

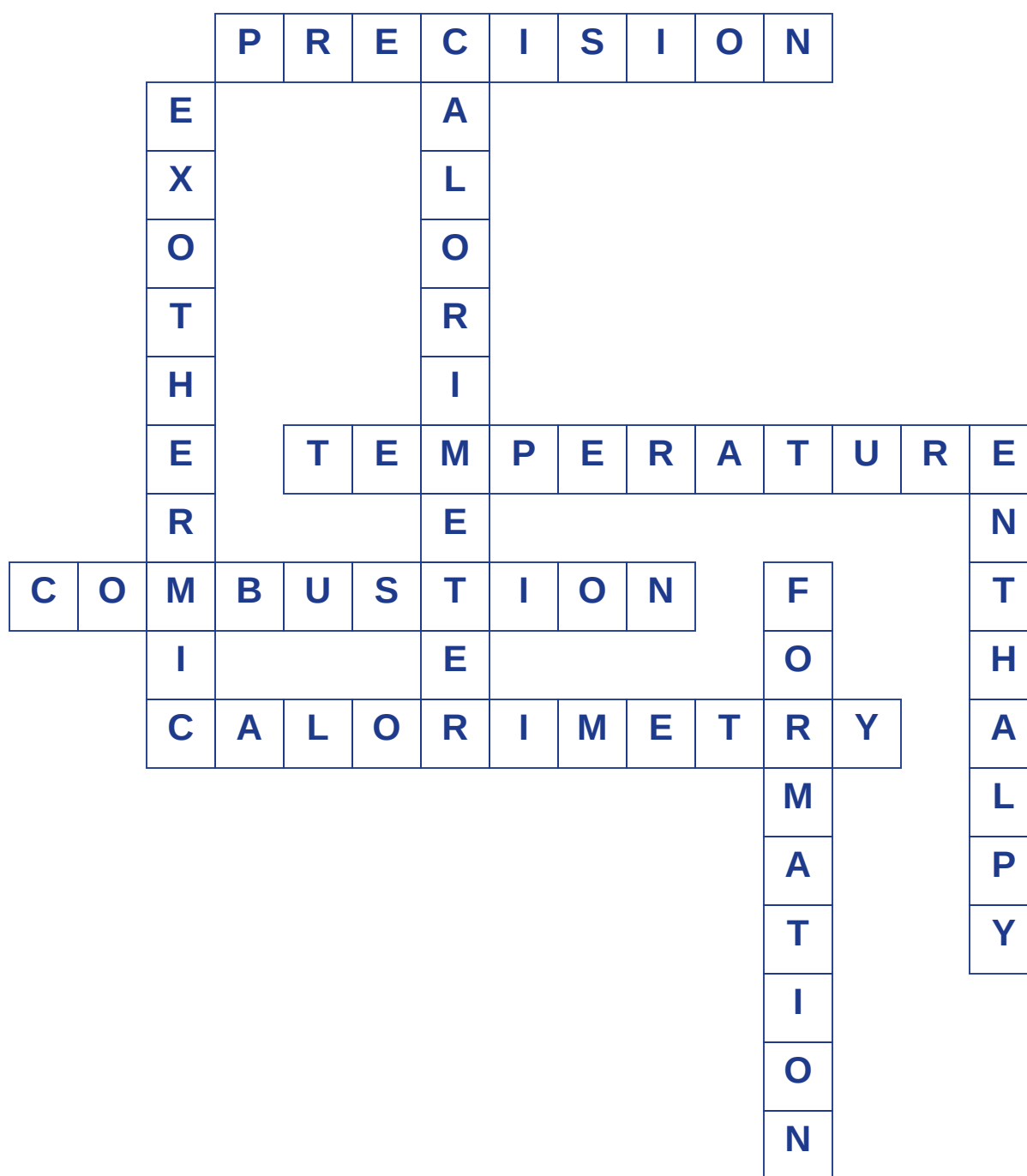
Enthalpy Changes and Calorimetry Crossword

In Chemistry 30, you determine and interpret energy changes in chemical reactions ([Topic](#)). This crossword reinforces key vocabulary and concepts from Unit A: Thermochemical Changes. You will encounter terms related to calorimetry, enthalpy notation, and the types of reactions you analyze quantitatively ([Outcome](#)). Use calorimetry data to calculate enthalpy changes ([Outcome](#)), apply the heat equation $Q = mc\Delta T$ ([Outcome](#)), and define enthalpy and molar enthalpy for reactions ([Outcome](#)). Mastery of these terms supports your ability to use potential energy diagrams ([Outcome](#)).

How to play

Complete the crossword by filling in the words that match the clues below. Each answer is a term from thermochemistry. Write one letter per cell. Check your work against the answer key after you finish.

Puzzle grid



Clues

Across

1. Consistency of repeated measurements in calorimeter testing (9)
2. Measure of the average kinetic energy of particles in a substance; changes recorded in calorimetry experiments (11)
3. Rapid chemical reaction in which a substance burns and releases thermal energy (10)
4. Experimental technique for measuring heat transfer in chemical reactions (11)

Down

2. Insulated device used to measure energy released or absorbed during a reaction (11)
3. Chemical reaction that releases heat energy to the surroundings (10)
4. Heat content of a system at constant pressure, denoted H , ΔH (9)
5. Process of creating a compound from its elements; used in standard enthalpy tables (9)

Answer key

- **1 across:** PRECISION
- **2 down:** CALORIMETER
- **3 down:** EXOTHERMIC
- **4 across:** TEMPERATURE
- **5 down:** ENTHALPY
- **6 across:** COMBUSTION
- **7 down:** FORMATION
- **8 across:** CALORIMETRY