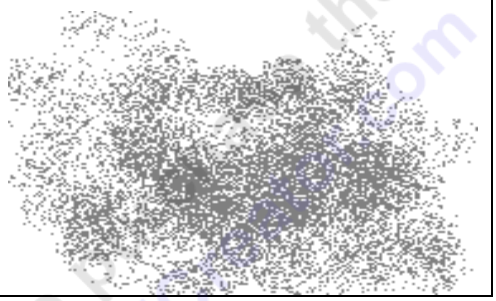
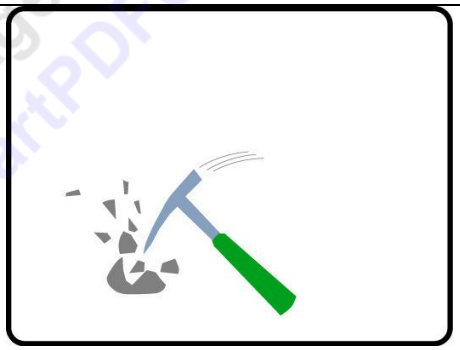
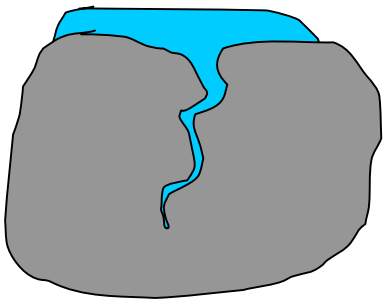
Flash Card Directions

- Please use the provided flashcards to memorize some of the important vocabulary in this unit.
- Write answer word (1st column) on the back of all of the flashcards in that row. Then cut the flash cards out and try to line up the three boxes to complete each important vocabulary word with its name, meaning, and picture.
- Start small with only a few, get really good at those, and then add more into your practice. Each time you master a small set by lining up all three add another in until they are all mastered.
- Moving the cards around on a table / clean surface is how these will help you. Just staring at them / trying to memorize them without moving and jumbling will not be as helpful.

| | | |
|---|---|---|
| Weathering | The breaking of rock into smaller pieces. |  |
| Mechanical Weathering | Physically breaking rocks into smaller pieces without chemicals. |  |
| Ice / Frost Wedging (Mechanical) | Water enters cracks in the rocks, freezes, expands and breaks rocks. |  |

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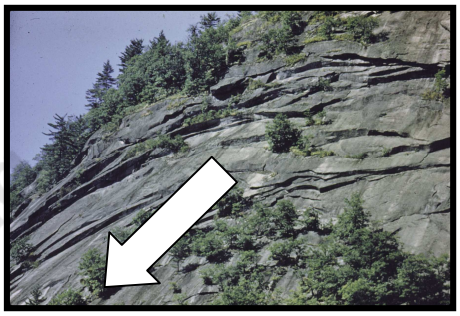
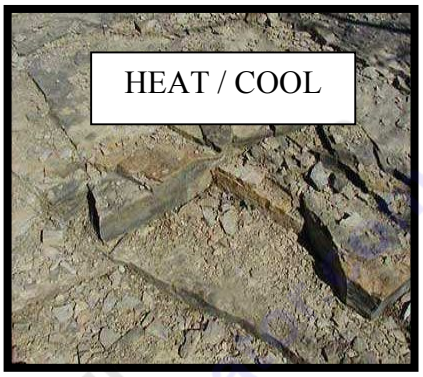
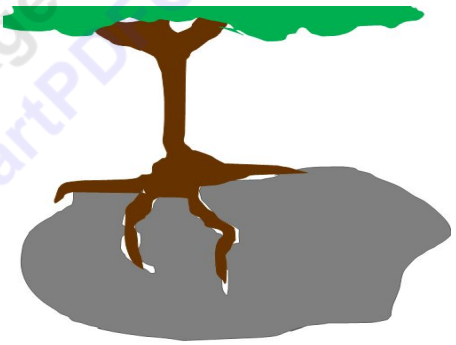
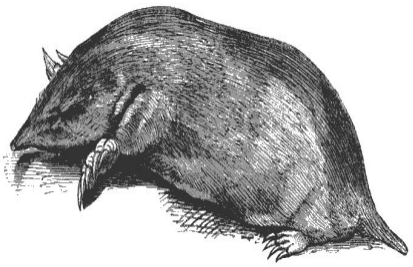
|---|---|---|
| Sheeting / Exfoliation (Mechanical) | Layers fall off like an onion. |  |
| Thermal Expansion (Mechanical) | Repeated heating and cooling of rocks will induce stress and breakage. |  |
| Root / Plant Wedging (Mechanical) | Plant roots enter crack, grow and expand the crack |  |
| Animal Activity (Mechanical) | Animals mechanically wear away the rock. |  |

