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Geology of Iowa

Summer 2011

6th Grade Earth Science Project

- a. **Description:** Students will use equipment and methods presented in IOWATER training to monitor the quality of Hawkeye Pond.
- b. **Objectives/Goals:** Students will gain an understanding of the components of quality water and how to monitor these components. This addresses several Earth Science Big Ideas.

Earth scientists use repeatable observations and testable ideas to understand and explain our planet.

Earth is the water planet.

Humans significantly alter the Earth.

- c. **Implementation:** Students will follow protocols for collecting data and graph the data over time. Students will gain a greater understanding of the testable components of water quality and how to use this data to look for human impact on water quality.
- d. **Evaluation:** Students will be evaluated based on their ability to
 - Accurately describe in writing and/or demonstrate water sampling and testing technique for any two of the chemical tests.
 - Design a graph for a data set that includes a title, label for x and y axis, and correct plotting of data
 - Interpret a graph of a data set to identify patterns and spikes in nitrates and dissolved oxygen and relate them to possible human activity.