

Name \_\_\_\_\_ Date \_\_\_\_\_

# Model the Solar System

## Procedure

**Safety:** Exercise caution when using scissors.

- 1. Record Data** Use the data in the chart on page 255 to make paper scale models of the planets.
- 2. Use Numbers** The astronomical unit (AU) is used to measure distances in space. Use the AU value for each planet to convert these values into distances you can measure.

Planet	Distance from Sun	Radius in cm
Mercury		
Venus		
Earth		
Mars		
Jupiter		
Saturn		
Uranus		
Neptune		
Pluto		

- 3. Use Numbers** Convert the radius of each planet and the Sun into a size you can model.
- 4. Measure** Use the compass to draw each planet and the Sun on construction paper. Label each and cut them out. If necessary, tape several pieces of paper together to make your models.

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- 5. Use Numbers** Lay the Sun cutout at one end of the hallway. Use the tape measure to plot the positions of the planets, using the values you calculated in step 2.
- 6. Use Models** Place each planet cutout at its proper distance from the Sun. You now have a model of the solar system.

## Conclusion

- 1. Observe** Look at the positions and sizes of the planets and the Sun. What patterns, if any, do you observe?

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- 2. Infer** Based on your answer to question 1, do you think Pluto is a true planet?

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### Ask Questions

### Guided Inquiry

Use the Internet to research the planet-like body, Sedna.  
**Use numbers** to modify your scale to include Sedna.