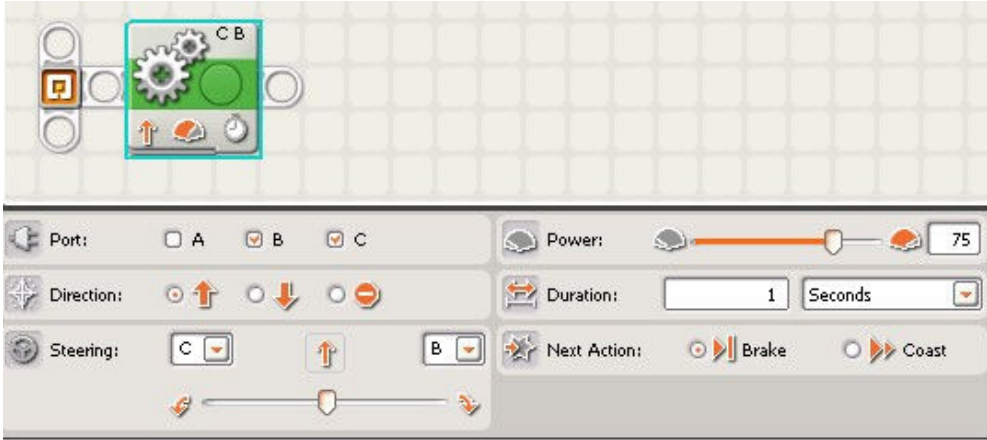


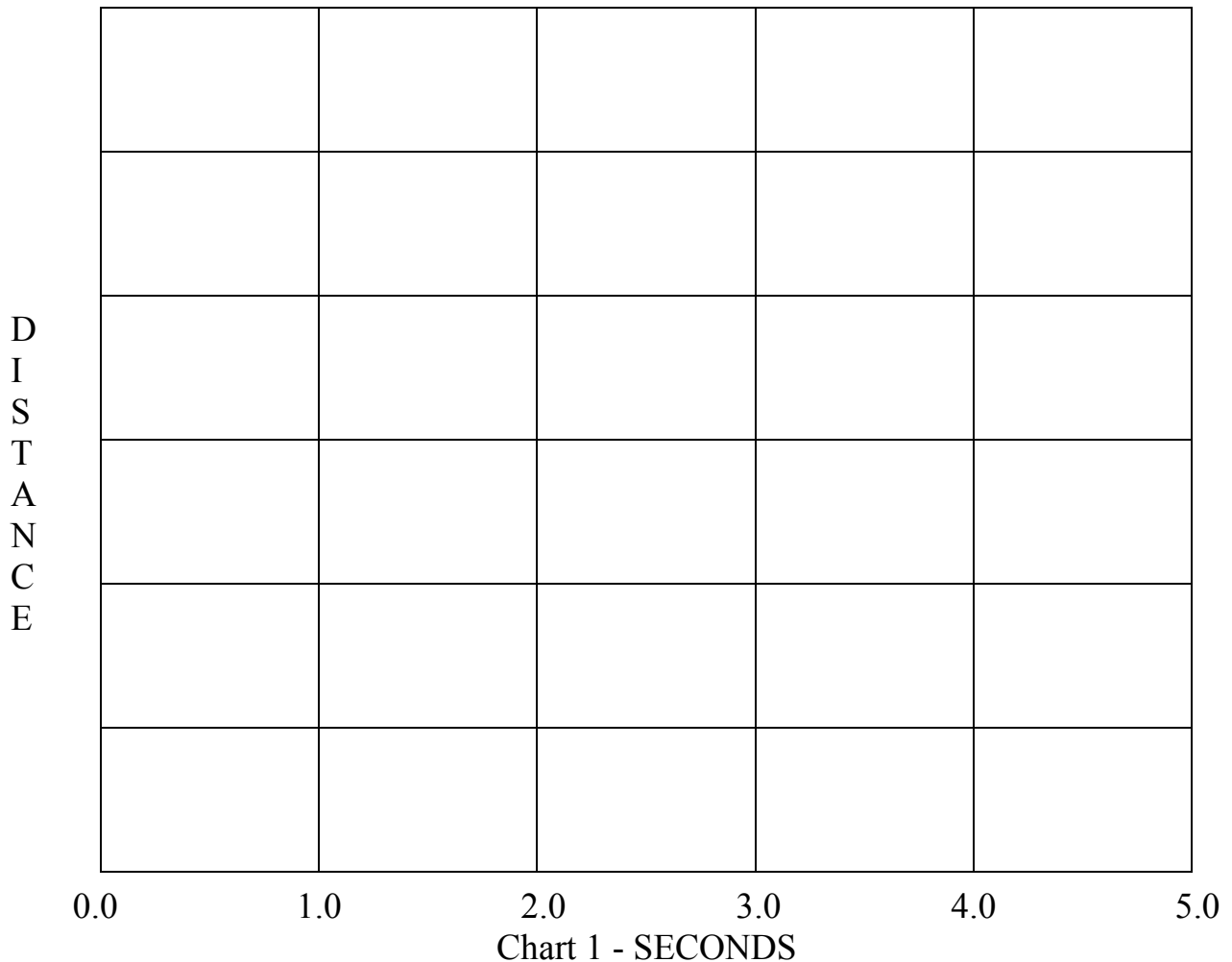
Name: _____

Experiment 1: Distance Vs. Time



Change the **duration** and measure the **distance** in inches. Write it in below.

- 1.0 Sec. _____ Inches
- 2.0 Sec. _____ Inches
- 3.0 Sec. _____ Inches
- 4.0 Sec. _____ Inches
- 5.0 Sec. _____ Inches



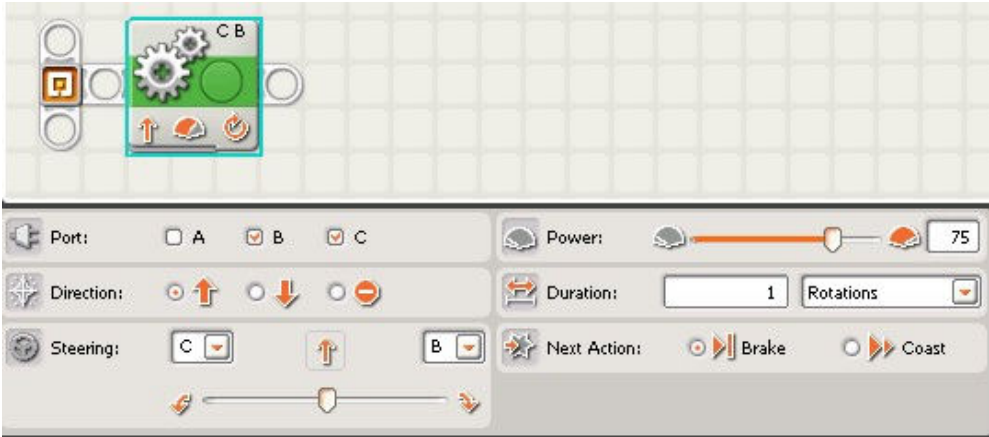
What power level did you use? _____

Choose steps for the left (Y) axis, making sure to include your largest distance.
Eg: 10,20,30 Then make an X on the chart for each time/distance.
Join the X's with ONE SOLID STRAIGHT LINE



Name: _____

Experiment 2: Distance Vs. Wheel Rotations



Change the **rotations** and measure the **distance** in inches. Write it in below.

- 1.0 Rot. _____ Inches
- 2.0 Rot. _____ Inches
- 3.0 Rot. _____ Inches
- 4.0 Rot. _____ Inches
- 5.0 Rot. _____ Inches

