GCSE (9-1)

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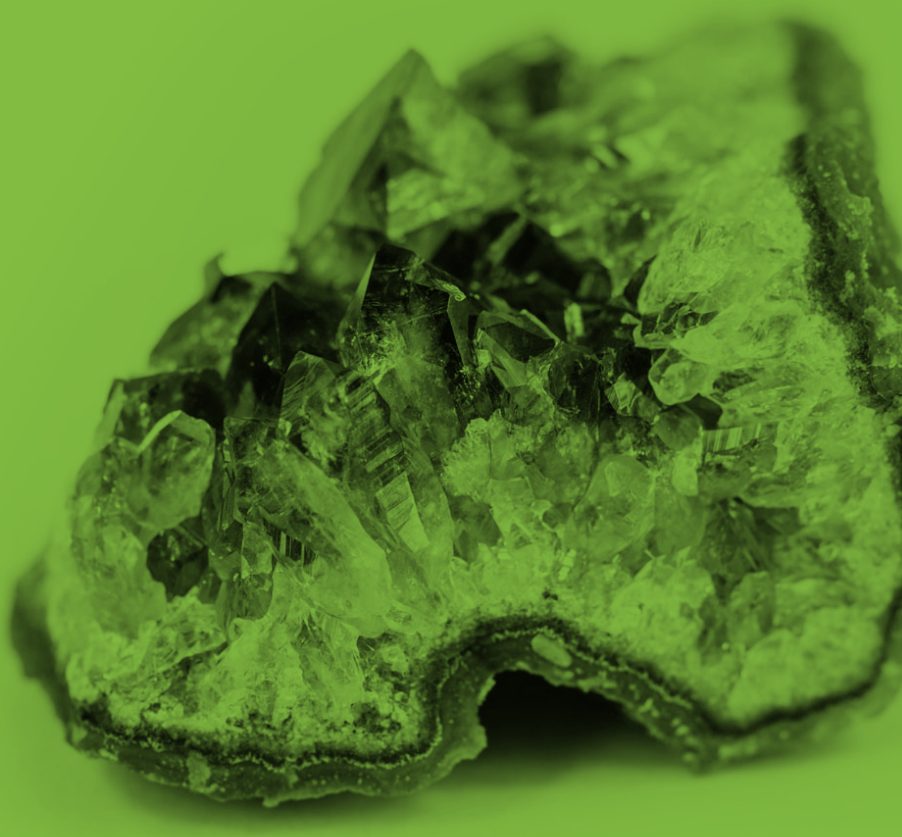
WJEC Eduqas GCSE (9-1) in

GEOLOGY

Practical Guidance Sheet 11



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GCSE Geology Practical Guidance Sheet 11

Title: Producing annotated, scientific drawings

Specification reference: Appendix B. The requirement to produce annotated, scientific drawings is stated in Appendix B.

Field Sketches
Aim: To produce scaled, annotated field sketches at unfamiliar field exposures to record data.

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, ie what you are aiming to show – decide on what is important to include and make prominent in your 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/top of a cliff and 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 your 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 your field sketch.
10. Label the direction, bearing, grid reference and a short written description of the ‘view'.

Considerations
Scale – this can be difficult, 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).
Slopes – 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 your ability to carry out a field sketch!
Use photography to complement your field sketch. Photos can be used to add detail to your sketch later, which you may not have had the 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 field notes – this takes

some thought and consideration.

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’ you are trying to convey.

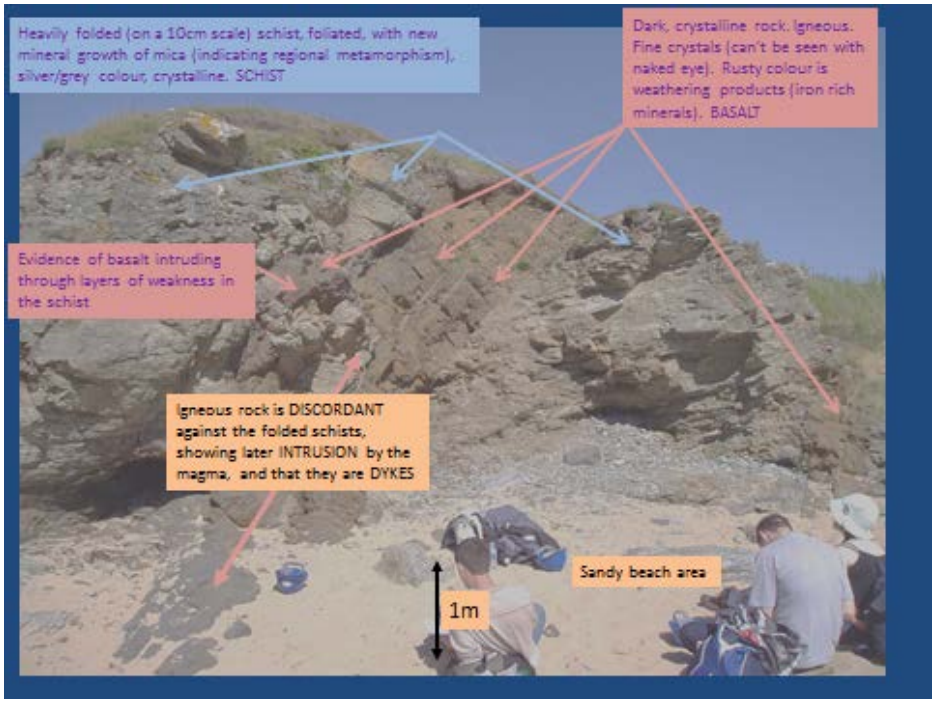
Learners may practice field-sketching in the classroom prior to fieldwork.

Task: 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 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 with mica crystals). The contacts were sharp. There was another dyke to the right of the exposure.”

The labels/annotations might look something like this when it is finished

West  East

Further information on how to construct field sketches can be found at
http://www.esta-uk.net/fieldworkskills/tips.htm