

-Unit 1: Work Like a Scientist *Study Guide*-

How Do We Use Inquiry Skills?

inquiry skills- things people use to find out information. People use inquiry skills to plan and do tests.

Tip- Question begins with the sound in the middle of inquiry.
Inquiry skills help you find answers to questions.

Here are some inquiry skills and questions.

<u>Inquiry Skill</u>	<u>Question</u>
Predict	What will we observe?
Observe	What does it look like? How does it feel?
Compare	How are things the same and different?
Classify	Which things belong together?
Measure	What is the length of something?
Make a Model	What does it look like?

***Read these important ideas. Do your best to remember them.**

1. You can use inquiry skills to find out information.
2. You can use inquiry skills to make a plan for finding information.
3. Observing is an inquiry skill.
4. When you observe, you use your senses to learn information.
5. When you predict, you make a guess about what will happen.
6. When you compare, you find ways things are alike and different.
7. When you classify, you put like things together.
8. A model may show what something is like.

How Do We Use Science Tools?

Science tools- things people use to find out information. A hand lens is a science tool.

Tip- A tool is used for doing work. Science tools are used for doing work in science.

Thermometer- a tool used to measure temperature

Tip-You may have a high temperature. Mom or Dad can use a thermometer to find out.

***Read these important idea. Do your best to remember them.**

1. Science tools help you learn about things.
2. A hand lens helps you observe details.
3. A thermometer measures temperature.
4. A measuring cup measures liquids, like juice.
5. A scale measures the weight of something.
6. A balance measures the mass of something.
7. Use a ruler to measure how long something is.
8. Use a tape measure to measure a ball.

How Do Scientists Think?

Investigate- plan and do a test to answer a question or solve a problem

Tip- Gate sounds the same as the last part of investigate.

When you investigate something, you open a gate to new information.

Hypothesis- a statement that can be tested

Tip- Hypothesis ends with the sound at the beginning of statement.

A hypothesis is a statement.

Draw conclusions- use information you have gathered to decide if your hypothesis is correct

Tip- Correct and conclusions begin with the same sound.

You draw conclusions to see if your hypothesis is correct.

Communicate- write or draw in order to share what you know

Tip- Communicate and community begin in the same way.

You communicate to share ideas with your community.

***Read these important ideas. Do your best to remember them.**

1. Scientists investigate to find answers to questions.
2. Scientists investigate to solve problems.
3. First, scientists observe and ask a question.
4. Then, scientists make a hypothesis.
5. Next, scientists plan a fair test for their hypothesis.
6. Scientists follow their plan for a fair test.
7. Scientists decide if their hypothesis is correct.
8. Scientists communicate what they learned.