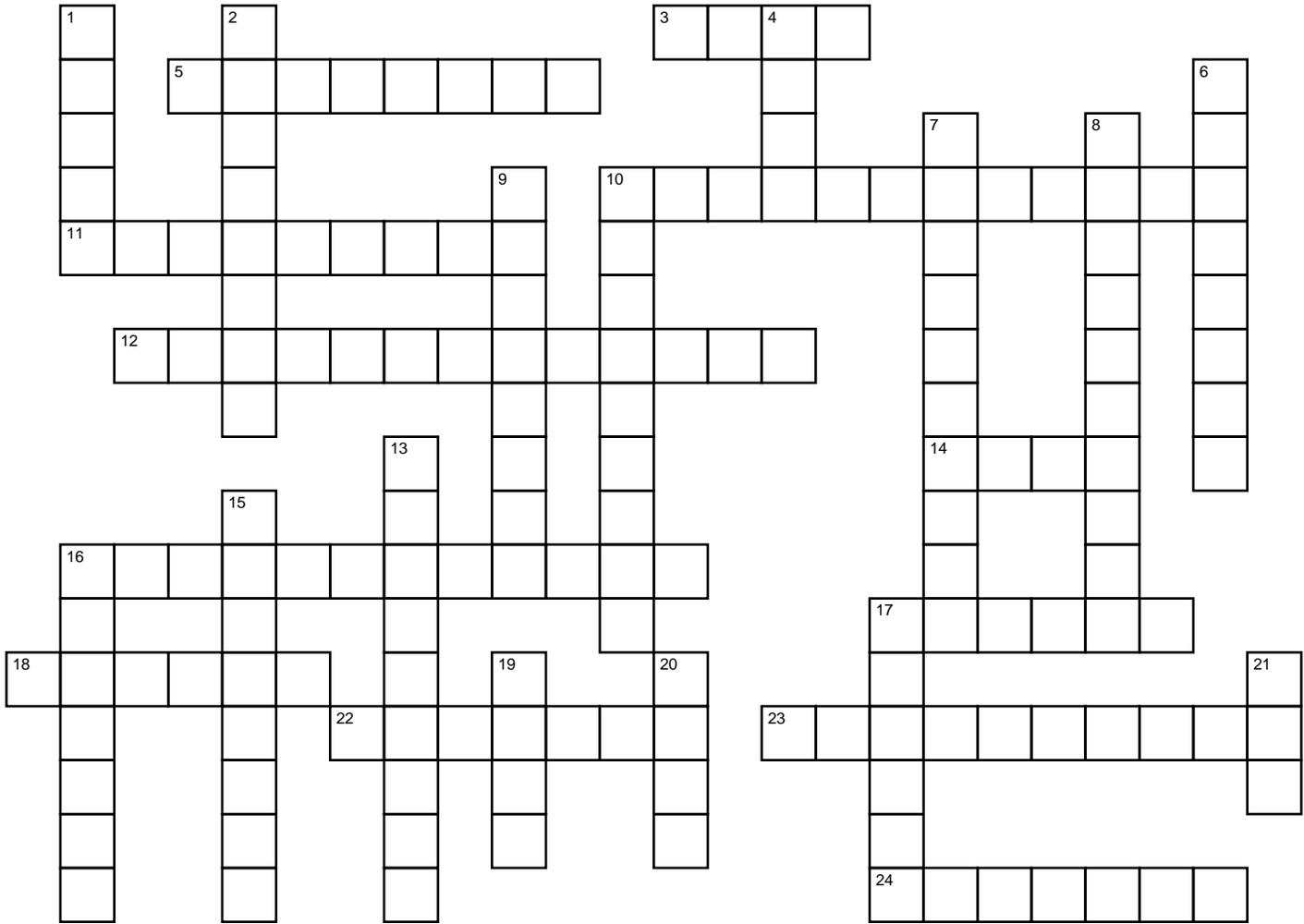


Chapter 4: Motion

Integrated Science: Physics & Engineering Design

Name _____ Period _____



Across

3. a ___ is NOT a projectile because it is affected by forces generated by its own power
5. the speed and direction of an object, this is a vector quantity
10. negative acceleration is also called
11. in a graph, the ___ variable is usually plotted on the y-axis
12. actual speed of an object at any moment
14. speed = distance/ ___
16. ___ is the rate at which speed changes
17. an acceleration of 10 km/h/s means that the velocity is changing by 10 km/h every ___
18. variable that gives direction information as part of the value
22. a ___ line on a position vs. time graph means a faster speed
23. on a speed vs. time graph, constant speed is shown by a straight ___ line
24. 9.8 m/s/s is the acceleration due to ___ on Earth

Down

1. the rate of motion of an object, how quickly something moves
2. acceleration might be a ___ in velocity
4. the slope of a line on a graph is the ratio of the ___ over the run.
6. if the speed stays the same it is a ___ speed
7. an object moving through space and affected only by gravity
8. the Earth is rushing through space at a speed of ___ thousand miles per hour
9. an object moving at a constant speed always creates a ___ line on a position vs. time graph
10. like velocity, acceleration is a vector quantity because it has ___
13. acceleration might be only a change in ___
15. acceleration is the rate of change in ___
16. total distance/total time = ___ speed
17. in a ___ relationship between variable, large changes in one variable cause similarly large changes in the other variable

Down

19. in a ___ relationship between variables, large changes in one variable cause only small changes in the other variable
20. ___ fall is acceleration due to the force of gravity alone - no other forces are acting on the object
21. the ideas in chapter 4 apply to ___ motion