

WJEC Eduqas GCE AS in
GEOLOGY

P14

Production of scaled,
annotated field sketches at
unfamiliar field exposures to
record data relevant to an
investigation



Title: P14 Production of scaled, annotated field sketches at unfamiliar field exposures to record data relevant to an investigation

Specification reference: 2.3b

Aim: To produce scaled, annotated field sketches at unfamiliar field exposures to record data relevant to an investigation.

Apparatus:

Field notebook or plain paper large enough to be able to include the required amount of drawn and written detail

Pencil (soft) and eraser

Clipboard / something to rest on

Metre rule or equivalent (to determine scale)

Compass (to determine orientation)

Method:

1. Consider the purpose of the field sketch, i.e. what is to be shown – decide on what is important to include and make prominent in the sketch. Make a list of terms first, then draw.
2. Find a comfortable sheltered position to work from, safe and easily accessible, (and gives the same perspective as the secondary data if needed), and is free from obstruction.
3. Identify a frame for the sketch – holding up a cardboard frame may help to do this. Alternatively define what will form the top and bottom of your sketch e.g. the skyline or top of a cliff, and the base of a cliff.
4. Orientate the paper so that it mirrors the dimensions of the sketch to be drawn e.g. orientate the paper in “landscape” for a sketch that will be wider than tall.
5. Draw a frame, or the features that will form the top and bottom of the sketch, onto the paper.
6. Draw the main features of the sketch which form the most prominent or important geological features first.
7. Draw geological features of finer detail.
8. Add labels and annotations for the geological features.
9. Add a scale for the field sketch.
10. Label the direction, bearing, grid reference and a short written description of the ‘view’.

Considerations

Scale – this can be difficult to assess, particularly when sketching a large landscape area. Starting the sketch with the things furthest away and working towards you will help. Also, add labels to show things of known height (refer to map of the area to find this).

Slope – drawing the correct angle of a slope can be problematic. Try holding a pencil away from you, towards the slope and then transfer it to the paper.

Weather – adverse conditions will have an immediate, preventative effect on the ability to carry out a field sketch!

Use photography to **complement** the field sketch. Photos can be used to add detail to the sketch later, which there may not have been time to include or suitable conditions to achieve in the field.

The field sketch needs to be ‘fit for purpose’ to add value to your investigation - this takes some thought and consideration. It’s very easy to just ‘knock out’ the odd quick sketch which adds nothing to an investigation.

Labels should be used to pick out the main features, and **annotations** to comment on certain aspects in order to bring out the main 'message' to be conveyed.

Analysis:

None required

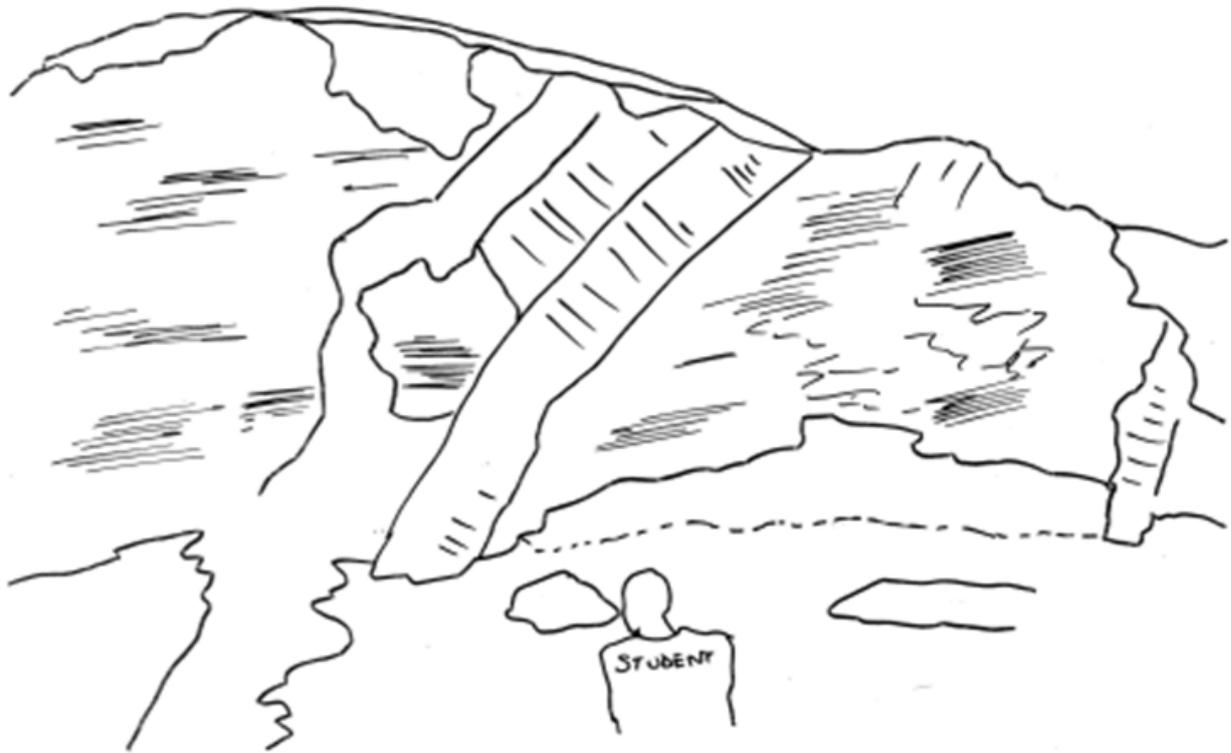
Teacher/Technician notes:

Learners may practice field-sketching in the classroom prior to fieldwork.

