WJEC 2014 Online Exam Review

GCE Geology GL2a 1212-01

Investigative Geology

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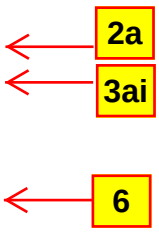

Examiner only

2. **Map 1** shows two faults, **F1** and **F2**.

(a) Complete **Table 2** with your evaluation of two statements about **Fault F1** and state your evidence from **Map 1**. [2]

Statement	Evaluation (true / false)	Evidence from **Map 1**
Fault F1 shows strike-slip displacement	•	•
Fault F1 dips at a lower angle than **Fault F2**	•	•

Table 2

2. **Map 1** shows two faults, **F1** and **F2**.

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Beds with the same dip are seperated from each other.

Statement	Evaluation (true/false)	Evidence from **Map 1**
Fault F1 shows strike-slip displacement	• True	• Beds either side of the fault have shifted and are no longer aligned.
Fault F1 dips at a lower angle than **Fault F2**	• False	• F1 is vertical (90°) and F2 is slightly sinkos so dips 70/80°. F1 dips at a higher angle.

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Fault F1 shows strike-slip displacement	• True	• The cut beds have all shifted towards the left
Fault F1 dips at a lower angle than **Fault F2**	• False	• Fault 1 is a vertical fault. evidence

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Statement	Evaluation (true/false)	Evidence from **Map 1**
Fault F1 shows strike-slip displacement	• Horizontal True	• Horizontal, sinistral movement or beds
Fault F1 dips at a lower angle than **Fault F2**	• false	• F1 is 90° and F2 is slightly sinus so low angle (lower than 90°)

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Fault F1 dips at a lower angle than **Fault F2**	• false	• F1 is 90° and F2 is ~~a~~ slightly sinuous ~~so~~ low angle (low ~~than~~ 90°)

Table 2

Examiner only

3. **Specimen C** is representative of **Rock Unit C** on **Map 1**.

(a) (i) Complete **Figure 3a** by drawing, to the scale provided, the texture of **Specimen C**. [4]

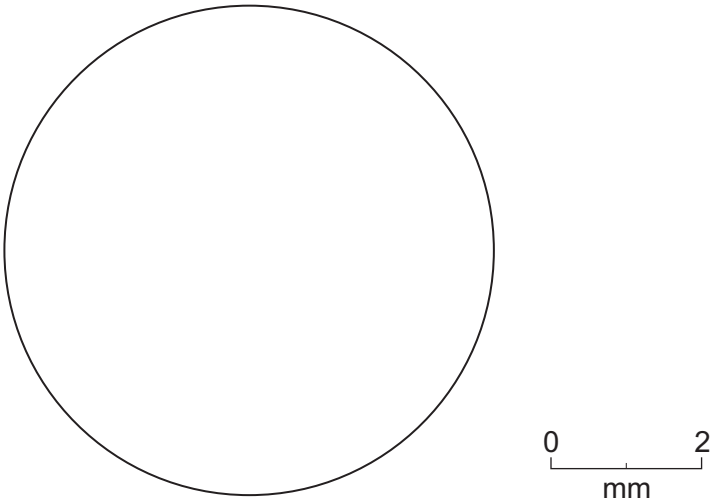

Figure 3a

(a) (i) Complete **Figure 3a** by drawing, to the scale provided, the texture of **Specimen C**. [4]

