Newton’s Laws of Motion TIC-TAC-TOE – Due date is by the end of class on Tuesday.

Directions: You are going to select any three of the following activities to complete. The activities must connect from top to bottom, left to right, or diagonally.

Name ___________________________ Date ______________ Period _______________

Activity # _____

Activity # _____

Activity # _____

--- Table ---

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<thead>
<tr>
<th>1. Write a letter to Isaac Newton explaining how you use each law in your everyday life. 5 paragraphs minimum</th>
<th>2. Find three cartoons from a newspaper that illustrates Newton’s Laws of motion. Glue them on a ½ sheet of poster board and explain how each law is demonstrated in the cartoon. (As an alternate, you can DRAW your own cartoon with a minimum of 4 panels per cartoon).</th>
<th>3. Choose a sport and relate how Newton’s 3 Laws are used in the sport. Make sure you carefully explain each law and how each action demonstrates that law.</th>
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<tr>
<td>4. Create a children’s book about Newton’s Laws of Motion and the differences between speed, velocity and acceleration. Write it for a 1st grader.</td>
<td>5. Use the following website <a href="http://www.learner.org/interactives/parkphysics/coaster/">http://www.learner.org/interactives/parkphysics/coaster/</a> to design a roller coaster, print the page that shows your final design, safety rating, and fun rating. Explain what make a good safety rating and what makes for a good fun rating.</td>
<td>6. Create a crossword puzzle using force and motion vocabulary. (I have graph paper available to make it easier for you to draw the boxes.)</td>
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<td>7. Create a video to demonstrate Newton’s Three Laws. You will present this to the class and explain. Email me the YouTube link by the deadline. You should use your cell phone to do the recording.</td>
<td>8. Create a poster that promotes seat belt use that explains scientific reasons to use a seat belt when it comes to inertia, balanced and unbalanced forces, etc. I have poster paper and crayons/markers available to you.</td>
<td>9. Create a Jeopardy game on force and motion. 5 categories across 5 clues for each category Include clues and answers for each category on a separate sheet of paper</td>
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### Guidelines for Project

1. Neatly written or typed  
   - Must cover the specific topic in detail  
   - Must be at least five paragraphs  
   - Must use appropriate vocabulary and follow grammar rules

2. Your explanation needs to follow the Claim, Evidence, Reasoning format.  
   - Claim - identify which of Newton's Laws is described  
   - Evidence - comes from the comic  
   - Reasoning - connect your Claim and Evidence with appropriate the scientific principles.

3. Neatly written or typed  
   - Must cover the specific topic in detail  
   - Must be at least three paragraphs  
   - Must use appropriate vocabulary and follow grammar rules

4. **Children's Book**  
   - Must have a cover with book's title and student's name as author  
   - Must have at least 10 pages  
   - Each page should have an illustration to accompany the story  
   - Should be neatly written or typed  
   - Can be developed on the computer

5. Neatly written or typed  
   - Must cover the specific topic in detail  
   - Must be at least three paragraphs  
   - Must use appropriate vocabulary and follow grammar rules  
   - Include an explanation of what role inertia plays in roller coasters.

6. **Crossword Puzzle**  
   - At least 20 significant words or phrases should be included  
   - Develop appropriate clues  
   - Include puzzle and answer key  
   - Can be created on the computer

7. **Video**  
   - Use VHS, DVD, or Flash format  
   - Turn in a written plan or story board with project  
   - Covers pertinent information about the project  
   - Name must be written on video label

8. **Poster**  
   - Should be the size of a standard poster board  
   - Includes at least five pieces of important information  
   - Must have title  
   - Must contain both words and pictures  
   - Name should be written on the back  
   - Bibliography should be included as needed

9. **Class Game**  
   - Game will allow all class members to participate  
   - Must have only a few, easy-to-understand rules  
   - Should be inventive or a new variation on a current game  
   - Must have multiple question opportunities  
   - Must provide answer key before the game is played