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Chapter 5: Electromagnetic Waves

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|  |  |  | 4E |  L |  E |  C |  T |  R |  O |  M |  A |  G |  N |  E |  T |  I |  C |  W |  A |  V |  E |  |  |  |  |  |  |  |  |
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| **Across****1.** the energy that electromagnetic waves transfer through matter or space**4.** a transverse wave that involves the transfer of electric and magnetic energy**5.** an image that shows reigons of different temperatures in different colors**9.** electromagnetic waves with the shortest wavelengths and the highest frequancies**11.** elelectromagnetic waves with the longest wave lengths and lowest frequencies**12.** electromagnetic waves with wavelengths shorter than those of microwaves**13.** a packet of light energy **14.** the light that passes through**15.** light can cause an electron to move so much it is knocked out of the metal**16.** electromagnetic waves with wavelengths just shorter than those of visible light**17.** a method of broadcasting signals by changing the frequency of a wave | **Down****2.** the complete range of electromagnetic waves placed in order of increasing frequency **3.** a method of broadcasting signals by changing the amplitude of a wave**6.** shorter wavelengths and higher frequencies**7.** electromagnetic waves that you can see**8.** electromagnetic waves with wavelengths just shorter than ultraviolet rays**10.** uses reflected microwaves to detect objects and measure their distance and speed  |

   Electromagnetic wave        Electromagnetic radiation       Polarized light        Photoelectric effect       Photon       Electromagnetic spectrum       Radio waves       Microwaves       Radar       Infrared Rays       thermogram       Visible light       Ultraviolet rays       X-rays       Gamma rays       Amplitude modulation       Frequency modulation