
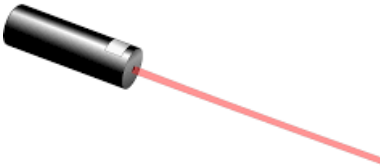



Name:

Date:

Class:

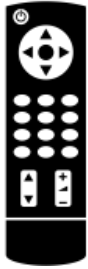
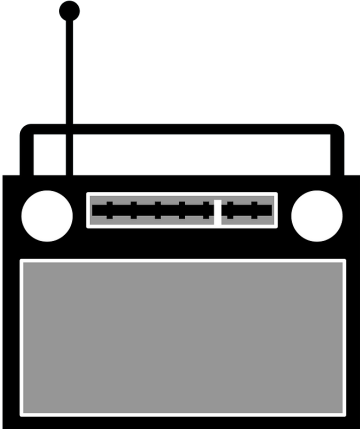

Electromagnetic Exploration Chart **Answer Key**

Device	Frequency rank (lowest to highest)	From your research, how might this device use electromagnetic radiation? (1-2 sentences)
<p>Tanning Bed</p> 	<p>Tanning beds use UV radiation, thus are one of the highest frequencies, second to X-ray</p>	<p>Hint: ask students to cite sources of information, so that you may evaluate the information given for legitimacy.</p> <p>NOTE: it is advisable not to grade according to a single number/ranking on the frequency ranking, but rather a TREND. Tanning beds and x-rays are higher frequencies, while laser pointers, cell phones, remote controls, and radio waves are lower rank.</p>
<p>Laser Pointer</p> 	<p>Laser pointers use 473nm radio waves, thus are one of the lower frequency wave</p>	
<p>Cellphone</p> 	<p>Cellphones are 700-800 MHz, which fall in the middle of the frequencies</p>	

Name:

Date:

Class:

<p>Remote Control</p> 	<p>Remote controls have the lower to lowest frequency, moving into infrared</p>	
<p>Radio</p> 	<p>Radio has the lowest frequencies, of radio waves</p>	
<p>X-ray machine</p> 	<p>X-rays have among the highest if not the highest frequency rating in this worksheet.</p>	

After conducting your research, write 2-4 interesting facts that you learned. Make sure to write in complete sentences.

Answers will vary and asking students to cite sources may help in determining credibility of answers. There will probably be several facts about tanning beds and laser pointers “causing cancer”, as that seemed to be a popular topic on Google the day we checked.