#### I) INTRODUCTION

WHAT IS POTENTIAL ENERGY?

ENERGY OF A SYSTEM AS A RESULT OF THE POSITION OF ALL THE PARTICLES (ENERGY OF ELECTRONS IN CHEMICAL BONDS)

WHAT IS KINETIC ENERGY?

ENERGY OF A SYSTEM DUE TO MOVEMENT OF ATOMS/ MOLECULES

WHAT HAPPENS WHEN BONDS ARE BROKEN?

ENERGY MUST BE ADDED (THAT IS EQUAL TO BOND ENERGY) -> POTENTIAL ENERGY INCREASES

#### A) WHAT IS "ENTHALPY"?

- I) ENTHALPY IS THE TOTAL PE AND KE OF A REACTION
- II) THINK OF ENTHALPY AS "HEAT OF REACTION" OR ENERGY OF REACTION
- III) SYMBOL FOR ENTHALPY IS ΗSYMBOL FOR CHANGE IN ENTHALPY IS ΔΗ
- **B) HOW DOES ENTHALPY APPLY TO REACTIONS?** 
  - I) A REACTION CAN <u>GAIN</u> ENTHALPY = <u>ENDOTHERMIC</u>
  - II) A REACTION CAN LOSE ENTHALPY =  $\underline{EXOTHERMIC}$
  - III) THE CHANGE IN ENTHALPY FROM REACTANT TO PRODUCT =  $\Delta H$







#### EXOTHERMIC REACTIONS-SURROUNDINGS WARMER

#### ENDOTHERMIC REACTIONS-SURROUNDINGS COOLER



READ: "EVERYDAY SITUATIONS" PAGE 10 AND 1.6 PAGE 13-16

QUESTIONS: #19 PAGE 11, #20-23 PAGE 12-13 AND # 24-28 PAGE 16