

Activity 8.1

Description

In this activity students will consider several different reactions and discuss the likelihood that they could be elementary.

Objective

The objective is to cause students to think about what could and could not occur in a single molecular event. A further objective is to introduce topics like unimolecular reactions that may be covered in subsequent units or courses.

Preparation

1. Decide whether the activity will be conducted individually, individually followed by pair and share, or as groups. The lesson plan assumes they will initially work individually, after which they will pair and share. Modify it accordingly if alternative grouping is used.

Lesson Plan

1. Display the first slide and have the students begin working on the questions individually.
2. When it appears that the majority of the students have assessed all of the reactions, have them pair up and compare their conclusions.
 - a. Encourage them to discuss differences and try to resolve them.
3. When it appears most pairs have finished, discuss each reaction as a class.
 - a. If different conclusions have been reached for a given reaction, resolve through discussion.
 - b. Hopefully this discussion will bring out most of the points on the second slide.
 - c. If not, steer discussion to the relevant point.
4. Put up the summary slide and go over it.

Variations

Conduct the activity in groups or by the class as a whole from the start.