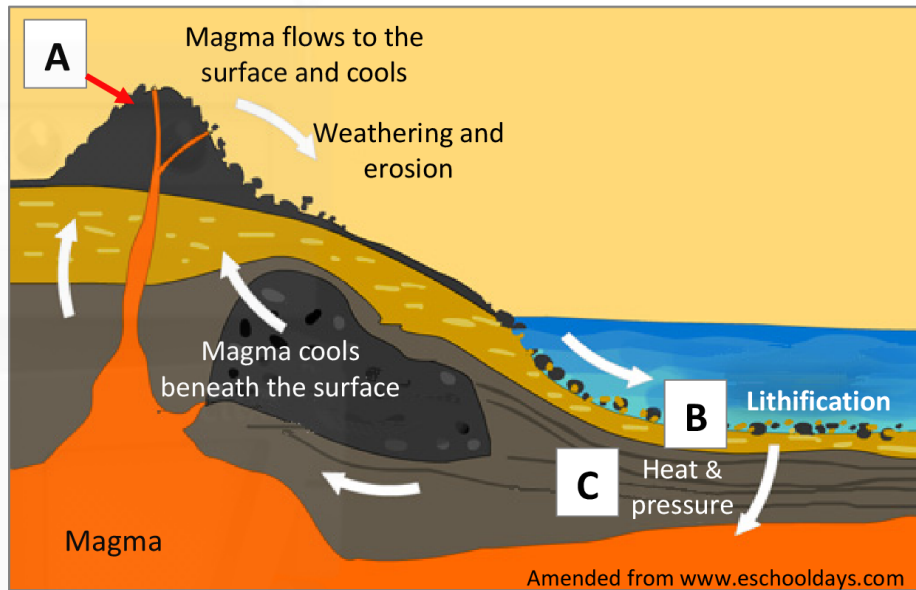


Question 1

A. Rock Cycle



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

- (i) Name the category of rock formed at **A** and the category of rock formed at **B**.
- (ii) Name the category of rock formed at **C** and name **one** specific Irish location where this rock can be found.
- (iii) Explain briefly what is meant by the term *lithification*.
- (iv) Explain briefly what is meant by the term *plutonic rock*.
- (v) Explain briefly how rocks are changed by either *thermal metamorphism* **or** *regional metamorphism*.

[20m]

Question 2

B. Rocks

Explain the formation of **one** igneous rock and **one** metamorphic rock, with reference to Irish examples.

[30m]

Question 3

4. Rocks

- (i) The list below contains a number of source materials from which rocks are formed and a number of metamorphic rocks.

Sand	Marble
Shells and fish bones	Gneiss
Magma	Quartzite

Complete the table below by inserting the correct terms from the list, to match each of the rocks named in the table with:

- (a) the source material most associated with it and
(b) the metamorphic rock most associated with it.

Rock Name	(a) Source Material	(b) Metamorphic Rock
Sandstone		
Limestone		
Granite		

- (ii) Name the rocks most associated with each of the following Irish locations.

(a) The Antrim Plateau _____

(b) The Burren _____

[8m]

Question 4

B. Sedimentary Rocks

Explain the formation of sedimentary rocks, with reference to Irish examples.

[30m]

Question 5

C. Human Interaction with the Rock Cycle

Examine how humans interact with the rock cycle, with reference to **one** of the following:

- Mining
- Extraction of building materials
- Oil/gas exploitation
- Geothermal energy production.

[30m]

Question 6

B. Rocks

Explain the formation of igneous rocks with reference to Irish examples.

[30m]

Question 7

B. Rocks

Explain the formation of metamorphic rocks, with reference to examples from Ireland.

[30m]

Question 8

C. Rocks and Landscapes

Examine how different rock types produce distinctive landscapes, with reference to examples that you have studied.

[30m]

Question 9

12. Rocks

The table below contains information on rocks regarding their name, category, location in Ireland and the name of the metamorphic rock they can become following metamorphosis.

Complete the table by inserting the correct term from the list below in its correct position in the table.

One row of the table is completed for you.

Sedimentary	Central Plain of Ireland	Sandstone	Gneiss
Igneous	Marble	Wicklow Mountains	Granite
Mountains of Munster	Quartzite	Limestone	Sedimentary

Name of Rock	Category of Rock	Location in Ireland	Metamorphic Rock
Limestone	Sedimentary	Central Plain of Ireland	Marble

