

Enthalpy and Calorimetry Maze

Students use knowledge of enthalpy, molar enthalpy, and the calorimetry equation to navigate a maze puzzle. Success requires recall of the heat transfer equation $Q = mc\Delta T$ ([Outcome](#)), the definition of enthalpy and molar enthalpy ([Outcome](#)), and the interpretation of ΔH ([Outcome](#)). The maze integrates calorimetry concepts that students encounter in laboratory investigations ([Resource](#), [Resource](#)) and in data analysis of chemical reactions ([Outcome](#), [Outcome](#)).

How to play

Start at the entrance (top left). Move through the maze by selecting the correct answer at each junction. At each stop, you will see a question about enthalpy changes or calorimetry. Choose the path marked with the correct answer. Incorrect paths lead to dead ends. Reach the exit (bottom right) to complete the puzzle.

The maze

START

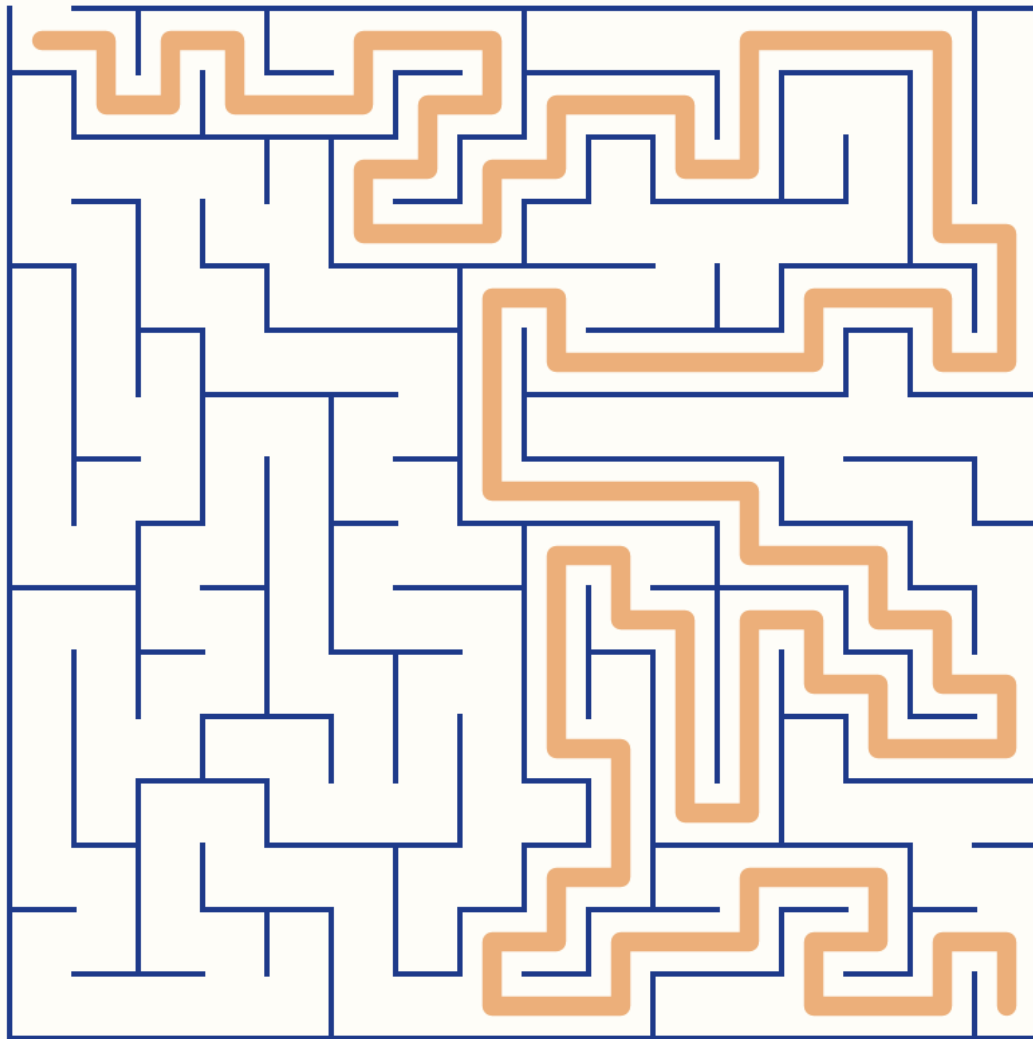
END

Maze

Answer key

Enthalpy and Calorimetry Maze (solution)

START



END

Maze solution

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