

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	_____	d. plastic
_____	b. iron filings	_____	e. cement
_____	c. milk		

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.