UNIT 2 - BASIC PRINCIPLES OF BODY CHEMISTRY

ACTIVITY - Physical and Chemical Change Of Six White Substances

Objectives:

1. To determine whether the reaction between selected white substances and vinegar, water and iodine are chemical or physical.
2. Make a hypothesis using observation, touch and smell.
3. Through chemical analysis the students will be able to determine what happens to each of the substances - i.e. will they (a) clump or clot; (b) bubble or fizz; (c) separate; (d) give off a sweet or foul odor; (e) change colors.

Materials Needed:

1. Petri dishes or Egg carton
2. Six white substances: powdered sugar, salt, baby powder, cornstarch, baking soda and plaster.
3. Water
4. Vinegar
5. Iodine

CAUTIONS TO STUDENTS:
Use of iodine can cause damage to clothing, irritation to skin and breathing iodine can be hazardous to your health.

Strategy:
Test each substance individually with the following materials: water, vinegar and iodine. Make a hypothesis using observation, touch and smell.

Conclusion:
The substances have been identified as follows: powder sugar, salt, baby powder, cornstarch, baking soda and plaster.

Vocabulary:

Physical Change- is one in which the appearance of matter changes but its properties and makeup remain the same.

Chemical Change- is a change that produces one or more kinds of matter that are different from those present before the change.

Chemical Property- is the ability of substances to undergo or resist chemical change.

Observation- is a close examination of something. Observation is more than seeing, it requires attention to details. It is a skill that requires patience and practice.