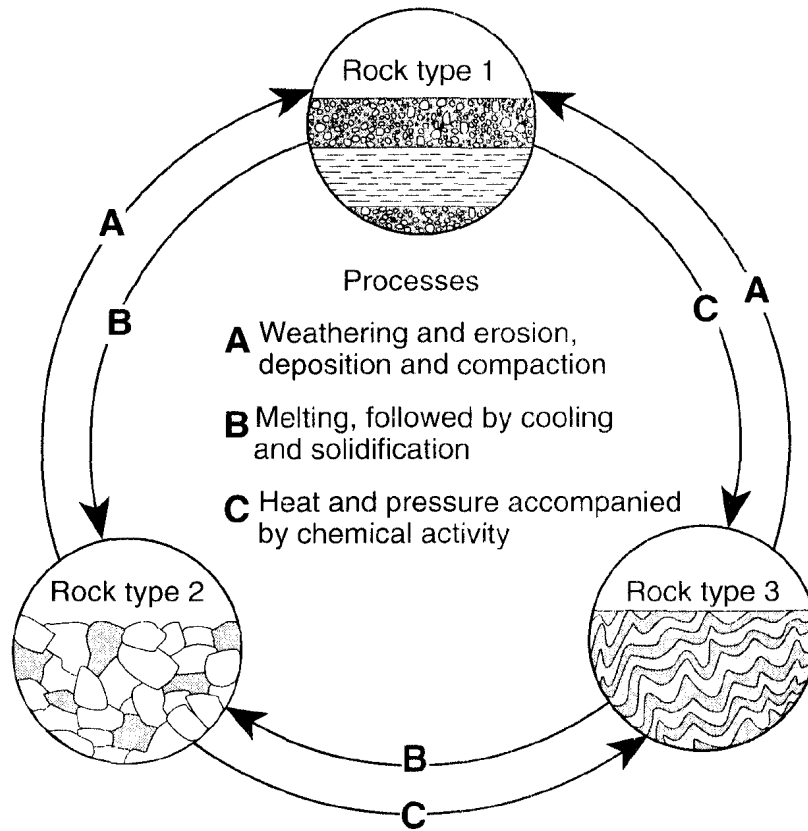


Practice Questions: Rock Cycle

1. Base your answer to the following question on The diagram below represents geological processes that act continuously on Earth to form different rock types.



Which table correctly classifies each rock type?

A)

Rock Type	Classification
1	sedimentary
2	metamorphic
3	igneous

B)

Rock Type	Classification
1	sedimentary
2	igneous
3	metamorphic

C)

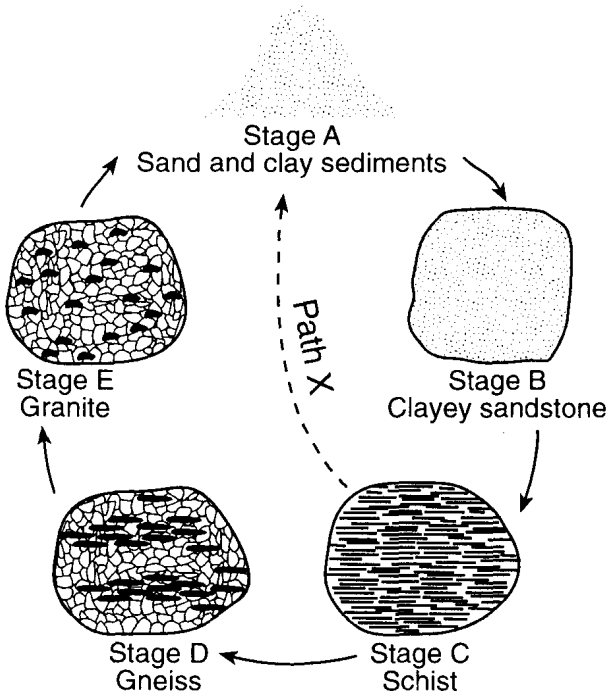
Rock Type	Classification
1	metamorphic
2	igneous
3	sedimentary

D)

