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## How Far Does the Robot Go? Activity Robot Go Worksheet

## Part I

In the table below, predict your distance travelled along with the actual distance travelled.
To begin, set the number of revolutions on the robot to 3 (this number is arbitrary, the teacher or students may choose any number). Each trial is determined by the number of revolutions predicted and measured of the robot wheels.

| Predicted Results |  |  |  | Experimental Results |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Radius | Circumference $C=2 \cdot \pi \cdot r$ | Distance D=C•(\# of revolutions) |  | Distance |
| Trial 1 |  |  |  | Trial 1 |  |
| Group Avg |  |  |  | Group Avg |  |
| Trial 2 |  |  |  | Trial 2 |  |
| Group Avg |  |  |  | Group Avg |  |
| Trial 3 |  |  |  | Trial 3 |  |
| Group Avg |  |  |  | Group Avg |  |
| Trial 4 |  |  |  | Trial 4 |  |
| Group Avg |  |  |  | Group Avg |  |
| Trial 5 |  |  |  | Trial 5 |  |
| Group Avg |  |  |  | Group Avg |  |

## Part II

In the table below, compare between the predicted and experimental results.

| Trial \# | \# of revolutions | Distance |  |
| :--- | :--- | :--- | :--- |
|  |  | Predicted | Experimental |
|  |  |  |  |
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