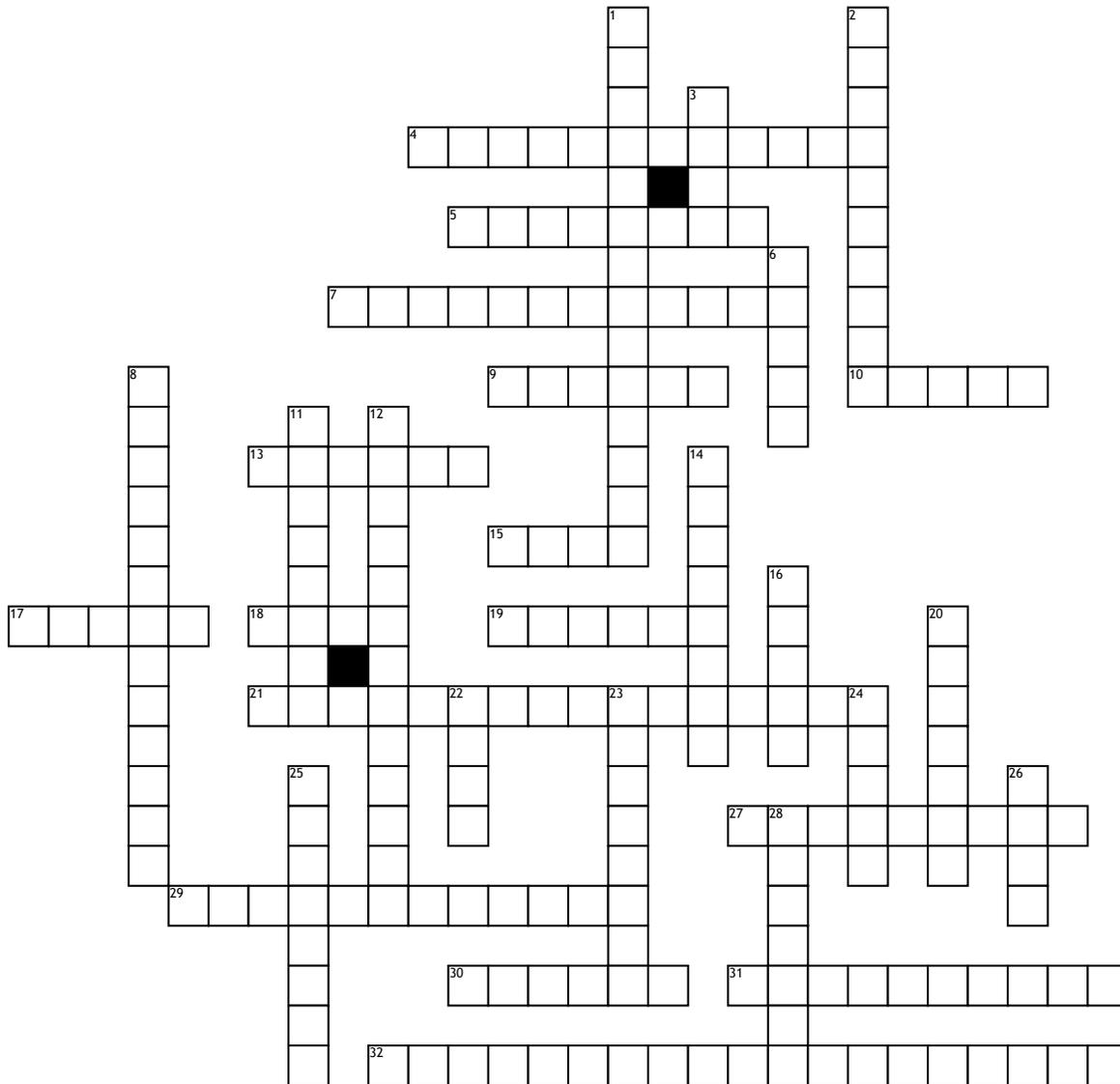


Fast and Furious Forces



Across

4. Distance and direction of an objects change in position of its starting point
 5. Speed in a given direction ($v=d/t$)
 7. A simple machine that consists of two attached circular or cylindrical objects that rotate about a common axis, each one with a different radius
 9. The force of energy that is applied to a machine for the accomplishment of useful work
 10. A simple machine that is an inclined plane that moves
 13. An object's change in position over time when compared with a reference point
 15. A measure of how much matter is in an object
 17. A simple machine that is an inclined plane wrapped around a central cylinder to form a spiral
 18. An interval separating two points of this quantity; duration
 19. A measure of force Gravity has on an object

21. Forces that produce a nonzero net force, which changes and objects motion
 27. The angle of movements from the resting point
 29. The rate at which velocity changes
 30. A simple machine that consists of a wheel over which a rope, chain, or wire passes
 31. Not moving; not changing
 32. The number of times a machine increases a force exerted on it (output force/ input force)

Down

1. Equal forces acting on an object in opposite directions
 2. The law of inertia, object in motion will stay in motion unless acted upon by an outside force
 3. Put something in resting position, as for support or steadying
 6. A simple machine that consists of a rigid bar that pivots about a fixed point
 8. A simple machine that is a flat, sloped surface

11. The location of an object compared to a reference point
 12. Device that can make a tough job easier by enabling a person to apply less force or to apply force in a direction that is easier to manipulate
 14. A force that one surface exerts on another when the two surfaces rub against each other
 16. A push or pull exerted on an object
 20. A force that pulls objects toward each other
 22. A bar or shaft on which a wheel turns
 23. How far an object has traveled
 24. The distance an object travels per unit of time
 25. The product of an object's mass and velocity
 26. Force exerted on an best that causes it to move
 28. The tendency of an object to resist any change in its motion