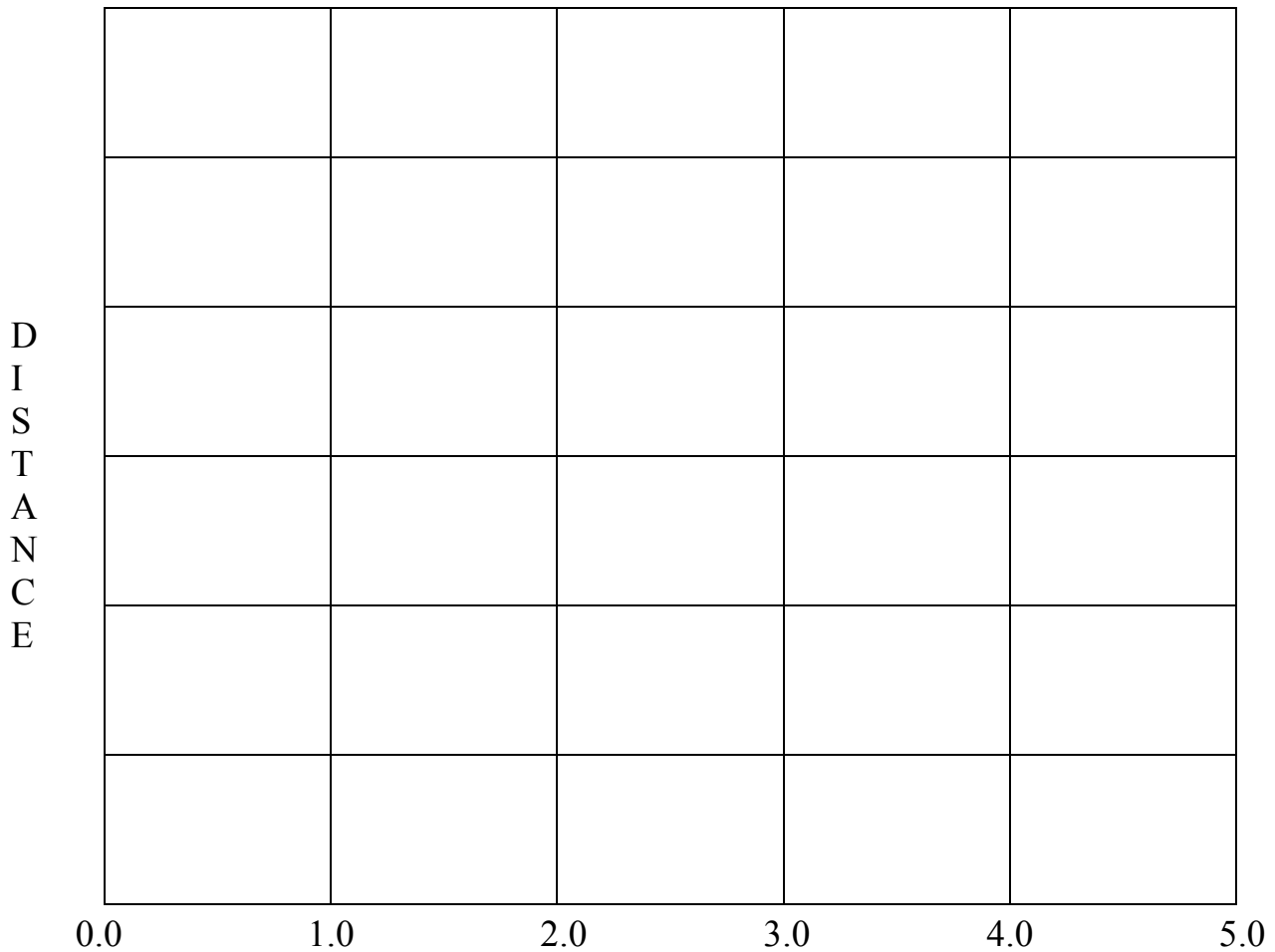


Chart 2 - WHEEL ROTATIONS

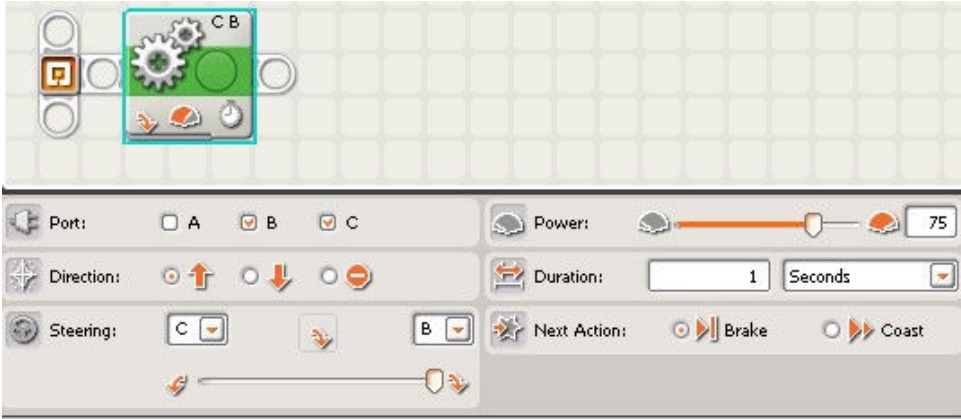
What power level did you use? _____

Choose steps for the left (Y) axis, making sure to include your largest distance.
Eg: 10,20,30 Then make an X on the chart for each time/distance.
Join the X's with ONE SOLID STRAIGHT LINE



