CHALLENGE #1

Given: **Power to the Right: 30   Power to the Left: 50   Time: 5**
What would the distance be?

1. Choose two of these settings to be your constants. These will not change throughout all of your tests.

2. Choose one independent variable. This is the part you will change and test (should be whatever given is that you did not choose for the constant).

3. Run at least three different trials and record the information on the table.
4. Stop and reflect.

5. Use the information to predict what the distance would be with the given settings. Then, call an adult over to observe! Be ready to explain why!

CHALLENGE #2

Given: **Power to the Right: 45**   **Power to the Left: 45**   **Distance: 36 in**

How much time would it take?

DO NOT MAKE THESE YOUR SETTINGS!

1. Choose two of these settings to be your constants. These will not change throughout all of your tests.

2. Choose one independent variable. This is the part you will change and test (should be whatever given is that you did not choose for the constant).

3. Run at least three different trials and record the information on the table.
4. Stop and reflect.

5. Use the information to predict what the distance would be with the given settings. Then, call an adult over to observe! Be ready to explain why!

CHALLENGE #3

Given: **Power to the Right: 25   Time: 8 seconds   Distance: 14 in**
How much time would it take?

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2. Choose one independent variable. This is the part you will change and test (should be whatever given is that you did not choose for the constant).

3. Run at least three different trials and record the information on the table.
4. Stop and reflect.

5. Use the information to predict what the distance would be with the given settings. Then, call an adult over to observe! Be ready to explain why!