Earth and Space Name\_\_\_\_\_\_\_\_\_\_\_\_\_

Web Quest <http://phschool.com/webcodes10/index.cfm?wcprefix=cud&wcsuffix=2051&area=view>

Can We Avoid Another Dust Bowl?

**Introduction**

Human activity contributed to the Dust Bowl, the period of intense wind erosion in the Great Plains in the 1930s. In this exercise, you will describe ways to prevent or alleviate wind erosion.

**Task**

**Create a poster that could form part of a presentation on the Great Depression or the history of farming practices. Describe what contributes to erosion in the Great Plains and how farmers have changed their practices to prevent loss of soil by wind erosion.**

**Resources and Process**

1. **Your poster should include a history of what caused the Dust Bowl. It should also include current agricultural practices that aim to prevent soil loss. You should be able to answer the following questions before starting your poster.**
   * **How much soil is currently lost to wind erosion in the Great Plains? How fast is it replaced?**
   * **What contributes to wind erosion in the Great Plains? How much is under human control? How much results from natural events?**
   * **What farming practices are being used to combat wind erosion? How do they differ from practices in the early 1900s? How successful are they?**
2. For information on what causes dust storms, check these sites.
   * [From the Dust Bowl to the Sahel](http://earthobservatory.nasa.gov/Features/DustBowl/)
   * NASA Explains 'Dust Bowl' Drought
3. For information on the current state of wind erosion, check this site.
   * [The Problem of Wind Erosion](http://www.weru.ksu.edu/new_weru/problem/problem.shtml)
4. For information on current agricultural practices, check these sites.
   * [Wind Erosion Research Unit](http://www.weru.ksu.edu/)
   * [Soil Erosion Control](http://www.omafra.gov.on.ca/english/crops/soils/manage.html#SOIL%20EROSION%20CONTROL)

**Learning Advice**

* Did you use information from multiple sources?
* Did you cross-check the information that you found?
* Did you include today's erosion-control practices?

**Conclusion**

* Can we prevent another Dust Bowl from happening? Explain your answer.
* What can people do to counter natural processes that lead to wind erosion?

**Rubric for Web Quest**

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|  | **Poor (1 pt.)** | **Fair (2 pts.)** | **Good (3 pts.)** | **Exemplary (4 pts.)** |
| **Content** | Little to no information about the Dust Bowl, its causes, or how to avoid another. Shows very little or no research done. | Some information about the Dust Bowl and its causes, but not how to avoid another. Shows minimal research done. No synthesis of information from more than one source. | Good information about the Dust Bowl, its causes, and how to avoid another. Synthesis of information from more than one source. | Extensive information about the Dust Bowl, its causes, and how to avoid another. Outstanding synthesis of information from several sources. |
| **Writing** | Numerous errors in spelling and/or sentence structure make the assignment almost impossible to read. | Many errors in spelling and/or sentence structure. | Few errors in spelling and/or sentence structure. | Almost no errors in spelling and/or sentence structure. |
| **Task** | Poster includes a few facts, with no causal explanation. Little creativity in approach. | Poster includes facts, but with little or erroneous causal explanation. Some creativity in approach. | Poster includes description of Dust Bowl and its causes, with current farming practices. Creative presentation. | Poster includes exhaustive description of Dust Bowl and its causes, with current farming practices. Highly creative presentation. |