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**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.
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