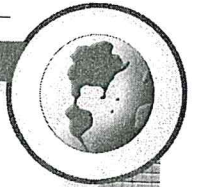


Name: _____

Date: _____



Igneous, Sedimentary, or Metamorphic?

FILL IN THE BLANKS

The rocks that make up Earth's crust are constantly changing over time. Rocks can form in several ways, and each type of rock forms by a different process.

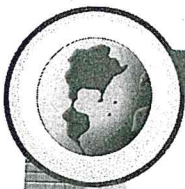
Sedimentary rocks are formed by cementation or compaction of sediments. Most sedimentary rocks are made of materials that have been moved from their original places by water, wind, waves, or ice. Sedimentary rocks form in layers over millions of years and may contain fossils.

Metamorphic rocks are formed by intense heat and pressure. All kinds of rocks—sedimentary, igneous, and metamorphic rocks—can be changed by this process. These rocks are created by the heat and pressure from the weight of Earth's crust bearing down from above.

Igneous rocks are formed by melting and crystallization. These rocks are created when hot liquids and gases inside Earth's mantle cool or when hot magma rises and melts other types of rocks in Earth's crust.

DIRECTIONS: Use a dictionary, science book, or the Internet to help you label each type of rock. In each blank, write *S* for sedimentary, *M* for metamorphic, or *I* for igneous.

- | | |
|-----------------------|---------------------|
| 1. gneiss _____ | 11. sandstone _____ |
| 2. siltstone _____ | 12. basalt _____ |
| 3. limestone _____ | 13. pumice _____ |
| 4. granite _____ | 14. slate _____ |
| 5. conglomerate _____ | 15. breccia _____ |
| 6. obsidian _____ | 16. halite _____ |
| 7. rhyolite _____ | 17. gabbro _____ |
| 8. schist _____ | 18. quartzite _____ |
| 9. shale _____ | 19. flint _____ |
| 10. marble _____ | 20. tuff _____ |



Name: _____

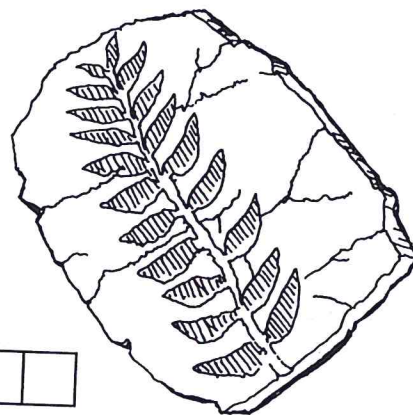
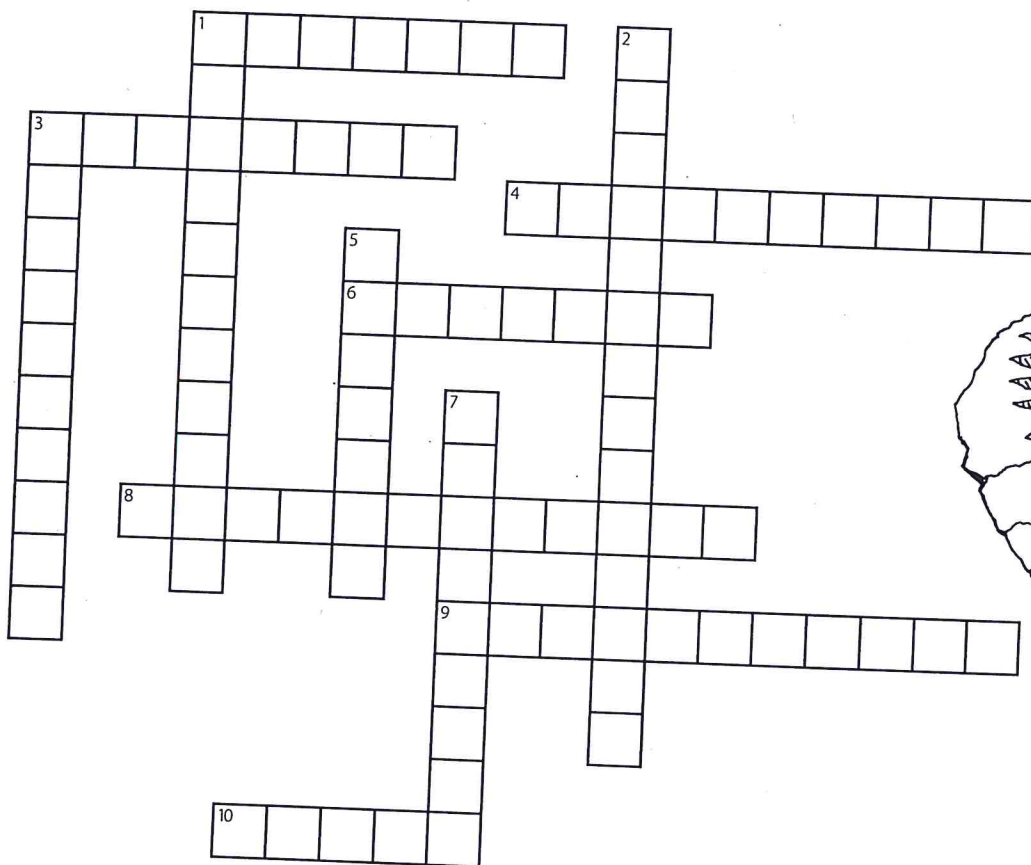
Date: _____

