

Geological Mapping Exercise 8



Refer to the geological map supplied on the last page of this exercise.

1. What is the geological character of the following boundaries? Give a reason for your answer in each case.

a) AB: _____

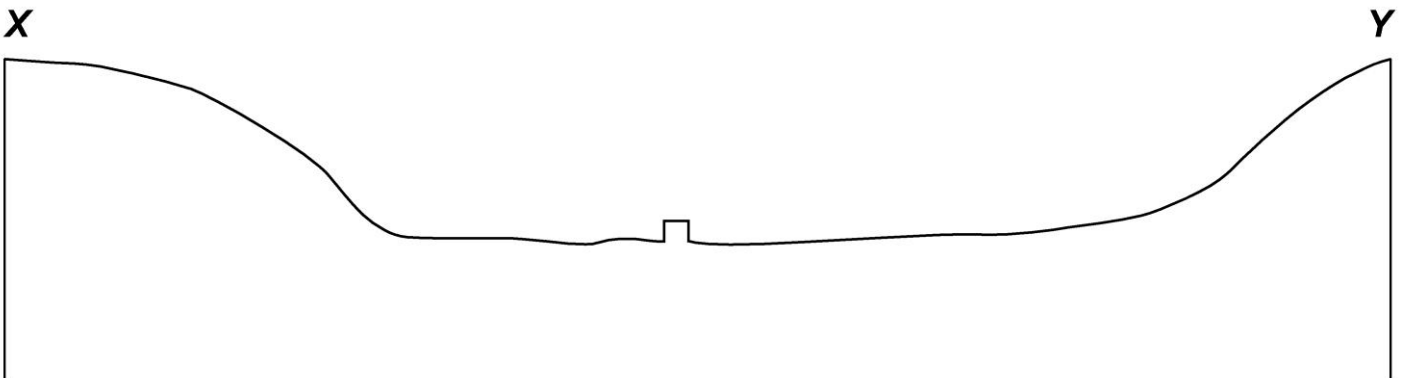
b) CD: _____

c) EF: _____

d) GH: _____

e) IK: _____

2. Construct a geological section from X to Y.



3. If EF is vertical, what sort of movement has occurred along this boundary?

4. Name the most likely metamorphic rocks to be found close to the boundary with the granite.

5. The basalt is between shale and sandy conglomerate. How could you tell whether this is a flow or a sill?

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6. List the rock types in order of formation. Use the stratigraphic column provided.

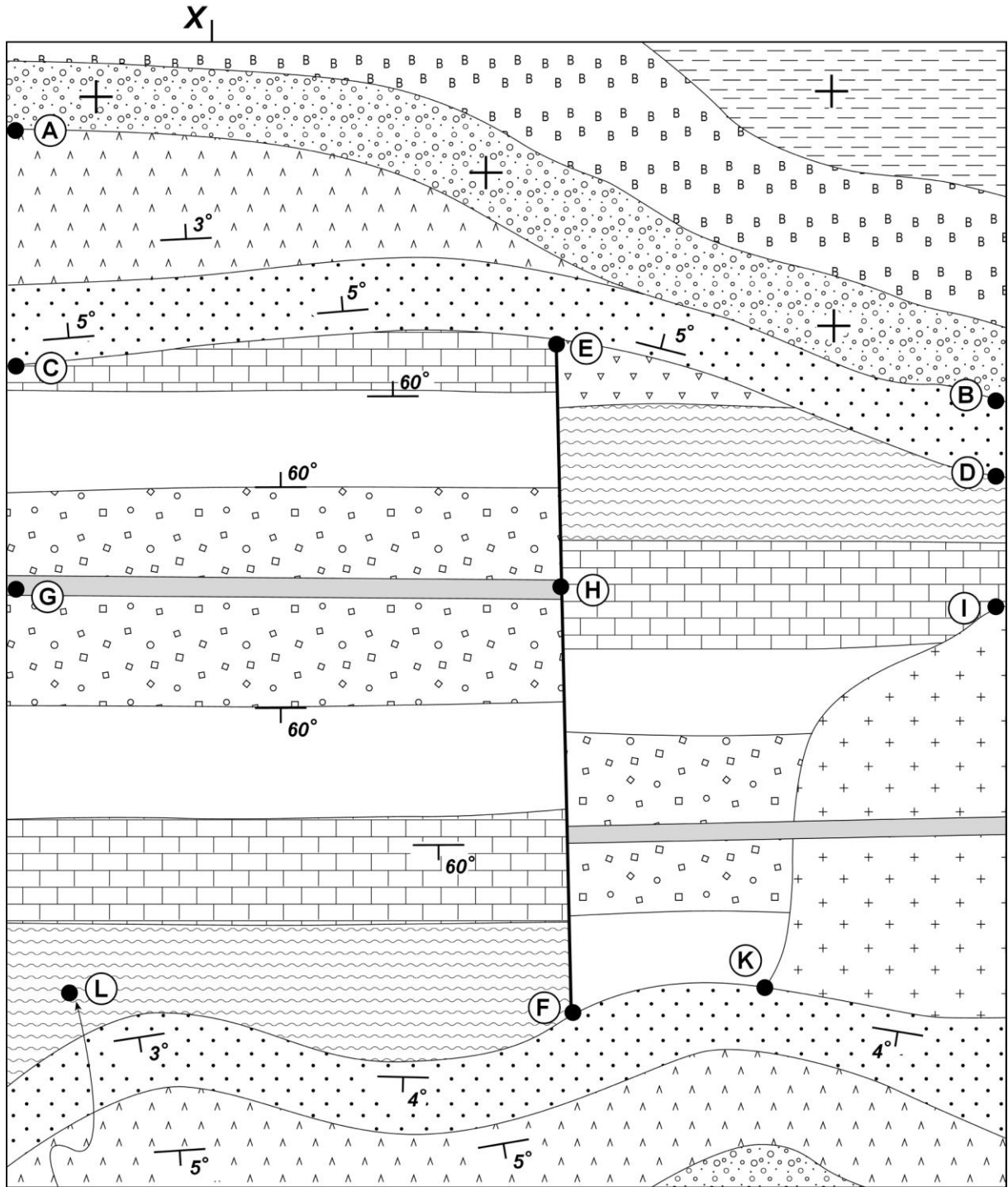
YOUNGEST

OLDEST

7. A greywacke is a poorly sorted mixture of angular and rounded fragments in a muddy matrix. Explain the changes that would have occurred in the environments of deposition between the greywacke, conglomerate and limestone.

8. Write a geological history of the area.

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Y

	Well sorted sandstone		Granite		Poorly sorted conglomerate		Horizontal bedding
	Dolerite		Tuff		Sandy conglomerate		40° Dip of bedding
	Carbonaceous slate		Greywacke		Dacitic tuff		
	Basalt		Shale		Poorly sorted limestone		

N

fossil found at L