Sedimentary Rocks Standard Based Activities

Standard: Students will classify rocks based on their process of formation.

Learning Goal: Students will classify sedimentary rocks based on their processes of formation

The activities below are designed to show your understanding of how to distinguish between the types of Igneous Rocks. You have the option to choose which activity you wish to complete based on your overall readiness level. A choice may also be provided to you based on teacher observation and work samples collected. Each option has a grade which is based on three levels of understanding. The grade correlates to the effort required to complete each task. Once you make your choice you must stick with it and must include all the components as required to get obtain that grade. You may increase your score by taking a written test based on the learning goal the test can be found on the back of this page so that you are aware of what you should know. Your test score will be averaged with your choice activity to give you a final standards based score example. You completed the Easy Assignment and your score is 75. You take the quiz and get a 100. 75+100=175 175/2=88. Your grade based on your activity and test grade will give you a standards based grade of 88 to show mastery of standard.

|  |  |  |  |
| --- | --- | --- | --- |
| Topic/Lesson  Describe the process of formation for Sedimentary Rock and classify types of sedimentary rocks | EASY ( grade 75)2.0  Create a comic strip of the processes of formation for Sedimentary Rocks. Describe each of the processes of formation(Weathering, Erosion, Deposition, Compaction, and Cementation) Make each picture or panel for the processes use the rocks | EXPECTED 3.0 (grade 85)  Using the bread as an example to represent sedimentary rock you will manipulate and demonstrate the processes of weathering, erosion, deposition, compaction, and cementation. You will be responsible for making predictions of how your bread looked before and after processes occurred. | EXTENDED 4.0 (grade 100)  You will be responsible for classifying the different Sedimentary Rock types (Clastic, Organic, and Chemical). You will identify particle size of grains for each type of rock represented to help determine the sedimentary rock type. |
|  | Grade:  Comments: | Grade:  Comments: | Grade:  Comments: |

Directions: Answer the following questions about sedimentary rocks.

1. What is the term for small weathered broken pieces of rock?
2. What step in the sedimentary rocks formation process are sediments **deposited** and **sink** to the bottom of a lake or ocean?
3. What step in the formation process of sedimentary rock result in the formation of sediments?
4. Name the **TWO** steps in the formation of sedimentary rocks that turn sediments into a sedimentary rock.
5. **Explain** what happens to rock during the process of **weathering**.
6. **Explain** what happens to sediment during the process of **erosion**.
7. Compare and contrast the formation of igneous rocks and sedimentary rocks.

Bonus: List the types of sedimentary rock that form from;

-Weathered fragments of rock \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-Dissolved minerals evaporating\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-Collection of Organic (Plant & Animal) Debris\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_