Names _____ Date _____

Glider Investigation

In this experiment, you will observe the difference in flight between a glider with a triangle-shaped head crest and one without the crest. Use the Glider Observations worksheet to record your results.

To set up the experiment, each team of three will need these materials:

- Glider 1 and Glider 2
- Large space to test the gliders
- Tape measure or meter stick
- 20 feet of string or yarn
- Pencil
- Calculator
- Glider Observations worksheet

Team Roles

- Glider thrower
- Measurer
- Recorder

Step ❶ Have the recorder read aloud the directions below as the others in your group perform their roles. First, choose a starting point on the floor or ground where your team will throw the glider. The measurer and the thrower then stretch the string from the starting point straight in the direction where the glider will be thrown.

Step ❷ From the starting point, the thrower will first throw Glider 1 in the direction of the string. Gently toss the glider and try to make it glide straight along the path of the string. It does not matter how far the glider goes.

Step ❸ With the measuring tape or meter stick, measure the distance from where the glider lands on the ground to the string. Measure the shortest distance, so that the measuring tape or meter stick meets the string at a right angle, meaning it will be perpendicular to the string. Record that distance in the chart next to Trial 1. Next, describe how your team saw the glider move this time. Was it wobbly, smooth, or did it dip down fast?

Step ❹ Repeat steps 2 and 3 for the next three trials. For best results, be sure to toss the glider with the same movement and strength each time. Measure and describe the gliding each time.

Step ❺ Now follow the same steps 2 and 3 for Glider 2. Make sure that you are using the same strength and movement each time.

Step ❻ Using a calculator, add the four measurements for Glider 1 and write the total in the first chart. Then divide the totals by 4, and write that number next to Average in the first chart. Then repeat Step 6 for the chart for Glider 2.

Step ❼ For both charts, read your descriptions. Answer the question “In what ways were the flight descriptions similar for most of the four trials?”

Step ❽ Use the observations recorded in the charts to draw conclusions as you answer the questions.

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