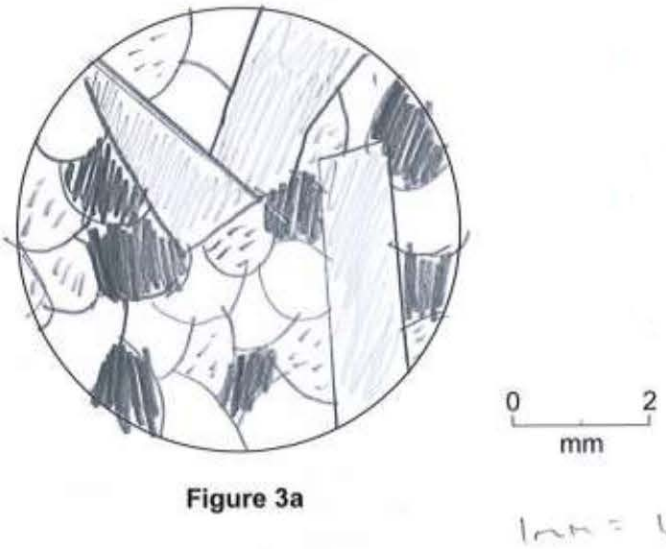

Figure 3a

1mm = 1cm

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0 2
mm

Figure 3a

X G
✓ Si
✓ Sh
✓ So

1mm = 1cm

3

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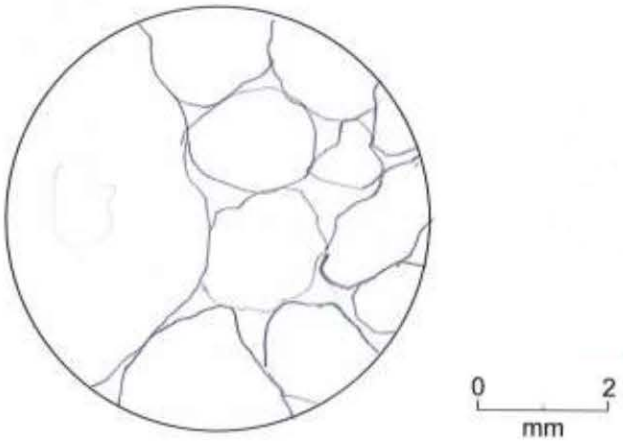

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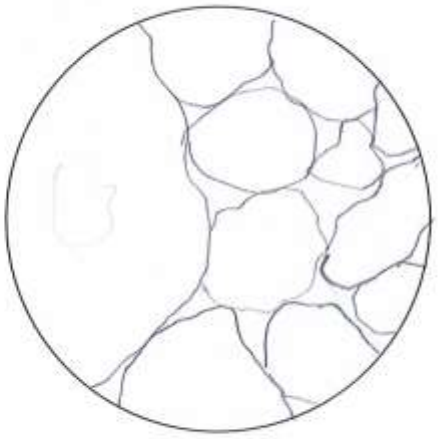

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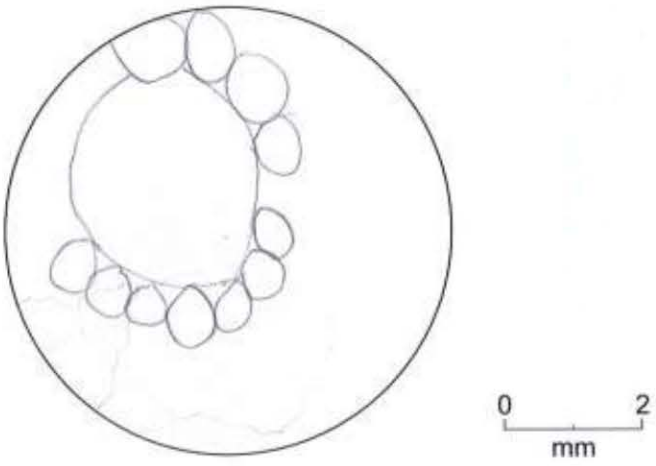

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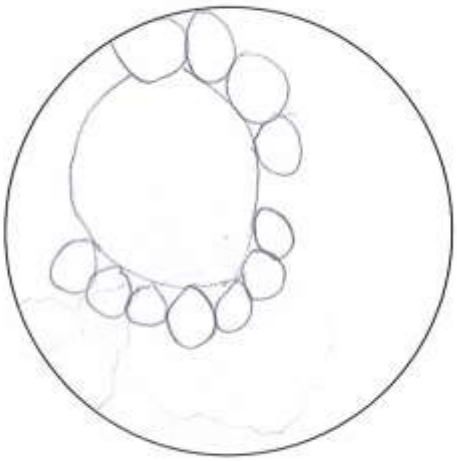


