**Newton's First Law   
Exit Ticket**

**Use the following vocabulary words to fill in the blanks. Each word is used once.**

**contact inertia speed rest velocity**

**noncontact motion force Galileo acceleration**

**When we measure distance per unit time (a rate), we are measuring \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. When we also note the direction, for example if we say we are biking due north at 5 meters per second, we are measuring \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. A change in velocity is defined as \_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**Interaction between two objects made of matter results in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_. We distinguish two categories of forces: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ forces are those in which matter in the objects touches; examples include friction, air resistance and spring forces. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ forces do not require physical interaction, but instead are the result of objects in a field, such as with gravity, electricity and magnetism.**

**Newton’s first law states that “an object in motion tends to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; an object at rest tends to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.” Many years before Newton wrote this law, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ stated the same idea as the principle of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**