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:

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

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

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