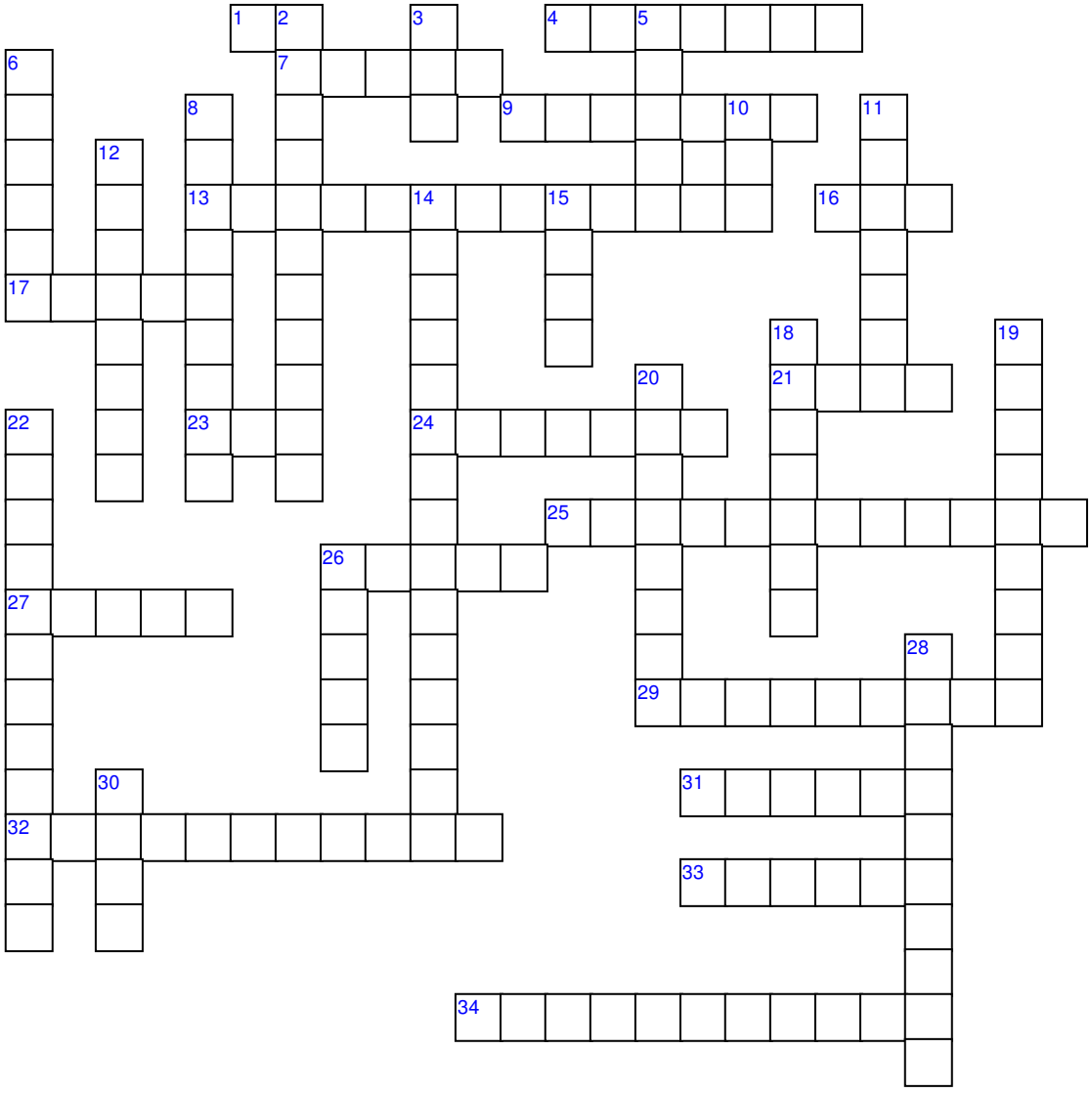
Date:_____ Name:_____

Unit 16: The Facts of Light



ACROSS

1. The area of a sphere is 4 ___ r ^2.
4. red + blue.
7. Unit of luminous flux ...(lm).
9. Red, green and blue are the _____ colors of light.
13. _____ colors are two colors of light that can be combined to make white light.
16. Luminous intensity is equal to illuminance (E) at _____ meter.
17. Combining the primary colors forms _____ light.
21. blue + green.
23. The secondary PIGMENTS, red, blue and green, absorb two colors and reflect _____
24. Colors of the visible spectrum.
25. Rate at which light energy is emitted from a luminous source (P)
26. All light is absorbed, none reflect.
27. Longest wavelenght, lowest frequency, lowest energy.
29. Yellow, cyan and magenta are the _____ colors of light, because each is a combination of two primary colors.
31. Illuminance (E) decreases as the _____ of the distance from the source.
32. (E)...Rate at which light strikes a surface area; unit is the lux.
33. Media that do not transmit light.
34. Media that transmit light

DOWN

2. Source that reflect light.
3. The cyan pigment absorbs what color wavelengths?
5. Shortest wavelenght, highest frequency, highest energy.
6. red + green.
8. First to measure the speed of light accurately.
10. ____ model of light: light travels in straight-line paths.
11. Unit of luminous intensity.
12. Source that emits light.
14. A wave that consists of oscillating electric and magnetic fields, which radiate outward from the source at the speed of light.
15. Prefix meaning 10^-9
18. Faster than a speeding bullet, more powerful than a locomotive, and able to leap tall buildings in a single bound...it's a bird, no, it's a plane, no it's....JUST KIDDING...it's just little old me",
19. Electromagnetic waves vary depending on _____ and wavelength .
20. Yellow, cyan and magenta are the three primary _____; they each absorb only ONE color and reflect TWO.
22. The production of light in a single plane of oscillation.
26. Color of a banana if illuminated with ONLY BLUE light
28. speed of light = frequency x _____.
30. Grass is green because it absorbes red and _____ and reflects green.