

Name: _____ Period: _____ Date: _____ BIN: _____

Exothermic and Endothermic Reactions Homework

When providing the best possible answer to the following questions please apply all learned scientific techniques and procedures, do not use abbreviations, use proper scientific terminology, show work for all mathematical calculations, use all significant figure and scientific notation rules, apply appropriate writing strategies, and note that at all times spelling counts. Your ability to meet these and all established classroom expectations, including labeling of BINs, providing heading information, and your ability to follow directions may be included in computation of grade.

Using the statements and examples provided on the back of this page fill in the table below comparing and contrasting exothermic and endothermic reactions.

EXOTHERMIC REACTIONS	ENDOTHERMIC REACTIONS
Facts:	Facts:
Examples:	Examples:

When trying to classify a process as exothermic or endothermic, imagine how the temperature of the surroundings changes. An exothermic process released heat, and causes the temperature of the immediate surroundings to rise. An endothermic process absorbs heat and cools the surroundings.

Place the following statements in the correct FACT box.

Place the following examples in the correct EXAMPLE box.

STATEMENTS

- Energy is usually absorbed from surroundings
- Reactants have higher bond energy than products
- Energy usually released as light or heat
- More energy absorbed by reactants when bonds broken than released when products form
- More energy released when products form than absorbed when reactants break apart
- Energy goes “out”
- Products have higher bond energy than reactants
- Energy goes “in”

EXAMPLES

- Making ice cubes
- Melting ice cubes
- Formation of snow in clouds
- Condensation of rain from water vapor
- A candle flame
- Conversion of frost to water vapor
- Evaporation of water
- Cooking an egg
- Producing sugar by photosynthesis