

EARTHQUAKES STUDY GUIDE

1. Define earthquake –

2. Define aftershock –

3. Define fault—

4. Define elastic rebound—

5. Define focus—

6. Define epicenter –

7. Describe the 2 types of body waves:

Wave name	AKA	Where it's located	Speed	Motion description	What can it move through?

8. How do geologist determine the epicenter of an earthquake? (put in order)

- Determine the distance from the earthquake for 3 cities
- Find the spot where all 3 circles collide
- Draw circles around the cities at the proper distance
- Measure the lag time between p and s waves

d,a,c,b

9. Describe the 2 types of surface waves:

Wave name	AKA	Where it's located	Speed	Motion description

10. Which waves are most destructive? _____

11. Where on Earth do most earthquakes occur? _____

12. How can you explain earthquakes that occur away from plate boundaries?

13. What measures earthquake waves? What is the paper called?

14. What does the Richter scale measure?

15. Mercalli?

16. Moment magnitude?

17. What is the name of a giant set of waves caused by earthquakes?

18. What is liquefaction?

19. What is the difference between a landslide and a mudslide?

20. Can we predict earthquakes?

21. What is the gap hypothesis?

VOLCANOES STUDY GUIDE

22. Describe the 3 types of lava flows and their viscosities

Lava	viscosity / description

23. Explosive eruptions always make pyroclastic materials. What does pyroclastic mean?

24. Fill in the chart

Pyroclastic material	Size	description

25. What is magma? Lava?

26. What are the 3 ways to make lava?

27. What are the 3 types of volcanism, and what landforms do they make?

Types of volcanism	Location	landform
	underwater	
	Under land	
	underwater	
	Under land	
	underwater	
	Under land	

28. What 2 factors affect the type of eruption?

29. How do gases affect eruptions?

30. Draw and describe a shield volcano

31. Draw and describe a cinder cone volcano

32. Draw and describe a composite / strato volcano

33. Where is the ring of fire, and why is it called that?

34. How do volcanic eruptions affect the environment?

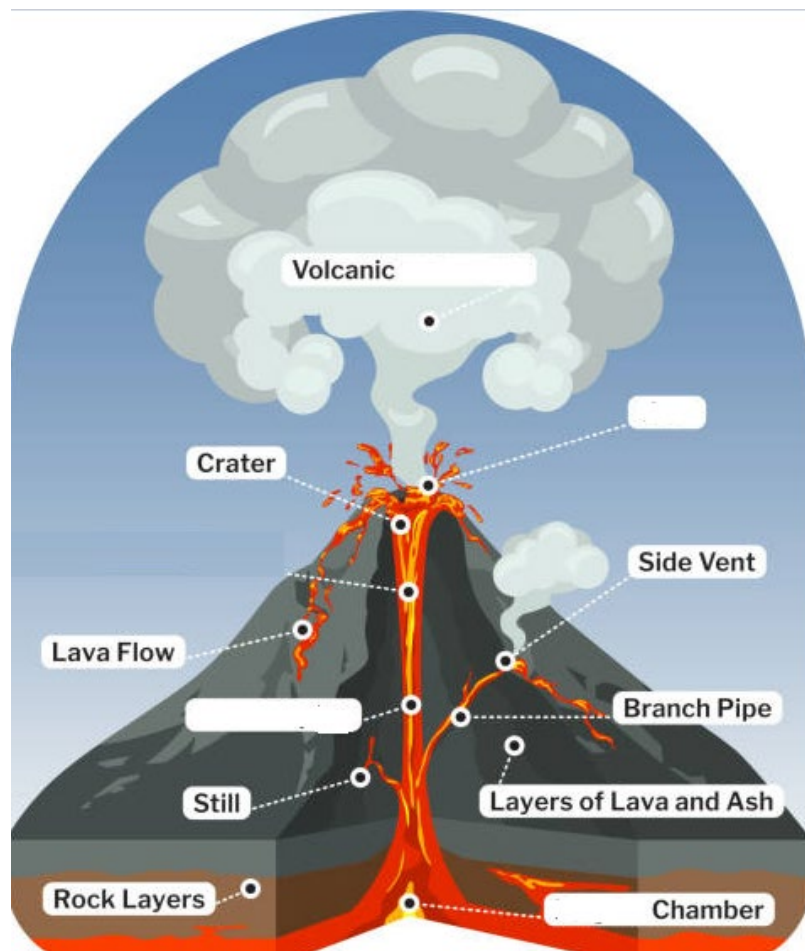
35. What are the 3 signs a volcano might erupt?

