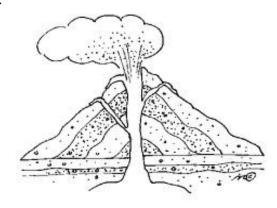
### **IGNEOUS ROCK**

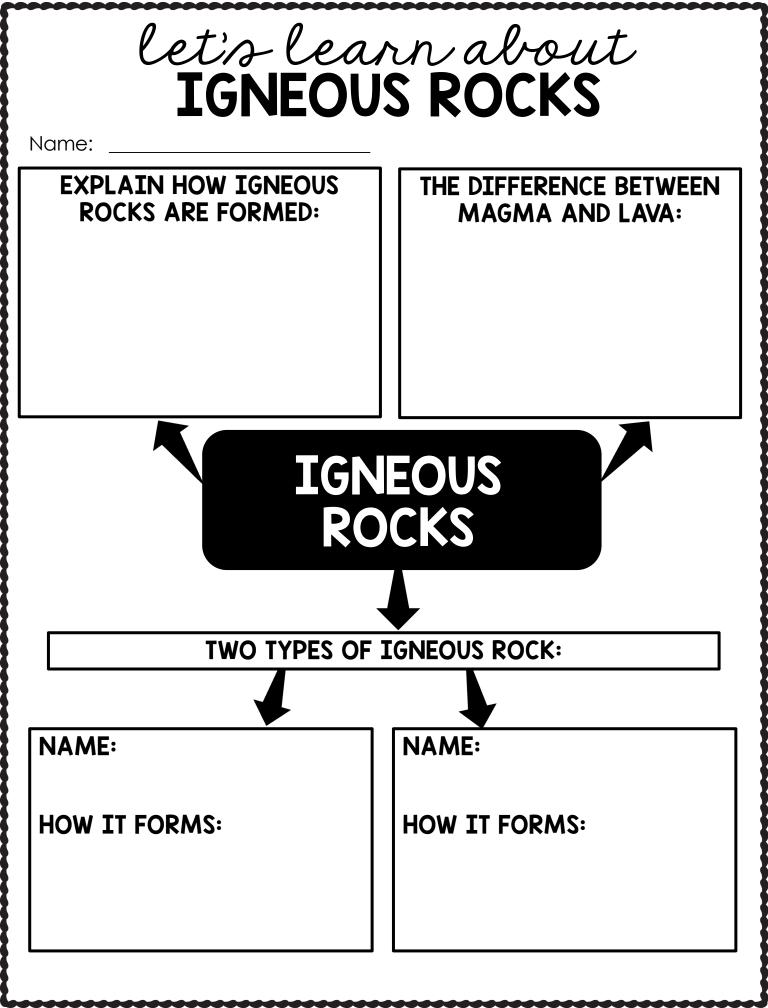
All rocks can be classified into three groups. The groups are determined based on how the rocks have formed. Igneous rocks form when liquid rock cools. Because the Earth's core is very hot, it can melt rock. When liquid rock is under ground, it is called

magma. Magma always rises up towards the Earth's surface. As it rises, it slowly cools as it moves farther away from the hot core. This will form an intrusive igneous rock. Other times, magma erupts from a volcano. When magma is outside the earth, it is called lava. Lava cools very quickly when it is outside a volcano. This will form an extrusive igneous rock.



| Fill in the blanks, using the words in the word bank, to |
|--|
| complete the sentences.                                  |

|    | extrusive magma lava intrusive igneous                          |
|----|---|
| 1. | rocks are formed when liquid rock cools.                        |
| 2. | is liquid rock that is still under Earth's surface.             |
| 3. | An igneous rock formed outside a volcano is an<br>igneous rock. |
| 4. | is liquid rock that erupts from a volcano.                      |
| 5. | An igneous rock forms inside the Earth is an igneous rock.      |



# SEDIMENTARY ROCK

Another of the three types of rock is the sedimentary rock.

Sedimentary rocks are formed very slowly, over many many years. These rocks are made from small pieces of sediment (old broken down rocks, minerals, fossils, and sand). Sediments are found on the bottom of bodies of water. Over many years, sediments are layered up on top of each other. Chemicals in the water or minerals in the sediment act like glue and



help the pieces of sediment stick together. This is how sedimentary rocks are formed.

| Fill in the blanks, using the words in the word bank, to complete the sentences. |       |           |             |       |  |  |
|--|-------|-----------|-------------|-------|--|--|
| sediments  | water | chemicals | sedimentary | stick |  |  |

\_\_\_\_ rocks are formed very slowly, over many years.

