

About the Activity

This activity gives participants the opportunity to learn about the rock cycle and fossil formation through observing local sedimentary rocks and hunting for fossils. Topics such as sea level change, tectonic movement and extinctions are covered as is the detail of the formation of sedimentary rock and the different varieties locally present.

Activity Aims

The aim of this activity is to:

- Introduce the geology, rocks and fossils activity and the necessary equipment.
- Allow each participant to observe sedimentary rock samples and to search for and collect fossils in the field.
- 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:

- Understood that rocks can be grouped due to their characteristics and formation.
- Understood sedimentary rock formation including the processes of erosion and deposition.
- Described the process of fossil formation.
- Demonstrated the ability to listen to, understand and act on instructions received.
- 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:

- Understand that rocks form in different environments.
- Be able to relate the texture and appearance of local sedimentary rocks to the environments in which they were formed.
- Begin to have an understanding of geological timescales.
- 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. digital camera, identification sheet.

Words relevant to the activity e.g. chalk, clay, cliff, deposition, erosion, fossil formation, igneous rock, limestone, metamorphic rock, sea level, sedimentary rock.

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