of the following electromagnetic waves has the highest frequency: 1.0 m wavelength, 100 m wavelength, 0.001 m wavelength, or 1,0000 m wavelength?
6. What does the term “spectrum” mean?
7. What happens to the energy of a wave as the frequency of a wave increases?
8. What form of electromagnetic wave has the lowest energy?