

Planet Movements



Procedure

- 1. Measure** Cut a drinking straw so that it is 12 cm long. Thread a piece of string that is 1 m long through the straw.
- 2.** Tie one end of the string to a washer. Wrap the other end of the string around a plastic-foam ball and tie it tightly. Use tape to secure the string to the ball.
- 3. Use Models** Hold the straw upright with one hand. Rest the washer in your other hand. Hold the washer so that there is 10 cm of string between the ball and the top of the straw. Stand away from your classmates. Move the straw in a circular motion above your head so the ball swings in a circle around the straw. Describe the motion of the ball.
Safety: Wear goggles.

- 4. Experiment** Repeat step 3 using 15 cm of string and then 60 cm of string.

Conclusion

1. Use Models What do you think the ball represents in the model?

2. Infer Venus is closer to the Sun than is Jupiter. Which planet travels farther around the Sun?

Ask Questions

Guided Inquiry

Write a question about how a planet's distance from the Sun affects the time it takes to go around the Sun. Use the Internet to compare the lengths of a "year" on each planet.
