# Motion and Forces 2.3 LAB Name \_\_\_\_\_\_\_\_\_\_\_

# Balloon Rockets: Newton’s Third Law Period \_\_\_\_\_\_\_

 Date \_\_\_\_\_\_\_\_

**Problem**: Which of three balloons inflated to different circumferences will travel the farthest distance?

**Hypothesis**: If \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

then \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Procedure**:

1. Watch Mrs. D conduct this experiment.

2. Record the data in the data table below. All measurements must be in metric units!

Data Table:

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|  | Circumference1: | Circumference 2: | Circumference 3:  |
| Trial 1 |  |  |  |
| Trial 2 |  |  |  |
| Trial 3 |  |  |  |
| Average Distance Traveled |  |  |  |

3. Create a graph of your data below.

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**Answer the following questions:**

1. What action and reaction forces were involved in this experiment?

2. What is Newton’s Third Law?

3. How is the balloon experiment an example of Newton’s Third Law?

**Conclusion:** Write a conclusion following your lab write up format (2 paragraphs!):