

I. Fill in the Blank: Write the correct answer in the blank

- light 1. The first thing that God created was _____.
- electromagnetic 2. Light is an _____ wave.
- space 3. Light waves can travel through both matter and empty _____.
- faster 4. Light waves travel _____ than sound waves do.
- transverse 5. Waves that move perpendicular to the way that matter is moving are called _____ waves.
- straight 6. Light generally travels in a _____ line.
- white 7. When all of the colors of light are reflected, you see _____.
- black 8. When all of the colors of light are absorbed, you see _____.
- blue 9. The primary colors of light are red, _____, and green.
- colors 10. The primary colors of light can be used to make all of the other _____ of light.
- pigments 11. Opaque substances that are used to color other materials are called _____.
- mirror 12. Any surface that can reflect light to form an image of an object is a _____.
- opposite 13. When light shines onto a smooth surface, the light bounces off in the _____ direction.

many 14. When light bounces off a rough surface it goes in _____ directions.

concave 15. A surface that curves inward and makes things look close to it look larger is _____.

convex 16. A surface that curves outward and makes things look smaller is _____.

II. Multiple Choice: Write the letter of the correct answer in the blank.

B 17. The distance between two crests or two troughs of a transverse wave is its _____.

A. frequency

B. wavelength

C. amplitude

C 18. The height of a wave is the _____.

A. frequency

B. wavelength

C. amplitude

A 19. The number of waves that pass a certain point in one second is called the _____.

A. frequency

B. speed

C. amplitude

B 20. The distance that one wave travels in one second is the _____.

A. frequency

B. speed

C. amplitude

B 21. Light cannot pass through _____ objects.

A. transparent

B. opaque

C. translucent

III. True – False: Write “T” for True or “F” for False.

- T 22. The different colors of light that can be seen are called the visible spectrum.
- F 23. The bending of light as it passes from one medium into another is ~~reflection.~~ *refraction.*
- F 24. The colors in the visible spectrum are in order by their ~~frequencies.~~ *wavelengths*.
- T 25. The colors of the visible spectrum are red, orange, yellow, green, blue, indigo, and violet.
- T 26. The color you see depends on which colors of light are reflected and which are absorbed.
- T 27. A lens is a piece of glass or other transparent object that refracts light and produces an image.
- T 28. Light is the only electromagnetic wave that is visible to the human eye.
- F 29. Light always travels at the same speed in all mediums.
- T 30. Radar and cellular phones use microwaves.