



Name _____ Class _____ Date _____

1 For an igneous rock to be classified as **rhyolite**, it must be **light colored**, be **fine grained**, and contain

- A quartz
- B calcite
- C pyroxene
- D olivine



2 Which **process** is necessary for the formation of **igneous rocks**?

- A erosion
- B deposition
- C solidification
- D metamorphism



3 Which type of rock is most likely to contain **fossils**?

- A granite
- B gneiss
- C shale
- D metaconglomerate



4 The three statements below are observations of the same rock sample:

- The rock has **intergrown crystals** from 2 to 3 millimeters in diameter.
 - The **minerals in the rock** are gray feldspar, green olivine, green pyroxene, and black amphibole.
 - There are **no visible gas pockets** in the rock.
- This rock sample is most likely



5



PREVIEW

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- A layers of rounded fragments
- B distorted bands of large mineral crystals
- C noncrystalline glassy texture
- D mineral cement between grains

- B cementing agent
- C texture
- D color



9

The absolute age of a rock is the approximate number of years ago that the rock **formed**. **The absolute age of an igneous rock can best be determined by**

- A comparing the amounts of decayed and undecayed radioactive isotopes in the rock
- B comparing the sizes of the crystals found in the upper and lower parts of the rock
- C examining the rock's relative position in a rock outcrop
- D examining the environment in which the rock is found

10

Compared to felsic igneous rocks, **mafic** igneous rocks contain **greater amounts of**

- A white quartz
- B aluminum
- C pink feldspar
- D iron





ANSWER KEY

For an igneous rock to be classified as **rhyolite**, it must be **light colored**, be **fine grained**, and **contain**

- A quartz
- B calcite
- C pyroxene
- D olivine



(a)

Which **process** is necessary for the formation of **igneous rocks**?

- A erosion
- B deposition
- C solidification
- D metamorphism



(c)

Which type of rock is most likely to contain **fossils**?

- A granite
- B gneiss
- C shale
- D metaconglomerate



(c)

The three statements below are observations of the same rock sample:

- The rock has **intergrown crystals** from 2 to 3 millimeters in diameter.
 - The **minerals in the rock** are gray feldspar, green olivine, green pyroxene, and black amphibole.
 - There are **no visible gas pockets** in the rock.
- This rock sample is most likely

- A sandstone
- C granite



(b)



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- B distorted bands of large mineral crystals
- C noncrystalline glassy texture
- D mineral cement between grains

- C texture
- D color



The absolute age of a rock is the approximate number of years ago that the rock **formed**. The **absolute age of an igneous rock can best be determined by**

- A comparing the amounts of decayed and undecayed radioactive isotopes in the rock
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(a)

Compared to felsic igneous rocks, **mafic** igneous rocks contain **greater amounts of**

- A white quartz
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(d)