Question 10

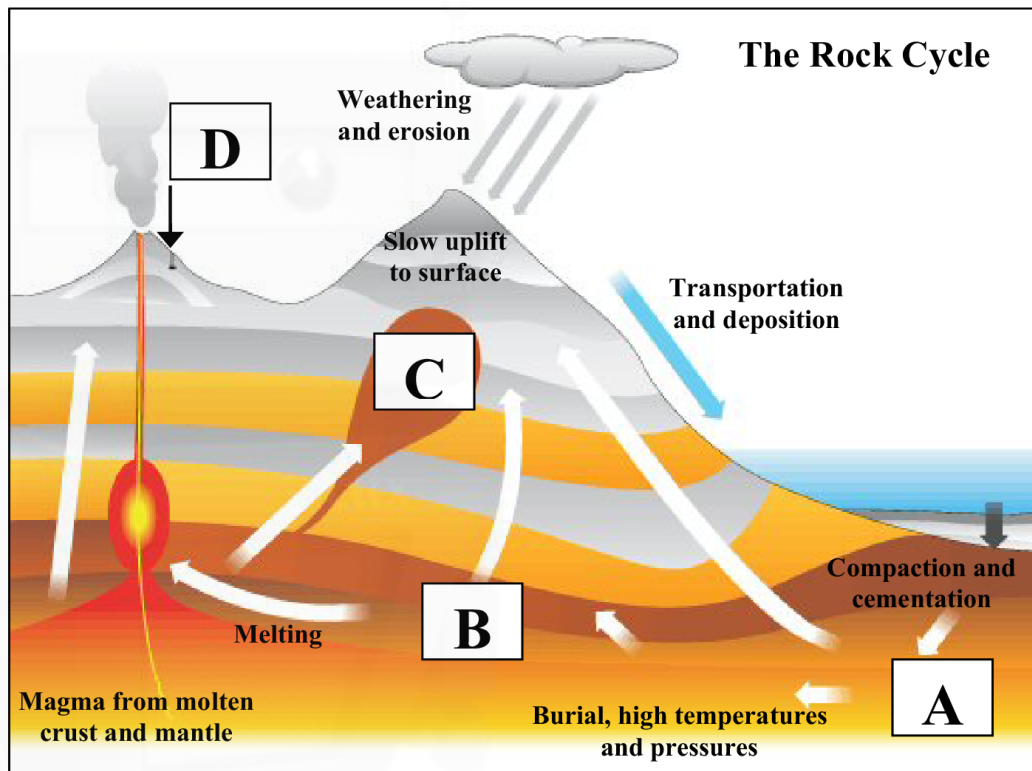
B. Sedimentary and Metamorphic Rocks

Describe the formation of **one** sedimentary rock that you have studied **and** briefly explain how this rock may be transformed into a metamorphic rock.

[30m]

Question 11

A. Rock Cycle



www.bbc.co.uk

Examine the diagram of the rock cycle above and answer the following questions.

- (i) Name the category of rock formed at **A** and name **one** example of this category of rock.
- (ii) Name the category of rock formed at **B** and name **one** example of this category of rock.
- (iii) Name **one** example of an igneous rock which is formed at **C**.
- (iv) Name **one** example of an igneous rock which is formed at **D**.
- (v) Briefly explain the difference between the process of weathering and the process of erosion.

[20m]

