

Part 1.

1. What is magma?
2. Where is magma found?
3. Magma reaches the Earth's surface through structures called _____.
4. _____ determines the rate at which magma moves.
5. Describe the differences between the two types of magma.

Part 2.

6. What dissolved gases are given off as the magma erupts?
7. What causes explosive volcanic eruptions? Why?

Part 3.

8. Once magma reaches the surface, it is known as _____.
9. What is the difference between *mafic* and *felsic* lava?

10. Name the two lava types with Hawaiian names. Which type is common to Hawaii?

Part 4.

11. Lava fragments are also known as _____.

12. Name each type from smallest to largest. Be sure to indicate the size of each one.

13. Describe the tephra which destroyed St. Pierre.

Part 5.

14. Describe a rift eruption.

15. Name three locations where rift eruptions occur.

16. Draw a diagram of a rift eruption.

Part 6.

17. Draw a diagram of a subduction boundary eruption.

18. What is the closest mountain range formed by subduction boundary volcanoes?

Part 7.

19. Describe how hot spots differ from rift or subduction volcanoes.

20. What is the most famous hot spot in the world?

UNIT 10 (CH. 14) → VOLCANOES & PLATE TECTONICS

1. MAGMA
2. VOLCANO
3. FELSIC
4. MAFIC
5. LAVA
6. TEPHRA
7. RIFT ERUPTIONS
8. SUBDUCTION BOUNDARY ERUPTIONS
9. HOT SPOTS

Earth Science 11 Unit 10 Test A Study Review

What is molten rock called before it reaches the surface of the earth?

What content determines the rate at which molten rock moves?

What are the two types that lava can be divided into?

What are fragments of lava known as?

What are rift eruptions and when do they occur?

What is the smallest piece of tephra called?

What are explosive eruptions caused by?

When lava reaches the Earth's surface what does it become?

What are the differences between lithosphere and asthenosphere?

Are subduction boundary eruptions usually explosive?

Short Answer:

Draw and label a sketch of a typical volcano, showing clearly the crust, lithosphere, asthenosphere, magma, and lava. (6 marks)

Describe the differences in characteristics and composition between mafic and felsic lava. (4 marks)