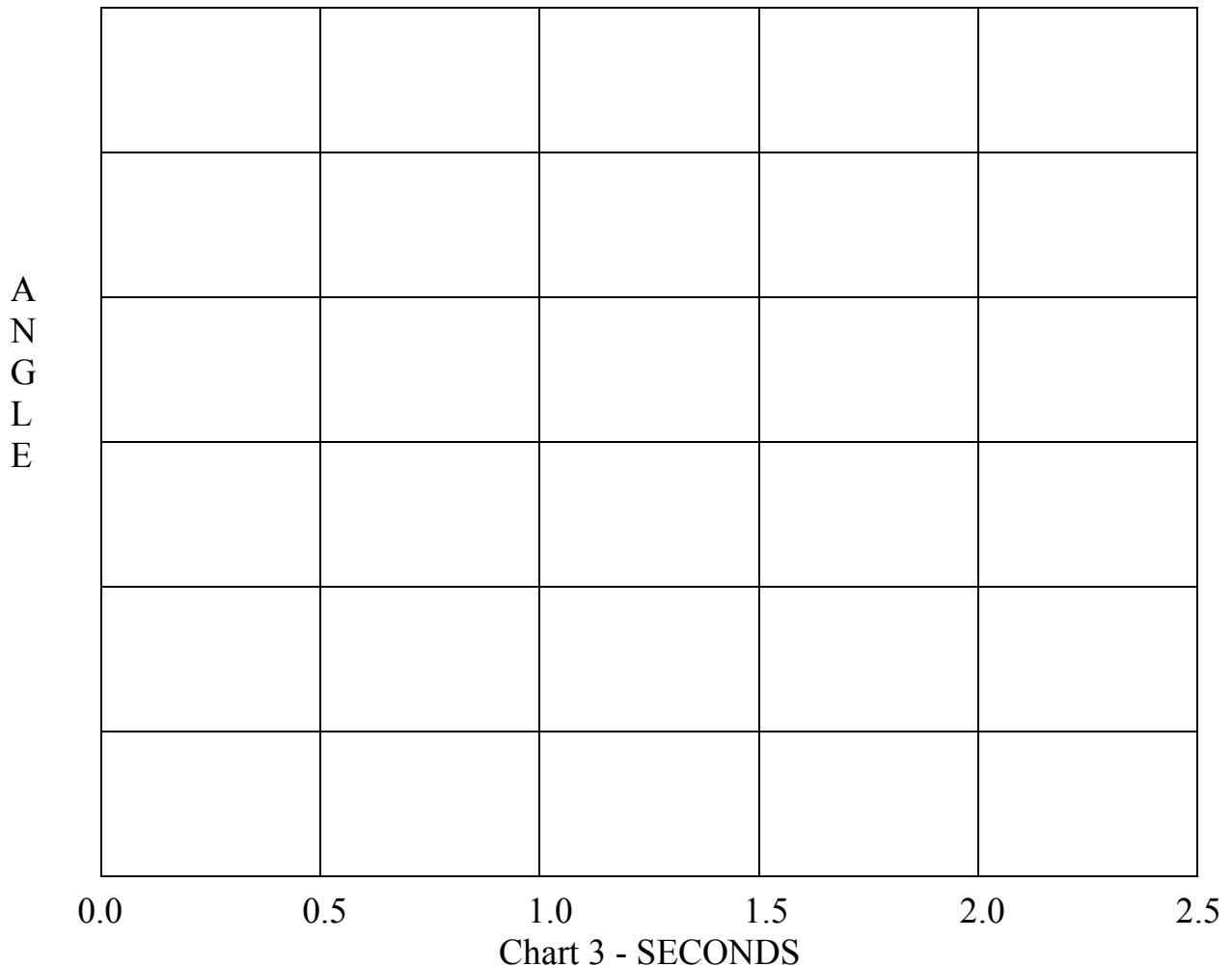
Name: _____

Experiment 3: Turning Vs. Time



Change the **duration** and measure the **turn** in degrees. Write it in below.

