Name _____ Date _____ Class _____

CHAPTER 1 REVIEW

Matter and Change

MIXED REVIEW

SHORT ANSWER **Answer the following questions in the space provided.**

1. Classify each of the following as a *homogeneous* or *heterogeneous* substance:

_____ **a.** sugar

_____ **b.** iron filings

_____ **c.** milk

_____ **d.** plastic

_____ **e.** cement

2. Select the most appropriate branch of chemistry from the following choices to best describe each of the investigations: organic chemistry, analytical chemistry, biochemistry, theoretical chemistry.

_____ **a.** A forensic scientist uses chemistry to find information at the scene of a crime.

_____ **b.** A scientist uses a computer model to see how an enzyme will function.

_____ **c.** A professor explores the reactions that take place in a human liver.

_____ **d.** An oil company scientist tries to design a better gasoline.

_____ **e.** An anthropologist tries to find out the nature of a substance in a mummy's wrap.

_____ **f.** A pharmaceutical company examines the protein on the coating of a virus.

3. For each of the following types of chemical investigations, determine whether the investigation is basic research, applied research, or technological development.

_____ **a.** A university plans to map all the genes on human chromosomes.

_____ **b.** A research team intends to find out why a lake remains polluted.

_____ **c.** A science teacher looks for a paint that will allow graffiti to be easily removed.

_____ **d.** A cancer research institute explores the chemistry of the cell.

_____ **e.** A professor explores the toxic compounds in marine animals.

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