

EM SPECTRUM

Name _____

Match each kind of wave with one item from column one and one item from column two.

COLUMN 1	WAVE	COLUMN 2
A. used in remote controls for TVs and VCRs _____	RADIO _____	H. used to find a broken bone or illegal plane carry-on
B. goes through most matter except bone and lead _____	MICROWAVE _____	I. used to kill bacteria on food
C. highest frequency and energy _____	INFRARED _____	J. ROY G. BIV
D. can cause skin cancer or promote vitamin D production _____	VISIBLE _____	K. shortest wavelength
E. longest wavelength _____	ULTRAVIOLET _____	L. used to heat food
F. used to transmit cellular phone calls _____	X-RAY _____	M. TV signals, and used in remote control devices like car alarms and garage door openers
G. wavelengths and frequencies that can be seen by the human eye _____	GAMMA _____	N. radiant heat rays

14. Write out the electromagnetic spectrum.

15. As you go from left to right across the electromagnetic spectrum what happens to the frequency and energy of the waves? _____

16. What happens to the speed of light as it enters a different medium? _____

17. Which color of the visible light portion of the electromagnetic spectrum has the highest frequency and the most energy? _____

18. Which color of the visible light portion of the electromagnetic spectrum has the lowest frequency and the least energy? _____
