

# Guide to the AS level geology exams

You have 2 papers:

Component 1 - Geological enquiries (1 hour 30 minutes) 60 marks (40%)

Component 2 - Foundation geology (1 hour 30 minutes) 90 marks (60%)

**COMPONENT 1** - Questions are based on a B&W map, photographs and specimens. The questions will test any part of the year 12 work. There will be a cross-section question.



GCE AS – **NEW**

B480U10-1



**GEOLOGY – AS component 1**  
**Geological Enquiries**

MONDAY, 13 MAY 2019 – MORNING

1 hour 30 minutes

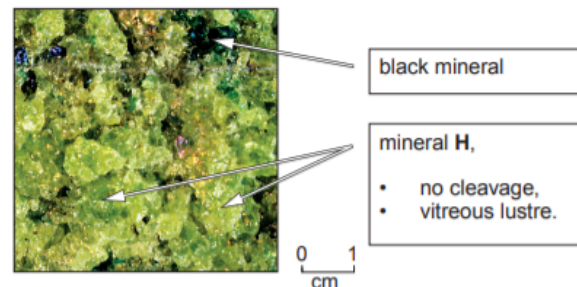
**ADDITIONAL MATERIALS**

In addition to this examination paper, you will need:

- the Resource Sheet
- **Specimens B, C, G and K**
- geological equipment for testing specimens
- the Mineral Data Sheet
- a calculator
- a protractor

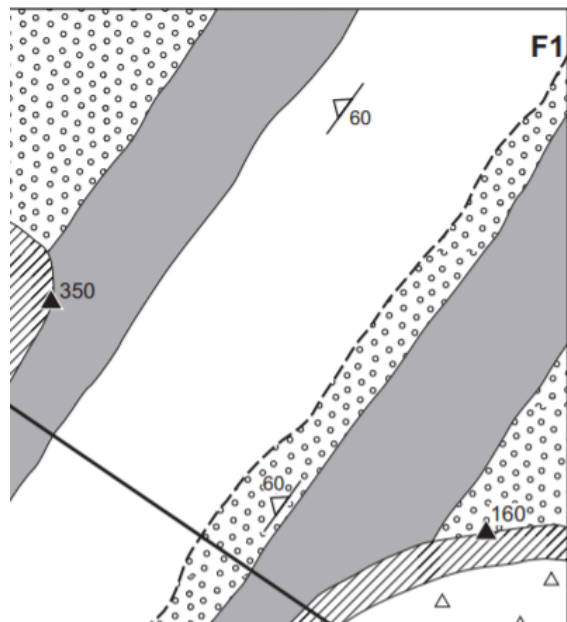
For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1.	10	
2.	13	
3.	5	
4.	4	
5.	10	
6.	6	

