

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Inquiry Model

Is about ...

The Inquiry Model is grounded in the scientific method and is designed to provide students with practice in scientific inquiry.

Main idea

### Theory

The Inquiry Model is best used when teaching the scientific method, and is often referred to as scientific inquiry. The Inquiry Model is a teaching model designed to give students experience with the scientific method. That is why it is best used to teach the scientific method which is a pattern of thinking that emphasizes asking questions, developing hypotheses to answer the questions, and testing the hypotheses with data.

Main idea

### Planning

**Identify the Inquiry Question or Problems:** Identify a question that is appropriate for Inquiry means that the question must involve a variable that can be manipulated and an effect that can be measured.  
**Identify Learning Objectives:** Solving the specific Inquiry problem and learning the critical-thinking skills associated with Inquiry will always be the learning objective. Inquiry lessons can also help students find relationships, which are important content objectives.  
**Planning for Data Gathering:** When identifying problems, the strategies for gathering data will most likely and ideally come from your students. Except when it involves younger students and those lacking experience with designing and conducting experiments This means teacher will need to provide all the materials and give them set rules explaining what they can and can not do to find their data while also providing them with a considerable amount of guidance

Main idea

### Implementing

**Identify Questions:** This begins when a teacher (ideally a student) can identify a questions that is intended to attract the attention and provide a challenge for the students. This action provides a focus for the lesson.  
**Generate Hypothesis:** When the class attempts to answer the question that has been identified their answer if a hypothesis. This provides a frame of reference for gathering data.  
**Gather and Display Data:** Before students can gather data they must first understand controlled variables. This is the process of holding constant the values of all variables but one. The variable that isn't held constant is the one students manipulate for investigation. This provides students with experience in testing hypotheses with evidence.  
**Assess Hypotheses and Generalize:** Teachers help guide a discussion based off the results and the extent in which they support the hypothesis then the students generalize the results based on the assessment of the hypothesis. This helps students develop the ability to make conclusions based on evidence and helps promote transfer to new situations.

Main idea

### Assessing/Modifying/ Motivating

**Assessing:** Case studies provide an additional way to assess learning in Inquiry lessons. By providing students with Inquiry-based cases, teachers can assess the different component process in Inquiry.  
**Modifying:** It can be modified to be effective in a variety of content areas. Primary modifications exist in the way data is gathered to examine to investigate hypotheses  
**Motivating:** It increases students motivation because it capitalizes on the motivating effects of curiosity, challenge, authentic tasks, involvement, and autonomy, all factors that increase students' motivation to learn.

So what? What is important to understand about this?

It is important to understand the Inquiry Model because it is a process of systematically answering questions based on evidence.