

How scientists work - What is the Scientific Method?

there are many steps to working on an experiment.

our problem is step 1

step 2 has us

we now need to gather up the materials and equipment we may need to solve the problem. Materials are items you use up or toss in the trash. Equipment are items we clean and use over again.

our goal is to learn and understand the scientific method.

In step 3 we have to design

As you experiment you will collect data

In step 4 you will

Step 5 has us

Why is the scientific method important?

What does the scientific method force the experimenter to do?

Method?

Pre-experimental stage
• finding a question/problem
• make a hypothesis/prediction

Experimental stage

- gather materials/equipment
- know how to use tools and equipment
- observe and record data
- identify a single test variable. control all other variables.
- perform measurements
- use math.

Post-experimental Stage

- Analyze results of experiment
- draw conclusions

Scientific investigation standards

- S8a, b, c, d
- S7a, b, c
- S6a, b, c
- S5a