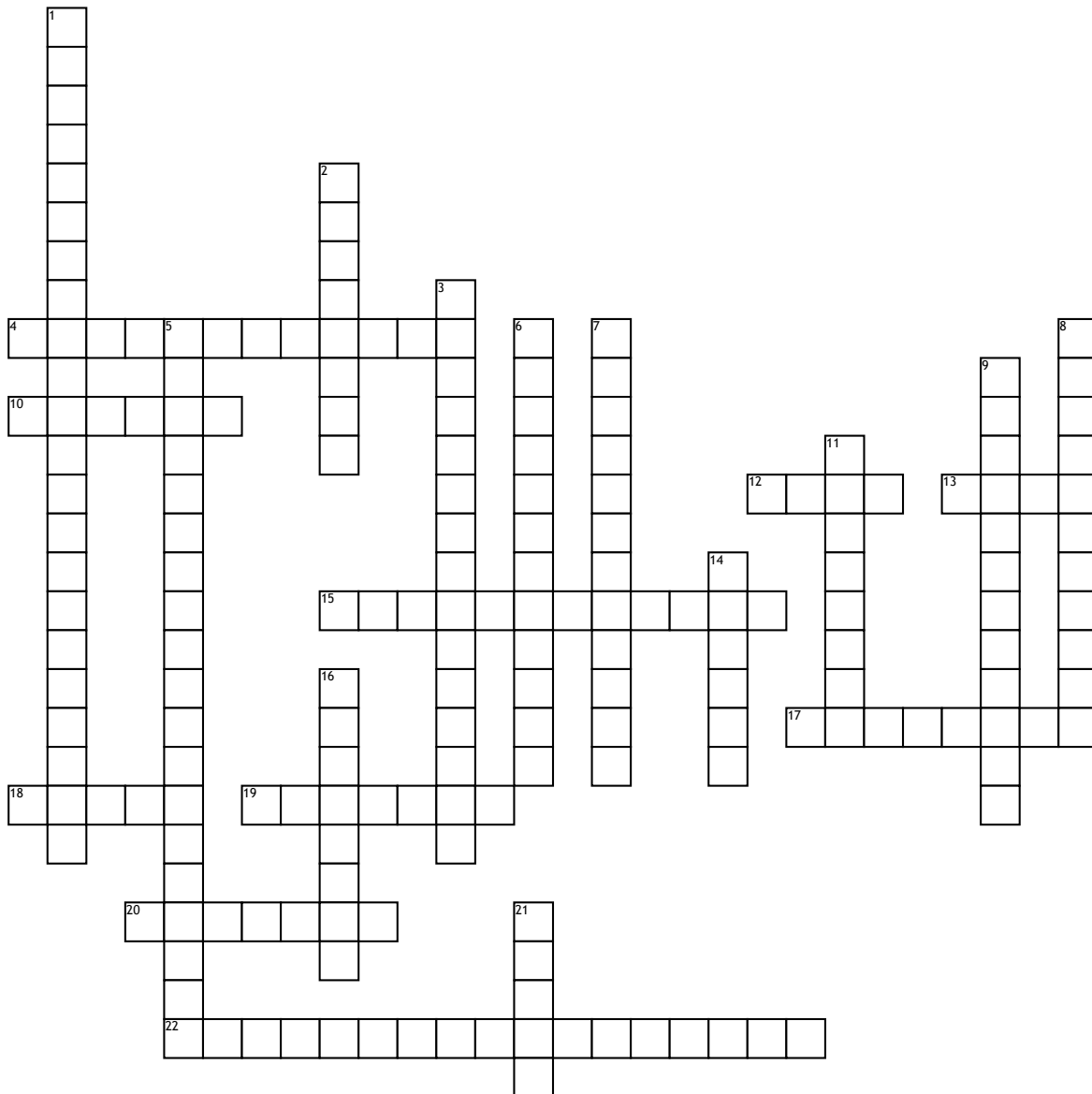


Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Biomechanics



## Across

4. Movement in a straight line and from one point to another  
 10. is the property that must be transferred to an object in order to perform work  
 12. there is a displacement of the point of application in the direction of the force  
 13. body of matter with no definite shape  
 15. increase of speed  
 17. the time rate of change of position of a body in a specified direction  
 18. is any interaction that, when unopposed, will change the motion of an object.  
 19. 1.the force that attracts a body toward the center of the earth

20. Study of factors relating to nonmoving systems

22. The second law states that the rate of change of momentum of a body is directly proportional to the force applied, and this change in momentum takes place in the direction of the applied force.

## Down

1. When one body exerts a force on a second body, the second body simultaneously exerts a force equal in magnitude and opposite in direction on the first body.  
 2. is the force resisting the relative motion of solid surfaces  
 3. applies to objects that move along a circular path in respect to time  
 5. is the rate of change of angular velocity

6. an object either remains at rest or continues to move at a constant velocity, unless acted upon by a force  
 7. The application of the principles of mechanical physics

8. study of human movement

9. Movement of a body around a center of rotation - the axis.

11. is the force applied perpendicular to the surface of an object per unit area over which that force is distributed

14. is rotational force

16. Study of mechanical factors that relate to systems in motion

21. the rate at which work is performed or energy is converted in one unit of time