

Geology of Iowa for Teachers
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Project Statement:

My project is to teach about Paleozoic limestones and fossils. This is important for students to understand because limestone is readily found in Iowa and especially the Cedar Rapids area, where I teach. During this study students will realize that our bedrock- made up of limestone - has formed because Iowa used to be a shallow warm sea.

Objectives/Goals:

Students will learn:

- the biochemical make-up of limestones
- how they form
- the anatomy of limestone
 - grains – skeletal particles
 - lime mud – microscopic crystals
 - cement – inorganically precipitated CaCO_3
- geological time for this limestone
- identify some fossils found in the limestone

Implementation Statement:

In my 7th grade science classroom we study rocks and minerals, but students don't really have to identify the various rocks. They need to understand the three rock types: metamorphic, sedimentary, and igneous. I want them to particularly know more about limestone and how it forms and why we have it in Iowa, etc. I would also like to plan a field trip to the Devonian Gorge with a stop at the MacBride Nature recreation Area to search for some of their own fossils. I would also check into getting any speakers from the area quarries that we have in Cedar Rapids and check about possible field trips there.

Evaluation Component:

Students will be given a short test at the end in the form of a Quick Write to have them tell me what they know about limestone. They would be

instructed to answer key questions in their write-up. It would let me know if they understood about limestone, its origin, etc.

Another authentic assessment would be to give them a test using actual pieces of limestone containing the fossils and they identify them.