**Unit: Surface Processes/Chapter 10/Deposition**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_**

**(Vocab) Deposition:**

* Most **final deposition** occurs in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_because running water is the most important natural erosional system, but before sediments reach bodies of water, they are deposited in different environments by :
1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**



**Deposition by GLACIERS:**

* **Moraines:** along the bottom, edges and at the end of a glacier, the sediments it carries are just dropped in **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of sediment called **\_\_\_\_\_\_\_\_\_\_\_\_.**
* A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Moraine marks the furthest extent to where the glacier moved during glaciation
* A \_\_\_\_\_\_\_\_\_\_\_\_\_ Moraine is formed due to a thin sheet of till accumulating at the bottom of a glacier
* ****If a glacier mounds up the ground moraine into an oval shape as it moves, it creates a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**🡨 Drumlin**

**Recession:**

* Glaciers can leave behind \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_within the terminal or ground moraine as it melts backward leaving behind either a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Melting Glacial water will carry sediments from the glaciers to produce \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_ sediments when the water slows down/stops. This is known as an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_-**are long winding ridge of sediments that are sorted and layered because they are deposited by running water from melt beneath the glacier
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- are boulder sized rocks that were \_\_\_\_\_\_\_\_\_\_\_\_\_\_ during advance and then \_\_\_\_\_\_\_\_\_\_\_\_\_ by a glacier during retreat

**Deposition by WIND**

* Wind generally deposits \_\_\_\_\_\_\_\_\_\_\_ sediments over large spaces of land.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ can occur when sand dunes migrate according to a change in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **Deposition by WATER WAVES AND CURRENTS**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- are created when an ocean/lake wave \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as it drags across the approaching shoreline and deposits a strip of sediment.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ will always occur on the side of a jetty/groin \_\_\_\_\_\_\_\_\_\_\_\_\_ the longshore current
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_are created when longshore current transports sediment in the direction of longshore drift
* A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_is created when the sediment on a sandbar piles up enough to grow vegetation and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the sediment.

**Deposition by MASS MOVEMENT**

* Deposition by a Mass Movement always results in \_\_\_\_\_\_\_\_\_\_\_\_\_\_ sediments, usually quite \_\_\_\_\_\_\_\_\_\_\_, being deposited at the \_\_\_\_\_\_\_\_\_\_\_\_ of the slope/cliff. These sediments will be \_\_\_\_\_\_\_\_\_\_\_\_\_(sharp edges)

**Deposition by RUNNING WATER: How fast sediment is deposited in this system is determined by:**

**1. The velocity of the system**

* + - Faster velocity= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
		- Slower Velocity= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
		- **Refer to pg. 6 of ESRT** ! If a stream flows below a given velocity, it will deposit the sediments it can no longer carry.

**2. The characteristics of the sediments themselves**

* + - **Size-** \_\_\_\_\_\_\_\_\_\_\_\_\_\_ particles settle out \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
		- **Shape-** \_\_\_\_\_\_\_\_\_\_\_\_\_\_ particles settle out \_\_\_\_\_\_\_\_\_\_\_, and flatter \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
		- **Density –** \_\_\_\_\_\_\_\_\_\_\_\_\_\_ density particles settle out \_\_\_\_\_\_\_\_\_\_\_\_

**The Sorting of Sediments in Deposition:**

If a deposit or layer of sediment has particles that are similar in size, density, or shape, they are considered \_\_\_\_\_\_\_\_\_\_\_\_.

🡨When a mixture of sediments in water settle out rapidly, a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bed (layer) develops with sedimentary size \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from bottom to the top, creating **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**FORMATION OF A DELTA (Triangular track of sediment deposited at the mouth of a river)**

* When a river enters a larger body of water (lake or ocean), **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**will occur as the stream velocity naturally **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** due to a decrease in **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,** and the collision of two flowing bodies of water**. \_\_\_\_\_\_\_\_\_\_\_\_\_**sorting will occur, where larger, denser, and rounder sediments settle out **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** while finer, flatter particles settle out last.

**FORMATION OF AN ALLUVIAL FAN**

Formed by running water in smaller rivers and streams at\_\_\_\_\_\_\_\_\_\_ altitudes. They carry sediment by erosion and deposit sediment over the ground as the stream fans out over a gentler slope, creating a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ shaped area of sediment.