

Light Grade 7 Quiz

Teacher's Answer Key

1. Light you can see with your eyes is called _____light.(visible)
2. Sound waves _____ the same kind of waves as light waves.(are not)
3. Light travels in a straight _____, except when the medium it travels through changes.(lines)
4. A simple wave has a repeating pattern with a specific wavelength, _____, & amplitude. (frequency)
5. _____ can travel through the vacuum of space.(light)
6. The angle of reflection of a beam of light is equal to the _____.(angle of incidence)
7. Radio waves are _____energy, _____ wavelength electromagnetic waves.(low, long)
8. When light hits an object, it can either be absorbed, _____, or _____ through the object.(reflected, transmitted)
9. X-rays are _____ energy, _____ wavelength electromagnetic waves. (high, short)
10. White light is a mixture of many _____. (colors or frequencies of light)
11. Lasers produce _____ color(s) of light, whereas incandescent flashlights produce _____ color(s) of light. (one, many)
12. Microscopes and magnifiers use _____ lenses. (convex)
13. For an object to be seen, light emitted by it or reflected by it must enter the _____. (eye)
14. A crystal radio is a simple, early form of radio _____. (receiver)
15. The human eye cannot detect _____ from your remote control, however your video camera can. (infrared light)
16. A laser is a device that generates an intense beam of _____ light by _____ emission of _____ from excited atoms or molecules. (coherent, monochromatic, stimulated, photons)
17. When a beam of light spread out after passing through a narrow opening, it's called _____. (diffraction)
18. _____ happens when two waves combine to form a resultant wave that may be larger, smaller, or the same in amplitude. (interference)
19. Polarization is used in _____ to reduce the glare and haze by filtering out intense reflected light. (sunglasses)
20. Reflector telescopes use _____ and mirrors, and are better for deep-sky observing than _____ telescopes. (concave and planar/flat lenses, refractor)

BONUS QUESTIONS!

The size of a radio wave is about the size of _____.(students should write something about the size of football fields or buildings)

Microwaves are about the size of _____ (butterflies, etc...)

Infrared light waves are about the size of _____. (the point of a needle, etc...)

Visible light waves are about the size of _____. (protozoans, etc...)

X-rays are about the size of _____. (an atom)

The size of gamma rays are on the order of _____. (the nucleus of an atom)

Light Grade 7 Quiz

Student Quiz Sheet

Name _____

Fill in the blank:

1. Light you can see with your eyes is called _____ light.
2. Sound waves _____ the same kind of waves as light waves.
3. Light travels in a straight _____, except when the medium it travels through changes.
4. A simple wave has a repeating pattern with a specific wavelength, _____, & amplitude.
5. _____ can travel through the vacuum of space.
6. The angle of reflection of a beam of light is equal to the _____.
7. Radio waves are _____ energy, _____ wavelength electromagnetic waves.
8. When light hits an object, it can either be absorbed, _____, or _____ through the object.
9. X-rays are _____ energy, _____ wavelength electromagnetic waves.
10. White light is a mixture of many _____.
11. Lasers produce _____ color(s) of light, whereas incandescent flashlights produce _____ color(s) of light.
12. Microscopes and magnifiers use _____ lenses.

13. For an object to be seen, light emitted by it or reflected by it must enter the _____.

14. A crystal radio is a simple, early form of radio _____.

15. The human eye cannot detect _____ from your remote control, however your video camera can.

16. A laser is a device that generates an intense beam of _____ light by _____ emission of _____ from excited atoms or molecules.

17. When a beam of light spread out after passing through a narrow opening, it's called _____.

18. _____ happens when two waves combine to form a resultant wave that may be larger, smaller, or the same in amplitude.

19. Polarization is used in _____ to reduce the glare and haze by filtering out intense reflected light.

20. Reflector telescopes use _____ and mirrors, and are better for deep-sky observing than _____ telescopes.

BONUS QUESTIONS!

21. The size of a radio wave is about the size of ...?

22. Microwaves are about the size of ...?

23. Infrared light waves are about the size of ...?

24. Visible light waves are about the size of...?

25. X-rays are about the size of ...?

26. The size of gamma rays are on the order of...?