

Geology of Iowa Project Development

1A Project Description

I would like to collect a variety of fossils found in Iowa during the different time periods for Biology students to observe and then develop an experiment on how life changes over time and why.

1B Objectives of the Project

Students often fail to realize that life changes to meet the requirements of the environment. Iowa's environment has changed, is changing, and will continue to change in the future. Life has, is and will continue to meet the requirements placed upon organisms. Students will be able to recognize how life has changed and possibly speculate on how life will adapt to the environment in the future.

1C Implementation of the Project

Students will be able to observe the fossils I collected and determine why the fossils I collected had the characteristics they had. Speculation of Iowa's environmental past will be discussed in which the students can they determine which organisms in Iowa currently will be able to adapt to new environmental changes the best.

1D Evaluation of the Project

Students will design an experiment in which they manipulate or change the experimental variable (environmental factor) and determine how a given organism is affected (dependent variable). The experiment will contain all the necessary components of a good experiment:

Problem Statement (contains Experimental + Dependent Variables)

Instructions

- Materials

- Procedure

Then Statement (Hypothesis)

- what the student expects is going to happen

Because Statement

- reasoning for their hypothesis

Conclusion

- based on data collected

- data is graphed