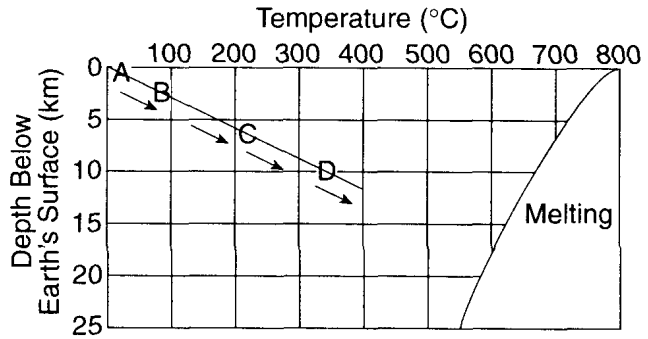
Rock Type	Classification
1	igneous
2	metamorphic
3	sedimentary

2. Base your answer to the following question on the diagrams below which represents the same rock material at five stages of development. The graph below shows the temperature and depth of burial at which stages *A* through *D* develop. Stage *E* has intentionally been omitted from the graph.

A Simple Rock Cycle



Environment of Rock Stages

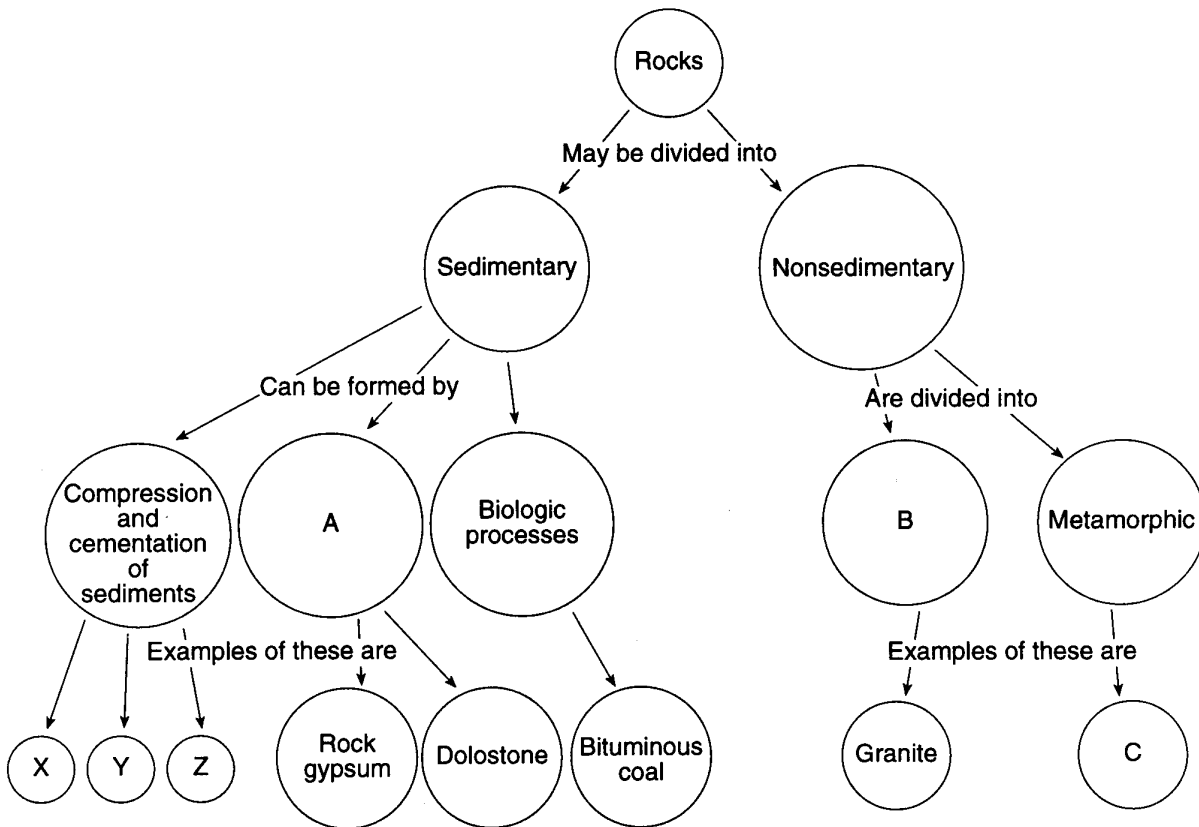


Which graph correctly shows where magma would begin to crystallize into granite (stage *E*)?

