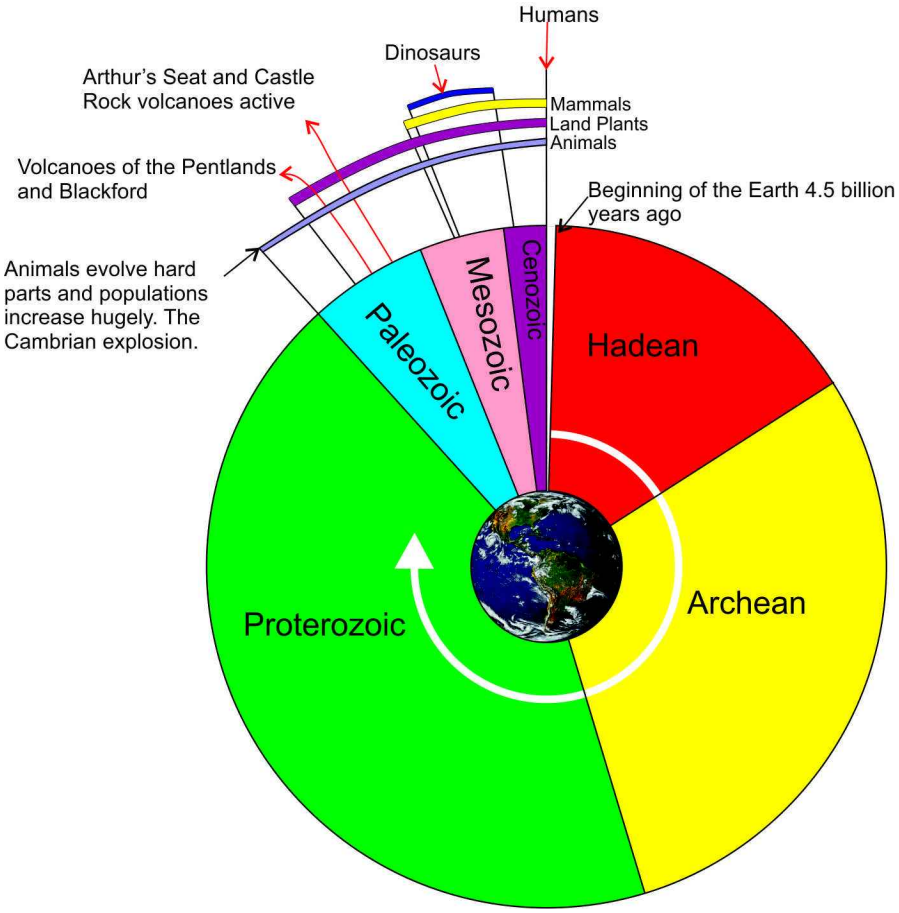
Questions for Blackford Hill excursion



Q) How old is the Earth?

A) _____

Q) Why did the "Cambrian explosion", where millions of new species suddenly appeared in the fossil record, actually happen?

A) _____

Q) How long was there between volcanism in the Pentlands and Arthur's Seat?

A) _____

Q) How long have humans been around?

A) _____

Q) What was life like in Edinburgh 20,000 years ago?

A) _____

The Observatory

1. Can tell what type of rock the Observatory and its walls are made of? (circle correct answer)
    a. Sedimentary
    b. Igneous
    c. Metamorphic
2. What is the rock made up of and can you give the rock a name?

3. Why is some of it a red colour?

4. Sandstone isn't very hard as rocks go, so why build out of it, instead of using a harder rock?

Corbie's Craig

1. Draw the outline of Corbie's Craig, the note on your sketch the important features of the craig. Can you draw the direction of the ice?

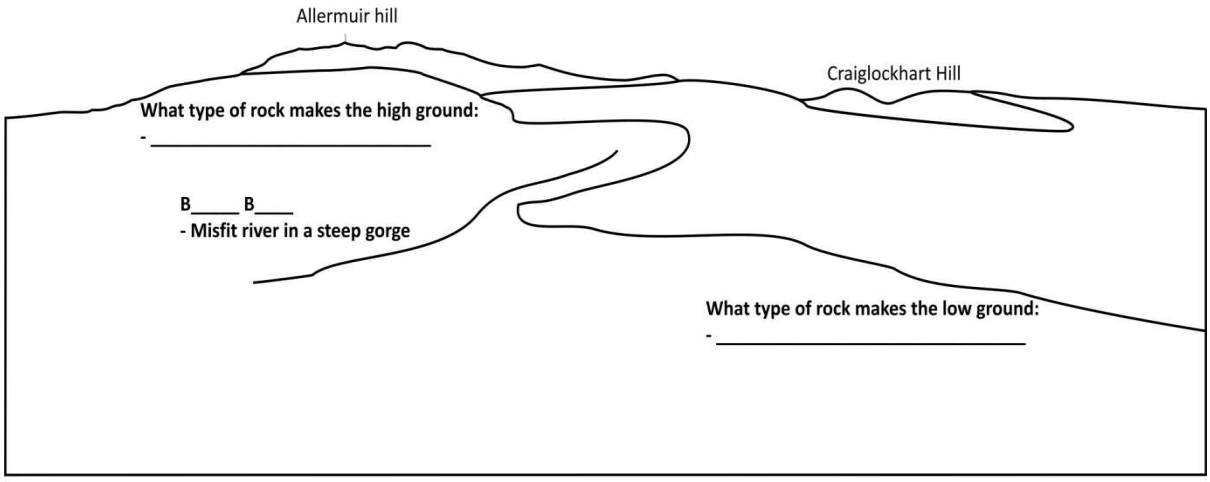
2. What type of weathering occurs on a) the steep side and b) the shallow side of the craig?
    a.
    b.

