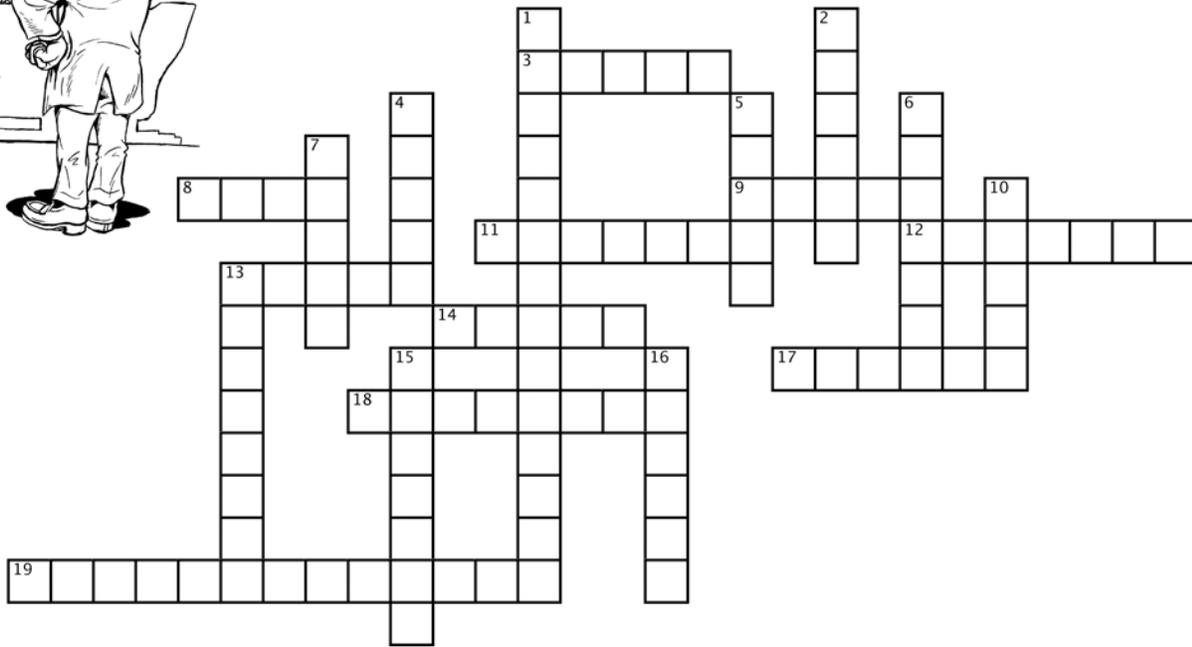


# Simple Machines

How much do you know about machines and how they work?  
Take our crossword challenge and test your knowledge



## Across

3. A simple machine consisting of a rigid bar pivoted on a fixed point and used to transmit force, as in raising or moving a weight at one end by pushing down on the other.
8. A supporting shaft or member on or with which a wheel or a set of wheels revolves.
9. A solid disk or a rigid circular ring connected by spokes to a hub, designed to turn around an axle passed through the center.
11. A system or device for doing work, as an automobile or a jackhammer.
12. A straight bar of iron or steel, with the working end shaped like a chisel and often slightly bent and forked, used as a lever.
13. The capacity to do work or cause physical change; energy, strength, or active power.
14. A piece of material, such as metal or wood, thick at one edge and tapered to a thin edge at the other for insertion in a narrow crevice, used for splitting, tightening, securing, or levering.
17. A hand tool with a handle and attached metal head used for striking or pounding.
18. The extent of space between two objects or places; an intervening space.
19. A plane set at an angle to the horizontal, especially a simple machine used to raise or lower a load by rolling or sliding.

## Down

1. Lifting machine using pulley blocks and ropes or cables used for hauling and hoisting heavy objects.
2. A simple machine made up of a wheel with a grooved rim that a pulled rope or chain can run through to lift a heavy object.
4. A unit of electrical energy equal to the work done when a current of one ampere is passed through a resistance of one ohm for one second.
5. The ability or capacity to perform or act effectively.
6. The point or support on which a lever pivots.
7. A toothed machine part, such as a wheel or cylinder, that meshes with another toothed part to transmit motion or to change speed or direction.
10. A device that converts any form of energy into mechanical energy.
13. A force that resists the relative motion or tendency to such motion of two bodies in contact.
15. A vehicle consisting of a light frame mounted on two wire-spoked wheels one behind the other.
16. A long board balanced on a central fulcrum with a person riding on each end.