

Enthalpy and Calorimetry Matching Game

This game reinforces your understanding of key terms and concepts in thermochemistry ([Topic](#)). You will match definitions and descriptions to the technical vocabulary used when determining and interpreting energy changes in chemical reactions ([Topic](#), [Topic](#)). Success requires you to distinguish between related concepts such as enthalpy and activation energy, and to recognize how calorimetry, catalysts, and Hess' law function in quantifying chemical energy.

How to play

1. Cut along the dotted lines to separate the two columns.
2. Read each term in the left column.
3. Find the matching definition or description in the right column.
4. Write the letter of the correct match next to each term, or arrange the cards in pairs.
5. Check your answers against the answer key.

Match the pairs

Column A		Column B
A. enthalpy	_____	1. State function principle
B. calorimetry	_____	2. Lowers activation energy
C. exothermic	_____	3. $q < 0$
D. formation	_____	4. Energy barrier
E. catalyst	_____	5. Heat flows out
F. activation	_____	6. Per mole basis
G. Hesslaw	_____	7. $q = mc\Delta T$
H. molar	_____	8. Standard enthalpy of formation

Answer key

- **A** matches **3** (enthalpy: $q < 0$)
- **B** matches **7** (calorimetry: $q = mc\Delta T$)
- **C** matches **5** (exothermic: Heat flows out)
- **D** matches **8** (formation: Standard enthalpy of formation)
- **E** matches **2** (catalyst: Lowers activation energy)
- **F** matches **4** (activation: Energy barrier)
- **G** matches **1** (Hesslaw: State function principle)
- **H** matches **6** (molar: Per mole basis)