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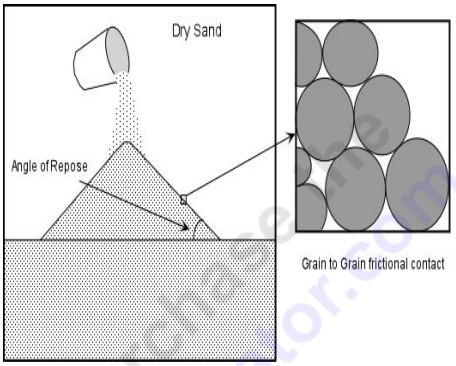
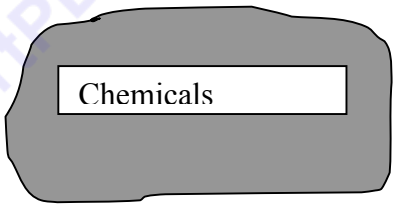
|---|---|---|
| Wind Weathering (Mechanical) | Particles of sand, pebbles, and dust are carried by wind and cause abrasion and <u>slowly</u> break down rock. |  |
| Angle of Repose | The maximum angle of a stable slope determined by friction, cohesion and the shapes of the particles. |  |
| Chemical Weathering | Chemical processes dissolve and decay earth materials. |  |
| Stalagmite<br>"Might reach Ceiling" | This rises from the floor of a limestone cave due to the dripping of mineralized solutions |  |

| | | |
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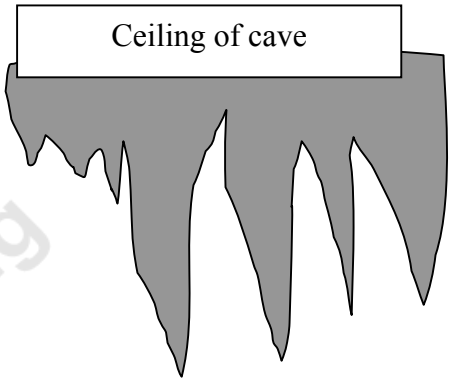
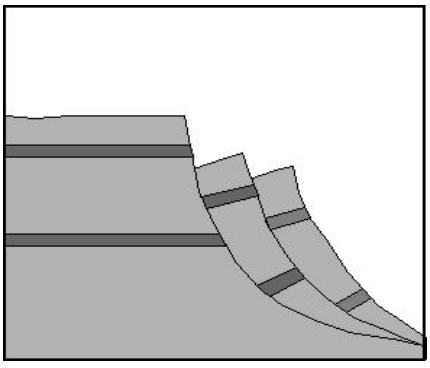
| **Stalactite**<br>"Hang tight" | This hangs from the ceiling of a limestone cave due to the dripping of mineralized solutions |  |
| **Mass Movement Landslide** | The down slope movement of earthen materials from gravity.<br>Example -A slide of a large mass of dirt and rock down a mountain or cliff. |  |
| **Soil Creep** | The slow, steady downhill movement of soil and loose rock. |  |
| **Slump** | A landslides in which the moving material moves in a block, more or less. |  |

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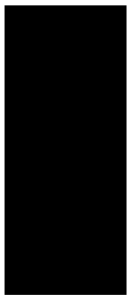
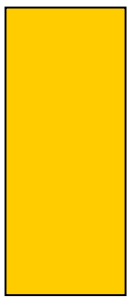
| Soil | A mixture of weathered rock and decaying organic material.<br>Plants, animals, fungus, bacteria… |  |
| Black Soil | Lots of organic matter (carbon).<br>May be poorly drained.<br>Usually fertile. |  |
| Brown Soil | Lots of sand and clay<br>Well drained<br>Good soil |  |
| Other Colored Soil | Many compounds present, Iron, Manganese, Sulfur.<br>High in salt.<br>Not as healthy. |  |

