

Quadratic Functions Matching Game

This game practises identifying key features of quadratic functions. You will match algebraic and graphical descriptions to their corresponding terms and definitions. Success requires fluency with the vertex form $y=a(x-p)^2+q$ and standard form $y=ax^2+bx+c$, and the ability to identify the vertex, axis of symmetry, direction of opening, x- and y-intercepts, and domain and range from both forms ([Outcome](#), [Outcome](#)). The game reinforces vocabulary essential to analyzing parabolas and solving quadratic problems ([Outcome](#), [Resource](#)).

How to play

1. Match each item in the left column to its correct description or example in the right column.
2. Write the letter of the correct match on the line provided.
3. Use your knowledge of quadratic function properties, graphing, and the relationship between algebraic and graphical representations.
4. Check your work using the answer key.

Match the pairs

Column A		Column B
A. vertex	_____	1. Axis of symmetry
B. parabola	_____	2. Quadratic formula
C. symmetry	_____	3. Direction of the parabola
D. intercept	_____	4. Graph of $y = ax^2 + bx + c$
E. domain	_____	5. x-intercept or y-intercept
F. opening	_____	6. All x-values in the function
G. factoring	_____	7. Method to solve quadratic equations
H. formula	_____	8. Turning point of a parabola

Answer key

- **A** matches **8** (vertex: Turning point of a parabola)
- **B** matches **4** (parabola: Graph of $y = ax^2 + bx + c$)
- **C** matches **1** (symmetry: Axis of symmetry)
- **D** matches **5** (intercept: x-intercept or y-intercept)
- **E** matches **6** (domain: All x-values in the function)
- **F** matches **3** (opening: Direction of the parabola)
- **G** matches **7** (factoring: Method to solve quadratic equations)
- **H** matches **2** (formula: Quadratic formula)