**Photograph 1** For use in Question 1

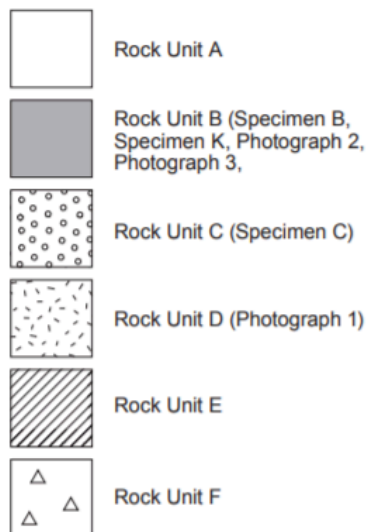


**Photograph 2** For use in Questions 2 and 3





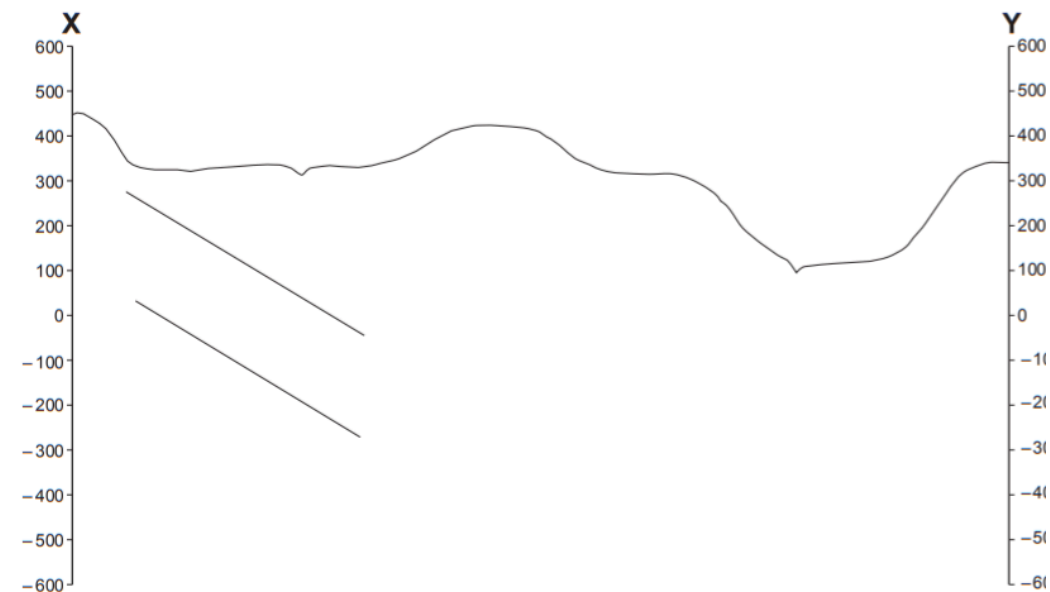
The rock units are not in order of age.  
Their ornament is not necessarily representative of rock type.




The topographic profile below was taken along the line X-Y on Map 1.

Complete the sketch of the geological cross-section along this line using Map 1.

- draw the rock units. Use similar ornament, or letters, for those as on Map 1.
- the top and base of **Rock Unit B** has been added.
- draw and label any **fold axes**, with the correct symbol.
- draw **arrows** to show the relative movement of any faults.
- mark on the extent of any metamorphic aureoles.
- project** the rock units and structures **above** the ground surface to illustrate any cross-cutting relationships.





[12]



GCE AS – NEW

B480U20-1

  
S19-B480U20-1-R1

  
Part of WJEC

GEOLOGY – AS component 2

Foundation Geology

FRIDAY, 17 MAY 2019 – AFTERNOON

1 hour 30 minutes

ADDITIONAL MATERIALS

In addition to this examination paper, you will need:  
the Mineral Data Sheet  
a calculator  
a protractor

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1.	14	
2.	14	
3.	18	

3. Figure 3a is a model showing the relationship between stress and strain within the Earth. Line P models deformation at a depth of 5 km. Line Q models deformation at a depth of 40 km.

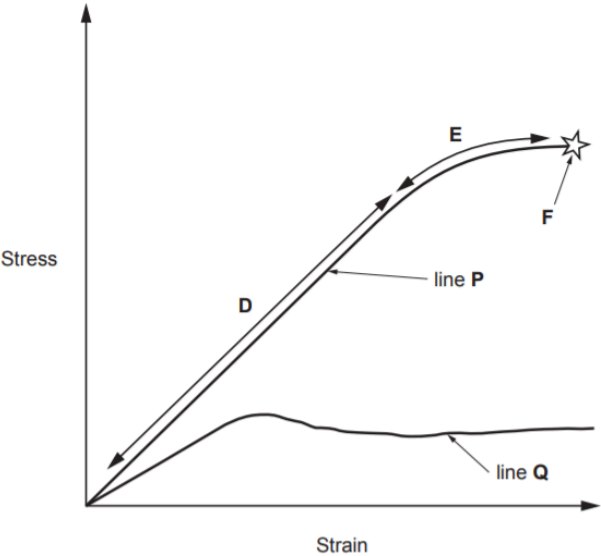


Figure 3a

Refer to Figure 3a.

(a) (i) State the type of deformation that occurs at D, E and F.

[3]

D ..... E ..... F .....