

Enthalpy and Calorimetry Maze Challenge

This maze reinforces core ideas from Chemistry 30 Unit A: Thermochemical Changes. As you trace the correct path, you will pass eight key terms tied to enthalpy and calorimetry, including molar enthalpy ([Outcome](#), [Outcome](#)), the equation $Q = mc\Delta T$ ([Outcome](#), [Outcome](#)), calorimetry data analysis ([Outcome](#)), and ΔH_{comb} ([Outcome](#)). These concepts connect directly to calorimetry investigations such as burning a nut sample ([Resource](#)) or building and testing a polystyrene-cup calorimeter ([Resource](#)), and to the skill of analyzing energy data using mathematical models ([Outcome](#), [Outcome](#)).

How to play

Start at the entrance cell and trace a single continuous path to the exit cell. You may move up, down, left, or right, one cell at a time. You cannot move diagonally, and you cannot cross your own path. Only one route through the maze reaches the exit without hitting a wall.

As you move through the maze, keep track of these eight terms. Each one names a concept you should be able to define or apply by the end of this unit:

1. Enthalpy
2. Molar enthalpy
3. Calorimetry
4. Specific heat capacity
5. Heat transfer
6. Exothermic
7. Endothermic
8. ΔH_{comb}

Once you finish, write the correct sequence of moves (for example: right 2, down 1) on the lines provided below the maze, then check your solution against the answer key.

The maze

START

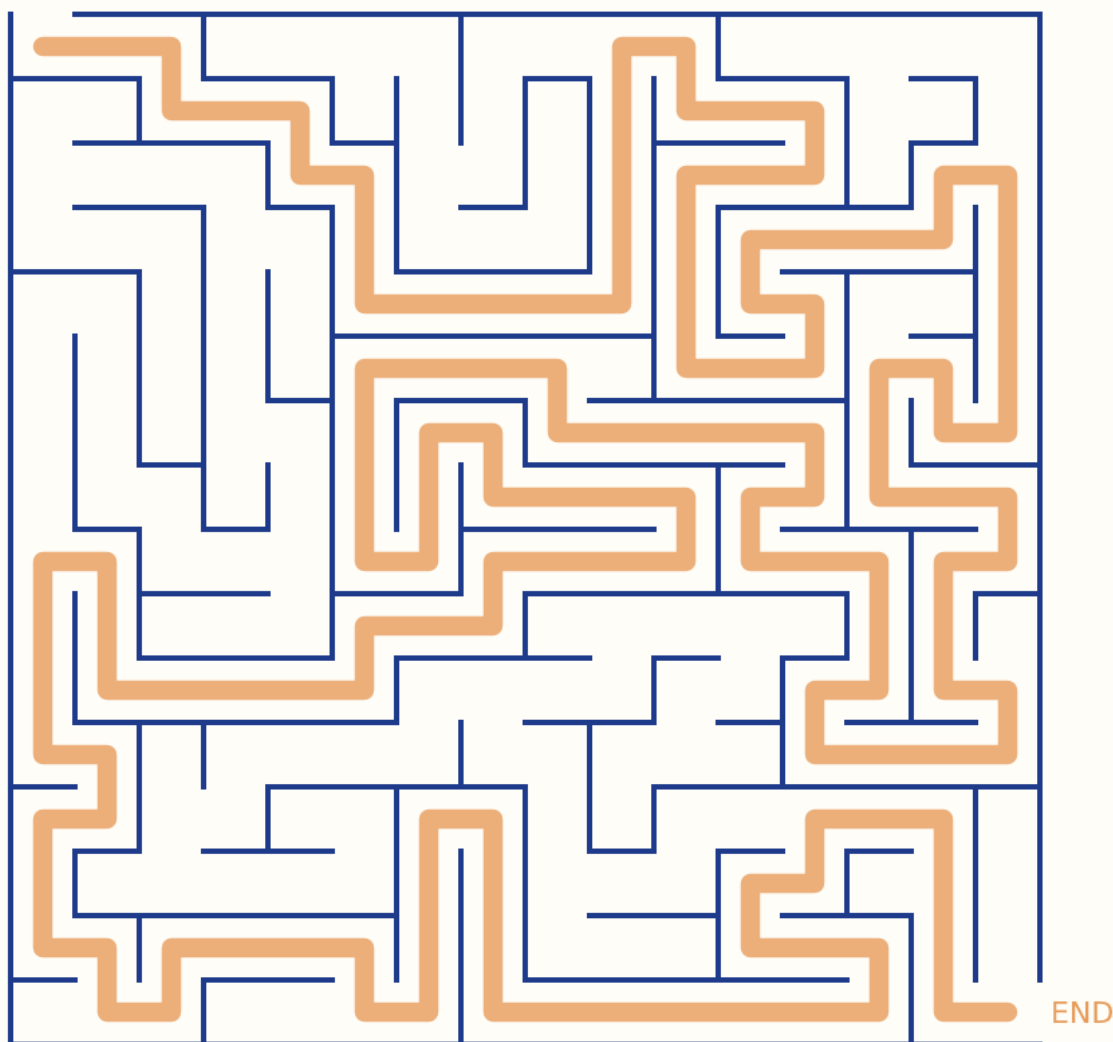


Maze

Answer key

Enthalpy and Calorimetry Maze Challenge (solution)

START



END

Maze solution

Path: right 2, down 1, right 2, down 1, right 1, down 2, right 4, up 4, right 1, down 1, right 2, down 1, left 2, down 3, right 2, up 1, left 1, up 1, right 3, up 1, right 1, down 4, left 1, up 1, left 1, down 2, right 2, down 1, left 1, down 2, right 1, down 1, left 3, up 1, right 1, up 2, left 2, up 1, right 1, up 1, left 4, up 1, left 3, down 3, right 1, up 2, right 1, down 1, right 3, down 1, left 3, down 1, left 2, down 1, left 4, up 2, left 1, down 3, right 1, down 1, left 1, down 2, right 1, down 1, right 1, up 1, right 3, down 1, right 1, up 3, right 1, down 3, right 6, up 1, left 2, up 1, right 1, up 1, right 2, down 3, right 1