

Wave Worksheet
Electromagnetic 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. BV
D. can cause skin cancer or promote vitamin D production _____	VISIBLE _____	K. shortest wavelength
E. longest wavelength _____	ULTRAVIOLET _____	L. most dangerous waves
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

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? _____

19. What type of wave is a radio wave? _____ an infrared wave? _____