

Unit 1: Principles of Chemistry

Chem 30A

(1)

Week 1: Answers to homework problems not found in the text.

Chapter 1

2. Matter is anything that contains mass and occupies space.
10. A hypothesis is a statement that explains an observation. Experiments are used to test hypothesis.
20. A physical property describes what you can see or touch such as volume, color, state [s], [l], [g], texture, touch. A chemical property describes how one substance reacts with other substances.
22. Gases expand to fill BOTH the volume and shape of the container. Liquids fill the shape, but not the volume. Solids retain both their shape and volume, regardless of the container.
34. (a) the human body (b) air
38. (a) chemical change; (b), (c) physical change
40. (b), (d) substance; (a), (c) mixture
42. Mixture. Saline contains salt and water.