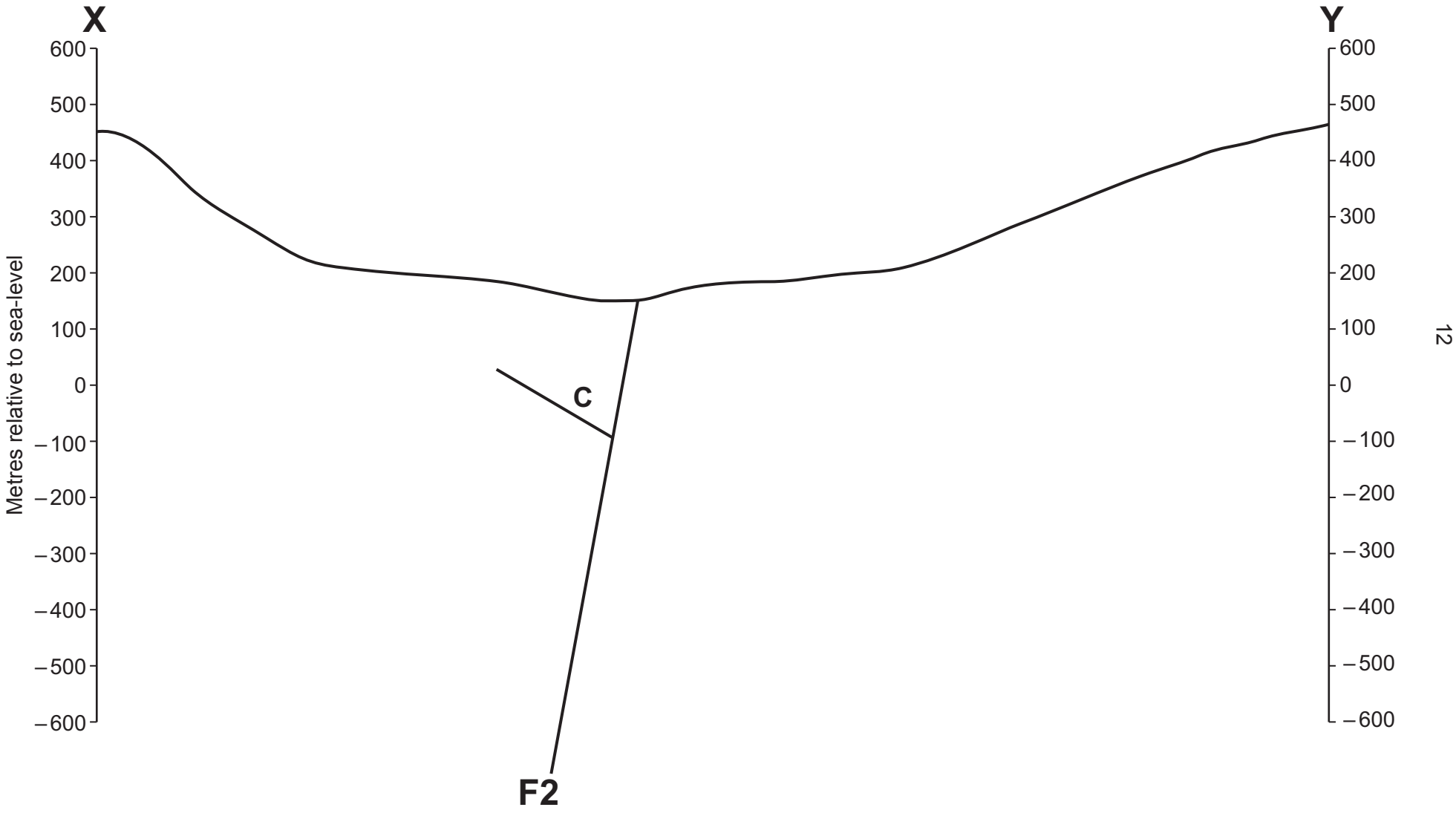
✓g
✓si
✗sh
✓so

Figure 3a

6. *(a)* The topographic profile below was taken along the line **X–Y** on **Map 1**.
Part of the base of **Rock Unit C** and **Fault F2** have been inserted.

