**Sedimentary Rocks Unit Project** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Blk: \_\_\_

*Summative Assessment*

**Inquiry Question:** What features and properties define a sedimentary depositional environment?

**Your task**: to investigate a local/global depositional environment. (Individual or partner assignment)

* Choose a depositional environment you will investigate.
* Choose a local or global example of your depositional environment.
* Investigate sediments, rock types, and sedimentary structures.
* Tell the geologic story of your location!
* Communicate your findings in any format: *poster, powerpoint, film, song, diorama, etc.*

Your project must include the following:

1. **Sediment present** 
   * **Grain Size**, **Rounding, and Sorting**  (Energy Level*and*Distance from Source)
2. **Sedimentary Rocks present**
3. **Sedimentary Structures present**
4. **Data from your local/global location** (Images and Maps)
5. **Geologic story of your Depositional Environment**
   1. **Weathering and Erosional PAST**
   2. **Depositional PRESENT**
   3. **Possible FUTURE**
6. **Reference List in APA format** *(full marks for in-text citation)*

You will have two classes to research your specific depositional environment. Record your sources in APA format.

**Sedimentary Depositional Environments** *(choose one*)

***Continental***

* Fluvial (rivers)
* Lacustrine (lakes)
* Paludal (swamps)
* Glacial (glaciers)
* Alluvial (alluvial fans)
* Aeolian (deserts)
* Talus/Scree Slopes
* Evaporates

***Coastal***

* Beaches
* Deltas
* Estuaries
* Lagoons

***Marine***

* Reefs
* Continental Shelf (shallow water)
* Continental Slope & Rise (deep water)
* Abyssal Plain

|  |  |
| --- | --- |
| **Your Depositional Environment:** |  |
| **Your Local/Global Location:** |  |

**Marking Rubric (**submit with your project**) /45**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Assessed Skills*** | **KNOWLEDGE**  **(Describing)** | **UNDERSTANDING (Explaining)** |  | **EVIDENCE OF RESEARCH** |
| **18 - 20** | * **Sediment** described extensively (Grain Size, Rounding, Sorting) * Common **sedimentary rocks** are identified accurately and in detail. * Common **sedimentary structures** are described in detail. * Personal evidence documented accurately from your **local or global** **location** (photos, details, maps, sketches) | * Uses evidence from your location to accurately explain the **energy level** and **distance from source** of your depositional environment. * Explains in detail the **Geologic Story** of your location (past, present, future) with appropriate connections, causes, and predictions. | **5** | * Sources are cited correctly * Correct Reference list in **APA format** * **In-text citations** included |
| **14 - 17** | * **Sediment** described extensively (Grain Size, Rounding, Sorting) * Common **sedimentary rocks** are identified accurately and in detail. * Common **sedimentary structures** are described in detail. * Evidence documented accurately from your **local or global** **location** (photos, details, maps, sketches) | * Uses evidence from your location to attempt to explain the **energy level** and **distance from source** of your depositional environment. * Explains the **Geologic Story** of your location (past, present, future) with some connections, causes, and predictions. | **4** | * Sources are cited mostly correctly * Reference list in **APA format** |
| **11 - 13** | * **Sediment** described extensively (Grain Size, Rounding, Sorting) * Common **sedimentary rocks** are identified accurately and in detail. * Common **sedimentary structures** are described in detail. * Evidence documented accurately from your **local** **or global location** (photos, details, maps, sketches) | * Attempts to use evidence from your location to explain either the **energy level** or the **distance from source** of your depositional environment. * Attempts to explain the **Geologic Story** of your location (past, present, future) with limited understanding. | **3** | * Sources are cited * Websites listed. |
| **0 - 10** | * Knowledge of the sedimentary geology of your location is not included. | * Understanding of the Geologic Story of your location was not included. | **2 - 0** | * Evidence of research and citation is not included. |