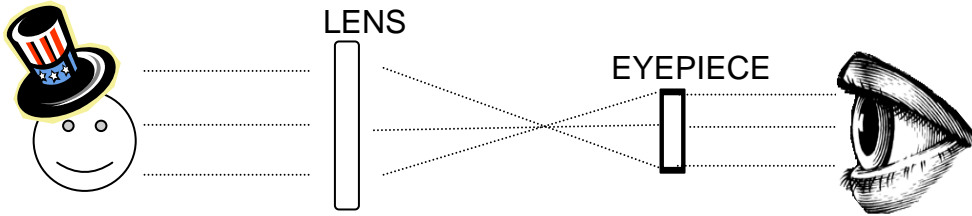


Name : \_\_\_\_\_

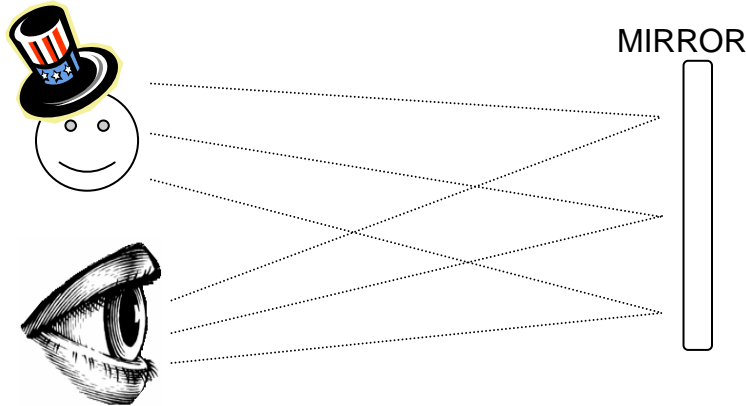
# Telescopes!

Trace over the lines showing the light path from the smiley face to the observer's eye. Use a different color for each line.

1) Trace the light path for the refractor.



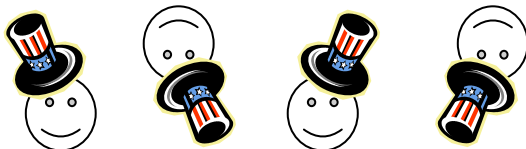
2) Trace the light path for the mirror.



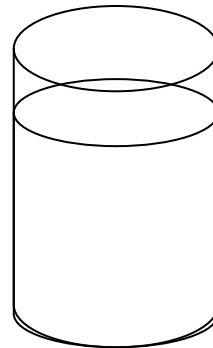
3) What does the observer see?

Draw an *oval* around the smiley face that the observer sees using the *lens*.

Draw a *rectangle* around the smiley face the observer sees using the *mirror*.



4) Draw a straw inside the glass filled with water.



**NORTHROP GRUMMAN**

**5) Write the word you see with your eyes. Make sure to use the correct colors and correct order!**

**6) Write the word you see through the telescope. Make sure to use the correct colors and correct order!**

**7) Use these words to fill in the blanks in the paragraph:**

**larger light eyepiece refraction telescopes bent magnifying**

A straw in a glass of water looks like it is \_\_\_\_\_ because water focuses light. This is called \_\_\_\_\_. Lenses also focus light. A \_\_\_\_\_ glass is a type of lens. A magnifying glass works by focusing light from an object so it appears \_\_\_\_\_ than it is. \_\_\_\_\_ use two lenses, one in front of the other. The first lens gathers \_\_\_\_\_ from a far-away object and focuses it to a small point. A second lens called the \_\_\_\_\_ focuses the light from the small point made by the first lens to make a larger image.