

## EMS Test Review

- How do scientists use emission spectrums to identify what objects in space are made of?
- How do scientists use emission spectrums to identify which direction objects in space are traveling?
- Show an emission spectrum for a redshifted star compared to a stationary spectrum.
- List the different types of waves in the electromagnetic spectrum.
- Order the types of visible electromagnetic waves from highest energy to lowest.
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- Describe the different parts of a transverse wave (light waves)- crest, trough, wavelength, amplitude.
- Explain wave frequency.
- Explain the Doppler effect and how wave frequency changes when an object is in motion.
- Use the periodic table of elements to correctly identify the number of protons, electrons, and neutrons in a Hydrogen atom, Helium atom, and Carbon atom.
- Using a Bohr model of each atom listed previously, correctly identify the number of electrons in each shell