

Name _____ Date _____ Hour _____

PS - Physics

Light & Optics WebQuest

To complete this assignment, you will travel to different websites in search of answers. Make sure to take your time and **read** carefully to find each answer!

Venture to <http://www.mysciencesite.com/optics.html>

1. What 3 colors make up the colored shadows of the hand? _____

2. Light comes from what 3 energy sources?

3. Explain the 2 types of light:

4. The 4 types of luminous light sources are

Click NEXT and head to Electromagnetic Spectrum Color & Waves

5. The sun emits most of its radiation in the _____

6. How do we see this radiation? _____

7. Look at the picture, what side of the electromagnetic spectrum has short wavelength? What is the name of the wave? _____

8. The high points of a wave are _____ and the low points are _____

9. What type of wave are electromagnetic waves? Explain why.

10. Why do we see different colors? _____

11. _____ are the primary colors.

Click NEXT under "To reflection and refraction p.3"

12. Light can be _____

13. Why are you able to see the tree?

14. Reflection involves what 2 rays? _____

15. The line perpendicular to the surface of reflection is _____

16. Reflection from a smooth, mirror-like surface is called _____

17. _____ is how we see illuminated objects.

18. The Law of Reflection states

19. How does Refraction occur? _____

20. When light enters a denser medium the ray _____ and when it enters a rarer medium it is bent _____.

21. What happens to light when it passes through water?

Click NEXT under "To mirrors, lenses and your eyes p.4"

22. The image you see in a mirror is a _____

23. A virtual image is the _____ size and shape as the object being reflected.

24. What are the 2 types of curved mirrors? Explain their differences.

25. What is a lens? Define the 2 types. (Drawing a picture always helps too!)

26. The lens of your eye is a _____

27. Where is the image focused onto? _____

Take a look at the pictures of the eyes and answer the following questions.

28. Farsighted focuses _____ and is corrected with a _____ lens.

29. Near sighted focuses _____ and is corrected with a _____ lens.

30. What is your eye compared to? Why?

Click NEXT under "To optical illusions p.5"

Optical Illusions play tricks on our eyes....

31. How many legs does the elephant have? _____

32. How many faces do you see? _____