Igneous, Sedimentary & Metamorphic Rocks

Notes

1. What is a rock?

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. What makes a rock different from a mineral?

|  |  |  |
| --- | --- | --- |
| **Rock** | **Both** | **Mineral** |
| Made of \_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Solid | Made of \_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_ crystal or no crystal structure | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_crystal structure |
|  | ←Granite=  Quartz+ Feldspar+ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_→ |  |

3. Magma & Lava form Different Types of Igneous Rocks

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Intrusive vs. Extrusive

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Igneous Rocks: Crystal Size & Cooling Time

|  |  |  |
| --- | --- | --- |
|  | **Location of Rock** | |
| **Intrusive (in earth)** | **Extrusive (earth surface)** |
| **Crystal Size** |  |  |
| **Cooling time** |  |  |

5. Some Rocks Form from Rock Particles

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_= material that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ out of water or\_\_\_\_\_\_\_\_\_\_\_\_\_

-Materials can be:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. How do Sedimentary Rocks Form?

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pile on top of each other on \_\_\_\_\_\_\_\_\_ or in \_\_\_\_\_\_\_\_\_
* As sediments pile, they become \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_ together

7. Some Rocks Form From Plants or Shells

* Coal- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + The coal we \_\_\_\_\_\_\_\_\_ today started forming \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of
  + years ago in \_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Limestone- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. Metamorphic Rocks

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_change rocks
  + The original rock is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rock
  + The new rock formed is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rock
  + Heat and pressure \_\_\_\_\_\_\_\_\_\_\_\_ the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the parent rock and their minerals \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

9. Examples of Metamorphic Rocks:

1. Parent Rock:\_\_\_\_\_\_\_\_\_\_\_\_\_ → Metamorphic Rock:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Parent Rock:\_\_\_\_\_\_\_\_\_\_\_\_\_ → Metamorphic Rock:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Parent Rock:\_\_\_\_\_\_\_\_\_\_\_\_\_ → Metamorphic Rock:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. When a rock forms does it stay that way forever? \_\_\_\_\_\_\_\_\_!!!!!!!

Rocks are always \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by processes like:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_