Pushing Cars

**Task 1**
Mark a starting line with a piece of tape. In your group, 1 person will push the car, one will be the timer, one will use the ruler to measure and the final team member will record. When ready, have the car begin on the starting line. When the timer says go, push the car 1 foot (the person with the ruler can lay this out so the car pusher knows how far to go). Every 5 seconds, the timer needs to say, “push” and the pusher needs to push the car 1 more foot. Continue pushing the car 1 foot every 5 seconds for 30 seconds. Record your data below.

<table>
<thead>
<tr>
<th>Distance Traveled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (seconds)</td>
</tr>
<tr>
<td>Distance (feet)</td>
</tr>
</tbody>
</table>

Graph the points from the table above.
**Task 2**
Go back to the starting line from Task 1. In your group, 1 person will push the car, one will be the timer, one will use the ruler to measure and the final team member will record. When ready, have the car begin 5 feet in FRONT of the starting line. When the time says go, push the car 1 foot (the person with the ruler can lay this out so the car pusher knows how far to go). Every 5 seconds, the timer needs to say, “push” and the pusher needs to push the car 1 more foot. Continue pushing the car 1 foot every 5 seconds for 30 seconds. Record your data below.

**Distance Traveled**

<table>
<thead>
<tr>
<th>Time (seconds)</th>
<th>0</th>
<th>5</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance (feet)</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Graph the points from the table above.

**Analysis Questions**
1. What is similar about the two tasks?

   In both tasks, ______________.

2. What is different about the two tasks?

   In task 1, I ______________ but in task 2 I ________________.

3. What is similar about the tables?

   _______________ is the same in both tables.

4. What is different about the tables?

   _______________ is different in the tables.

5. What is the same about the graphs?

   Both graphs

   ________________

6. What is different about the graphs?

   The graph of task 2 is different
   because ________________.