

Slides Summary

The slides are designed to be used alongside the experiment. They provide an introduction to the exercises, and then can be used to facilitate discussion between exercises.

First, the main concepts of chemical kinetics are introduced. Explanations are meant to be broad and to highlight the ideas of collisions and rearrangements of molecules. A slide outlining the iodine clock reaction sets the stage for the exercises. (There was confusion about what amount of blue constitutes a color change. This is probably the best time to discuss a standardized method to determine the end of the reaction.) This section was presented before the exercise.

After the first set of exercises (food dye mixing), we return to the slides to introduce the role of temperature in kinetics. During the following activities (where temperature is varied) students will begin to develop an intuition regarding temperature's effects on kinetics. By the end of the activity, students will be ready to continue the dialog about temperature and answer questions on the worksheet.

Similar to the temperature slide, there is another slide introducing concentration effects. This is to be presented after debriefing the temperature section and before beginning the last set of exercises.