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Waves

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| **Across**  **2.** Electromagnetic waves with wavelengths between 1 mm and 0.7 millionths of a meter.  **7.** Waves that can travel through matter or space including radio waves, infrared waves, visible light waves, ultraviolet waves, X rays and gamma rays.  **9.** Surrounds a magnet and exerts a magnetic force on other magnets.  **10.** Electromagnetic waves with wavelengths between 0.4 and 0.7 millionths of a meter that can be seen with your eyes.  **11.** Electromagnetic waves with wavelengths between about 0.4 millionths of a meter and 10 billionths of a meter that has frequencies and wavelengths between visible light and X rays. | **Down**  **1.** Range of electromagnetic waves, including radio waves, visible light, and X ray with different frequencies and wavelengths.  **3.** Energy carried by an electromagnetic waves.  **4.** Surrounds every electric charge and exerts forces on other electric charges.  **5.** Highest energy electromagnetic waves with the shortest wavelengths and highest frequencies.  **6.** High energy electromagnetic wave that is highly penetrating and can be used for medical diagnosis.  **8.** Lowest frequency electromagnetic waves that have wavelengths greater than about 0.3 m and are used in most forms of telecommunications technology such as TV's, telephone, and radios |