Geomorphology Facts & Vocabulary

CAPSTONE

Hillslope Facts

1. Due to steepness and structural stability, agriculture, forestry, and human settlement was being determined.
2. If the materials that form hillslopes move rapidly through the process of mass wasting, hillslopes could be hazardous to humans.
3. According to the inputs and outputs of the hillslope system, we can begin thinking of hillslopes as a process-response by studying them.
4. Hillslopes are the most important part of the terrestrial landscape, and you can think of the Earth's landscape as composition of mosaic hillslope types being made.
5. Those hillslopes range from mountains and cliffs to almost flat planes. However, on most hillslopes, large quantities of soil and sediment are moved over time.
6. Often, the mediums of air, water, and ice are under the influence of gravity.
7. Also, the approximate length it takes to form a hillslope depends on the various geomorphic processes acting on it.
8. They're the source of material that are used to construct a number of depositional landforms.
9. In practical terms, hillslopes have a number of direct and indirect influences on a number of human activities.
10. This hillslope system receives inputs of solar radiation, precipitation, solid and dissolved substances from the atmosphere, and unconsolidated sediment derived from the weathering of bedrock.

Igneous Rock

1. Igneous rock is formed when magma cools and solidifies.

2. The most important characteristics of igneous rocks are their color and the size of the crystals formed in them.

3. Their color usually varies from pink to black, depending on the mineral content of the rock

4. Image result for igneous rocksgeology.com

Extrusive igneous rocks cool and solidify quicker than intrusive igneous rocks.

5. They consists of crystals, hence, also called as crystalline rock

6. There are over 700 different types of igneous rocks.

7. 'Igneous' comes from the Latin phrase 'made from fire'.

8. The igneous rock called pumice is the lightest rock on earth.

9. Igneous rocks contain many minerals that help plants grow.

10. The upper section of the Earth's crust is made up of around 95% igneous rock.

Fluvial Process

1. The fluvial process is a form of erosion.
2. The definition of fluvial processes is, the set of mechanisms that operate as a result of water flow within (and at times beyond) a stream channel, bringing about the erosion, transfer, and deposition of sediment.
3. Rivers always try to erode to their base level which is usually sea level.
4. Sea level is the base level for measuring elevation and depth on Earth.
5. The names of many rivers derive from the color that the transported matter gives the water.
6. Scientists who study the fluvial process are called Fluvial Geomorphologists.
7. Fluvial Geomorphologists earn on average from $40.80 to $60.85 per hour, although salary can vary greatly depending on the person.
8. When streams or rivers are associated with glaciers, ice sheets, or ice caps, the term glaciofluvial or fluvioglacial is used.
9. To become a person would need to start by earning a Bachelor of Science degree in Geology or a closely related field such as Environmental Science. A degree in engineering is also accepted by employers providing the person has experience in geology.

Aeolian Process

1. Aeolian means wind in Latin.
2. The Aeolian process is used when wind and water takes parts of rocks and minerals from one place to another across earth's surface.
3. A deposition of wind is the geological process in which sediments, soil and rocks are added to a landform or land mass.
4. Aeolian transport is the first process of coastal dune formation and involves the movement and weathering of sand particles behind and parallel to the shoreline.
5. Wind erosion is a serious environmental problem attracting the attention of many across the globe.
6. The Aeolian process mostly takes place in dessert.
7. Wind erosion is mostly effective in the desert because in humid regions smaller particles are held together by the moisture in the soil and by plant roots from the vegetation.
8. Aeolian deposit is is transported. It also has to do with the deposits that wind leave behind, such as sand dunes. A sand dune is an elongated mound of sand formed by wind or water.
9. The term wind erosion refers to the damage of land as a result of wind removing soil from an area. Most often, wind erosion occurs on flat land in dry or sandy areas. Forexample: Rock formation in various location sculpted by wind erosion. Dunes, particularly in deserts, off of which sand is blown.
10. The first effect is the winnowing of light particles. Wind erosion is very selective, carrying the finest particles - particularly organic matter, clay and loam - many kilometres. ... Lastly, wind erosion reduces the capacity of the soil to store nutrients and water, thus making the environment drier.

Vocabulary

Geomorphology – the study of the physical features of the surface of the earth and their relation to its geological structures.

Fluvial Process – the physical interaction of flowing water and the natural channels of rivers and streams.

Aeolian Process – also spelled **eolian** or æolian, pertain to wind activity in the study of geology and weather and specifically to the wind's ability to shape the surface of the Earth (or other planets).

Hill Slope Process – the movement downslope of a mass of rock, debris, earth, or soil (soil being a mixture of earth and debris).

Igneous Rock Process – (derived from the Latin word ignis meaning fire), or magmatic rock, is one of the three main rock types, the others being sedimentary and metamorphic. **Igneous rock** is formed through the cooling and solidification of magma or lava.

Deposition – the **geological** process in which sediments, soil and rocks are added to a landform or land mass. Wind, ice, and water, as well as sediment flowing via gravity, transport previously eroded sediment, which, at the loss of enough kinetic energy in the fluid, is **deposited**, building up layers of sediment.

Sandstone – a clastic sedimentary rock composed mainly of sand-sized minerals or rock grains. Most **sandstone** is composed of quartz or feldspar because these are the most common minerals in the Earth's crust.

Shale – a fine-grained, clastic sedimentary rock composed of mud that is a mix of flakes of clay minerals and tiny fragments (silt-sized particles) of other minerals, especially quartz and calcite. The ratio of clay to other minerals is variable.