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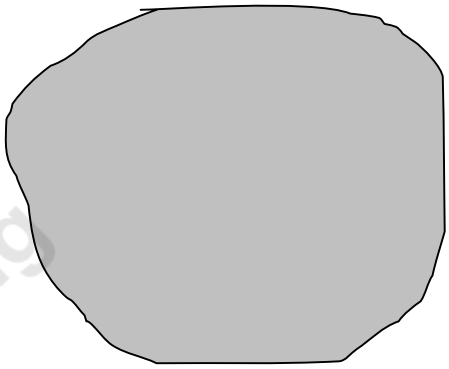
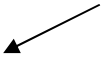
|---|---|---|
| Boulder | Largest Particle Size<br>(Greater than 25 cm) |  |
| Cobble | Particle Size<br>(Between 6-25 cm) |  |
| Gravel | Particle Size<br>(Between 2- 7.5 cm) |  |
| Sand | Particle Size<br>(Just under 2 mm) |  |
| Silt | Particle Size<br>(Below Sand) |  <br>Smaller than sand |

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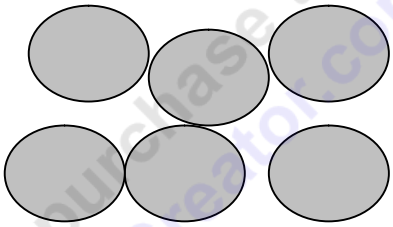
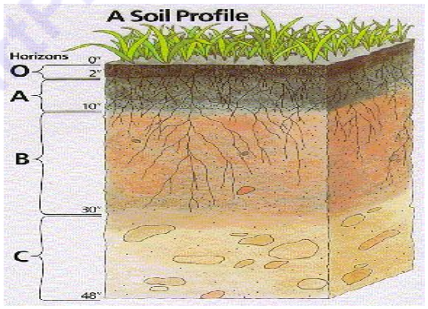
|---|---|---|
| Clay | Very small particle Size (Below Silt) | |
| Permeability | The rate at which water and air move through the soil. |  |
| Soil Porosity | The spaces that allow air and water to move through the soil. |  |
| Soil Horizon | Layers of different types of soil. |  |
| Erosion | Process of wearing or grinding something down. |  |

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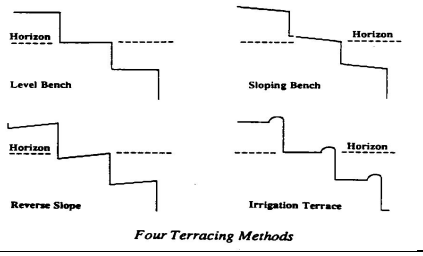
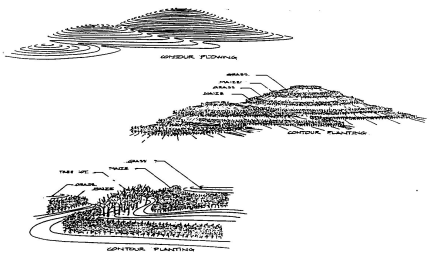
| Deposition | The natural process of laying down a deposit of something. (Sediment) |  |
| Dust Bowl | Period of severe dust storms causing major ecological and agricultural damage to American and Canadian prairie |  |
| Conservation Plowing | Disturbing the ground and plant cover as little as possible. |  |
| Terracing | Creating steps against water erosion. |  <br>*Four Terracing Methods* |
| Countour Plowing | A practice of slowing water run-off by planting across a hills contours. |  |

