Name:	Date:

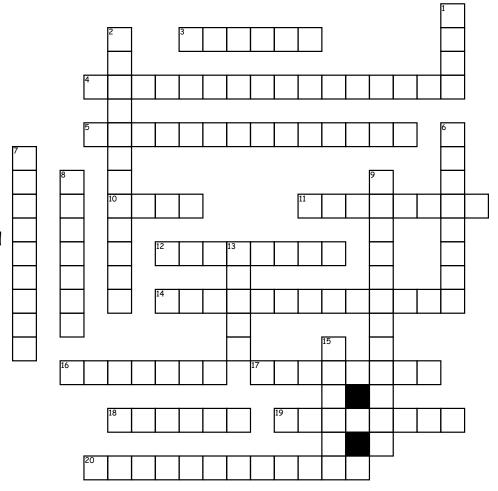
## Newton's Law of Motion

## <u>Across</u>

- 3. The state in which one object's distance from another is changing
- 4. Forces that produce a nonzero net force, which changes an objects motion
- Equal forces acting on an object in opposite directions
- 10. How you can use Newtons Second Law to find force
- 11. The force that one surface exerts on another when the two surfaces rub against each other
- 12. Any object at rest or in motion stays that way until a force is acted on it
- 14. Energy that an object has due to its motion
- 16. The force that pulls objects toward each other
- The product of an objects mass and velocity
- 18. The definition includes push of pull
- 19. The overall force on an object when all the individual forces acting on it are added together
- 20. how far an object moves

## Down

- 1. The amount of inertia depends on this
- 2. A push or a pull on an object by another that is touching it



- **6**. Speed in a given direction
- 7. the property of relative size or extent
- 8. The tendency of an object to resist any change in its motion
- 9. The rate at which velocity changes
- 13. The distance an object travels per unit of time
- 15. A unit of measure that equals the force required to accelerate 1 kilogram of mass at 1 meter per second per second

