

NAME. \_\_\_\_\_

### The Wonderful World of Rocks & Minerals

This computer program is designed to be instructional and to review. You have studied most of the material within this program, and will hopefully learn a few new things. Take the time to "view" the program while you are doing the work required.

Open the program "Rocks and Minerals"

From the main menu choose "How Igneous Rocks Form"

Answer the questions and do the self-tests where indicated

If you missed something, you can choose the left arrow, or you can go back to the main menu and select the topic you were working on

#### How igneous rocks form

1. Igneous rocks that form when lava solidifies are classified as \_\_\_\_\_ igneous rocks.
2. Igneous rocks that crystallize under the surface of the earth are \_\_\_\_\_ rocks.
3. How are intrusive rocks exposed at the surface? \_\_\_\_\_
4. Name two places where intrusive rocks are exposed.
5. How would you describe a sill?

#### Do self-Test

#### Textures of igneous rocks

1. \_\_\_\_\_ defines the size and arrangement of a rock's mineral crystals.
2. Igneous rocks that cool at the surface or as small masses are \_\_\_\_\_ in texture.
3. Slower cooling produces \_\_\_\_\_ texture.
4. What minerals are common to granite? \_\_\_\_\_

#### Do self-Test

#### Minerals in Igneous rocks

1. The primary mineral composition of basalt is \_\_\_\_\_
2. Name four(4) minerals commonly found in igneous rocks \_\_\_\_\_
3. Light igneous rocks are rich in \_\_\_\_\_ & \_\_\_\_\_.
4. Dark igneous rocks are rich in \_\_\_\_\_ & \_\_\_\_\_.

5. Continents are usually made of \_\_\_\_\_ & ocean floors are usually made of \_\_\_\_\_.

Do self test

### **Naming igneous rocks**

1. Igneous rocks are classified based on their \_\_\_\_\_.
2. Coarse-grained rocks of quartz and potassium feldspar are called \_\_\_\_\_.
3. Fine-grained rocks composed of pyroxene and calcium rich feldspar is called \_\_\_\_\_.
4. Composition of a rock can be estimated based on \_\_\_\_\_ when minerals are too small to be seen.

Self-test

### **How sedimentary rocks form**

1. Weathering can be \_\_\_\_\_ or \_\_\_\_\_
2. Large quantities of angular fragments accumulate to produce \_\_\_\_\_
3. Name a water soluble mineral. \_\_\_\_\_
4. Why does halite dissolve in water?
5. What gas is responsible for producing carbonic acid? \_\_\_\_\_.
6. Feldspar breaks down to form \_\_\_\_\_.
7. The above material turns into the sedimentary rock called \_\_\_\_\_.
8. Give two (2) examples of sediment \_\_\_\_\_ & \_\_\_\_\_.
9. What does lithification mean?
10. One (1) example of a clastic rock is \_\_\_\_\_.

Self-test

### **Sed(mentary rocks;conglomerate, sandstone and shale**

1. Name two products of weathering \_\_\_\_\_ & \_\_\_\_\_.
2. Transported, solid materials are called \_\_\_\_\_.
3. How do you distinguish between detrital rocks? \_\_\_\_\_.
4. The predominant mineral in most sandstones is \_\_\_\_\_.

Self-test

5. Continents are usually made of \_\_\_\_\_ & ocean floors are usually made of \_\_\_\_\_.

Do self-test

### Naming igneous rocks

1. Igneous rocks are classified based on their \_\_\_\_\_.
2. Coarse-grained rocks of quartz and potassium feldspar are called \_\_\_\_\_.
3. Fine-grained rocks composed of pyroxene and calcium rich feldspar is called \_\_\_\_\_.
4. Composition of a rock can be estimated based on \_\_\_\_\_ when minerals are too small to be seen.

Self-test

### How sedimentary rocks form

1. Weathering can be \_\_\_\_\_ or \_\_\_\_\_.
2. Large quantities of angular fragments accumulate to produce \_\_\_\_\_.
3. Name a water soluble mineral. \_\_\_\_\_
4. Why does halite dissolve in water?
5. What gas is responsible for producing carbonic acid? \_\_\_\_\_.
6. Feldspar breaks down to form \_\_\_\_\_.
7. The above material turns into the sedimentary rock called \_\_\_\_\_.
8. Give two (2) examples of sediment \_\_\_\_\_ & \_\_\_\_\_.
9. What does lithification mean?
10. One (1) example of a elastic rock is \_\_\_\_\_.

Self-test

### Sedimentary rocks, conglomerate, sandstone and shale

1. Name two products of weathering \_\_\_\_\_ & \_\_\_\_\_.
2. Transported, solid materials are called \_\_\_\_\_.
3. How do you distinguish between detrital rocks? \_\_\_\_\_.
4. The predominant mineral in most sandstones is \_\_\_\_\_.

Self-test