

### **The Scientific Method As It Pertains To Water Monitoring**

The scientific method consists of research used to develop a hypothesis and an experiment that will provide a conclusion for a question. In most cases a question initially prompts the process. Research serves the purpose of determining the best experiment to perform. A hypothesis is a prediction based on the research prior to conducting the experiment. An experiment is a procedure used to collect, record, and analyze data. The conclusion of an experiment summarizes the results of an experiment in reference to the original question.

Water Monitoring is a process that determines the quality of water based on particular categories tested. Youth Area watch provides a kit that includes materials for testing and recording the results of Dissolved Oxygen, pH, and Turbidity tests as well as the temperature of the water. This is an experiment that uses the scientific process to predict, collect, record and analyze data to draw conclusions about the quality of tested water.

Water monitors may have questions concerning the quality of water or the reasons for the quality of water. Before testing water the procedure of doing so should be thoroughly researched. There are specific instructions pertaining to each testing category of water monitoring. All information should be recorded as soon as possible after collecting a sample. A data sheet can be used to organize data and make it easier to analyze and draw conclusions from.

It is important to remember to be as thorough and accurate as possible with information collected from water monitoring as well as any other experiment. Following the scientific method is a valuable tool for ensuring that data is complete and concise.

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