

REINFORCEMENT

Composition of Matter.

Text Pages 220-225

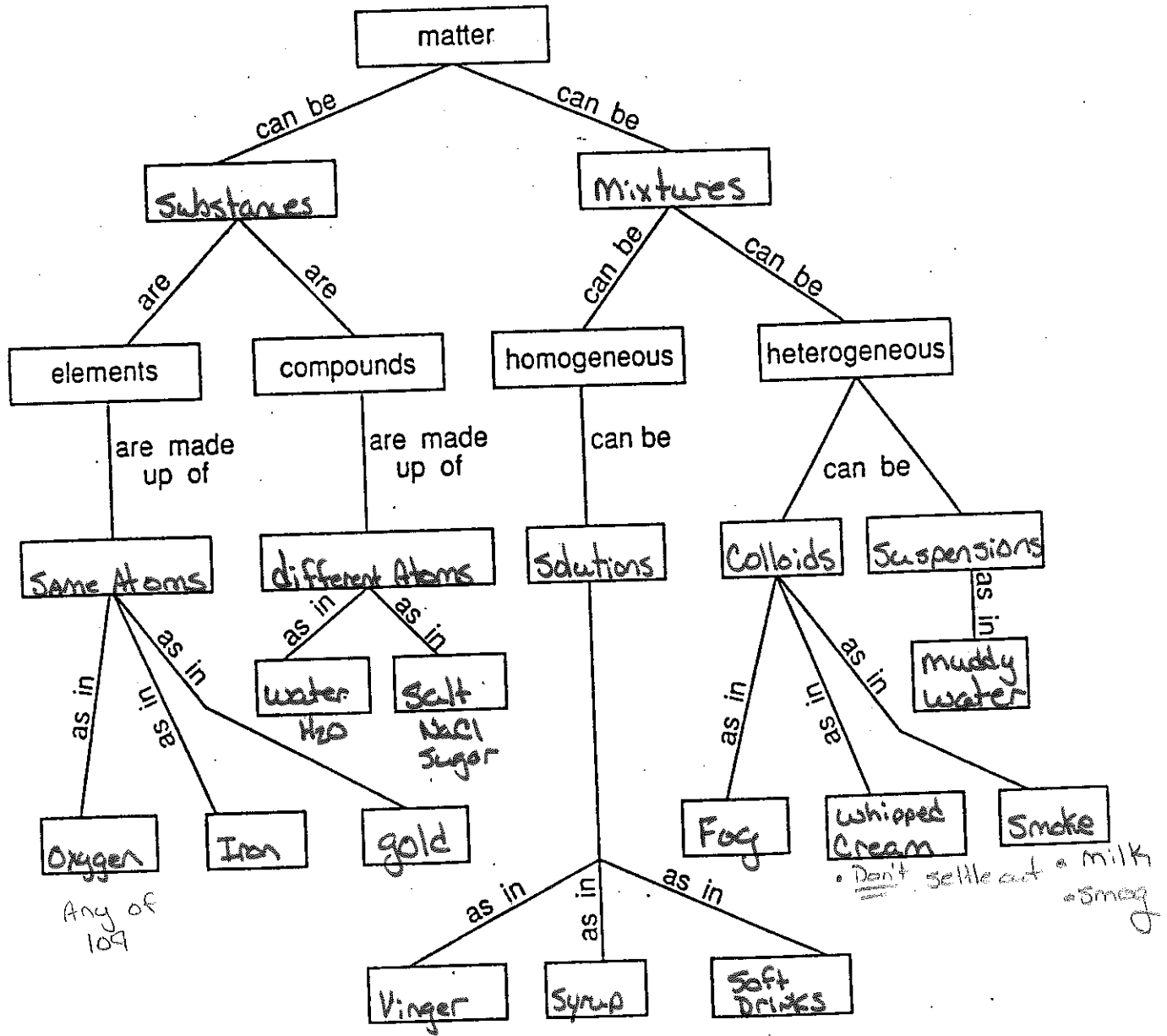
Use the words listed below to correctly complete the concept map.

atoms (different)
gold
oxygen
solutions
vinegar

atoms (same)
iron
salt
substances
water

colloids
mixtures
smoke
suspensions
whipped cream

fog
muddy water
soft drinks
syrup



No settling
light passes through
particles very small

Describing Matter

Text Pages 228-236

Complete the following by filling in each blank with the correct term.

Scientists try to explain how changes in substances take place. By applying energy, you can tear a sheet of paper into pieces and cause a(n) physical change in the paper. If you place a balloon filled with air into the refrigerator, the balloon will get smaller. The balloon undergoes a(n) Physical Change. On a hot summer day, water vapor will condense into water droplets on the outside of a glass of iced tea. The glass of iced tea is a(n) mixture of sugar, tea, lemon, and water. Ice is water in the solid state. The density of ice is less than that of liquid water. Therefore, ice floats on the tea. The melting point of ice is 0°C . This temperature is also the freezing point of liquid water. Water is a clear, colorless liquid at room temperature. The words *clear* and *colorless* describe two physical Properties of water. The melting of the ice in iced tea is a(n) physical Change.

In comparison, a(n) Chemical Change produces new substances. When a candle burns, physical and Chemical changes take place. The melting of the wax is a physical change. The melted wax is now in the liquid state. However, when burning occurs, a(n) Chemical Change takes place. The melted wax, as it burns, combines with gaseous oxygen in air. After the chemical change, water vapor and carbon dioxide gas are formed. The mass of all substances before a chemical change is equal to the mass of all substances after a chemical change.