ROCKS AND MINERALS

Simply Sedimentary

CROSSWORD PUZZLE

DIRECTIONS: Complete the crossword puzzle.



ACROSS

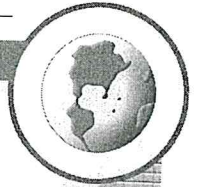
1. type of sedimentary rock that forms when sediments stick together
3. type of sedimentary rock that forms when minerals crystallize out of a solution
4. the breakdown of rock into smaller sediments, beginning the process of sedimentary rock formation
6. type of sedimentary rock that forms from the remains of organisms
8. a coarse-grained sedimentary rock in which large, rounded sediments can be seen
9. rock that forms when sediments are cemented or compacted together

DOWN

2. term for the layering of sedimentary rock
5. remains of plants and animals that have been preserved in sedimentary rock
7. a sedimentary rock that forms from calcium carbonate and fizzes in acid
10. a fine-grained sedimentary rock that forms slate when placed under extreme heat and pressure

Name: _____

Date: _____



The Pressure on Metamorphic Rocks

MYSTERY WORD

DIRECTIONS: Write each word in the correct blank to complete each sentence below. Circle the named letter in each answer. Then, unscramble the circled letters to reveal the mystery word.

WORD BANK

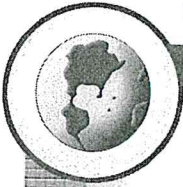
sculptures
foliated
grains

metamorphic
nonfoliated
pressure

magma
sedimentary
slate

1. _____ Marble, gneiss, slate, and quartzite are examples of _____ rock. (sixth letter)
2. _____ When mineral grains flatten and line up in layers, a metamorphic rock has a _____ texture. (third letter)
3. _____ When mineral grains in a metamorphic rock do not form layers, the rock has a _____ texture. (first letter)
4. _____ Metamorphic rocks can form from igneous, _____, or other metamorphic rocks. (seventh letter)
5. _____ Metamorphic rocks form from intense heat and _____.
6. _____ Marble is often used in carving _____ and monuments. (second letter)
7. _____ Heat from pockets of hot _____ found in Earth's crust can help create metamorphic rocks.
8. _____ As metamorphic rocks are created, the size and shape of the rock's _____ are changed by heat and pressure. (fourth letter)
9. _____ _____ is a foliated metamorphic rock that can be used for flooring, roofing, or chalkboards. (second letter)

MYSTERY WORD: This famous memorial in Washington, DC, is sculpted from marble.



Name: _____

Date: _____

ROCKS AND MINERALS

Which Rock Am I?

FILL IN THE BLANKS

DIRECTIONS: Read the clues that describe a type of rock. Write the name of the rock from the word bank on the line below its matching set of clues.

WORD BANK

limestone

slate

granite

obsidian

conglomerate

marble

- I am a sedimentary rock.
I am made from fragments of other rocks.
I am formed from large-grained sediments.
My sediments are smooth and rounded.

Which rock am I?

- I am an igneous rock.
I am extrusive.
I am usually black in color.
I am often referred to as volcanic glass.

Which rock am I?

- I am an igneous rock.
I am intrusive.
I have large mineral grains.
Because of my strength, I am often used in making headstones.

Which rock am I?

- I am a sedimentary rock.
I am made of calcium carbonate.
I can be found where water once stood.
Bubbles of gas are produced when acid is placed on me.

Which rock am I?

- I am a metamorphic rock.
I am a foliated rock.
I am formed from shale.
My minerals are pressed so tightly that I am watertight.

Which rock am I?

- I am a metamorphic rock.
I am a nonfoliated rock.
I am formed from limestone.
I am a popular rock among artists, since I am easy to sculpt.

Which rock am I?
