

Enthalpy Changes and Calorimetry

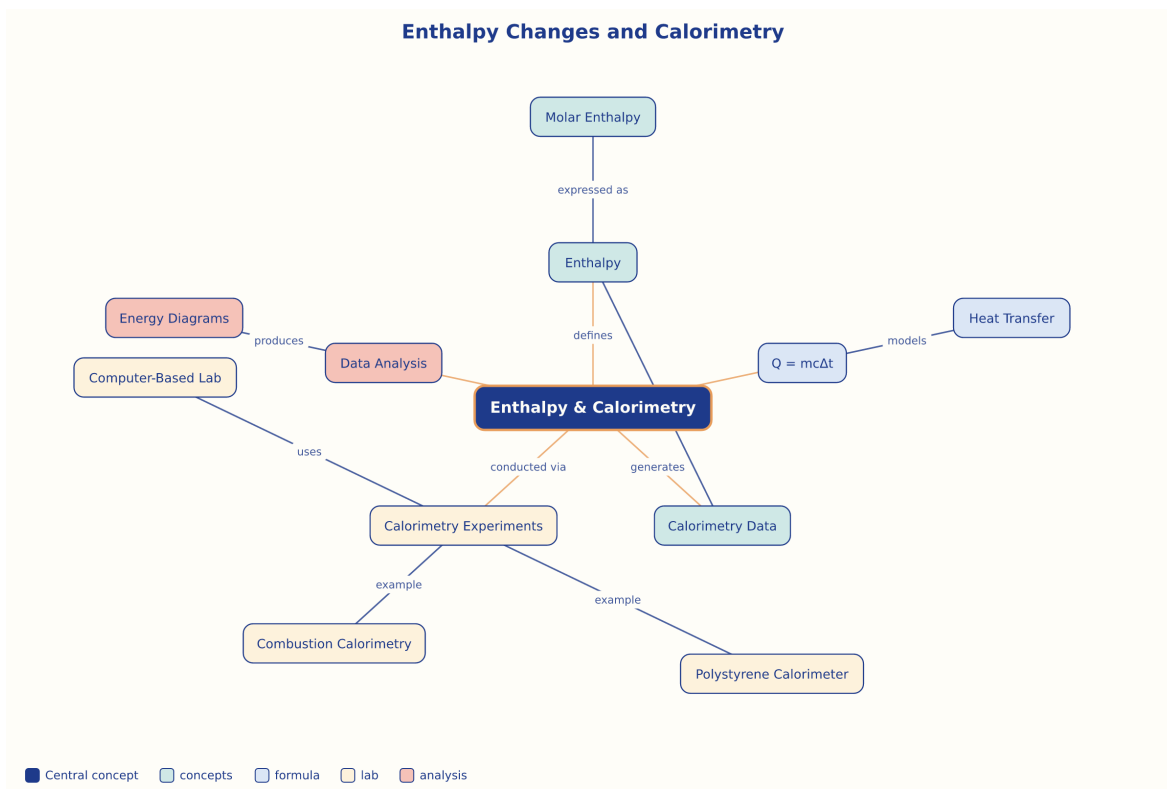
Central concept: **Enthalpy & Calorimetry**

Connections

- Enthalpy & Calorimetry (defines) -> Enthalpy
- Enthalpy (expressed as) -> Molar Enthalpy
- Enthalpy & Calorimetry (uses) -> $Q = mc\Delta T$
- $Q = mc\Delta T$ (describes) -> Heat Transfer
- Enthalpy & Calorimetry (generates) -> Calorimetry Data
- Calorimetry Data (determines) -> Enthalpy
- Enthalpy & Calorimetry (conducted via) -> Calorimetry Experiments
- Calorimetry Experiments (example) -> Polystyrene Calorimeter
- Calorimetry Experiments (example) -> Combustion Calorimetry
- Calorimetry Experiments (uses) -> Computer-Based Lab
- Enthalpy & Calorimetry (requires) -> Data Analysis
- Data Analysis (produces) -> Energy Diagrams

Notes

- **Enthalpy & Calorimetry:** Unit A: Thermochemical Changes, Chemistry 30 General Outcome 1 [Resource](#)
- **Enthalpy:** Heat content of a system; molar enthalpy defined per mole of reaction ([Outcome](#), [Outcome](#), [Outcome](#))
- **Molar Enthalpy:** Enthalpy change expressed per mole of substance reacted ([Outcome](#), [Outcome](#))
- **$Q = mc\Delta T$:** Equation used to analyze heat transfer between substances ([Outcome](#), [Outcome](#))
- **Heat Transfer:** Energy moves from a system to surroundings, or vice versa, measured via $Q = mc\Delta T$ ([Outcome](#)) [Outcome](#)
- **Calorimetry Data:** Experimental measurements used to determine enthalpy changes of reactions ([Outcome](#)) [Outcome](#)
- **Calorimetry Experiments:** Investigations to determine molar enthalpy change using thermometers or temperature probes ([Outcome](#)) [Outcome](#)
- **Calorimetry:** Methods for measuring enthalpy changes in chemical reactions
- **Enthalpy and Molar Enthalpy:** Defining enthalpy and molar enthalpy for chemical reactions
- **Computer-Based Lab:** Compiles and organizes calorimetry data to demonstrate molar enthalpy change ([Outcome](#)) [Outcome](#)
- **Data Analysis:** Analyzing data and energy diagrams to compare energy changes across reactions ([Outcome](#)) [Outcome](#)
- **Energy Diagrams:** Visual models comparing energy changes among different chemical reactions ([Outcome](#)) [Outcome](#)



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