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

- Draw the rock units. Use similar ornament or letters for these as used on **Map 1**.
- Draw and label any **fold axes**.
- Draw arrows alongside **Fault F2** to show movement.
- Project the rock units and structures above the ground surface to illustrate any cross-cutting relationships. [12]



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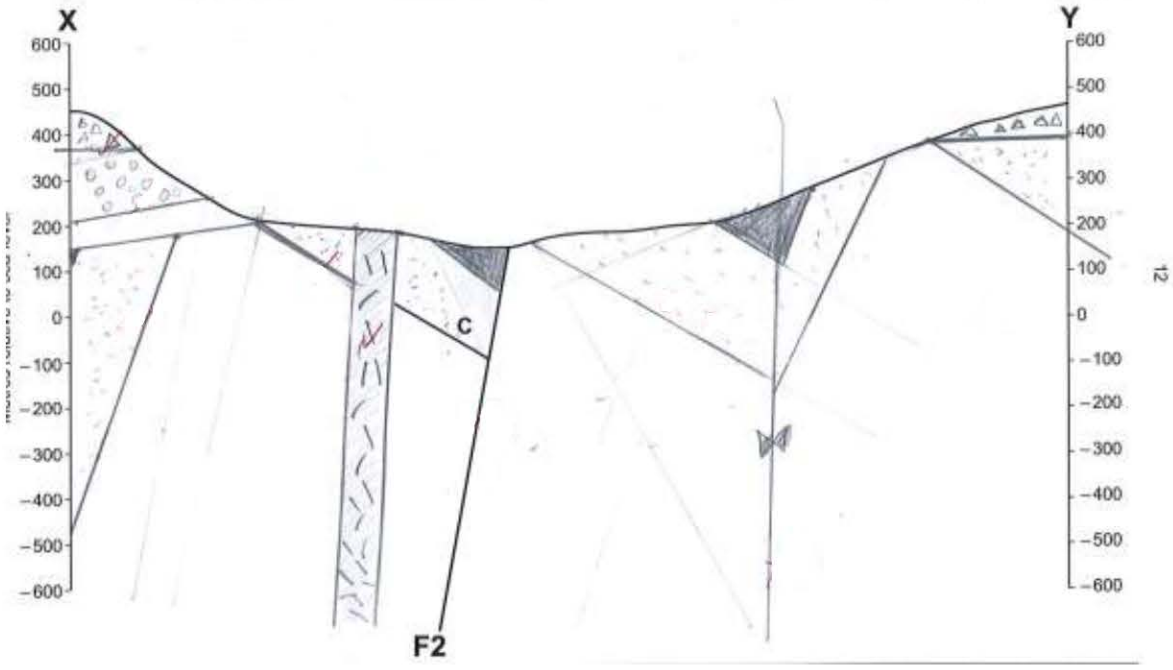

