

Your Classroom Partner

## Grade 6 Science (GSE) Quiz Answer Key

Formation of Earth's Surface - (S6E5.c) Rock Cycle

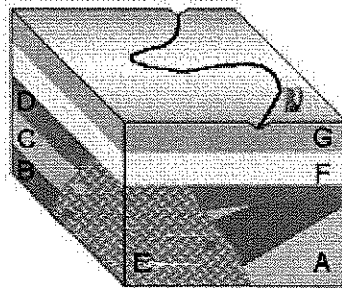
Student Name: \_\_\_\_\_

Date: \_\_\_\_\_

Teacher Name: Trony Dixon

Score: \_\_\_\_\_

1)



Once the magma found at location "E" cools and crystalizes, it will

- A) turn into lava.
- B) **form igneous rocks.**
- C) sink back into Earth's deep interior.
- D) form igneous, metamorphic, and sedimentary rocks.

### Explanation:

The magma in area E will **form igneous rocks**. Different minerals cool at different rates but eventually igneous rocks are formed. The different rates of cooling and crystallization give us rocks with different sized crystals.

2) Granite is a coarse or medium-grained rock that is rich in quartz and feldspar. It is formed when bodies of magma cool and harden deep below the earth. What type of rock is granite?

- A) metamorphic
- B) sedimentary
- C) extrusive igneous
- D) ***intrusive igneous***

**Explanation:**

Granite is the most common type of **intrusive igneous** rock.

3)



Igneous rock is formed by the cooling and solidification of molten Earth materials. Igneous rock forms when magma or lava cools. If igneous rock forms above ground after a volcanic eruption, it \_\_\_\_\_ forming \_\_\_\_\_ igneous rock, such as obsidian which is a naturally occurring volcanic glass.

- A) *cools quickly, extrusive*
- B) cools quickly, intrusive
- C) cools slowly, extrusive
- D) cools slowly, intrusive

**Explanation:**  
**cools quickly, extrusive**

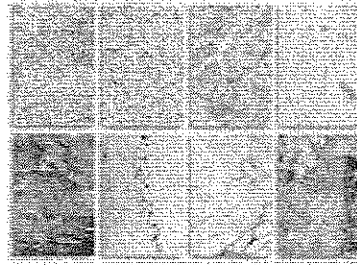
Extrusive igneous rocks cool and solidifies quickly and are fine grained.

- 4) Molten hot magma that cools very slowly can cause \_\_\_\_\_ in igneous rock.
- A) mineral layering
  - B) glass-like formations
  - C) settling of precious metals
  - D) ***the formation of large crystals***

**Explanation:**

**The formation of large crystals** is caused by slow cooling. The faster the cooling, the smaller the crystals. This is why rock candy is made by cooling the sugar water very slowly.

5)



Jennifer was investigating granite, a type of rock that forms when magma deep below the Earth's crust cools off and hardens. What type of rock is granite?

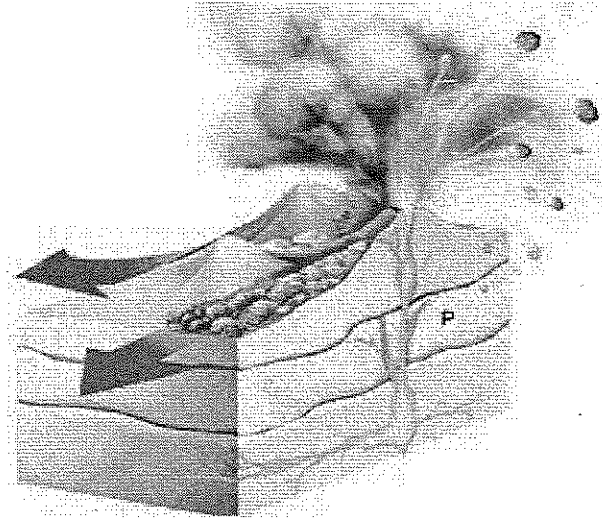
- A) bedrock
- B) ***igneous rock***
- C) sedimentary rock
- D) metamorphic rock

**Explanation:**

**igneous rock**

There are only three types of rock. Igneous rocks are the rocks formed when molten, or melted rock, from deep inside of the Earth cool off and harden.

6)



The diagram shows a region P near a group of active volcanoes.

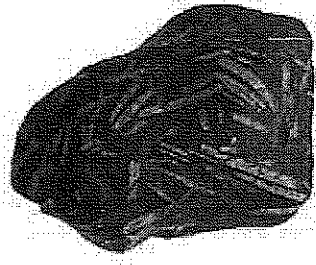
Which kind of rock is MOST likely to be found at location P?

- A) *granite*
- B) limestone
- C) marble
- D) sandstone

**Explanation:**

Igneous rocks form when lava or magma cools and solidifies. **Granite** is an intrusive igneous rock. Intrusive igneous rocks cool and solidify underground. P is a region underground where magma might solidify.

