Light & Color Webquest Answer Document

**SECTION 1. FIBER OPTICS**

1. Describe Fiber Optics and explain how they transmit light.
2. What is the Physics principle behind Fiber Optics?

1. Briefly describe three applications of Fiber Optics

**SECTION 2. HUMAN EYE**

1. Discuss how the eye works analogous to a camera.
2. Describe three vision defects: Nearsightedness, Farsightedness and Astigmatism
3. Explain which kinds of lenses are needed to correct the previous vision defects.

**SECTION 3. PHYSICS EXPLAINED**

1. Describe the formation of Rainbows
2. How do Mirages form?
3. Discuss the color of the Sky and the colors of Sunsets.
4. Explain how sunglasses work.

**SECTION 4. OPTICAL INSTRUMENTS**

1. Describe how a Microscope works. (\*) Include a diagram of the image formation by a  microscope.
2. Describe how a Refractor Telescope works. (\*) Include a diagram of the image formation by a refractor telescope.

DO NOT cut & paste! Trace your own diagrams using the links or your textbook as a resource, check the appropriate chapter.