

Experiment 2 Engaging Chemistry

The following chemical systems illustrate various chemical phenomena. While examining these systems, you will begin the process of scientific inquiry by performing an experiment, making observations, and proposing logical reasons for the changes you observe.

Careful observation is important, but what observations are important enough to write down? That varies with the experiment. You should certainly record initial observations such as whether a sample is a solid or liquid, its color, and any odor. Note whether solids are chunks, powdered, or crystalline. Upon mixing, watch for changes in color, odor, temperature, bubbling (indicating gas formation), or cloudiness (indicating precipitation). Write thoughtful observations, and be careful in your choice of words. For example, students often use the word "clear" incorrectly. Clear means transparent, but implies nothing about color. Iced tea is a clear, brown solution while water is clear and colorless.