7)



Which set of characteristics best describes igneous rock?

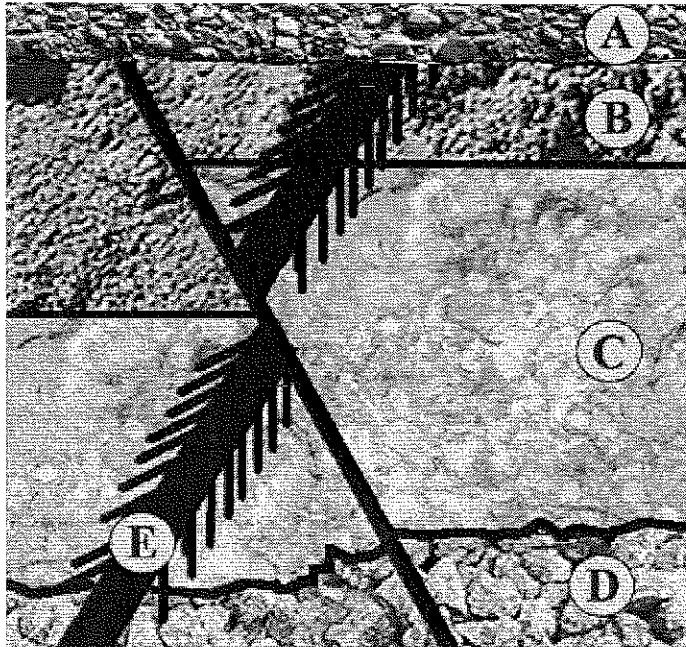
- A) largest type of rock, made of organic matter, hardest type of rock
- B) least abundant type of rock, made of other rocks, made mostly of minerals
- C) found on all continents, contains wavy bands of stripes, contains fossils
- D) ***most abundant type in Earth's crust, made of magma/lava, contains no fossils***

**Explanation:**

**most abundant type in Earth's crust, made of magma/lava, contains no fossils**

It is formed through the cooling and hardening of magma or lava.

8)



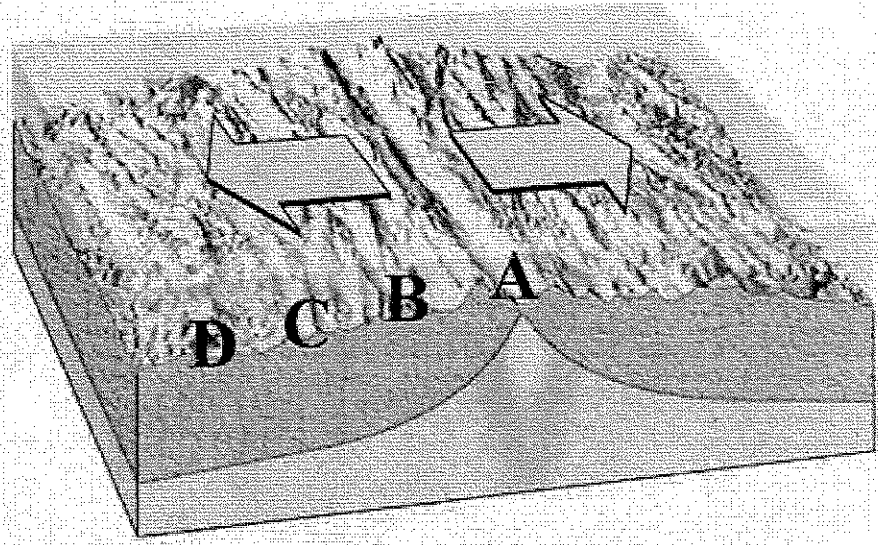
Which rock or rock layers MOST LIKELY represent igneous rocks?

- A) rock E
- B) layer A
- C) layer C and D
- D) *layers D and E*

**Explanation:**  
**layers D and E**

These two layers represent igneous rock. D is a parent igneous layer; E is an igneous intrusion.

9)



Divergent plate boundaries occur where hot magma rises to the surface, pushing the plates apart. The mid-ocean ridges, as seen here, form at divergent plate boundaries. The older crust in this case would be at point D, the newest at point A. What type of rock would you expect to find forming at point A?

- A) metamorphic
- B) clastic igneous
- C) ***extrusive igneous***
- D) intrusive igneous

**Explanation:**

**extrusive igneous** This rock starts as magma, so you know it must be a type of igneous rock. The question tells you that it rises to the surface so you know it is formed outside of the Earth's interior, therefore making it extrusive igneous rock.



## Unit 1 Igneous Rock Quiz

Name \_\_\_\_\_

Date \_\_\_\_\_ Period \_\_\_\_\_

10. According to the Igneous Rock video, the word igneous derives its name from what word?

- A. Lava
- B. Magma
- C. Fire
- D. Rock

11. Describe the process in which igneous rocks are formed. Explain using at least five sentences.