- 0.5 Sec. _____ Degrees
- 1.0 Sec. _____ Degrees
- 1.5 Sec. _____ Degrees
- 2.0 Sec. _____ Degrees
- 2.5 Sec. _____ Degrees



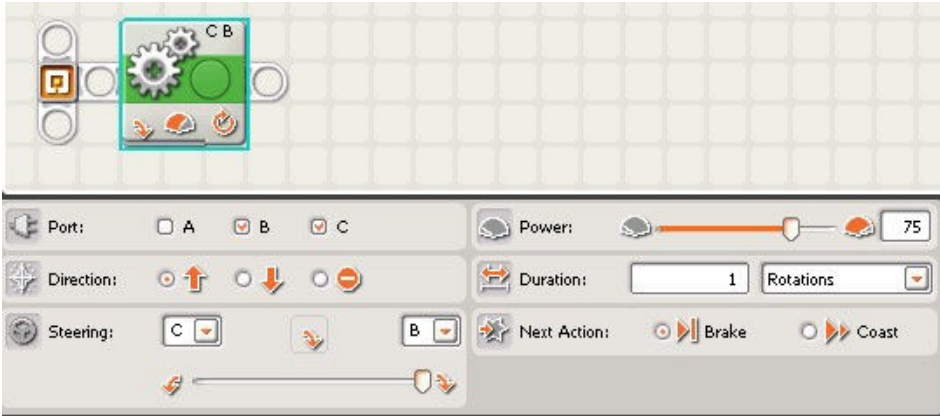
What power level did you use? _____

Choose steps for the left (Y) axis, making sure to include your largest angle.
Eg: 100,200,300 Then make an X on the chart for each time/distance.
Join the X's with ONE SOLID STRAIGHT LINE



Name: _____

Experiment 4: Turning Vs. Wheel Rotations



Change the **rotations** and measure the **turn** in degrees. Write it in below.

- 0.5 Rot. _____ Degrees
- 1.0 Rot. _____ Degrees
- 1.5 Rot. _____ Degrees
- 2.0 Rot. _____ Degrees
- 2.5 Rot. _____ Degrees