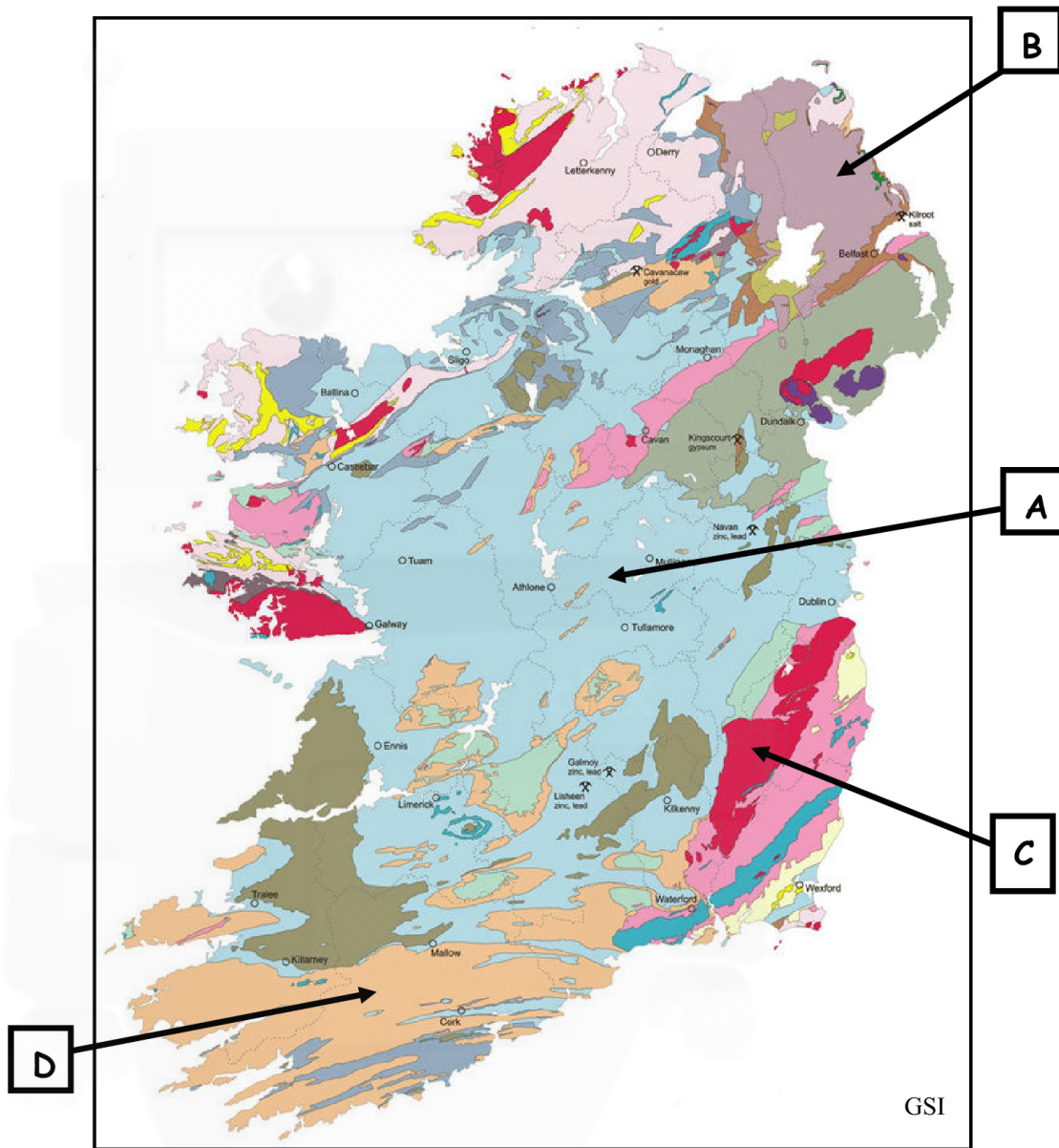
Question 12

C. Human Interaction

Explain, with reference to **one** human interaction with the rock cycle, that you have studied, how humans benefit economically from this interaction.

[30m]

Question 13



Examine the geological map of Ireland above.
Match **each** of the letters **A** to **D** with its correct rock type in the table below.

Rock Type	Letter
Basalt	
Limestone	
Sandstone	
Granite	

9. **Rock Type**

Examine the photographs of the igneous rocks **A** and **B** shown below and answer the questions which follow:

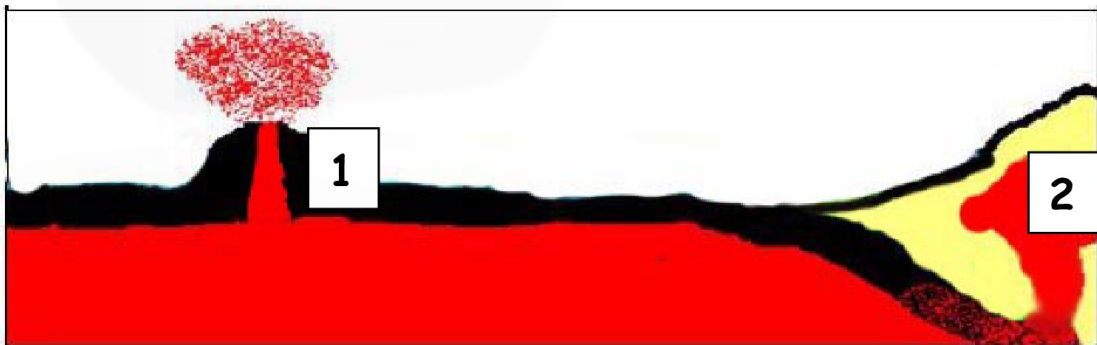


(i) Name each of the rocks. Fill in the names in the spaces provided.

Rock **A** is _____

Rock **B** is _____

(ii) Study the diagram below and identify the location where each of the rocks **A** and **B** from part (i) are formed. Tick the correct box in each case.



