Name _____ Date_____ Class_____

THINKING SKILLS

Using Your Senses

Imagine that a fourth-grader asks you, "Why did early scientists think that the sun goes around the Earth?" How would you respond?

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Because early scientists based their conclusions on their sense of sight, you may have used a phrase like, "It looked like . . ." or "It appeared that . . ." in your answer. Unfortunately, when early scientists relied only on what they saw, they were often fooled.

Observations

By using their sense of sight, early scientists were making **observations.** Although you may not realize it, you make observations about your environment all the time. You constantly see things, hear things, and touch things, and sometimes you taste and smell things, too. Occasionally, like those scientists, you observe something and then find out later that your observation was wrong. The following is an example:

> "Yechhhh!" cried Walter as he spit out the first bite of his cereal, "This milk tastes sour!" Then the smell caught his attention, too. It was awful. In fact, he couldn't believe he hadn't noticed the sour smell before. "The milk looked fine when I took it out of the refrigerator," he remarked.

What sense had given Walter incomplete information?

_____

Why *hadn't* Walter noticed the smell earlier?

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Keep Your Eyes and Ears Open

When you are doing scientific work, use your different senses to make accurate and thorough observations. But **remember**—it's never safe to touch, smell, or taste substances unless your teacher says it is okay.

Making Sense

For each sense listed below, describe a situation in which that sense might give you incomplete information. The first one is done for you.

Smell

Some colored markers are scented to smell like food. If you relied only on

your sense of smell, you might think that they were *food!*

Touch

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_____

_____

Hearing

_____

_____

_____

Taste

_____

_____

_____

Sight

_____

_____

_____

TROUBLESHOOTING	**TRY THIS!**
If you are having trouble thinking of examples, ask yourself, "Are there products designed to imitate or deceive?" For instance, scented markers are designed to smell like food.	Put a few unbreakable objects in a shoe box. Give the box to some friends. Ask them to guess what's inside without opening it and to tell you what senses they are using.