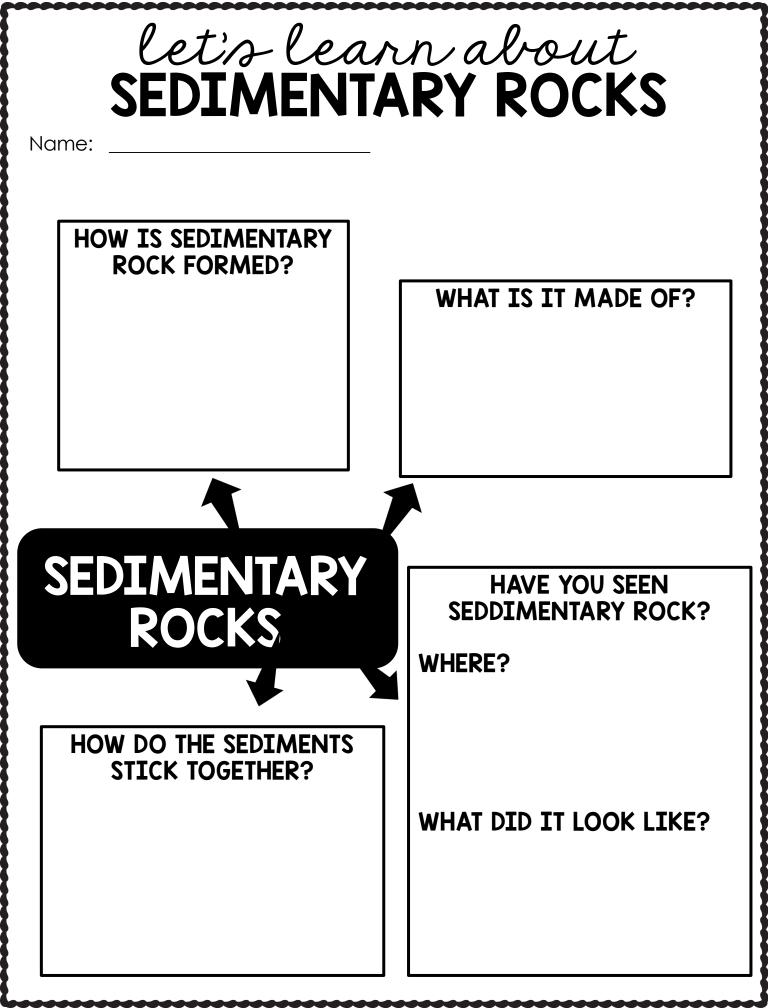
2. They are made from small pieces of \_\_\_\_\_.

3. Sediments are found on the bottom of bodies of \_\_\_\_\_

4. \_\_\_\_\_ in the water or minerals in the sediment help the

pieces \_\_\_\_\_ together.

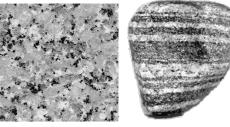
1.



# METAMORPHIC ROCK

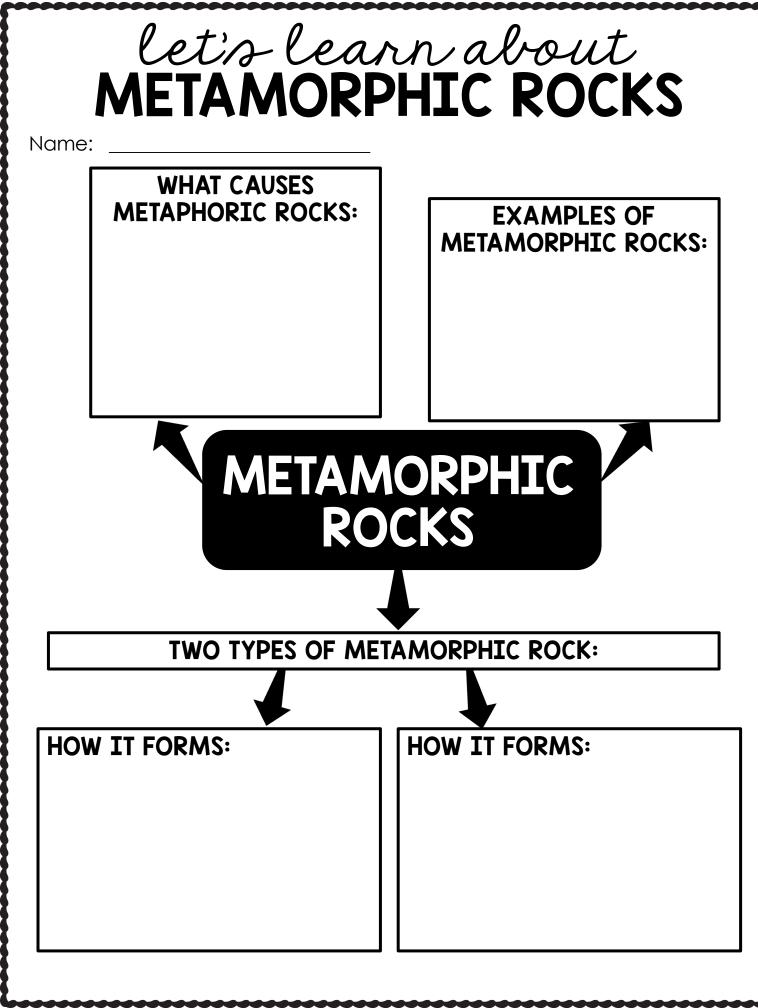
Metamorphic rocks are rocks that change from extreme heat and pressure inside the Earth. The temperature inside the Earth, along with the weight of tons of land pressing down on the rock, causes it to go through a physical or chemical change. Some metamorphic rocks are made by sandstone being pressed together. Sandstone will change to quartzite, one of the hardest rocks, through this process. Another type of metamorphic rock forms when pressure rearranges the minerals inside rocks into layers, instead of grains that are found in igneous rock. In the picture, you

