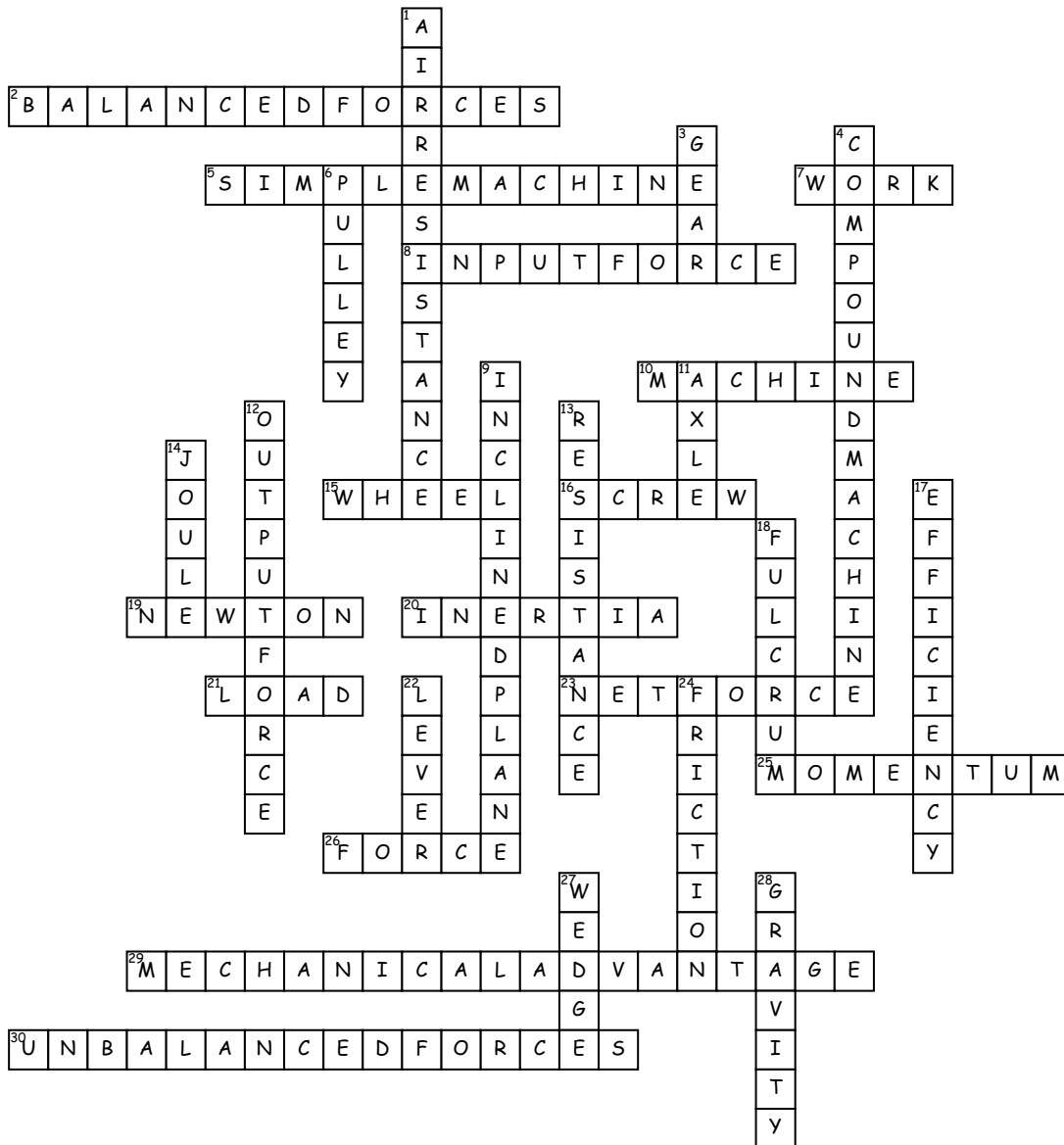


Work and Machines Crossword Puzzle



Across

2. Two forces acting in opposite directions on an object, and equal in size
5. A machine designed to make work easier by increasing the distance and decreasing effort
7. The transfer of energy that occurs when a force makes an object move
8. The force applied to the machine and the force you exert
10. A device that uses energy to perform an activity
15. A circular object that revolves on an axle and is fixed below a vehicle or other object to enable it to move easily over the ground
16. A simple machine that consists of an inclined plane wrapped in a spiral around a cylindrical post
19. The unit used to measure force
20. The resistance of any physical object to any change in its state of motion
21. The object that is moved or lifted (known as the output force)

23. The overall force on an object when all the individual forces acting on it are added together
25. measured as a product of an objects mass and velocity
26. An influence that causes a free body to undergo acceleration; a push or a pull
29. Output force ÷ input force; the number of times a machine multiplies the effort force
30. Forces that cause a change in the motion of an object

Down

1. The forces that oppose the relative motion of an object through a fluid
3. A type of lever that looks like a wheel with teeth
4. Two or more simple machines that operate together
6. A group of wheels with a rope, chain, or cable running along a groove
9. A sloping surface that reduces the amount of force required to do work

11. A rod or spindle passing through the center of a wheel or group of wheels.
12. The weight of the object of which force is being exerted to known as the load
13. The force which an effort force must overcome in order to do work on an object via a simple machine
14. The unit of work
17. Ration of output work done by the machine to input work done on the machine expressed as a percentage
18. The point on which a lever rests or is supported and on which it pivots
22. A simple machine consisting of a bar free to pivot about a fixed point called a fulcrum
24. A force that opposes motion
27. A simple machine that is an inclined plane with one or two sloping sides
28. a force that acts upon all objects