

Name \_\_\_\_\_  
Period \_\_\_\_\_ Date \_\_\_\_\_

Unit 12 Deposition  
Earth Science

I.

- \_\_\_\_\_ -  
a. results from a loss of \_\_\_\_\_.  
b. Most deposition takes place in \_\_\_\_\_.  
c. The sediments that are deposited may under go processes to make them turn into \_\_\_\_\_ rock.

II. Factors that Affect Deposition

- a. \_\_\_\_\_ - the greater the size, the \_\_\_\_\_ the settling rate.  
b. \_\_\_\_\_ - the more spherical the shape, the \_\_\_\_\_ the settling rate.  
i. Flat, angular and irregularly shaped particles settle \_\_\_\_\_.  
ii. Smooth and round particles settle \_\_\_\_\_.  
c. \_\_\_\_\_ - the greater the density, the \_\_\_\_\_ the settling rate (if all the other factors are the same like size and shape).  
d. \_\_\_\_\_  
i. The faster the medium, the \_\_\_\_\_ the settling rate.  
ii. The slower the medium, the \_\_\_\_\_ the settling rate.  
iii. Rate and time  
1. The greater the settling rate, the \_\_\_\_\_ time it takes.  
2. The lower the settling rate, the \_\_\_\_\_ time it takes.  
e. \_\_\_\_\_  
i. Evaporation, temperature changes or an increased amount of dissolved minerals in a body of water would make the water unable to hold any more dissolved minerals.  
ii. Any more minerals will \_\_\_\_\_ dissolve and settle to the bottom.  
iii. Some minerals may \_\_\_\_\_ to form crystals of minerals or rocks.

III. Sorting of Sediments

- a. During deposition sediments of similar size, shape or density get separated (\_\_\_\_\_) by types.  
b. Deposition happens when the velocity \_\_\_\_\_.  
c. \_\_\_\_\_ sorting happens when a stream enters a large body of water and the \_\_\_\_\_, \_\_\_\_\_ particles settle out first. The smaller, less dense particles are carried farther from shore.  
d. \_\_\_\_\_ - happens when a landslide dumps sediments into the ocean.  
e. \_\_\_\_\_ - happens after a series of vertical sorting events.

**IV. Deposition by Gravity**

- a. No \_\_\_\_\_ occurs, pieces of different sized are mixed together – very angular

**V. Deposition by Running Water**

- a. Deposition occurs where the water is \_\_\_\_\_ its velocity.  
b. \_\_\_\_\_ can form at a river's mouth.  
c. \_\_\_\_\_ can form at the base of mountains on land.

**VI. Deposition by Waves**

- a. When ocean waves slow down as they drag on the bottom of the beach, the waves tend to move sediment \_\_\_\_\_ shore and sometimes \_\_\_\_\_ to the shoreline.
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**VII. Deposition by Wind**

- a. Wind \_\_\_\_\_ the sediment that it carries when the wind velocity decreases.  
b. Sand dunes can result.

**VIII. Deposition by Glaciers**

- a. Deposition occurs when glaciers \_\_\_\_\_ and sediments are dropped.  
b. \_\_\_\_\_ are large rocks that have been transported by glacial ice without being broken into small pieces.  
c. \_\_\_\_\_ consists of deposits of material left by a glacier  
d. \_\_\_\_\_ are soils that haven't developed all the way (3 well-defined layers is a well developed soil).  
e. \_\_\_\_\_ are curving ridges of sand and gravel  
f. \_\_\_\_\_ are elongated hills of sediment.  
g. \_\_\_\_\_ are small, rounded hills.  
h. \_\_\_\_\_ are where chunks of ice have melted.



IX. \_\_\_\_\_ - are regions on the Earth's surface in which physical features are related by origin (hills, valleys, streams...)

a. The shape and composition of the landscape are determined by the \_\_\_\_\_, local bedrock, geologic structure and human activities.

b. Landscape regions:

i. \_\_\_\_\_ - have the greatest relief.

1. \_\_\_\_\_ is the change in elevation between the highest and lowest places.

2. Can find each of the three types of rocks in mountains.

3. Result from \_\_\_\_\_ forces with the Earth that push up mountains, some mountains are volcanic.

ii. \_\_\_\_\_ - often relatively flat or rolling uplands in which streams have cut deep valleys.

1. Famous Example: Grand Canyon

iii. \_\_\_\_\_ - flat and low in elevation

1. Contain small hills and generally have flat sedimentary rock.

c. The climate influences the landscape.

i. \_\_\_\_\_ climates have a lot of water.

1. Rounded landscapes that have lots of \_\_\_\_\_ (plants hold the water in the soil.)

2. Chemical weathering may occur more here if it's warm.

ii. \_\_\_\_\_ climates have very little water.

1. Angular landscapes that have little vegetation

2. Physical weathering is more abundant

## X. Stream Development

a. \_\_\_\_\_ falls on the ground and flows downhill along the easiest path.

b. Young streams have \_\_\_\_\_ shaped channels and are relatively straight.

c. Middle-aged streams have modified \_\_\_\_\_ shaped channels and have many meanders.

i. \_\_\_\_\_ are curves in a stream.

d. Old-aged streams have sort of \_\_\_\_\_ shaped channels and have many meanders.

i. Once a meander gets too \_\_\_\_\_, the streams can cut itself off to go straight again. Leaving a curved lake behind.



