Making a Telescope

Procedure

1. **Collaborate** Work with a partner to make a telescope. Slip a smaller tube inside a larger tube to make a telescope tube. Tape lens A, the larger, thinner lens, to the larger end of the telescope tube.

2. Tape lens B, the smaller, thicker lens, to the smaller end of the tube.

3. **Observe** Without using the telescope, observe three objects that are across the room. In the space below, make a drawing or use words to record how the objects look.

4. Use the telescope to observe the same three objects. Hold the smaller end of the telescope to your eye and look through the lens. Slowly slide the larger tube forward and back until you can see each object clearly.

5. **Record Data** In the space below, draw or use words to record how the three objects look through your telescope.
Conclusion

Write the answers to the questions below.

1. Compare  What differences did you notice when you viewed the objects with just your eyes and then with the aid of a telescope?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

2. Infer  Why do you think telescopes are so useful to scientists who study space?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Investigate More!

**Design an Experiment**  Predict how the objects you observed in step 4 would look if you held the larger end of the telescope to your eye. Design an experiment to test your prediction.