

# Igneous Rock Quest

<https://www.youtube.com/watch?v=cjyF-te4lQI>

20 min Igneous Rock Overview

1. When new minerals form, their texture is based on what: answer is given within the first 30 seconds
  - 1.
  - 2.
  - 3.
  - 4.
  - 5.
2. What two ways do we classify igneous rocks \_\_\_\_\_ and \_\_\_\_\_
3. What are five basic textures of igneous rocks?
  - 1.
  - 2.
  - 3.
  - 4.
  - 5.
4. Slow cooling results in what type of texture? \_\_\_\_\_
5. Define aphanitic.
6. Ash is basically what?
7. What two elements do ultramafic/mafic rocks contain? \_\_\_\_\_ and \_\_\_\_\_
8. Compared to felsic rocks, mafic rocks are \_\_\_\_\_ and \_\_\_\_\_ in color.
9. Are there exceptions to the above generalization?
10. What are the three different settings magma can form in?
  - 1.
  - 2.
  - 3.
11. How are magmas created at subduction zones?
12. How are magmas created at divergent boundaries?
13. How are magmas created at mantle plumes?

14. Mantle Melt = \_\_\_\_\_
15. Evolved Melt = \_\_\_\_\_
16. Where does intermediate to felsic magma occur?
17. Melted crust = \_\_\_\_\_
18. If you identify a rock as felsic, where might it have formed?
19. To name and identify an igneous rock, you need to know what two things?  
 \_\_\_\_\_ and \_\_\_\_\_
20. Put the following rocks on the Bowen's Reaction Series along with their texture.  
 Peridotite, Andesite, Rhyolite, Basalt, Diorite, Gabbro, Scoria, Obsidian, Pumice, Granite

**Aphanitic    Phaneritic**

