

Name: \_\_\_\_\_

Date: \_\_\_\_\_



# GENIUSCHALLENGE

## ELECTROMAGNETIC SPECTRUM

1. All waves transfer \_\_\_\_\_ from one place to another.
2. Which wave property measures how many waves pass a point in one second? \_\_\_\_\_
3. Which property of electromagnetic waves must go down as the frequency goes up?  
\_\_\_\_\_
4. Put these four parts of the electromagnetic spectrum in order from shortest to longest wavelength:  
gamma, infrared, microwave, ultraviolet.  

a. _____	b. _____
c. _____	d. _____
5. Any object above absolute zero gives off \_\_\_\_\_ radiation, which can be detected by a thermal imaging camera.
6. Each of the different colors that make up white light has a different \_\_\_\_\_.
7. A “black light” uses \_\_\_\_\_ radiation to make some objects glow.
8. \_\_\_\_\_ waves are used to send signals because they can travel over very long distances and pass through buildings.
9. Why are X-rays used to produce images of broken bones?  
\_\_\_\_\_
10. How does a prism separate white light into the different colors that compose it?  
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