12

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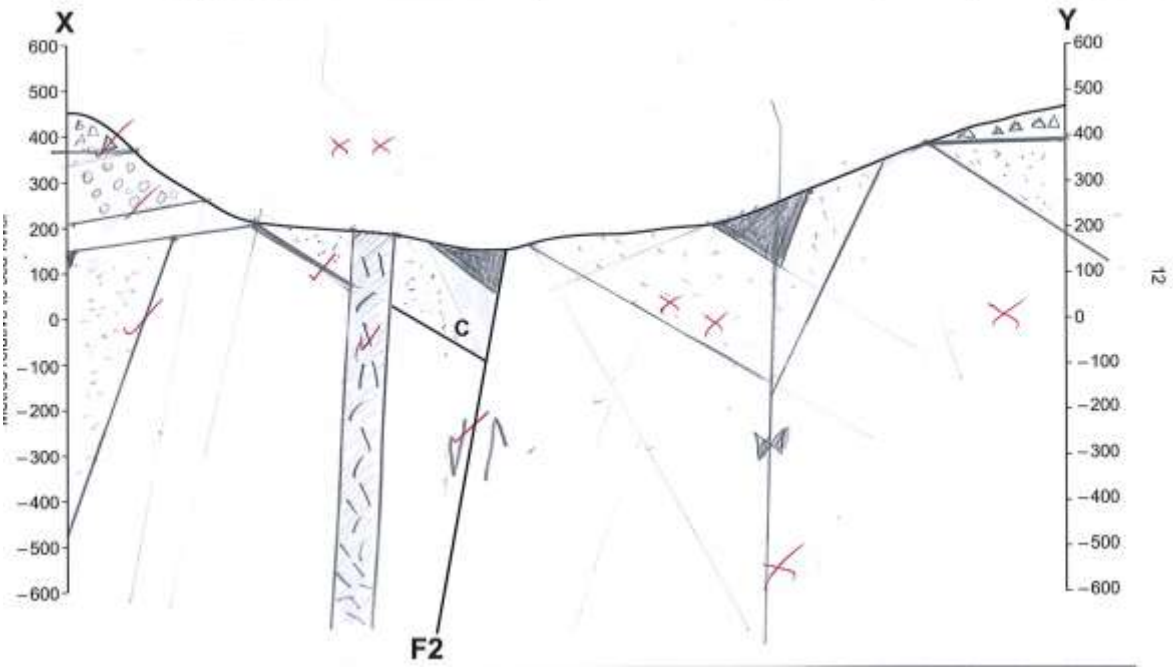

