

# Thermochemistry: an ice calorimeter determination flashcard



**ASSIGN  
BUSTER**

D. F. McCann Thermometers: An Ice Calorimeter Determination of Reaction Enthalpy 9/1 1/2014 Introduction: A chemical reaction often indicated by a transfer of energy measured in heat.

By measuring this heat transfer in a constant pressurized environment, the enthalpy of the reaction can be used to Infer certain Information about a specific reactions reactants and products.

The transfer of heat from outside sources In would be described as an endothermic reaction. Contrary, when a reaction releases heat out to TTS surroundings it is described as an exothermic reaction. Method: Small strips of Magnesium (0.

Egg) were added into a precise measurement of ml of MM Sulfuric Acid (measured with a transfer pipette) within a calorimeter. Precautions were taken to ensure the most accurate reading of the transfer of heat and the complete isolation of the reaction's heat exchange.

To do this first the Sulfuric Acid was chilled. Secondly, the calorimeter was covered in ice and tested for the amount of heat captured in the calorimeter (Calorimeter Data Table 1 Lastly, the eat change could have been measured with a thermometer, but the thermometer would've added heat to the solution, so this was not used; Instead, with a known Initial volume of the calorimeter, the change In volume was measured at different time Intervals using an Inverted volumetric pipette to determine the heat captured within the calorimeter.