

Which Law? Review WS

Mrs. Wolfe

Name _____ Period _____ Date _____

We're told that Sir Isaac Newton discovered some things about motion when an apple dropped on his head. Whatever "force" was behind his discoveries, we have benefited from them. Here are his three laws of motion. Fill in the missing words in each of the three laws. Then, tell which law fits each example below.

Newton's FIRST Law of Motion

An object at _____ stays at _____ & an object in _____ keeps moving with the same _____ unless an _____ force acts on it.

Newton's SECOND Law of Motion

The amount of _____ needed to make an object change its _____ depends on the _____ of the object.

Newton's THIRD Law of Motion

When 1 object exerts a _____ on a 2nd object, the 2nd object exerts an _____ and _____ force back on the 1st object.

- _____ 1. A frog leaping upward off his lily pad is pulled downward by gravity and lands on another lily pad instead of continuing on in a straight line.
- _____ 2. As the fuel in a rocket ignites, the force of the gas expansion and explosion pushes out the back of the rocket and pushes the rocket forward.
- _____ 3. When you are standing up in a subway train, and the train suddenly stops, your body continues to go forward.
- _____ 4. After you start up your dirt bike, as you give it more gas, it goes faster.
- _____ 5. A pitched baseball goes faster than one that is gently thrown.
- _____ 6. A swimmer pushes water back with her arms, but her body moves forward.
- _____ 7. As an ice skater pushes harder with his leg muscles, he begins to move faster.
- _____ 8. When Bobby, age 5, and his dad are skipping pebbles on the pond, the pebbles that Bobby's dad throws go farther and faster than his.
- _____ 9. When you paddle a canoe, the canoe goes forward.
- _____ 10. A little girl who has been pulling a sled behind her in the snow is crying because when she stopped to tie on her hat, the sled kept moving and hit her in the back of the legs.