

Team Name: _____ Date: _____

Action-Reaction! Worksheet

1. What is Newton's first law of motion and when does it occur during this experiment?



2. What is Newton's second law of motion and when does it occur during this experiment?
3. What is Newton's third law of motion and when does it occur during this experiment?
4. Draw a picture of your "Action-Reaction Rocket." Label the action and reaction forces.

- Are the action and reaction forces equal, less than or greater than each other?
- Predict the distance traveled along the string for a balloon that is filled with air so that it is small, medium and large in size. Then, record the actual distances traveled during three trials for each size balloon.

Balloon Size	Trial #	Predicted Distance	Actual Distance Traveled
Small	1		
	2		
	3		
Medium	1		
	2		
	3		
Large	1		
	2		
	3		

- How does the balloon size relate to the action and reaction forces?
- Graph the results with the size of balloon on the x-axis and the distance traveled on the y-axis.
