

Enthalpy and Calorimetry Matching Game

This matching game reviews the vocabulary students need to interpret calorimetry data and calculate energy changes in chemical reactions. It covers the definitions of enthalpy and molar enthalpy ([Outcome](#), [Outcome](#)), the use of $Q = mc\Delta T$ or heat transfer analysis ([Outcome](#), [Outcome](#)), and the application of calorimetry data to determine enthalpy changes in reactions such as combustion ([Outcome](#)). These terms also appear in the hands-on calorimetry investigations described in [Resource](#) and [Resource](#), where students measure temperature change to calculate the thermal energy released or absorbed by a reaction.

How to play

Match each term on the left to its correct definition or description on the right. Work through the pairs you know first, then use the process of elimination for the rest. Record your answers on a separate sheet before checking the answer key.

Match the pairs

Column A		Column B
A. enthalpy	_____	1. heat-releasing
B. calorimetry	_____	2. heat intensity
C. thermal	_____	3. per mole
D. combustion	_____	4. 9D€
E. exothermic	_____	5. heat measurement
F. calorimeter	_____	6. burning
G. molar	_____	7. heat measurement device
H. temperature	_____	8. heat-related

Answer key

- **A** matches **4** (enthalpy: 9D,•
- **B** matches **5** (calorimetry: heat measurement)
- **C** matches **8** (thermal: heat-related)
- **D** matches **6** (combustion: burning)
- **E** matches **1** (exothermic: heat-releasing)
- **F** matches **7** (calorimeter: heat measurement device)
- **G** matches **3** (molar: per mole)
- **H** matches **2** (temperature: heat intensity)