Balsa Glider Competition – Worksheet

Instructions

1. Determine the *control* distance traveled and time aloft for the basic glider:

Control Distance: _____

Control Time: _____

2. Draw two wing shapes that you would like to test.

3. Write one or two sentences as to why you chose these particular wing shapes.

4. Test your two wing designs, and record the results in the chart below. Compute the average distance traveled and time aloft for each wing shape.

	Wing Shape #1		Wing Shape #2		
	Distance	Time Aloft	Distance	Time Aloft	
Trial 1					
Trial 2					
Trial 3					
Averages					
			•		

[Average = (Trial 1 + Trial 2 + Trial 3) divided by 3]

5. With the help of your teachers and class, compute the *average* (median) distance traveled and time aloft for all new wing designs in the class.

New Wing Distance _____ New Wing Time _____

6. With the help of your teachers and class, compute the *most common* (mode) distance traveled and time aloft for all new wing designs in the class.

New Wing Distance _____ New Wing Time _____

- 7. Answer the following questions:
 - a) Did your new wing designs improve the distance traveled and time aloft from the control glider?

b) What was the most successful wing design in the class?

c) Why do engineers build model planes?