


W	101 Introduction to Chemistry	
	OBJECTIVES 101.1 Define Chemistry 101.2 Identify and describe the five main branches of chemistry 101.3 Describe the three domains of chemistry 101.4 Distinguish between pure and applied research 101.5 Describe how modeling is used in chemistry	

Laboratory Activity 101

Place a cube of ice into the palm of your hand and answer the questions below.

1. Describe the physical properties of the ice.

2. Identify the physical change(s) that the ice is undergoing while it's in your hand.

3. Determine the direction of heat flow between the ice cube and your hand.

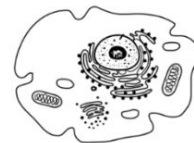
101.1 Chemistry

1. What is chemistry?

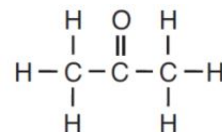
101.2 Branches of Chemistry

Identify which branch of chemistry each example below illustrates.

2a. A scientist researched how nutrients are transferred across cell membranes.

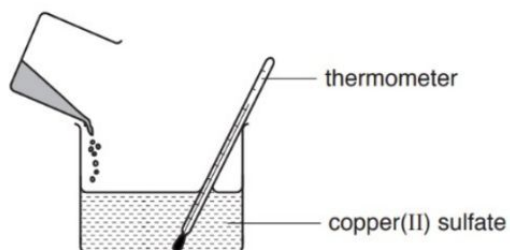


2b. A student explored how propanone C_3H_6O can be used as a cleaning agent.



101.3 Domains of Chemistry

A student added 4.5 grams of zinc (Zn) granules to 25.0 cm of copper (II) sulfate (CuSO_4) solution and used a thermometer to measure the maximum increase in temperature.



Identify one example from each of the three domains of chemistry using the information above.

3a. macroscopic: _____

3b. microscopic: _____

3c. symbolic: _____

101.4 Pure and Applied Research

4. Explain why scientists conduct both pure and applied research.

101.5 Modeling in Chemistry

5. Why do scientists use models?
