

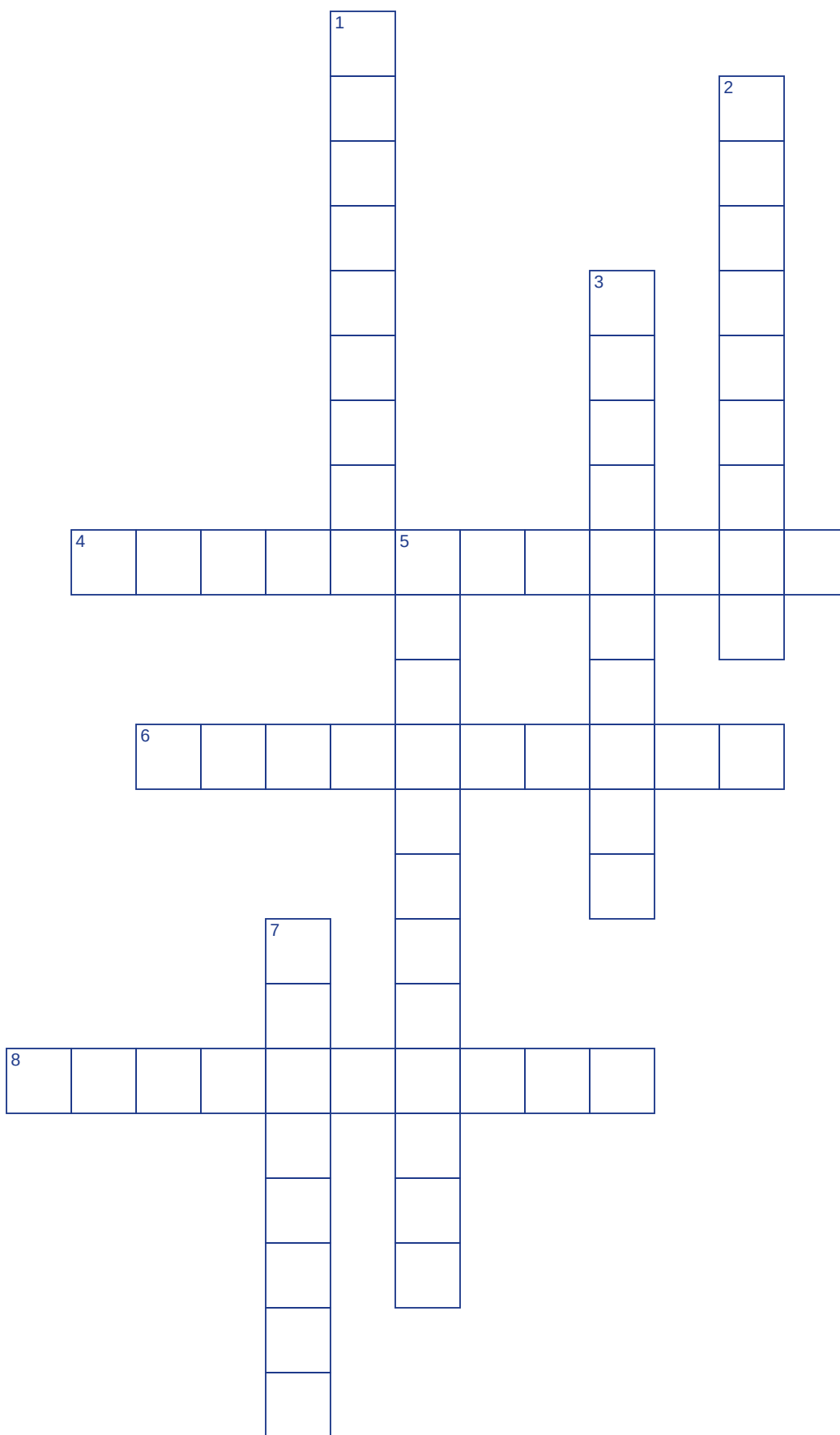
Kinematics Crossword

Unit A: Kinematics asks students to describe motion in terms of displacement, velocity, acceleration and time ([Topic](#)). This puzzle reviews the vocabulary that carries that work: how to define displacement, velocity and acceleration ([Outcome](#)), how to read graphical relationships among these quantities ([Outcome](#)), how to break two-dimensional motion into components ([Outcome](#)), how to solve projectile motion problems ([Outcome](#)), how to describe relative motion between two objects ([Outcome](#)), and how simulations support the study of motion ([Outcome](#), [Resource](#)). Use it as a warm-up review before a unit test or as a station activity alongside the motion labs in [Resource](#) and [Resource](#).

How to play

Read each clue and write its answer into the grid, one letter per box, matching the numbered starting square. Across and Down answers share letters where they cross, so a correct entry in one direction can help confirm a letter in the other. All answers relate to kinematics vocabulary and concepts from Unit A. Answers are single words, with no spaces or hyphens. Work through the clues you know first, then use the crossing letters to solve the harder ones. Check your finished grid against the answer key only after you have attempted every clue.

Puzzle grid



Clues

Across

4. Change in position from start to finish, including direction (12)
5. Object in motion under the influence of gravity alone (10)
6. Computer model used to explore motion relationships interactively (10)

Down

1. Method of analyzing motion using position-time or velocity-time plots (9)
2. Part of a vector along a particular direction or axis (9)
3. Study of motion without considering the forces that cause it (10)
4. Rate at which velocity changes over time (12)
5. Motion of one object as observed from another object's frame of reference (8)

Answer key

- **1 down:** GRAPHICAL
- **2 down:** COMPONENT
- **3 down:** KINEMATICS
- **4 across:** DISPLACEMENT
- **5 down:** ACCELERATION
- **6 across:** PROJECTILE
- **7 down:** RELATIVE
- **8 across:** SIMULATION

