

# Enthalpy Changes and Calorimetry Word Search

This puzzle reinforces vocabulary from Unit A: Thermochemical Changes, where students define enthalpy for chemical reactions ([Outcome](#), [Outcome](#)) and apply  $Q = mc\Delta T$  to heat transfer problems ([Outcome](#), [Outcome](#)). A calorimeter built from a polystyrene cup allows students to test experimental precision while collecting temperature and mass data ([Resource](#)), and a combustion lab demonstrates how an exothermic reaction transfers thermal energy to water during calorimetry ([Resource](#)). Locate each term below to review the language you will need for lab reports and diploma exam questions on this unit.

## How to play

- Scan the grid horizontally, vertically, and diagonally, in both forward and reverse directions, to locate each term from the word list.
- Circle or highlight each word as you find it, then cross it off the list to track your progress.
- Work through the full list before checking the answer key, since several terms share overlapping letters and can be mistaken for one another.

## Words to find

- CALORIMETER
- CALORIMETRY
- COMBUSTION
- ENTHALPY
- EXOTHERMIC
- POLYSTYRENE
- PRECISION
- TEMPERATURE

## Puzzle grid

|   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E | C | O | M | B | U | S | T | I | O | N | C | G |
| X | W | A | B | Q | G | B | Z | Y | Q | C | L | O |
| O | L | R | L | P | A | L | N | F | W | G | U | R |
| T | X | T | E | O | R | Y | K | Z | A | C | X | K |
| H | J | U | M | L | R | E | N | O | V | W | E | D |
| E | T | X | S | Y | S | I | C | V | D | E | M | A |
| R | D | L | W | S | B | I | M | I | X | D | D | Y |
| M | R | B | F | T | V | Z | D | E | S | A | N | F |
| I | E | H | P | Y | G | B | K | J | T | I | J | W |
| C | A | L | O | R | I | M | E | T | E | R | O | E |
| T | E | M | P | E | R | A | T | U | R | E | Y | N |
| U | A | F | E | N | T | H | A | L | P | Y | A | T |
| W | F | Y | C | E | C | S | C | G | T | O | O | S |

## Answer key

- **CALORIMETER**: row 10, column 1, across
- **CALORIMETRY**: row 1, column 2, diagonal
- **COMBUSTION**: row 1, column 2, across
- **ENTHALPY**: row 12, column 4, across
- **EXOTHERMIC**: row 1, column 1, down
- **POLYSTYRENE**: row 3, column 5, down
- **PRECISION**: row 3, column 5, diagonal
- **TEMPERATURE**: row 11, column 1, across