Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**EMS/ Light – Study Guide**

**Directions**: Use multiple resources (flexbooks, learning module, science website, etc.) to complete the graphic organizer on light and the electromagnetic spectrum.

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| **Electromagnetic Spectrum:**  Draw and label the electromagnetic spectrum. | **Visible Light:**  What colors are included in visible light (use acronym to help)?  Draw a diagram to show what colors have the largest and smallest wavelength? |
| **Absorption:**  What is absorption? | **Scattering:**  What is scattering? |
| **What medium does light travel through fastest?**  Light travels the fastest in a \_\_\_\_\_\_\_\_\_\_.  Light travels slower in \_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_.  Light travels \_\_\_\_\_\_\_\_\_ than sound. | **Refraction:**  What is light refraction?  What happens when white light is refracted? |
| **Transparent, Translucent and Opaque:**  What is transparent?  What is translucent?  What is opaque? | **Why does an object appear black, white, or green?**   * **Black**: All colors from light are \_\_\_\_\_\_\_\_ and no light is reflected. * **White**: All colors from light are \_\_\_\_\_\_\_\_. * **Green**: All colors from light are absorbed but only \_\_\_\_\_\_\_ is reflected back to your eyes. |