Rock **A** forms at **1** or **2**

Rock **B** forms at **1** or **2**

Question 15

C. HUMAN INTERACTION

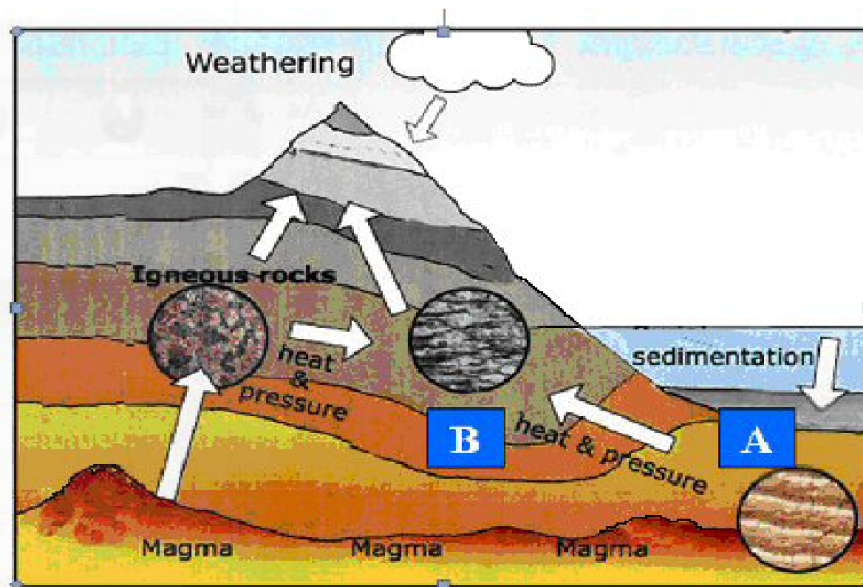
Discuss, with reference to **one** of the following, how humans interact with the rock cycle:

- Mining
- Extraction of building materials
- Oil / Gas exploitation
- Geothermal energy production.

[30m]

Question 16

A. THE ROCK CYCLE



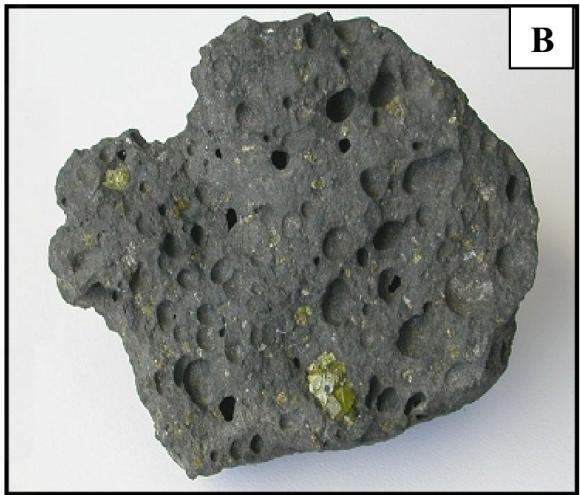
www.pullouttheplug.co.uk

Examine the diagram above and answer the following **in your answer book**:

- (i) Identify the rock group found at **A**.
- (ii) Name **one** example of a rock within the rock group named in part (i).
- (iii) Identify the rock group found at **B**.
- (iv) Name **one** igneous rock formed **below** the earth's surface.

[20m]

9. Rock Types



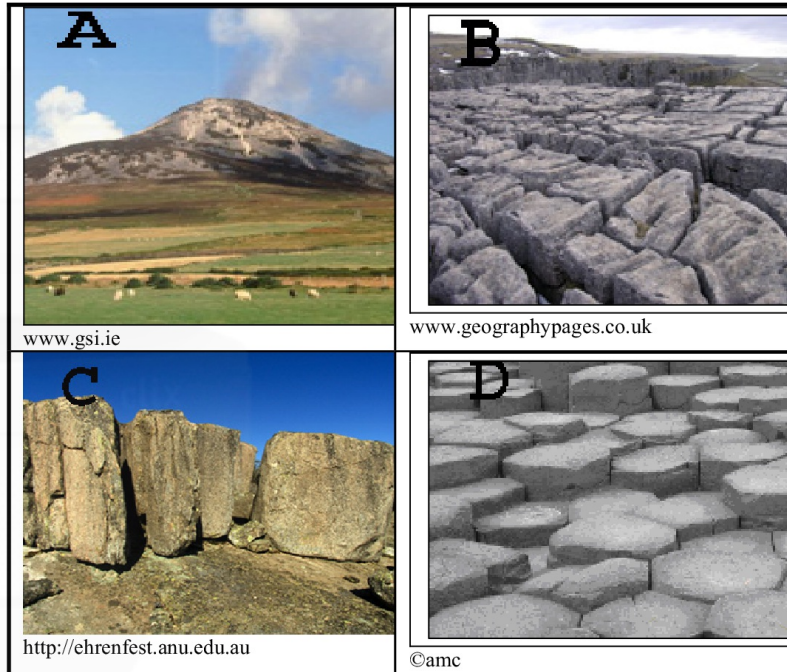
www.geology.about.com/www.beg.utexas.edu

Examine the images above and identify each rock type by placing the appropriate letter into each of the boxes below:

Rock Type	Letter
Slate	
Basalt	
Old Red Sandstone	
Limestone	

[8m]

Question 18



Examine these images, which show landscapes developed on **four** different rock types.
In your answer book, match **each** of the rock-types below with the correct, labelled image above:

Granite

Basalt

Limestone

Quartzite

[20m]

