Geology of Iowa

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Lesson Plan/Science

4th Grade/Corse Elementary

Description:

This lesson will help students to read and identify basic geological elements and formations within a given area. Students will be gradually released from direct instruction to small cooperative learning group work and independent study regarding map reading and development through observation.

Objectives/Goals:

- Students will use local maps to determine geological land forms.
- Students will work in small cooperative learning groups to create a map of a section of Perkins Park, a local park, using geological formations.
- Students will work independently to create a geological map of an area of their choice (their yard, a block, park section, school yard, ect.).

The geological observations and identifications students will complete during this lesson will help to increase map reading skills to meet district curriculum standards.

Implementation:

Students will be given a few minutes to observe a map and then share their thoughts and ideas regarding the elements. Teacher will directly

instruct a map lesson on how to read the map and to identify geological elements and formations. Students will then work in small cooperative learning groups to create and document geological elements and formations on a group-made map. Teacher will go over and discuss group findings, maps, and thoughts/ideas. Students will be released into independent study to create their own geological maps of a personally chosen area as a project-based assessment.

Evaluation:

- Student understanding will be informally assessed by teacher during large group and small group activities to identify any needed modifications in the lessons and requirements.
- Students will complete a project-based assessment for evaluation. Students will independently complete a geological map of their personal choice to demonstrate geological elements and land forms.

Extension:

Students could use Schoolyard Geology at http://education.usgs.gov/schoolyard/ to complete a multitude of great geological activities and examples of what to look for to turn their school yard into a rich geological research area.