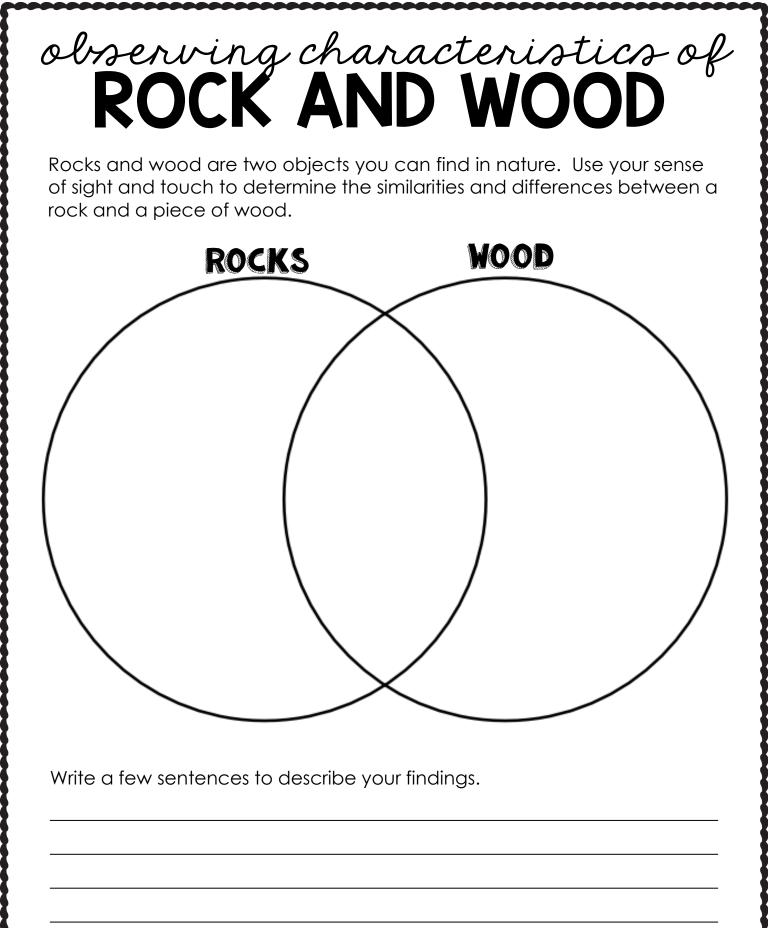
can see that the first rock, granite, contains specks, or grains of minerals. After being pushed down from the pressure of the earth, theses specks form layers and change to the metamorphic rock, gneiss.



Fill in the blanks, using the words in the word bank, to complete the sentences.

|          | pressure layers metamorphic heat change  |  |  |  |  |  |  |  |
|----------|--|--|--|--|--|--|--|--|
| 1.<br>2. | rocks go through a physical or chemical change.<br>Metamorphic rocks are formed from extreme and |  |  |  |  |  |  |  |
| 3.       | ·  |  |  |  |  |  |  |  |
| 4.       | metamorphic rocks are rocks that into another type of  |  |  |  |  |  |  |  |
| -т.      | rock.  |  |  |  |  |  |  |  |





#### let's learn about ROCK TYPES

Name:

Find words in the wordsearch. Write them on the lines provided.

| С | F | D | E | Н | F | R | W | Е | С |
|---|---|---|---|---|---|---|---|---|---|
| D |   | G | Ν | Е | 0 | U | S | Y | Н |
| Μ | Ν | S | U | А | S | Т | Н | U | Е |
| А | Т | Н | E | Т | S | W | R | W | Μ |
| G | R | R | F | Y |   | J | Κ | F |   |
| Μ | U | Н | Α | Т | L | Κ | R | J | С |
| А | S | Ι | Κ | W | S | L | А | V | А |
| Μ | Ι | Ν | E | R | А | L | S | U | L |
| Н | V | U | 0 | W | Т | R | Е | U | S |
| F | E | Х | Т | R | U | S |   | V | Е |
| Ρ | R | Е | S | S | U | R | Е | R | J |

#### Use the words you found to complete the paragraph about ROCK TYPES.

| rocks form when liquid rock cools. When liquid rock is            | UNDER    |
|---|----------|
| ground, it is called As Magma rises it slowly cools to            | form     |
| igneous rock. When magma is outside the earth, it is a            | called   |
| It cools very quickly when it is outside the earth. This wi       | ill form |
| an igneous rock. Sedimentary rock are made fr                     | rom      |
| broken down rocks, sand, and                                      |          |
| in the water act like glue and stick pieces of sediment together. |          |
| Metamorphic rocks change from extreme and                         |          |
| inside the Earth  |          |