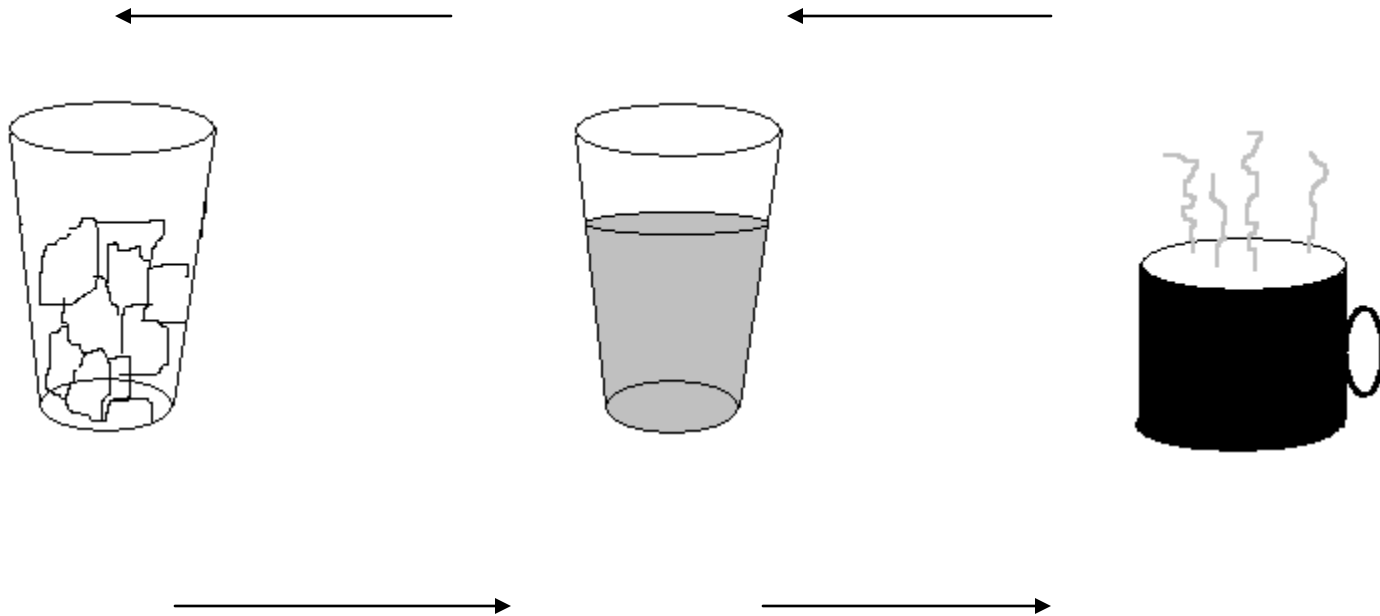


Explain how molecules change when a substance freezes, melts, evaporates, and condenses.

TEMPERATURE DECREASES



TEMPERATURE INCREASE

1 Explain how molecules change when a substance freezes, melts, evaporates, and condenses.

Measure ½ cup of water into a sealable sandwich bag. Seal it with just a slight amount of air in the bag (but room to expand later.) Mark the level of water. Put it in the freezer to freeze.

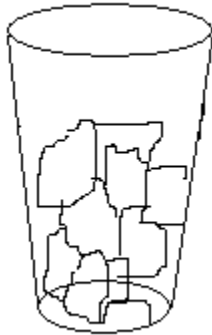
TEMPERATURE DECREASES

Molecules move slower.

4 Put an ice cube or cold object so it touches one side of the bag. Note the condensation. Hunt for other examples of condensation.

Freezing

Condensing



Melting

Boiling/Evaporating

2

Compare the level of ice with the level of water originally put into the bag. Set the bag out to melt. Measure the liquid.

TEMPERATURE INCREASE

Molecules move faster.

3

Put the bag in the microwave and heat to boiling point. Be careful to avoid burns. Notice a decrease in the amount of liquid and bulging in the bag from the air vapor.

INFORMATION PIECES

Freezing LE-6
Melting LE-6
Boiling/Evaporating LE-6
Condensing LE-6
Molecules move slower. LE-6
Molecules move faster LE-6