

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

## VOYAGE OF DISCOVERY

As a team, decide who will take each of the following roles. Read through this page and discuss what must be done.

- **Leader**—keeps the group on task.
- **Material Specialist**—collects items on the Materials List.
- **Recorder**—writes down group answers.
- **Reporter**—speaks for the team.

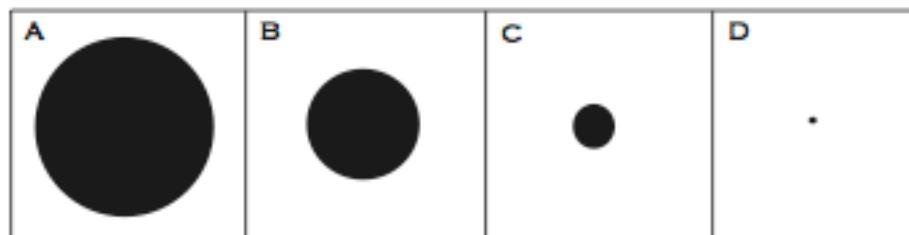
### Materials List

Metric ruler  
Balloon  
Miniature marshmallows  
Poppy seeds  
Mustard seeds  
Kix cereal and Crunchberries  
Popcorn kernels  
Dried peas  
1-cent gum balls  
Black Pepper  
Glue

### Part 1: Exploring the Planet Sizes

Directions. Blow the balloon to 15 centimeters in diameter. This balloon is a model Sun that is approximately one ten-billionth (10,000,000,000) the size of the real Sun. The questions below show planets that use the balloon as the scale model for the Sun.

1. Predict which circle below you think represents the model Earth, if the balloon is the model Sun.



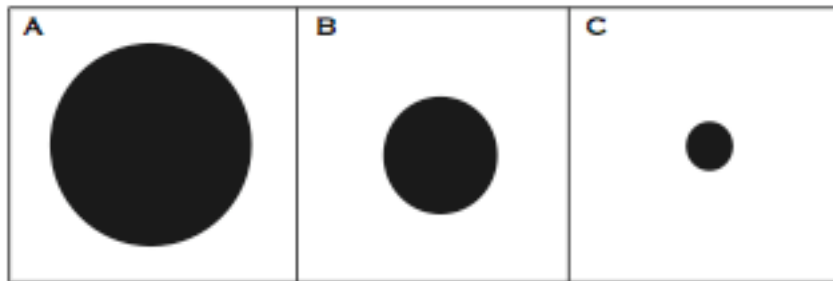
2. Which planet is the biggest? (Circle One)

Earth    Jupiter    Mars    Mercury    Neptune    Saturn    Uranus    Venus

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

## VOYAGE OF DISCOVERY

3. Which circle below do you think represents the biggest planet?



4. Look at the Model Planet Cards. What are the three smallest planets?

5. What are the four largest planets? Hint: These are called the gas giants.

6. Using the items on the Materials List, match them to the size of the planets on the cards, and glue them to the right card.

7. Find your model Sun and model Earth. How far do you think the model Earth should be from the model Sun? State your answer in meters.

8. Walk the distances between the planets with your class and complete the chart below with your teacher's help.

<b>Walking from:</b>	<b>Paces (or meters) between models:</b>	<b>Total distance from model Sun to each Planet</b>
Sun to Mercury		
Mercury to Venus		
Venus to Earth		
Earth to Mars		
Mars to Jupiter		
Jupiter to Saturn		
Saturn to Uranus		
Uranus to Neptune		
Neptune to Pluto		



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

# VOYAGE OF DISCOVERY

## Model Planet Cards

