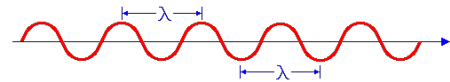


Name _____

Video: Light Optics

1. Light can _____ off of things. Light can be _____. Or light can be _____.
2. What do the two kids make with a milk carton & mirrors?
3. Light travels in a _____ line unless it hits something or is pulled by gravity.
4. Scientists like to think of light as traveling in _____.
5. A remote control uses _____ light.
6. The way a lense is _____ effects how it bends light.
7. _____ lenses make things look smaller.
8. _____ lenses make things look bigger.
9. When light _____ down, it changes direction.
10. The _____ point is where the beams of light come together.
11. _____ reflection is reflection inside.
12. Heat is _____ light.
13. White light contains all the colors of the _____.

Behavior of Waves Research



Directions – Go to the following website to gather information about behavior of waves.
https://science.nasa.gov/ems/03_behaviors

1. What is Reflection?
2. What type of surface will reflect almost all light?
3. The _____ of an object is actually the wavelengths of the light _____ while all other wavelengths are _____.
4. This reflective behavior of light is used by lasers onboard NASA's Lunar Reconnaissance Orbiter to map the surface of the _____.

Draw a picture of Refection

5. What is absorption?

Draw a picture of Absorption

6. What does the absorbed light turn into?

7. What color absorbs the most light energy?

8. Why is the black pavement hotter than a light colored concrete sidewalk?

9. What is it called when the warming of air above cities influences the weather?

10. What is diffraction?

Draw a picture of Diffraction

11. What tool uses diffraction to separate light wavelengths?

12. Patterns in a spectral signature help scientists identify the physical condition and composition of _____ and _____ matter.

13. What is scatter?

Draw a picture of Scatter

14. Why does the sky appear blue? (must use 3-5 sentences)

15. What else in the atmosphere scatters light?

16. What is refraction?

Draw a picture of Refraction

17. Light travels slower in _____ than in a _____, and even slower in _____.

18. What causes light to bend?

19. Different _____ of light are slowed at different _____, which causes them to bend at different _____.