

About the Activity

Participants conduct a series of simple, safe experiments, investigating common-place chemical processes that occur at home, at school and on centre. They will be introduced to the concepts of chemical states, reactions, variables and waste products. They will begin to understand how many chemical reactions are taking place naturally within their environment and within household technology.

Activity Aims

The aim of this activity is to:

- Introduce the Everyday Chemistry activity and the necessary equipment.
- Allow each participant to collect, record and analyse data.
- Ensure participants work together, supporting and encouraging each other.
- Provide an opportunity for participants to discuss what they have accomplished.

Learning Outcomes

Upon completion of the activity, participants will have:

- Described the key elements in a chemical reaction and the variables involved.
- Understood why data collection must be fair and consistent.
- Describe simple experiments in word formula format.
- Understand that some household substances can produce interesting substances when combined.
- Understood the safety implications of some common household substances in terms of storage and use.
- Demonstrated the ability to listen to, understand and act on instructions received.
- Understanding of the importance of teamwork.
- Consolidated and then improved abilities through performance.
- Understood the importance of safety, risk, risk assessment, hazards and rules.
- Contributed to a post activity review led by the instructor identifying what they did well and then suggested ways to improve.

Progression Opportunities

Some participants may also:

- Identify limitations of and improvements to the methods of data collection used.
- Suggest ways to increase awareness of health and safety implications of household chemicals in the home.
- Take the initiative in evaluating their performance and that of the group.

In addition, participants should also have developed in the following:

- Interpersonal Communication
- Teamwork

Associated Vocabulary:

Words relevant to safety e.g. boundaries, hazards, risk assessment, rules.

Words relevant to equipment e.g. beaker, chemical, measurement, pipette, protective clothing, safety glasses, sample tray.

Words relevant to the activity e.g. acid, alkali, charge, dissolve, reactions, rates of reaction, solution, waste product.

Words relevant to teamwork e.g. discussion, instruction, listening, opinion, participation, responsibility, understanding.