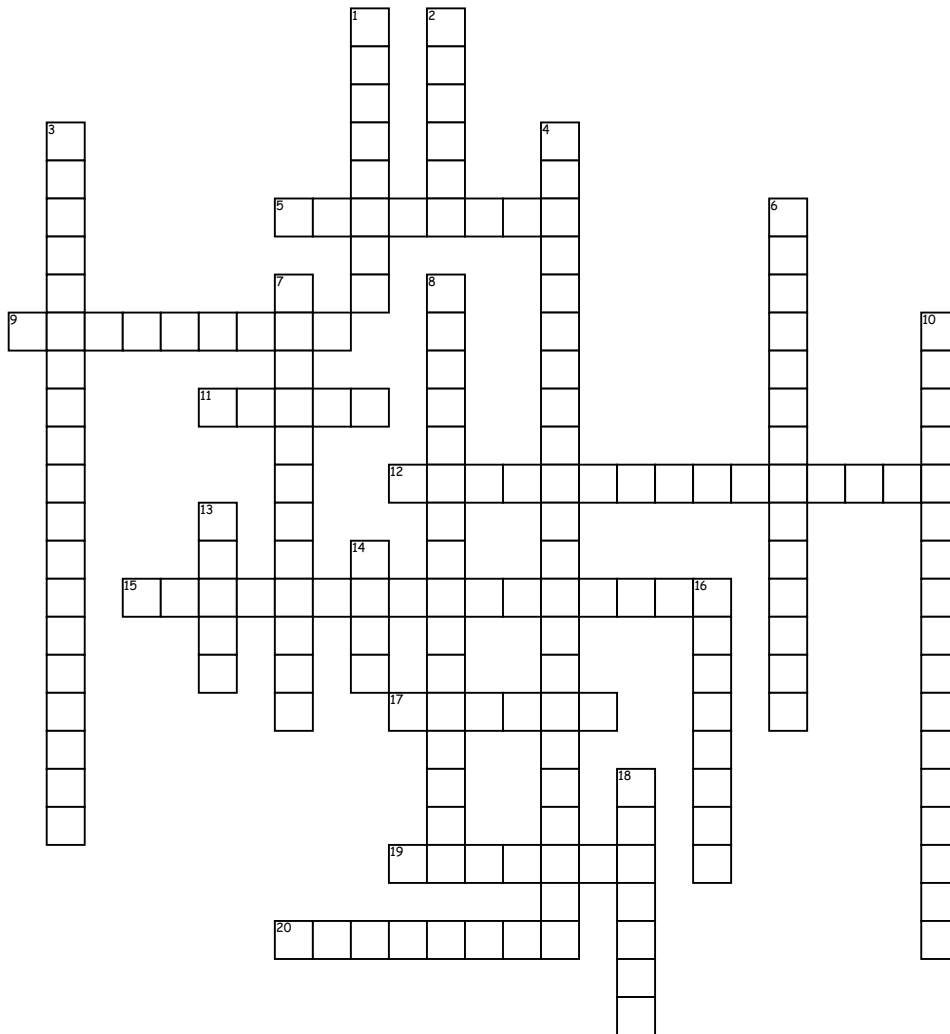


Name: _____ Date: _____ Period: _____

crossword puzzle



Across

5. The force that two surfaces exert on each other when they rub against each other is called ____.

9. A ____ causes a change in the object's motion.

11. The ____ of an object is the distance the object travels per unit of time.

12. ____ occurs when two solid surfaces slide over each other.

15. Newton's ____ states that an object at rest will remain at rest unless acted upon by a nonzero net force. An object moving at a constant velocity will continue moving at a constant velocity unless acted upon by a nonzero net force.

17. ____ is mathematically described in terms of displacement, distance, velocity, acceleration, speed, and time.

19. Resistance to change in motion is called ____.

20. ____ is a characteristic of a moving object that is related to the velocity of the object.

Down

1. ____ is defined as the vector measurement of the rate and direction of motion.

2. ____ is a measure of the force of gravity on an object.

3. ____ of action and reaction forces are all around you.

4. The law of ____ states that, in the absence of outside forces like friction, the total momentum of objects that interact does not change.

6. An object is in motion if it changes position relative to a ____.

7. Acceleration Scientists define ____ as the rate at which velocity changes.

8. Newton's ____ states that if one object exerts a force on another object, then the second object exerts a force of equal strength in the opposite direction on the first object.

10. Newton's ____ states that an object's acceleration depends on its mass and the net force acting on it.

13. A ____ is a push or pull.

14. ____ is a measure of the amount of matter in an object.

16. The combination of all the forces on an object is called the ____.

18. ____ is a force that pulls objects toward each other.

Word Bank

first law of motion

Weight

velocity

Net force

speed

third law of motion

friction

Gravity

Sliding friction

acceleration

0 net force

Force

Action reaction pairs

Motion

Momentum

inertia

Reference point

Mass

second law of motion

conservation of momentum