- A)
 B)
 C)
 D)

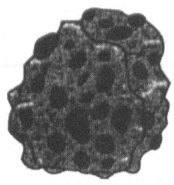
3. Which statement about the formation of a rock is best supported by the rock cycle?
- A) Magma must be weathered before it can change to metamorphic rock.
 - B) Sediment must be compacted and cemented before it can change to sedimentary rock.
 - C) Sedimentary rock must melt before it can change to metamorphic rock.
 - D) Metamorphic rock must melt before it can change to sedimentary rock.

Base your answers to questions 4 and 5 on the diagram below, which represents a scheme for classifying rocks. The letters *A*, *B*, *C* and *X*, *Y*, *Z* represent missing labels.



4. Which processes would form the type of rock that is represented by circle *B*?
- A) deposition and compaction
 - B) weathering and erosion
 - C) melting and solidification
 - D) faulting and folding
5. If the rock in circle *C* formed from limestone, it would be called
- A) schist
 - B) anthracite coal
 - C) marble
 - D) slate

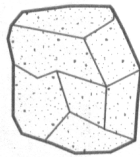
6. Base your answer to the following question on the drawings of six sedimentary rocks labeled *A* through *F*.



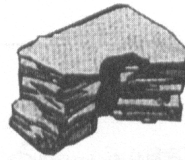
A
Conglomerate



B
Breccia



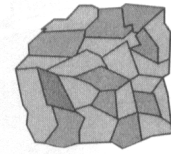
C
Sandstone



D
Shale



E
Limestone



F
Rock salt

Which table shows the rocks correctly classified by texture?

A)

Texture	clastic	bioclastic	crystalline
Rock	A, B, C, D	E	F

B)

Texture	clastic	bioclastic	crystalline
Rock	A, B, C	D	E, F

C)

Texture	clastic	bioclastic	crystalline
Rock	A, C	B, E	D, F

D)

Texture	clastic	bioclastic	crystalline
Rock	A, B, F	E	C, D

7. Base your answer to the following question on The table below indicates the presence of various minerals in different rock samples.

Rock Sample	Mineral Composition								
	Quartz	Potassium feldspar	Plagioclase feldspar	Biotite	Hornblende	Pyroxene	Olivine	Calcite	Others
Granite	✓	✓	✓	✓	✓				
Rhyolite	✓	✓	✓	✓	✓				
Pumice	✓	✓	✓	✓	✓				
Conglomerate	✓	✓	✓	✓	✓	✓	✓	✓	✓
Slate				✓					✓
Marble								✓	
Limestone								✓	
Basalt			✓		✓	✓	✓		
Gabbro			✓	✓	✓	✓			

Key
✓ = Mineral is present

Which statement is an accurate conclusion based on the information provided in the table?

- A) Most rocks are monomineralic.
- B) All rocks are polymineralic.
- C) Many rocks have a number of minerals in common.
- D) Only igneous rocks contain quartz.

8. Base your answer to the following question on the table below which provides information about the crystal sizes and the mineral compositions of four igneous rocks, *A*, *B*, *C*, and *D*.

Mineral	Coarse Grained		Fine Grained	
	Rock <i>A</i>	Rock <i>B</i>	Rock <i>C</i>	Rock <i>D</i>
	Percent of Rock	Percent of Rock	Percent of Rock	Percent of Rock
Quartz	40	0	0	0
Pyroxene	0	25	0	70
Plagioclase feldspar	20	0	60	10
Potassium feldspar	20	0	0	0
Biotite	10	0	17	0
Hornblende	10	0	23	3
Olivine	0	75	0	17

Rock *B* most likely is

- A) conglomerate B) schist C) obsidian D) peridotite

9. Which statement best describes a general property of rocks?

- A) Most rocks have a number of minerals in common.
B) Most rocks are composed of a single mineral.
C) All rocks contain fossils.
D) All rocks contain minerals formed by compression and cementation.

10. Of the Earth's more than 2,000 identified minerals, only a small number are commonly found in rocks. This fact indicates that most

- A) minerals weather before they can be identified
B) minerals have properties that are difficult to identify
C) rocks have a number of minerals in common
D) exposed surface rocks are igneous