



Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

1 The metamorphic rock quartzite forms when **sandstone changes** under tremendous **heat and pressure**. Sandstone consists of small grains of quartz. The **composition** of quartzite is \_\_\_\_\_.

- A the same as the composition of sandstone
- B different than the composition of sandstone, because of metamorphism
- C similar to limestone
- D similar to granite which has quartz, feldspar, and mica

3 The **texture** of a rock is **defined by the size and shape** of the minerals, grains, and particles in a rock. Here is a picture of the sedimentary rock called **conglomerate**.

What is the **texture** of this rock?

- A fine-grained
- B medium-grained



2 The **composition** of a rock is **determined** by \_\_\_\_\_.

- A the environment in which it forms
- B the minerals that make up that rock
- C how deep the rock forms in the earth's crust
- D the type of rock it is (igneous, metamorphic, or sedimentary)



4 The texture of **igneous** rocks is determined by how **quickly** the **liquid rock cools**. The **slower** the cooling rate, the **larger** the crystals in the rock. Two igneous rocks can have similar mineral composition, as is true with these rocks, even if they have very different textures. **Based on their textures**, the rhyolite (left) **cooled slowly** and the granite (right) **cooled quickly**.

True or false?



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## PREVIEW

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lava \_\_\_\_\_.

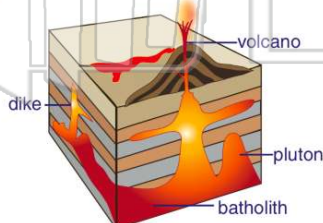
- A never escapes the earth's crust
- B has erupted onto the surface of the earth
- C has melted into the inner core
- D never leaves the inner core

- B metamorphic rocks
- C igneous rocks
- D organic rocks



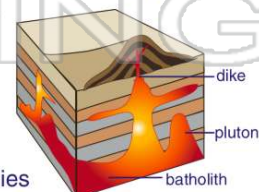
9 Which of the following igneous bodies is an **extrusive igneous rock formation**?

- A batholith
- B pluton
- C dike
- D volcano



10 In this picture are a number of igneous bodies **below** the earth's **surface**. Geologists refer to them as \_\_\_\_\_.

- A extrusive bodies
- B intrusive bodies
- C lava bodies
- D metamorphic bodies





## ANSWER KEY

The metamorphic rock quartzite forms when **sandstone changes** under tremendous **heat** and **pressure**. Sandstone consists of small grains of quartz. The **composition** of quartzite is \_\_\_\_\_.

- A** the same as the composition of sandstone
- B** different than the composition of sandstone, because of metamorphism
- C** similar to limestone
- D** similar to granite which has quartz, feldspar, and mica

(a)

The **composition** of a rock is **determined** by \_\_\_\_\_.

- A** the environment in which it forms
- B** the minerals that make up that rock
- C** how deep the rock forms in the earth's crust
- D** the type of rock it is (igneous, metamorphic, or sedimentary)



(b)

The **texture** of a rock is **defined by the size and shape** of the minerals, grains, and particles in a rock. Here is a picture of the sedimentary rock called **conglomerate**.

What is the **texture** of this rock?

- A** fine-grained
- B** medium-grained
- C** coarse-grained
- D**



(c)

The texture of **igneous** rocks is determined by how **quickly** the **liquid rock cools**. The **slower** the cooling rate, the **larger** the crystals in the rock. Two igneous rocks can have similar mineral composition, as is true with these rocks, even if they have very different textures. **Based on their textures**, the rhyolite (left) **cooled slowly** and the granite (right) **cooled quickly**.

True or false?



(b)



## PREVIEW

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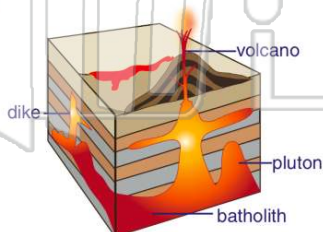
- A** never escapes the earth's crust
- B** has erupted onto the surface of the earth
- C** has melted into the inner core
- D** never leaves the inner core

- C** igneous rocks
- D** organic rocks



Which of the following igneous bodies is an **extrusive** igneous rock formation?

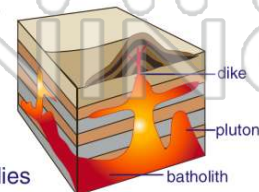
- A** batholith
- B** pluton
- C** dike
- D** volcano



(d)

In this picture are a number of igneous bodies **below** the earth's **surface**. Geologists refer to them as \_\_\_\_\_.

- A** extrusive bodies
- B** intrusive bodies
- C** lava bodies
- D** metamorphic bodies



(b)