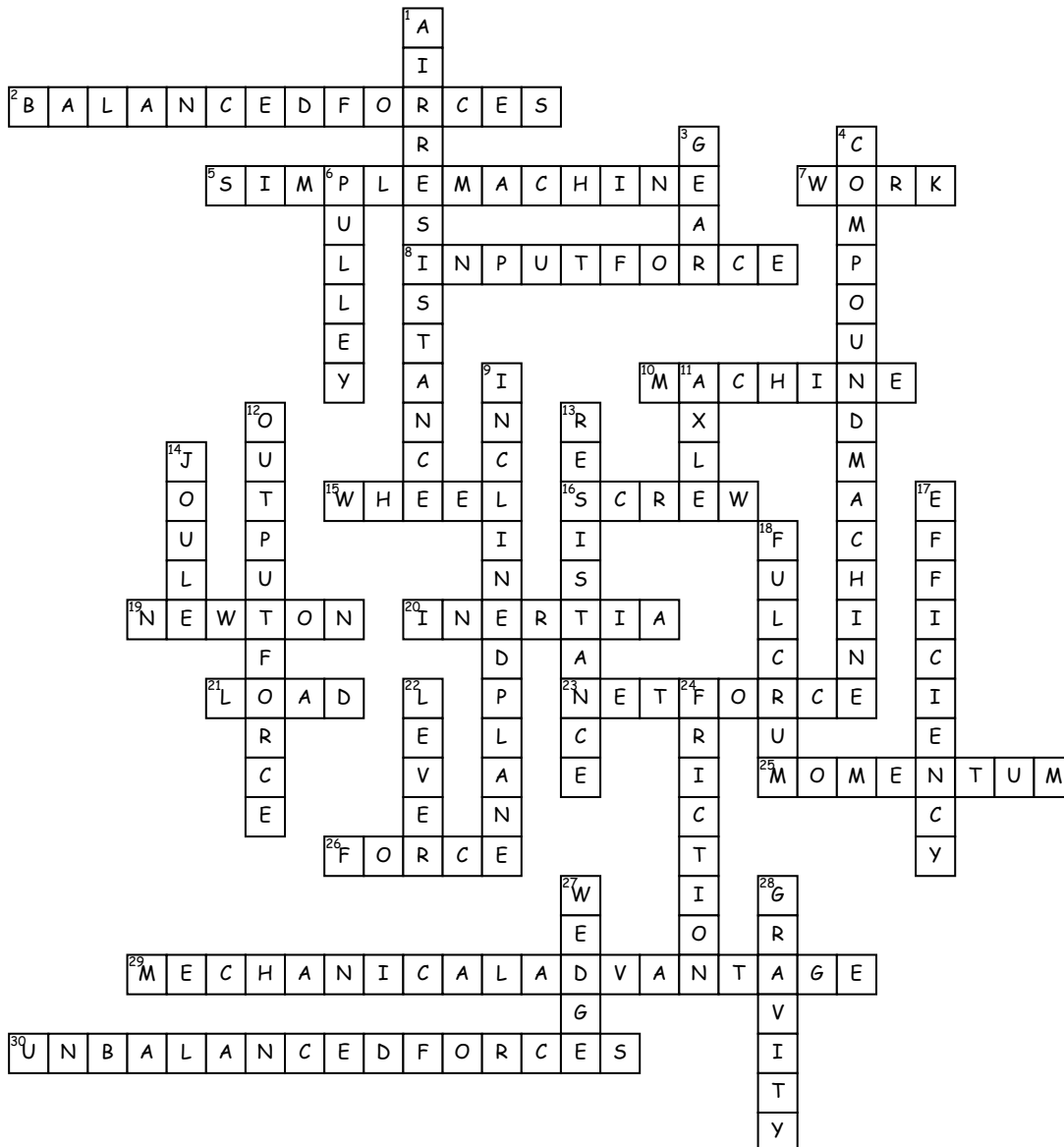


Work and Machines Crossword Puzzle



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