Moving Bodies

Materials:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small box</td>
<td>Marble</td>
</tr>
<tr>
<td>Small cart</td>
<td>Lego figure</td>
</tr>
</tbody>
</table>

Procedure:

1. Put the marble in the box
2. Slide the box across the table.
3. Stop the box suddenly.
4. Observe and record the motion of the marble.
5. Balance the Lego figure in the middle of the cart.
6. Push the cart forward suddenly. Observe the movement of the cart and the Lego figure.
7. Record your observations.
8. Balance the Lego figure in the middle of the cart.
9. Roll the cart across the table smoothly, so that the figure does not fall.
10. Crash the cart into your have or notebook. Observe the movement of the cart and the Lego figure.
11. Record your observations.
Data:

<table>
<thead>
<tr>
<th>Observations of Moving Bodies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marble in the box</td>
</tr>
<tr>
<td>Lego figure on cart</td>
</tr>
</tbody>
</table>

Data Analysis:
Based on your observations, describe what must happen to make an object move or stop moving. Be very specific.
Conclusions:
1. Compare the results of this investigation with what you feel when you are riding in a car that starts and stops suddenly.

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2. Based on your statements above; why do you think wearing seatbelts is a law?

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Use your textbook to define and give an example of *inertia*:
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