36. What is a caldera and how does it form?

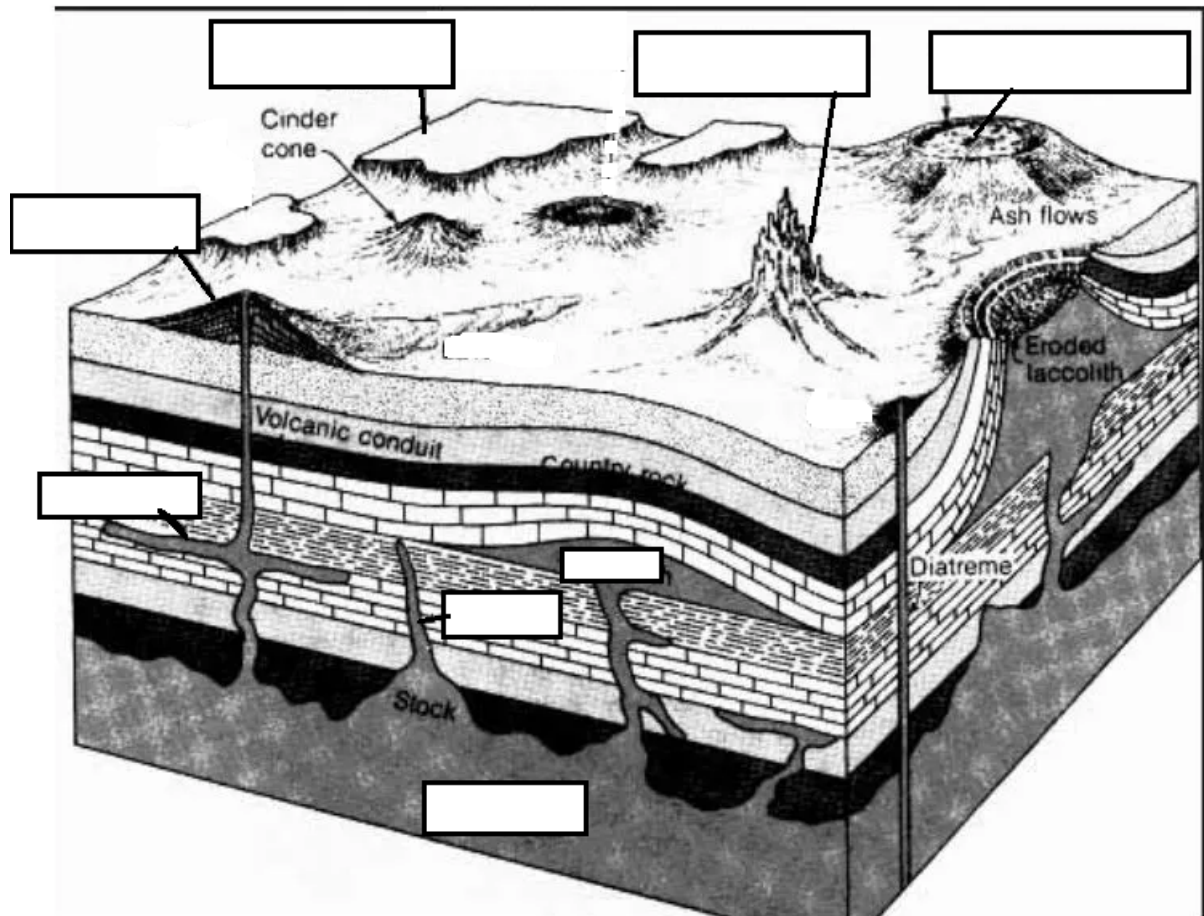
37. Describe how subduction produces volcanoes. Are they explosive or quiet?

38. What are hotspots and how do they produce volcanoes?

39. Label the parts of a volcano: conduit, vent, magma, ash cloud



40. LABEL THE VOLCANIC LANDFORMS AND INTRUSIONS: volcanic plateau, sill, dike, volcanic neck, laccolith, composite volcano, batholith, caldera



41.