HL Volcano Exam Qs



Question 1

B. Volcanic Activity

Examine the influence of volcanic activity on the development of the Irish landscape with reference to **each** of the following:

- Intrusive features
- Extrusive features.

[30m]

Question 2

C. The Tectonic Cycle

Examine how the tectonic cycle helps to explain the global distribution of **one** of the following:

- Volcanoes
- Earthquakes
- Fold Mountains.

[30m]

2. Volcanic Activity



Examine the photographs above and answer each of the following questions.

(i) Match each of the photographs **A**, **B**, **C** and **D** with the feature or process that best matches it in the table below.

Feature / Process	Letter
Pyroclastic flow	
Lava fissure eruption	
Ash cloud	
Lava vent eruption	

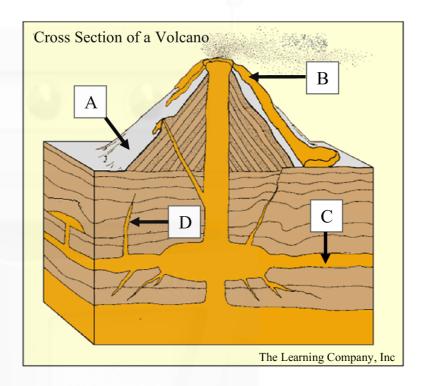
- (ii) Indicate whether each of the following statements is true or false, by circling the correct option in each case.
 - (a) Basic lava has a very high silica content.

True False

(b) Lava with a high silica content is most associated with explosive eruptions.

True False

1. Structure of a Volcano



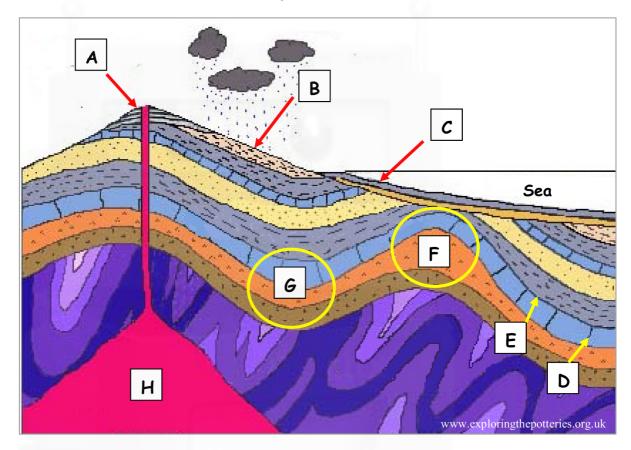
Examine the diagram above and answer each of the following questions.

- (i) Match each of the letters **A**, **B**, **C** and **D** with the feature that best matches it in the table below.
- (ii) Indicate whether plutonic processes or volcanic processes are most associated with each of the features, by ticking the correct box in the table below.

Feature	(i) Letter	(ii) Plutonic	(ii) Volcanic
Sill			
Pyroclastic sediment			
Dyke			
Lava flow			

[8m]

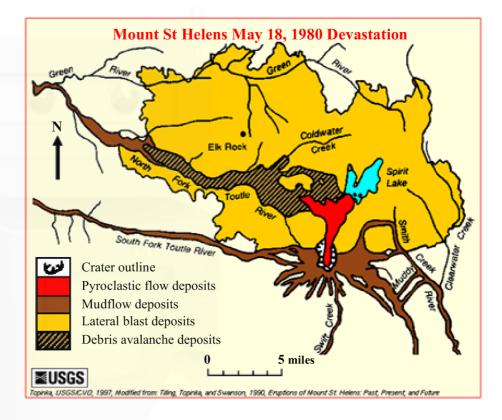
3. Patterns and Processes in the Physical Environment



Examine the diagram above. Match each of the letters A, B, C, D, E, F, G and H with the feature or process that best matches it in the table below.

Feature / Process	Letter
Joint	
Syncline	
Volcano	
Coastal deposits	
Bedding plane	
Magma chamber	
Weathering	
Anticline	

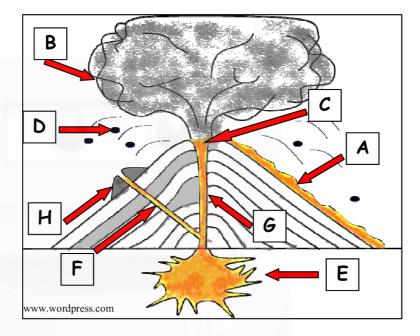
A. Volcanoes



Examine the map and legend above showing the extent of the materials deposited as a result of the eruption of the Mount St Helens volcano and answer the following questions.

- (i) What were the most extensive deposits as a result of the eruption?
- (ii) What was the direction of the pyroclastic flow deposits?
- (iii) What distance did the pyroclastic flow deposits extend to?
- (iv) Name **two** examples of pyroclastic materials.
- (v) Explain briefly why some volcanoes erupt violently.

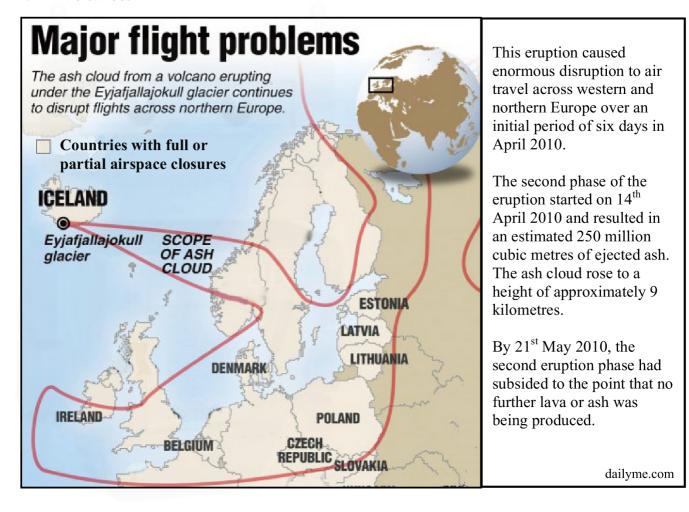
[20m]



Match each of the letters $\bf A$ to $\bf H$ in the above diagram with the correct volcanic feature in the table below.

Feature	Letter
Vent	
Crater	
Ash cloud	
Secondary cone / parasitic cone	
Lava flow	
Magma chamber	
Volcanic bombs / lava bombs	
Subsidiary vent	

A. Volcanoes



Examine the data above relating to the Eyjafjallajökull volcano which erupted in April 2010 and answer the following questions:

- (i) What approximate height did the volcanic ash cloud rise to?
- (ii) How many cubic metres of ash were ejected by the volcano?
- (iii) Name **two** countries not named on the map which had full or partial airspace closures.
- (iv) Briefly explain why volcanic activity occurs in Iceland.

[20m]

The satellite images below all show different views of a volcano.



Name an example of a volcano which you have studied. State **two** advantages and **one** disadvantage for people living in a volcanic region.

[20m]