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| **Newton's Laws – Activity**  **Directions:** Mark each of the following situations as an example of Newton’s First (1st ), Second (2nd ) or Third (3rd ) Law on the blank before the number. Then explain in complete sentences how the situation is an example of that particular law.   1. A magician pulls a tablecloth out from under dishes and glasses on a table without disturbing them. **Explain Your Answer:** 2. A person’s body is thrown outward as a car rounds a curve on a highway. **Explain Your Answer:** 3. Rockets are launched into space using jet propulsion where exhaust accelerates out from the rocket and the rocket accelerates in an opposite direction. **Explain Your Answer:** 4. A picture is hanging on a wall and does not move. **Explain Your Answer:** 5. A person not wearing a seatbelt flies through a car window when someone slams on the breaks because the person’s body wants to remain in continuous motion even when the car stops. **Explain Your Answer:** 6. Pushing a child on a swing is easier than pushing an adult on the same swing, because the adult has more inertia. **Explain Your Answer:** 7. A soccer ball accelerates more than a bowling ball when thrown with the same force. **Explain Your Answer:** 8. A soccer player kicks a ball with their foot and their toes are left stinging. **Explain Your Answer:** 9. A student leaves a pencil on a desk and the pencil stays in the same spot until another student picks it up. **Explain Your Answer:** 10. Two students are in a baseball game. The first student hits a ball very hard and it has a greater acceleration than the second student who bunts the ball lightly. **Explain Your Answer:** |  |
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**Newton's Laws – Comparison Matrix**

**Directions:** Use your notes, the Introduction to Physical Science textbook and internet sites to complete the following comparison matrix.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Newton’s 1st Law** | **Newton’s 2nd Law** | **Newton’s 3rd Law** |
| **State the Law** |  |  |  |
| **Associated Terms/Concepts & Nickname of Law** |  |  |  |
| **Everyday Example** |  |  |  |