Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_

**Newton’s Laws of Motion Extra Credit**

**Directions: Match the words with their correct definition**

1. Force that opposes motion between two surfaces \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Amount of matter in an object or a measure or the inertia of an object \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Resistance to change \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Speed of an object, but in a specific direction \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Push or pull \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Measure of gravitational attraction or force or gravity pulling one object toward the center of another object\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. 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. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. The result of unbalanced forces\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. The force that pulls on objects and causes acceleration if the objects are not balanced by an opposing force \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. Distance traveled per unit time \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. 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 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. For every action, there is an equal and opposite reaction \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. The rate velocity changes with time \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- |
| Gravity Mass First Law of Motion Friction Acceleration Speed Velocity  Third Law of Motion Second Law of Motion Force Inertia Weight Motion |

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| --- | --- |
| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Motion, Forces and Energy

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**Across Down**

**1.** an object at rest will stay at rest and an object in **2.** cause an object to start moving, stop moving

motion with stay in motion or change direction

**3.** fluid friction on objects falling through the air **4.** equal forces acting on an object in OPPOSITE directions **5.** product of an object's mass and velocity

**7.** acceleration depends on an object's mass and the **6.** object that is used to determine if something is in motion **8.** force that pulls objects toward each other

net force acting on the object **9.** amount of matter in an object

**10.** for every action there is an equal but opposite **12.** distance an object travels in a given unit of time

Reaction **13.** an object that is thrown

**11.** rate at which an object is moving at a given **15.** combination of ALL forces acting on the object

instant in time **17.** tendency of an object to resist a change in motion

**14.** force of gravity on a person/object **18.** SI unit that measures strength of force

**16.** speed in a given direction **19.** when one object's distance from another is changing

**20.** push or pull on an object

**21.** force that 2 surfaces exert on each other when

they rub against each other