Properties of Matter

liquid **physical change** **chemical change** **mixture**

physical properties **physical property** **distillation** **physical change**

equals **melting** **conservation of mass**

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 **1.** _____ in the paper. 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 **2.** _____ of sugar, tea, lemon, and water. Water is a clear, colorless **3.** _____ at room temperature. The words clear and colorless describe two **4.** _____ of water. The melting of the ice in iced tea is a **5.** _____.

In comparison, a **6.** _____ produces new substances. When a candle burns, physical and chemical changes take place. The **7.** _____ of the wax is a physical change. 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 **8.** _____ the mass of all substances after a chemical change. This is called the law of **9.** _____

To separate a solid from a liquid, such as salt from seawater, a process using the **10.** _____ of boiling point called **11.** _____ is used.