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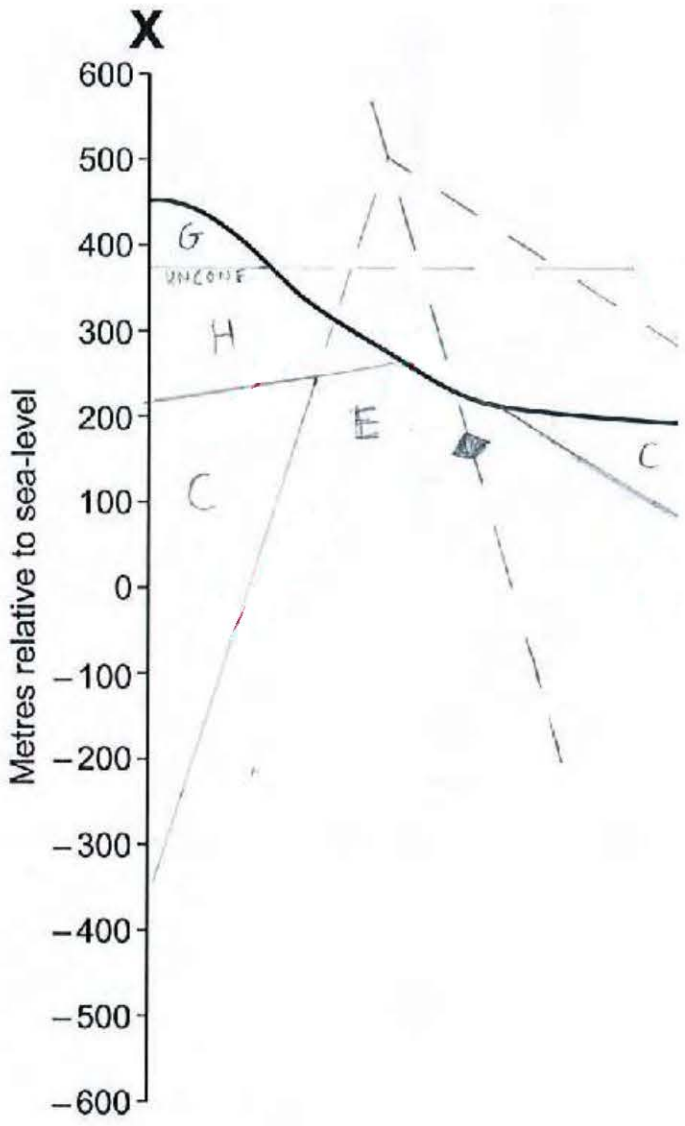
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Metres relative to sea-level
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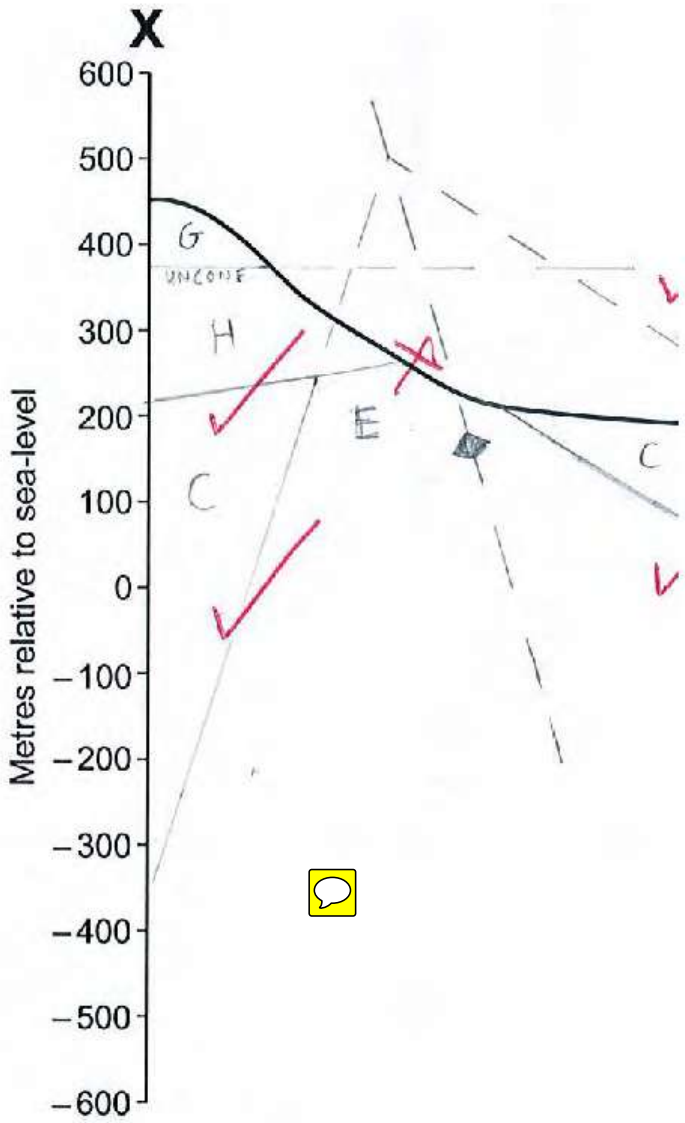
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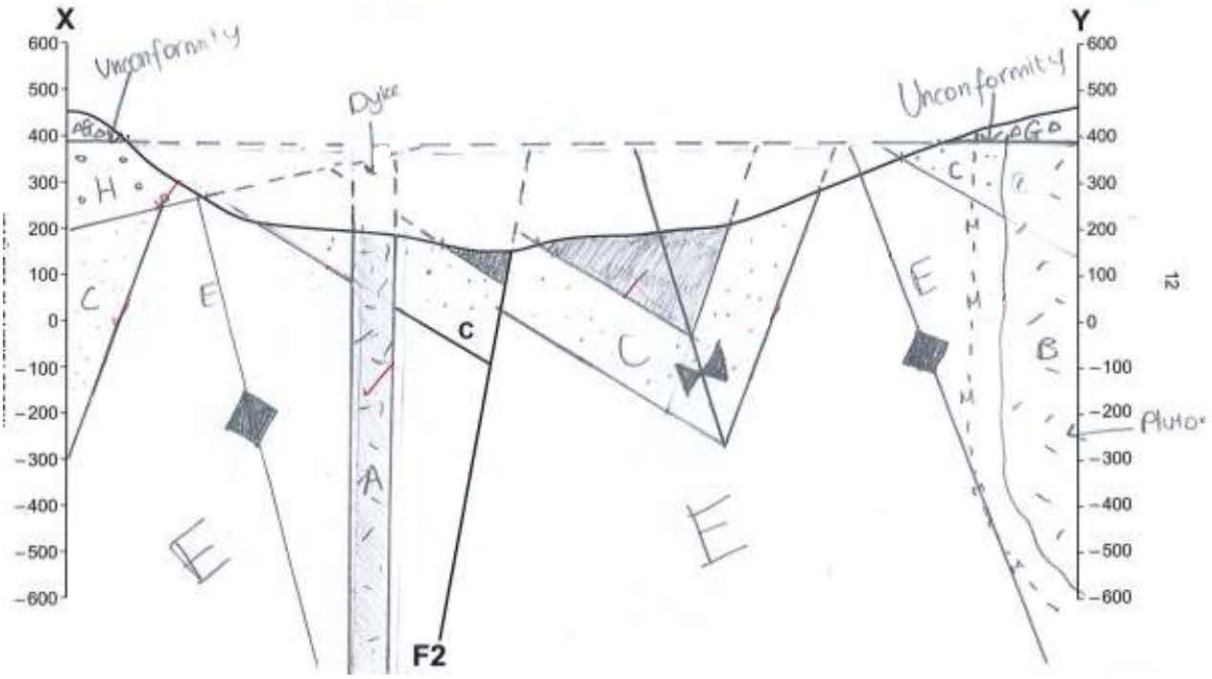

