Name: _____ **Date:** _____

1. Which substance listed in the table is a liquid at 27°C?

	Melting Point	Boiling Point
I	28°C	140°C
II	10°C	—25°C
III	20°C	140°C
IV	90°C	—14°C

A. I B. II C. III D. IV

2. A jar and three ice cubes weigh 30 g. What do the jar and the water weigh after the ice cubes melt?

A. 10 g B. 30 g C. 60 g D. 90 g

3. Which sequence represents matter that is losing energy?

A. solid → gas → liquid B. solid → liquid → gas

C. gas → solid → liquid D. gas → liquid → solid

4. Which is the *best* example of a physical change?

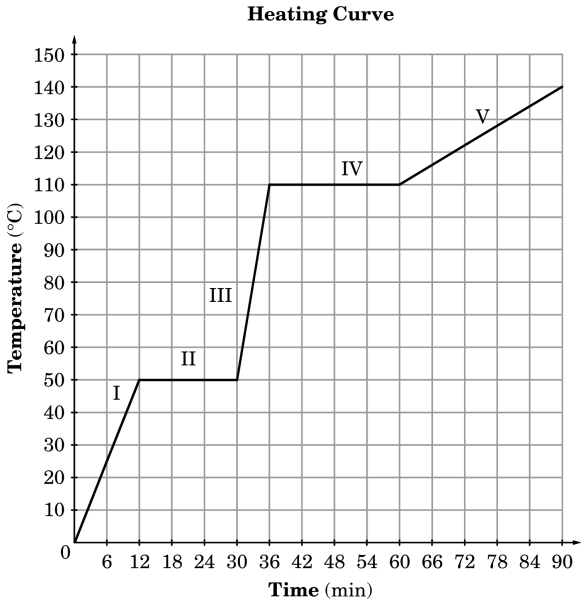
A. ice melting B. candle burning C. bread baking

5. When water evaporates to form water vapor, what type of process is taking place?

A. heating of water B. dissolving of water

C. a chemical change D. a physical change

6. This graph represents a heating curve of a substance.



Which region on the graph represents the solid phase?

A. I B. II C. III D. IV

7. The solubility of a substance can be described in a variety of ways. Some references may use descriptive terms for solubility, such as those in the table illustrated below.

Descriptive terms	Parts of solvent needed for 1 part solute
Very soluble	<1
Freely soluble	1–10
Soluble	10–30
Sparingly soluble	30–100
Slightly soluble	100–1,000
Very slightly soluble	1,000–10,000
Practically insoluble or insoluble	>10,000

Using the table above as a reference, what descriptive term would be used for a medication that required 4,000 mg of water to dissolve 200 mg of the drug?

A. soluble B. slightly soluble

C. sparingly soluble D. very slightly soluble