Task 1: In class situations, learners could use photographs to be given practice in how to produce a large field sketch, possibly using tracing paper or a transparency to help. See example below.



It might look something like this when finished.

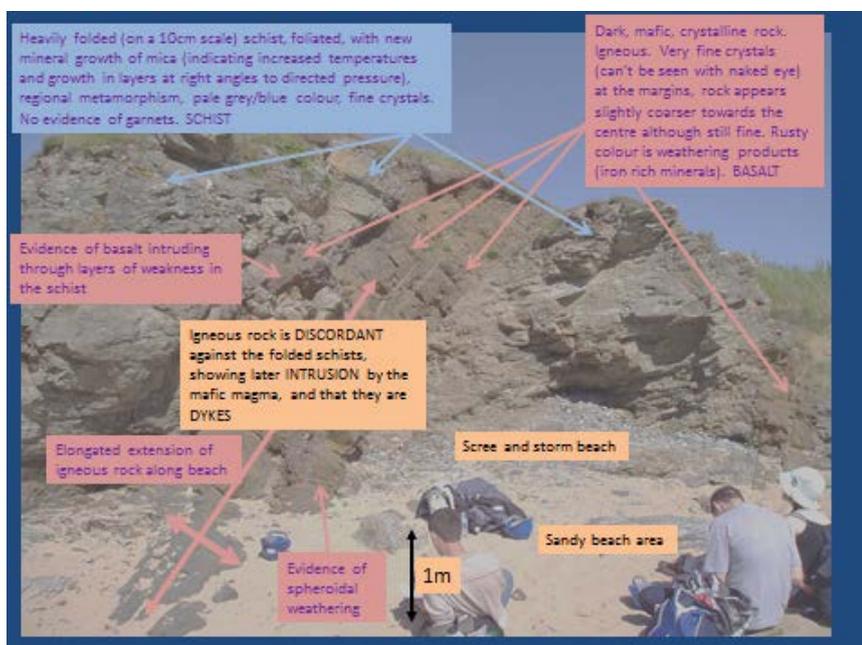


From the following description, try to label and annotate your field sketch:

“the area was a beach, with a small shingle storm beach at the top and some vegetation on the area behind. The exposure faced east. In the middle of the exposure there were two basalt igneous intrusions cutting across the country rock (which was a heavily folded schist). The contacts were sharp. There was another dyke to the right of the exposure. The dykes were more coarsely crystalline towards their middles but still fine.”

Labels/annotations might look something like this when it is finished.

North



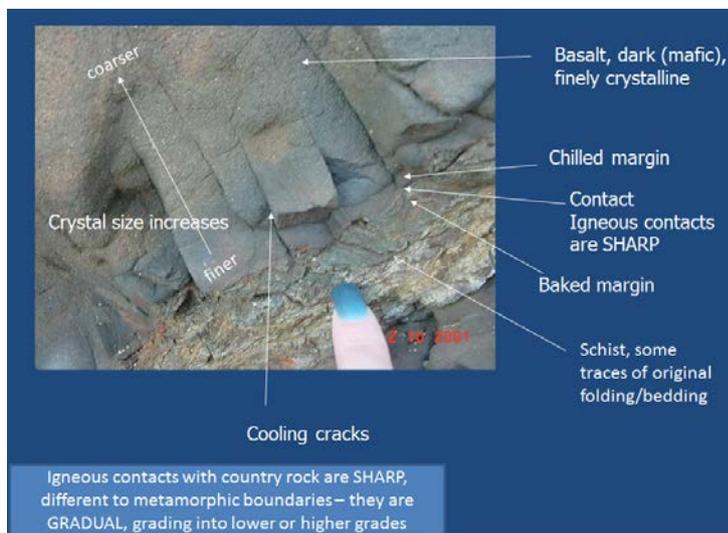
South

Task 2: In class situations, learners could use photographs to be given practice in how to produce a small detailed sketch, possibly using tracing paper or a transparency to help. See example below.

Using the photograph below produce a detailed interpretation of the contact between the country rock and the igneous contact, drawing and annotating a field sketch, or annotating the photograph.



It could look something like this.



Information on how to construct field sketches can be found at

<http://www.esta-uk.net/fieldworkskills/tips.htm>