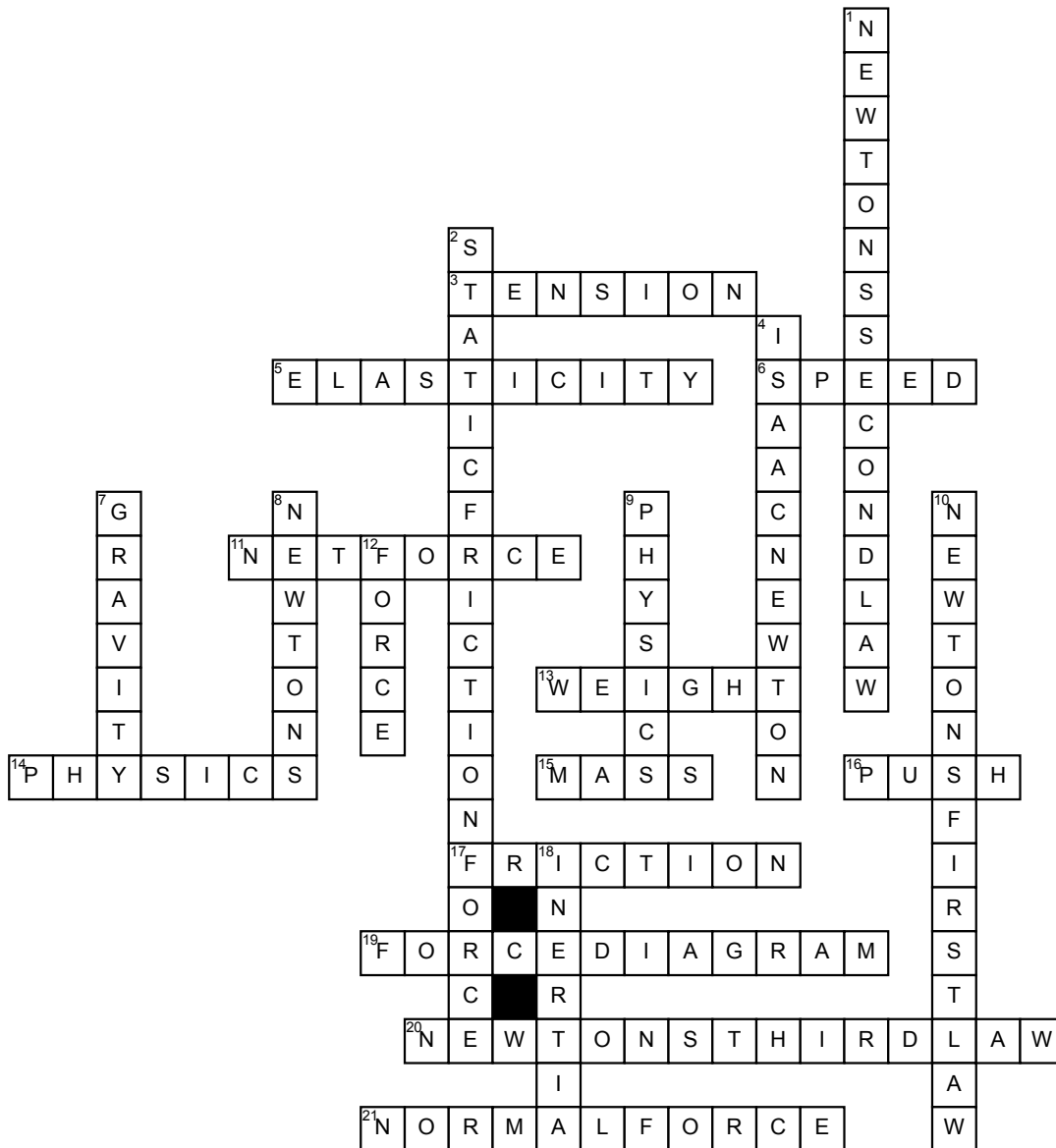


Name: _____

Date: _____

Forces



Across

3. the pulling force exerted by each end of an object
 5. the ability of a material to return to its original shape after being stretched or compressed
 6. the rate at which something moves
 11. the overall force acting on an object
 13. a body's relative mass or the quantity of matter contained by it
 14. the branch of science concerned with the nature and properties of matter and energy
 15. amount of matter present in an object
 16. exert force on something
 17. the force exerted on the surface by another when there is no motion between the two surfaces

19. a diagram showing all the forces acting on an object, the force's direction and its magnitude.

20. For every action there is an equal and opposite re-action. acceleration: the net result of any and all forces acting on the object (change in velocity). velocity: how fast and in what direction an object moves.
 21. The support force exerted upon an object that is in contact with another stable object.

Down

1. The greater the mass, the greater the amount of force needed (to accelerate the object).
 2. a force trying to cause a stationary object to start moving
 4. English physicist
 7. the force that attracts a body toward the center of the earth

8. Standard International (SI) unit of force

9. the branch of science concerned with the nature and properties of matter and energy

10. An object at rest will remain at rest unless acted on by an unbalanced force. An object in motion continues in motion with the same speed and in the same direction unless acted upon by an unbalanced force

12. strength or energy as an attribute of physical action or movement

18. the resistance of any object to any change in its state of motion