**EM Waves, Light, and Sound Test Review**

**DIRECTIONS:** Answer the following questions in the space provided in the right

column.

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| **Question** | **Answer** |
| What do all waves transfer? |  |
| What are the parts of a wave: crest, trough, wavelength, amplitude? |  |
| How is wavelength measured in a longitudinal wave? |  |
| How are the waves on the electromagnetic spectrum arranged? |  |
| Which electromagnetic wave has the lowest frequency and longest wavelength? Highest frequency and shortest wavelength? |  |
| How are electromagnetic waves different from each other? |  |
| When visible light is absorbed by matter what happens to it? |  |
| How does color affect the absorption of visible light? |  |
| What part of the electromagnetic spectrum can be broken into seven colors? |  |
| Which color of visible light has the shortest wavelength? Longest wavelength? |  |
| When all seven colors of visible light are present, what color is the visible light? |  |
| How do we see specific colors of visible light? |  |
| How do we see specific colors of visible light? |  |
| What is the relationship between frequency and wavelength? |  |
| How does a sound wave get started? |  |
| What type of wave is a sound wave? |  |
| Through what state of matter do sound waves travel the fastest? Slowest? |  |
| What factors affect how fast sound waves travel? |  |
| How is the volume (loudness) of a sound changed? |  |
| How is an echo produced? |  |
| How does 265 Hz compare to 512 Hz? |  |
| How many decibels is the volume of normal conversation? |  |
| At what decibel level can hearing be damaged? |  |
| How are frequency and pitch related? |  |
| Why is there no sound in space? |  |