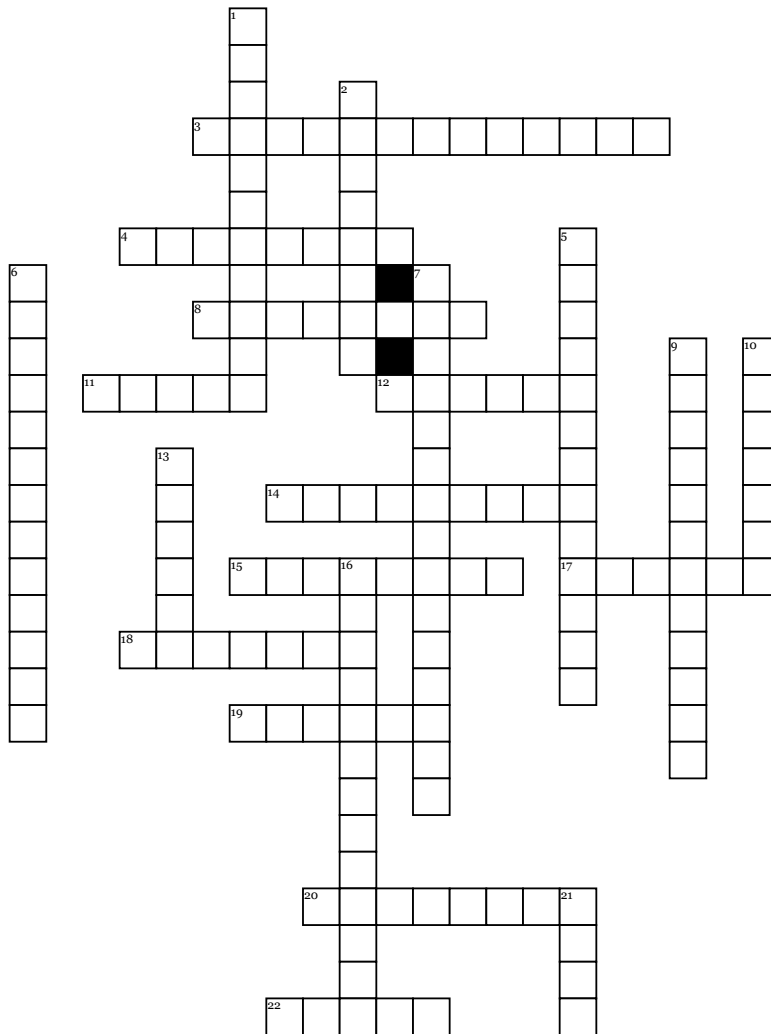


# Newton's Laws of Motion



## Across

- 3.** the force of air pushing against a moving object  
**4.** the overall force on an object when all forces acting on it are added together  
**8.** the force another object exerts on another  
**11.** a push or pull  
**12.** the force of gravity on an object  
**14.** a number that tells how much of something there is  
**15.** for every action there is an equal and opposite reaction  
**17.** the ability to produce change

- 18.** the tendency of an object to resist a change in motion  
**19.** a quantity that has both size and direction

- 20.** mass multiplied by velocity  
**22.** the distance an object travels per unit of time

## Down

- 1.** the name often given to the force exerted by the first object on a second object  
**2.** speed in a given direction  
**5.** energy that an object has due to its motion

- 6.** the overall force has zero force on an object  
**7.** stored energy that results from the position or shape of an object

- 9.** a change in velocity  
**10.** a force that pulls objects towards each other

- 13.** the act of movement  
**16.** the name often given to the force exerted by the second object back on the first object  
**21.** the amount of matter in an object

## Word Bank

acceleration  
 velocity  
 mass  
 speed  
 air resistance

magnitude  
 motion  
 force  
 energy  
 vector

gravity  
 weight  
 inertia  
 potential energy

friction  
 net force  
 kinetic energy  
 reaction force

action force  
 third law  
 momentum  
 balanced force