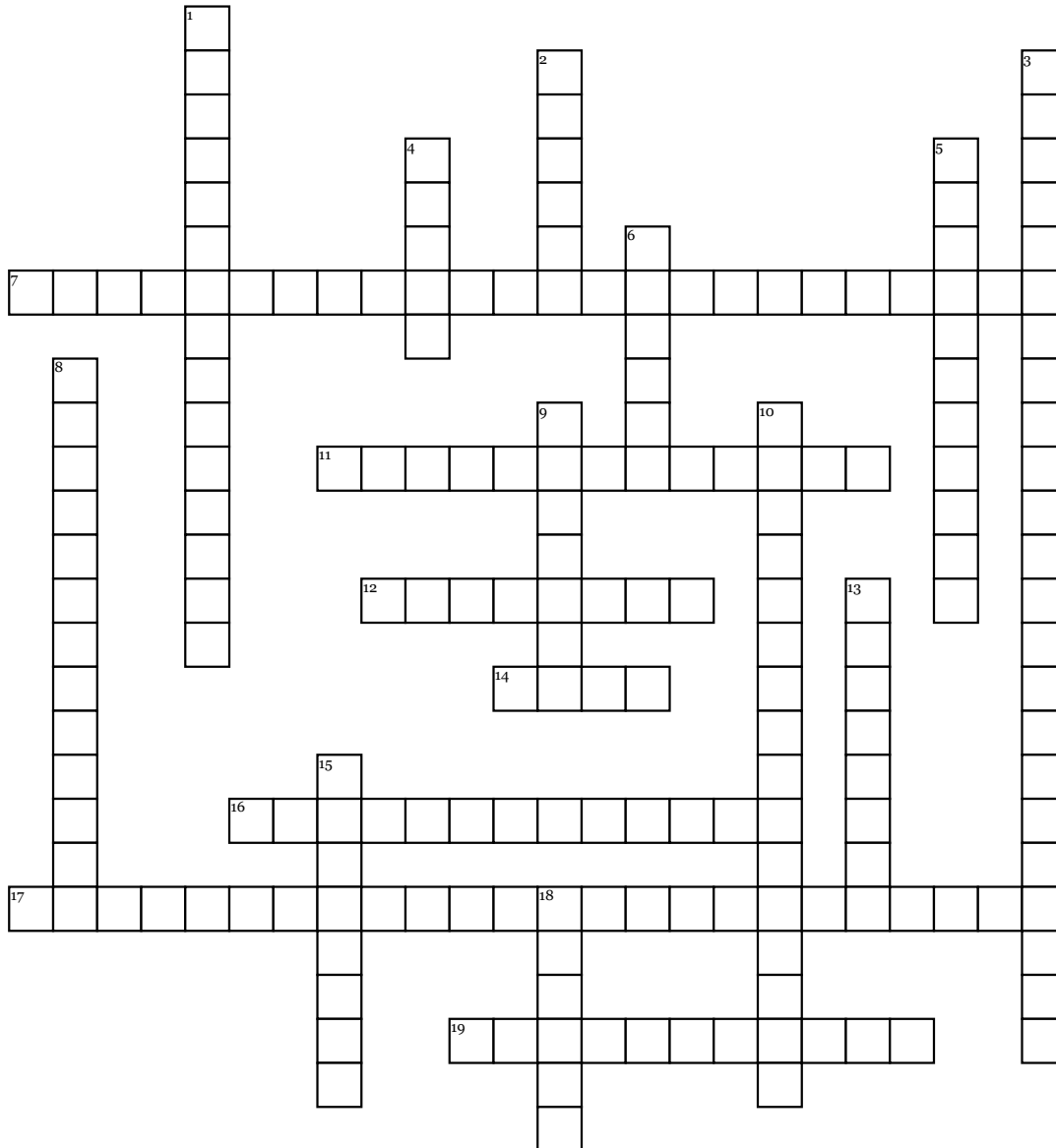


Physics



Across

7. An object at rest stays at rest and an object in motion stays in motion with the same speed and in the same direction unless acted upon by an unbalanced force.

11. the maximum speed of a falling object when it can no longer accelerate from the gravitational pull or any constant force.

12. surface resistance to relative motion, as of a body sliding or rolling.

14. the quantity of matter as determined from its weight

16. the frictional force air exerts against a moving object.

17. The acceleration of an object as produced by a net force is directly proportional to the magnitude of the net force, in the same direction as the net force, and inversely proportional to the mass of the object.

19. the direct effect that one kind of particle has on another, in particular, in inducing the emission or absorption of one particle by another.

Down

1. used to show the relative magnitude and direction of all forces acting upon an object in a given situation.

2. the force that gravitation exerts upon a body, equal to the mass of the body times the local acceleration of gravity: commonly taken, in a region of constant gravitational acceleration, as a measure of mass.

3. For every action, there is an equal and opposite reaction.

4. substance, as a liquid or gas, that is capable of flowing and that changes its shape at a steady rate when acted upon by a force tending to change its shape.

5. acting in one direction.

6. the standard unit of pressure or stress in the International System of Units (SI), equal to one newton per square meter.

8. acting in the opposite direction.

9. the property of matter by which it retains its state of rest or its velocity along a straight line so long as it is not acted upon by an external force.

10. the constant speed that a freely falling object eventually reaches when the resistance of the medium through which it is falling prevents further acceleration.

13. unit of mass equal to 1000 grams: the basic unit of mass in the International System of Units (SI),

15. force per unit area

18. the standard unit of force in the International System of Units (SI), equal to the force that produces an acceleration of one meter per second per second on a mass of one kilogram.