Name: Date:

HANDS-ON LAB

Modeling Parallax

PROCEDURE

1. Use masking tape to tape one end of each piece of the 1 m lengths of thread to the edge of a paper plate. Each plate should have the same diameter. One plate should be red, and four should be blue.
2. Stand on a ladder, and tape the free end of each piece of thread to the ceiling at various heights. Place the threads 30 cm apart in a staggered pattern. Hang the plates in a location that allows the widest field of view and movement.
3. Stand directly in front of and facing the red plate at a distance of several meters.
4. Close one eye, and sketch the position of the red plate in relation to the blue plates.
5. Take several steps back and to the right. Repeat Step 4.
6. Take several more steps, and make another sketch.
7. Repeat Step 6.

MATERIALS

- metric ruler
- scissors
- five 1-m lengths of thread
- masking tape
- paper plates, 1 red and 4 blue
- ladder

ANALYSIS

1. Compare your drawings. Did the red plate change position as you viewed it from different locations? Explain your answer.

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2. What results would you expect if you continued to repeat Step 6? Explain your answer.

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3. If you noted the positions of several stars by using a powerful telescope, what would you expect to observe about their positions if you saw the same stars six months later? Explain.

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