Newton's Laws of Motion Crossword

Complete the activity.

ACROSS
1. Force is equal to the change in momentum (mV) per change in time. For a constant mass, force equals mass times acceleration. F=m a
6. Every object persists in its state of rest or uniform motion in a straight line unless it is compelled to change that state by forces impressed on it.
9. Push or pull
10. For every action, there is an equal and opposit reaction
12. Measure of gravitational attraction or force or gravity pulling one object toward the center of another object
13. The rate velocity changes with time

DOWN
2. The result of unbalanced forces
3. Force that opposes motion between two surfaces
4. The force that pulls on objects and causes acceleration if the objects are not balanced by an opposing force
5. Speed of an object, but in a specific direction
7. Resistance to change
8. Distance traveled per unit time
11. Amount of matter in an object or a measure or the inertia of an object

<table>
<thead>
<tr>
<th>Motion</th>
<th>Acceleration</th>
<th>Speed</th>
<th>Third Law of Motion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inertia</td>
<td>Weight</td>
<td>Velocity</td>
<td></td>
</tr>
<tr>
<td>Force</td>
<td>Friction</td>
<td>First Law of Motion</td>
<td></td>
</tr>
<tr>
<td>Mass</td>
<td>Gravity</td>
<td>Second Law of Motion</td>
<td></td>
</tr>
</tbody>
</table>

©Beverly Hernandez, licensed to About.com http://homeschooling.about.com