

Kinematics Matching Game

This matching game focuses on the core concepts you need to master in kinematics: displacement, velocity, acceleration, and the distinction between scalar and vector quantities ([Outcome](#), [Outcome](#)). You will match definitions, examples, and key characteristics to reinforce your understanding of how motion is described quantitatively and qualitatively. The eight terms cover fundamental concepts and applications central to uniform and uniformly accelerated motion ([Outcome](#)).

How to play

Match each term on the left with its correct description on the right. Write the letter of the description next to the number of the term. You have 15 minutes.

Match the pairs

Column A		Column B
A. displacement	_____	1. Examples include displacement, velocity, and acceleration
B. velocity	_____	2. Straight-line motion with no change in speed or direction
C. acceleration	_____	3. Vector quantity; displacement divided by time
D. scalar	_____	4. Two-dimensional motion problem involving horizontal and vertical components
E. vector	_____	5. Examples include speed, distance, and time
F. uniform	_____	6. Vector quantity describing motion from initial to final location
G. projectile	_____	7. Used to analyze two-dimensional motion in horizontal or vertical planes
H. component	_____	8. Can be positive, negative, or zero; measured in metres per second squared

Answer key

- **A** matches **6** (displacement: Vector quantity describing motion from initial to final location)
- **B** matches **3** (velocity: Vector quantity; displacement divided by time)
- **C** matches **8** (acceleration: Can be positive, negative, or zero; measured in metres per second squared)
- **D** matches **5** (scalar: Examples include speed, distance, and time)
- **E** matches **1** (vector: Examples include displacement, velocity, and acceleration)
- **F** matches **2** (uniform: Straight-line motion with no change in speed or direction)
- **G** matches **4** (projectile: Two-dimensional motion problem involving horizontal and vertical components)
- **H** matches **7** (component: Used to analyze two-dimensional motion in horizontal or vertical planes)