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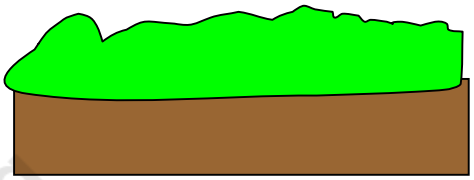
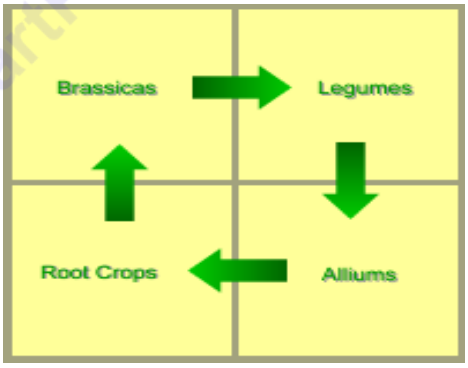
| Cover Crop | A plant that grows first and protects the cash crop. |  |
| Strip Cropping | Alternate the type of plant on each row to control water and nutrient uptake. |  |
| Alley Cropping | Plant trees in between ground crops. Provides shade, wind break, and prevents water loss. |  |
| Crop Rotation | Planting different crops each year. Changes nutrient uptake (increased soil fertility over a long period) |  |
| Gully Reclamation | Dam gullies to trap silt Plant ground vegetation to stabilize slopes. |  |

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| Wind Breaks | Trees at edge of field to break the wind. |  |
| Manure | Add this to plants to increase fertility |  |

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- Please place flashcards in sandwich bags after use to reuse for the next years class after you have mastered them.

| | | |
|---|---|---|
| Glacier | A moving mass of snow and ice that moves downhill. |  |
| Continental Glacier | A Giant ice sheet that spreads out from a center of accumulation. |  |
| Alpine Glacier | A glacier that starts in a mountain and moves into a valley. |  |

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|---|---|---|
| Ice Berg | A giant piece of freshwater ice that broke off of a glacier or ice shelf. |  |
| Ice Age | A cold period marked by episodes of extensive glaciation alternating with episodes of relative warmth. |   |
| Smilodon | A specific Saber-Toothed Cat |  |
| Wooly Mammoth | Elephant like mammal of the ice age. Pointy head, curved tusk, lots of hair. |  |
| Wooly Rhino | Large Mammal of the ice age. Has horn |  |

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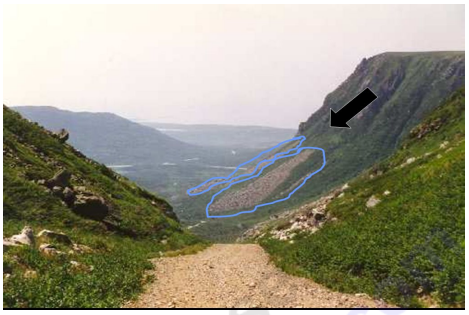
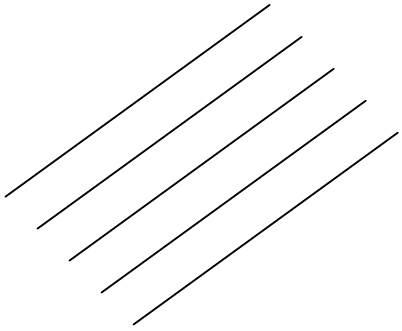
|---|---|---|
| Glacial Erratic Boulder | A piece of rock carried by glacial ice some distance from the rock outcrop from which it came. |  |
| Talus | Piles of weathered glacial rock. |  |
| Cairn | Manmade pile of stones, usually conical, and often marks the path of an alpine trail. |  |
| Glacial Striations | Multiple, straight parallel lines which represent the movement of the sediment loaded base of a glacier. |  |

| | | |
|---|---|---|
| U-Shaped Valley | Glaciers carve valleys into a U shape. |  |
| Fjord | U-Shaped valley near the sea |  |
| Kettle Lake | A depression filled with water left by a glacier. |  |
| Tarn | A glacial lake produced by scouring. These are often found in cirques. |  |
| Horn | A sharp peak on a mountain cut by glaciers. |  |

| | | |
|---|---|---|
| Cirque | A steep-sided carve into a mountain by a glacier. |  |
| Aret'e | A knife edge caused by glaciers and erosion. |  |
| Esker | A narrow, steep-sided ridge of sediment, the remains of sediment piling up in a winding river under the glacier. |  |
| Moraine | Material transported by a glacier and then deposited. Many types of Moraines. |  |
| Drumlin | Formed glacial till (sediment). They are elongated features that can reach a kilometer or more in length. |  |