Sun Test

Procedure

1. **Use Models**  Tape four sheets of construction paper together to form one very large sheet. The large sheet represents space. The flashlight represents the Sun.

2. **Measure**  Hold the flashlight 1 cm directly over the center of the sheet. While one partner holds the flashlight, the other traces the circle of light that the flashlight forms on the paper. Draw a dot on this circle and label it “Mercury.”

3. **Measure**  Raise the flashlight until the circle is about two and a half times wider than the first circle. Trace this circle. Draw a dot on the circle and label it “Earth.”

4. Raise the flashlight again until the circle of light reaches the edges of the paper. Trace the circle. Draw a dot on the circle and label it “Jupiter.”

5. **Compare**  Move the flashlight up and down to fill each of the three circles again. Compare the different amounts of light in each circle. Record your observations.

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Conclusion

1. **Analyze Data** In your model, how does sunlight compare on Mercury, Earth, and Jupiter?

   
   
   
   
   
   
   

2. **Infer** How would Earth change if its orbit moved closer to the Sun? How would it change if it moved farther away?

   
   
   
   
   
   

**Ask Questions**

What questions do you have about stars and planets? Which of these questions do you think scientists can investigate? **Research** the answers and report back to the class.

   
   
   
   
   
   

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