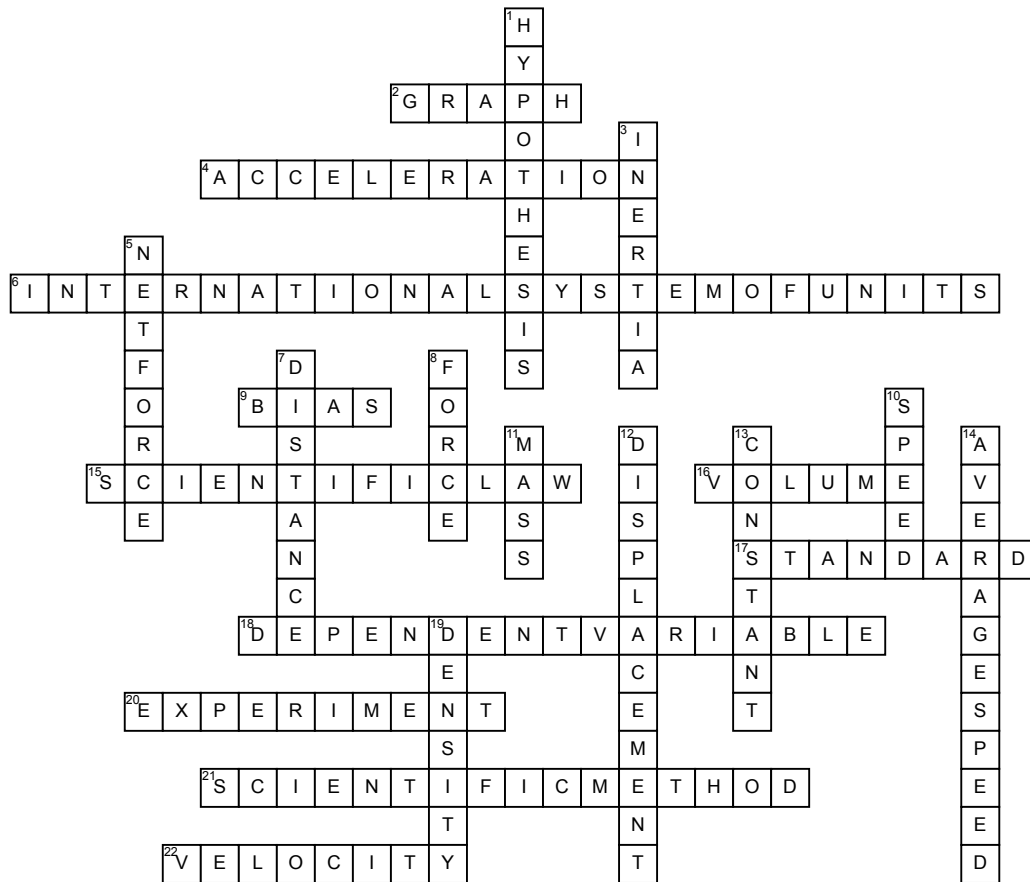


# Motion



## Across

2. visual display of information or data that can provide a quick way to communicate a large amount of information and allow scientists to observe patterns or trends
4. the rate of change of velocity
6. the improves, universally accepted version of the metric system that is based on multiples of 10
9. occurs when a scientist's expectations change how the results of an experiment are viewed
15. statement about something that happens in nature that seems to be true all the time
16. the amount of space occupied by an object

17. an exact, agreed-upon quantity used for comparison

18. factor that changes as a result of changes in the other variables

20. an organized procedure for testing a hypothesis

21. an organized set of investigation procedures that can include stating a problem, forming a hypothesis, researching and gathering information, testing a hypothesis, analyzing data, and drawing conclusions

22. the speed and direction of a moving object

## Down

1. an educated guess using what you know and what you observe

3. resistance of an object to a change in its motion

5. sum of the forces that are acting on an object

7. how far an object moves

8. a push or a pull exerted on an object

10. distance an object travels per unit of time

11. amount of matter in an object

12. distance and direction of an object's change in position from the starting point

13. in an experiment, a variable that does not change when other variables change

14. total distance an object travels divided by the total time it takes to travel that distance

19. mass per unit volume of a material

## Word Bank

mass  
velocity  
standard  
force  
dependent variable  
density

hypothesis  
displacement  
experiment  
International System of Units  
scientific method  
distance

average speed  
volume  
graph  
inertia  
constant

scientific law  
acceleration  
bias  
net force  
speed