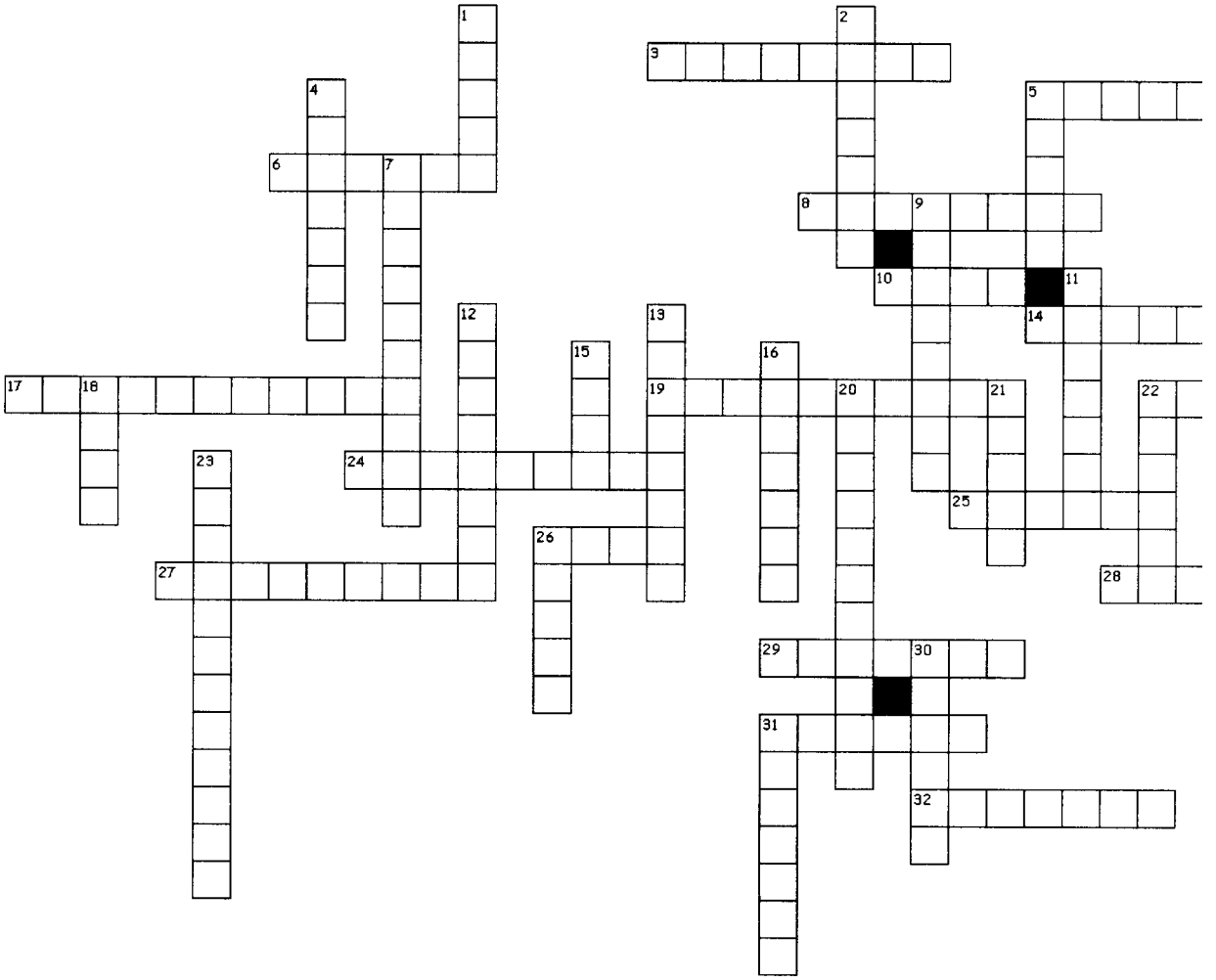
Velocity, Acceleration, Forces



Across
3. speed + direction
5. force that acts opposite to the direction of motion
6. fluid friction occurs when something is in a gas or a _____
8. speed x time
10. _____ fall is when gravity is the only force acting on an object
14. something is in _____ if it changes position over time relative to a reference point
17. _____ is a force that is exerted when matter is pushed or squeezed
19. _____ are substances that are put on surfaces to reduce friction between surfaces
22. _____ force is the combination of the forces acting on an object
24. d=442 m v=26 m/s t=? s
25. measure of the gravitational force on an object
26. if a feather and an elephant were thrown off a building, they would fall at the _____ speed if there was no air
27. _____ point is a place or object used for comparison to determine if something is in motion
28. v=20 m/s t=.05 s d=? m
29. Newton's first law is also called the law of _____
31. not moving
32. _____ is a force that is exerted when matter is pulled or stretched

Down
1. a skydiver experience _____ friction
2. something that is moving will have _____ friction
4. a book being pushed on a table will experience _____ friction
5. push or pull
7. _____ forces cause a change in velocity of an object
9. _____ velocity is the constant maximum velocity reached by a body falling through the atmosphere
11. a car's tires will experience _____ friction with the ground
12. sometimes sand is spread on icy roads to help _____ friction
13. _____ forces result in no change in motion
15. the slope of a speed vs. ____ graph is acceleration
16. _____ is a force that pulls objects towards the center of the earth
18. force = _____ x acceleration
20. _____ acceleration happens when an object moves at a constant speed in a circular motion
21. distance traveled divided by the total time taken
22. unit used to describe the magnitude of a force
23. rate at which velocity changes over time
26. you can find speed by calculating the _____ of a distance vs. time graph
30. v =40 m/s v =25 m/s t=.5 s a=? m/s²
31. d=602 m t=8.6 s v=? m/s