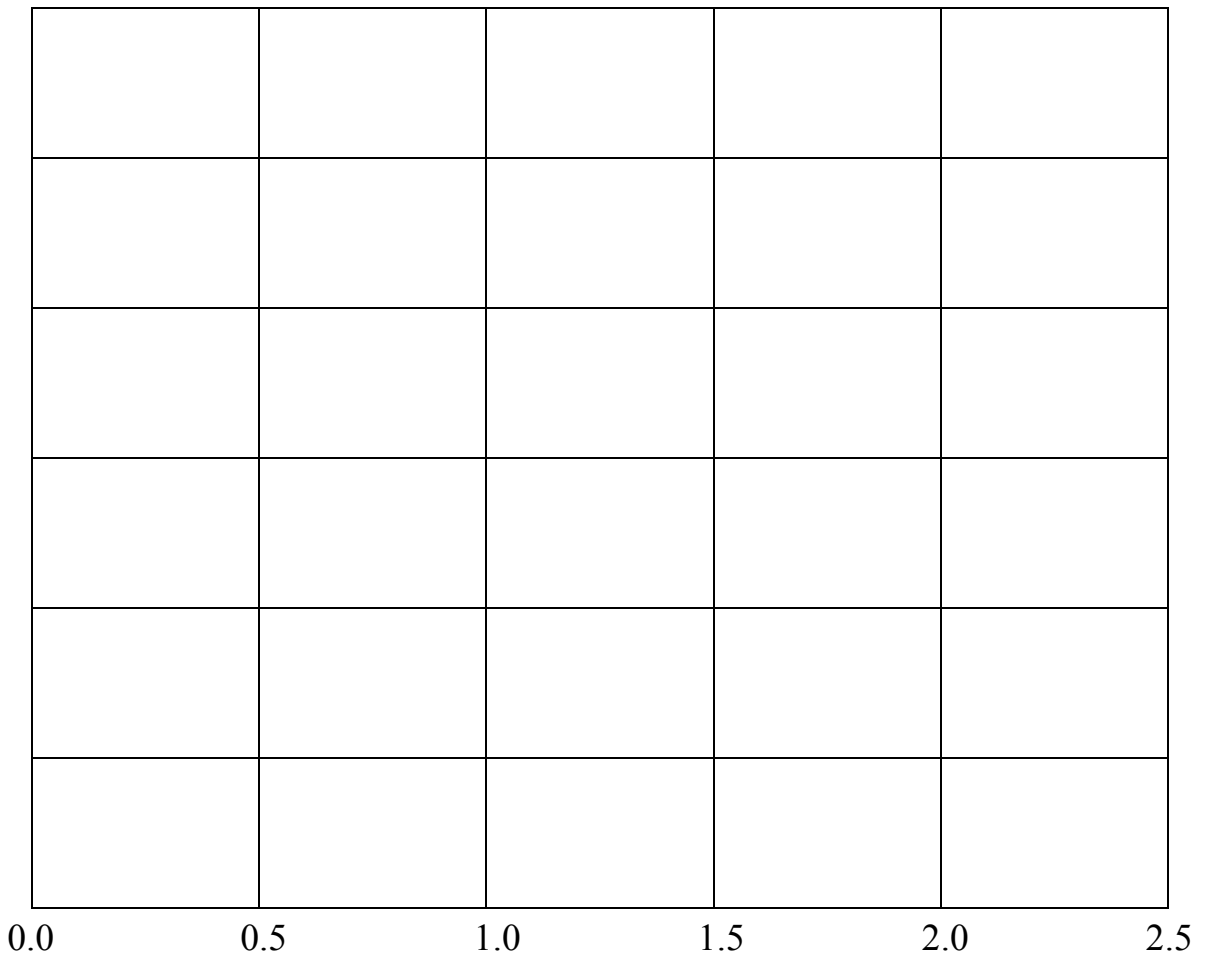


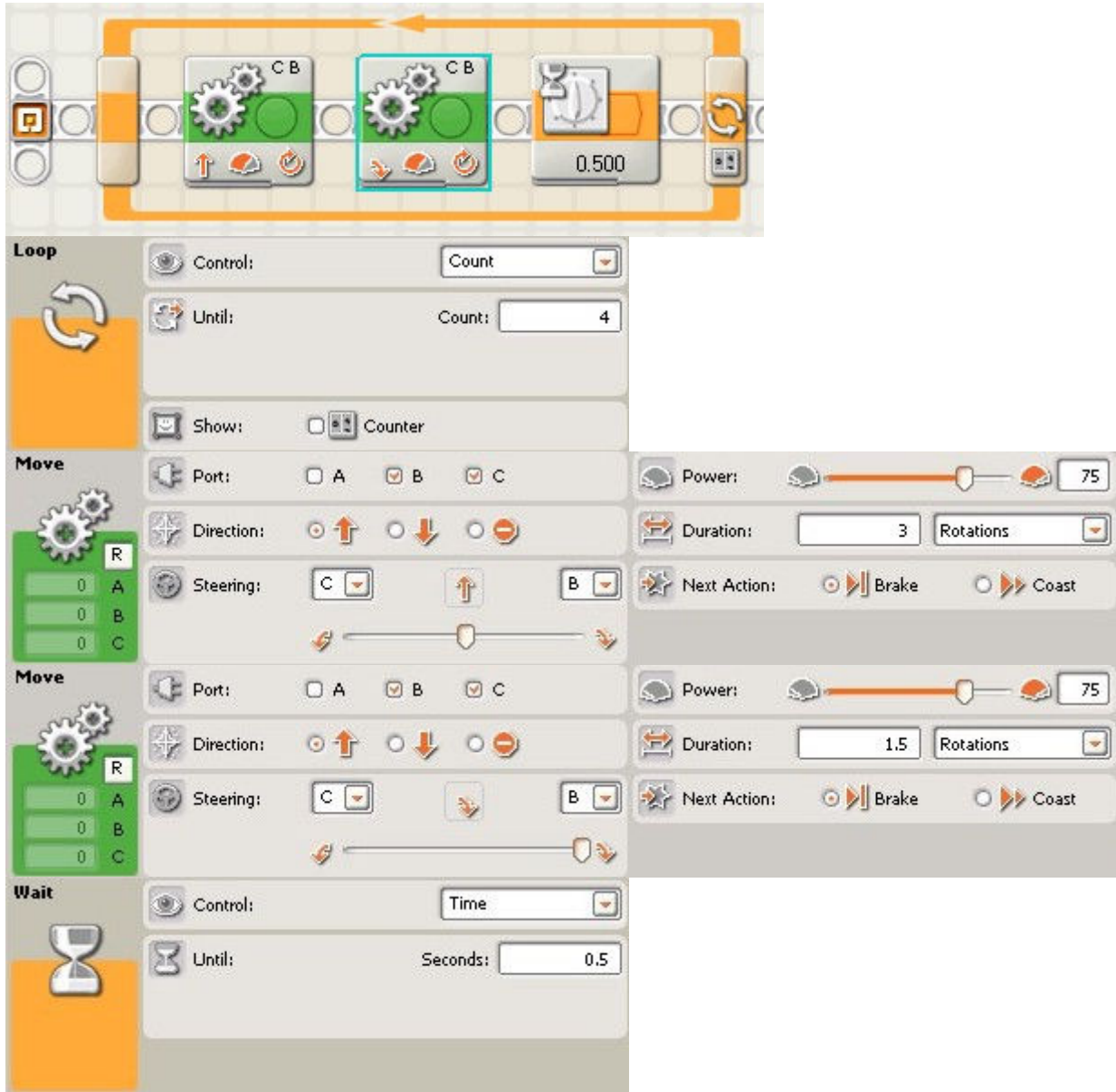
Chart 4 - WHEEL ROTATIONS

What power level did you use? _____

Choose steps for the left (Y) axis, making sure to include your largest angle.
Eg: 10,20,30 Then make an X on the chart for each time/distance.
Join the X's with ONE SOLID STRAIGHT LINE



Experiment 5: Drive in a Square

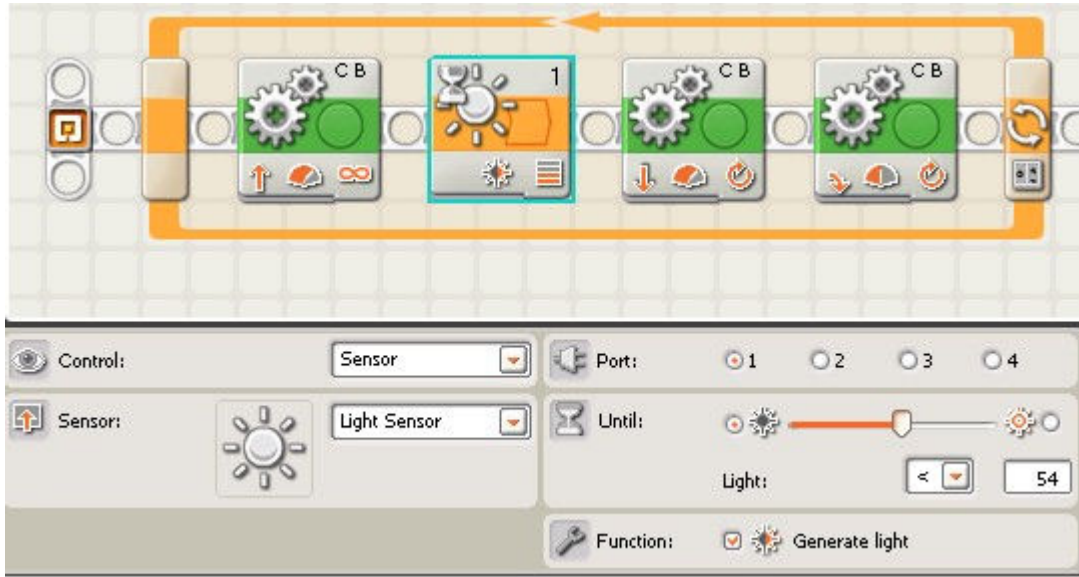


Attempt to drive in a 36 inch square (90 Degree corners).
 Look up wheel rotations in charts 3 and 4.
 Adjust the wheel rotations for a perfect square.

Forward rotations

Turn Rotations

Experiment 6: Bounce in a box



Try to keep the robot in the black tape box.
 Experiment with different values for Light level.
 Adjust Reverse Rotations and Turn Rotations to avoid the line.

Light Level	Forward rotations	Turn Rotations
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____