3. On the right of the path (looking up slope) is a small outcrop of a dark rock, this is the same rock as Corbie's Craig. Can you describe its features? (E.g its colour or what it is made of.) Is it harder or softer than the red Observatory sandstone?

The summit

Pentlands

1. Draw some more important features onto the sketch and fill in the blanks.



2. Why is the housing estate built where it is?

3. How were the rocks that the Pentland Hills and Braid and Blackford Hills are made of formed?

4. What would the environment have looked like?

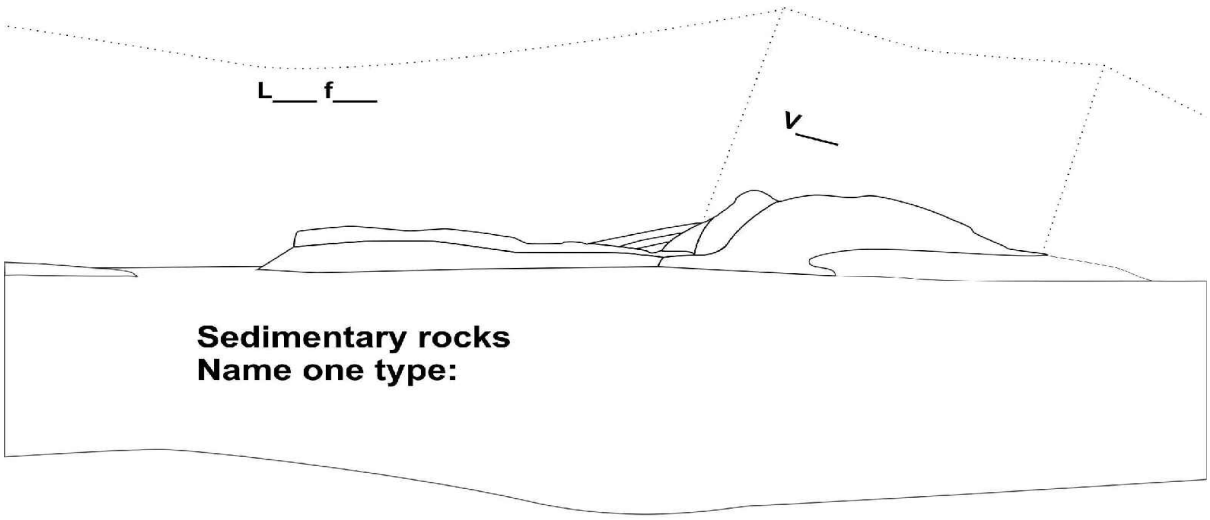
Arthur's Seat

1. What is Arthur's Seat?

2. Fill in the blanks. Can you draw where more of the volcanoes lavas and ash would have been? And where is the crag and tail (can you see them both)?

Why is the volcano tilted?
A) _____

Why is the top missing?
A)
_____



3. The castle should be visible to the north. Why would you build a castle here?

4. Why did Edinburgh become the capital?

5. What was the environment like when Arthur's Seat and Castle Rock were active?

Wall Rocks

1. On the wall at the bottom of the hill, can you see any rocks you recognise? If so, where were they?

2. What is the purple rock?

3. There is a third rock. Describe it.

The two dark rocks are volcanic in origin (lavas), the Pentlands and Blackford hill are both made up hundreds of lava flows of these rock types.

Scree slopes

1. Describe the rocks that are within the scree slopes. Do they change size in the slope?

2. Sketch the shape of the slope and the crag.

Braid Burn

1. Sketch the burn and valley. Is the river too small for the valley?

2. The bridge is relatively new. Why is this?

3. Can you see some flood defenses?

Blackford Quarry

1. What rock were they taking from the quarry?

2. Why?

3. Was the quarry any bigger? If it was, why is it now this size?

4. What is the quarry used for now?

Agassiz Rock

1. Can you see any of the glacial striations (scratches from the rocks carried within the ice) that proved glaciers were once in Scotland?

If you walk back to the Observatory through the 'community wood', remember you are walking over an old quarry that became a landfill and is now a wood! To the east is a golf course on old farm land, you can see some farmland still remaining to the south, on Braid Hill.