**Soil Erosion Inquiry**

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| **Engage** | Look at Mrs. Riedel’s image on edmodo. Where is this? What happened? Is this a problem? Why or why not? How could this impact your life? |
| **Explore** | Go outside and investigate erosion on campus. Find a site that exhibits erosion. Fill in the following information about this site:

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| --- | --- |
| Site location |  |
| Show Mrs. Riedel your image and get her approval. |  |
| What is happening? |  |
| Where is the sediment going? |  |
| Is this a problem? Why or why not? |  |
| What is causing this erosion? |  |

Erosion Word Wall: Define, describe, draw or detail or how this relates to you.

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| Soil Erosion | Detachment | Transport |
| Rill | Gully | Sedimentation |
| Slope | Rain Intensity | Soil Texture |
| Turbidity | Total Suspended Solids (TSS) | pH |
| Subsoil | Infiltration | Compaction |
| Turbidimeter | Best Management Practices (BMP) | Silt Fence |
| Baffle | Coir | Sediment Basin |
| Wattle | Check Dams | Wool |
| Ditch | Polyacrilamide (PAM) | Flocculate |
| Soil Structure | Aggregate | Soil Ribbon |
| Velocity | Deposition | Soil Conservation |

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| **Explain** | Create a one page report summarizing what is happening at your Wakefield High School erosion site. Include details about the site’s slope, compaction, whether subsoil is exposed, and whether this site has rills or gullies. Be sure to include how this impacts the community, wildlife, fish, crops, the current and future use of this site, and what is currently being done to promote and/or control this erosion. Site any and all implications of the current erosion. |
| **Elaborate** | 1. Develop a soil conservation plan for this site. This should include the Best Management Practices for the site. Include all materials that will be used to aid in the conservation of the soil. Describe why you feel that this plan will be the best approach for the site. This should be at least one page. Describe the current soil’s texture and structure, describe the site’s slope, and compaction. Include how your plan will improve this site.
2. Using the tools provided, put your Soil Conservation plan into practice. Using at least one component of your plan, construct something to better manage this site’s erosion.
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| **Evaluate** | After the first heavy rain, go back to the site and determine what, if any, impact your erosion control method played in soil conservation. In one page, write an evaluation of your methods. Describe what you learned, what did/did not work and why, and what you would do to improve the erosion control of your site. |