

Problem Set: Volcanoes

1. In the space below, compare with both words and simple drawings the three types of volcanoes—**shield cones, cinder cones, and stratovolcanoes**.

2A. What are three important characteristics of extrusive igneous rocks?

2B. Briefly describe four types of extrusive rocks.

2C. What landscape features of northern NJ formed by volcanic activity? In which geologic period?

3. What are **batholiths**? What creates them?

4A. What are three important features of intrusive igneous rocks?

4B. Briefly describe two important intrusive rocks

5A. Contrast **sills** with **dikes**. Include drawings to show the differences.

5B. Where do we have an example of a sill in our region? What evidence proves it is a sill?

For questions 6 and 7, use <http://volcanoes.usgs.gov/> and www.volcanoes.com

6. Where are active volcanoes in the US? Elsewhere in the world?

7. In what other states can you see remnants of extinct volcanoes?

8. Use other online resources to find out more about **at least two of these famous volcanoes, and write 2 paragraphs about them on sheets attached to this packet.** You can earn extra credit if you do others.

- Etna
- Vesuvius
- Krakatoa
- Pinatubo
- Mt. St. Helens
- Crater Lake
- Mauna Kea and Mauna Loa
- Paricutin
- Any other volcano of your choosing

Follow directions to construct a paper model of a volcano provided at
<http://pubs.usgs.gov/of/1991/0115a/report.pdf>

BONUS: CREATE A PAPER MODEL OF A CINDER CONE VOLCANO.