12

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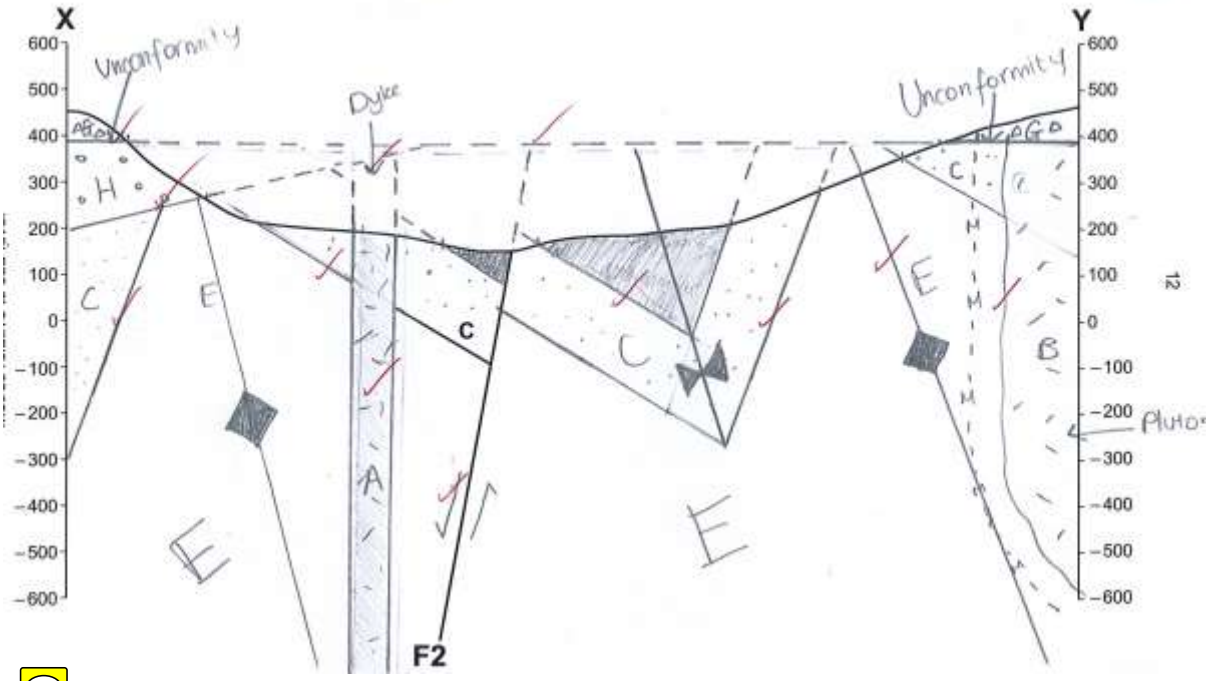

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