

Date _____

Period _____

The Scientific Method

Make **OBSERVATIONS**

To think like a scientist, you should learn as much as you can by observing things around you. Everything you hear and see is a clue about how the natural world works.

Q

1) Ask a **QUESTION**

Look for patterns. You'll get ideas and ask questions like these:

- Do all birds eat the same seeds?
- How does the time that the sun sets change from day to day?

H

2) Make a Guess Called a **HYPOTHESIS**

If you have an idea about why or how something happens, make an educated guess, or hypothesis, that you can test. For example, let's suppose that your hypothesis about the sunset time is that it changes by one minute each day.

T

3) Plan and Do a **TEST**

Plan how to test your hypothesis. Your plan would need to consider some of these problems:

- How will you measure the time that the sun sets?
- Will you measure the time every day?
- For how many days or weeks do you need to measure?

Turn over!

R

4) Record and Analyze What Happens - **RESULTS**

When you test your idea, you need to observe carefully and write down, or record, everything that happens. When you finish collecting data, you may need to do some calculations with it. For example, you might want to calculate how much the sunset time changes in a week or a month.

C

5) Draw **CONCLUSIONS**

Whatever happens in a test, think about all the reasons for your results. For example, you might wonder what causes the time of the sunset to change. You might also ask when the earliest and latest sunsets occur during the year. Sometimes, this thinking leads to a new hypothesis.

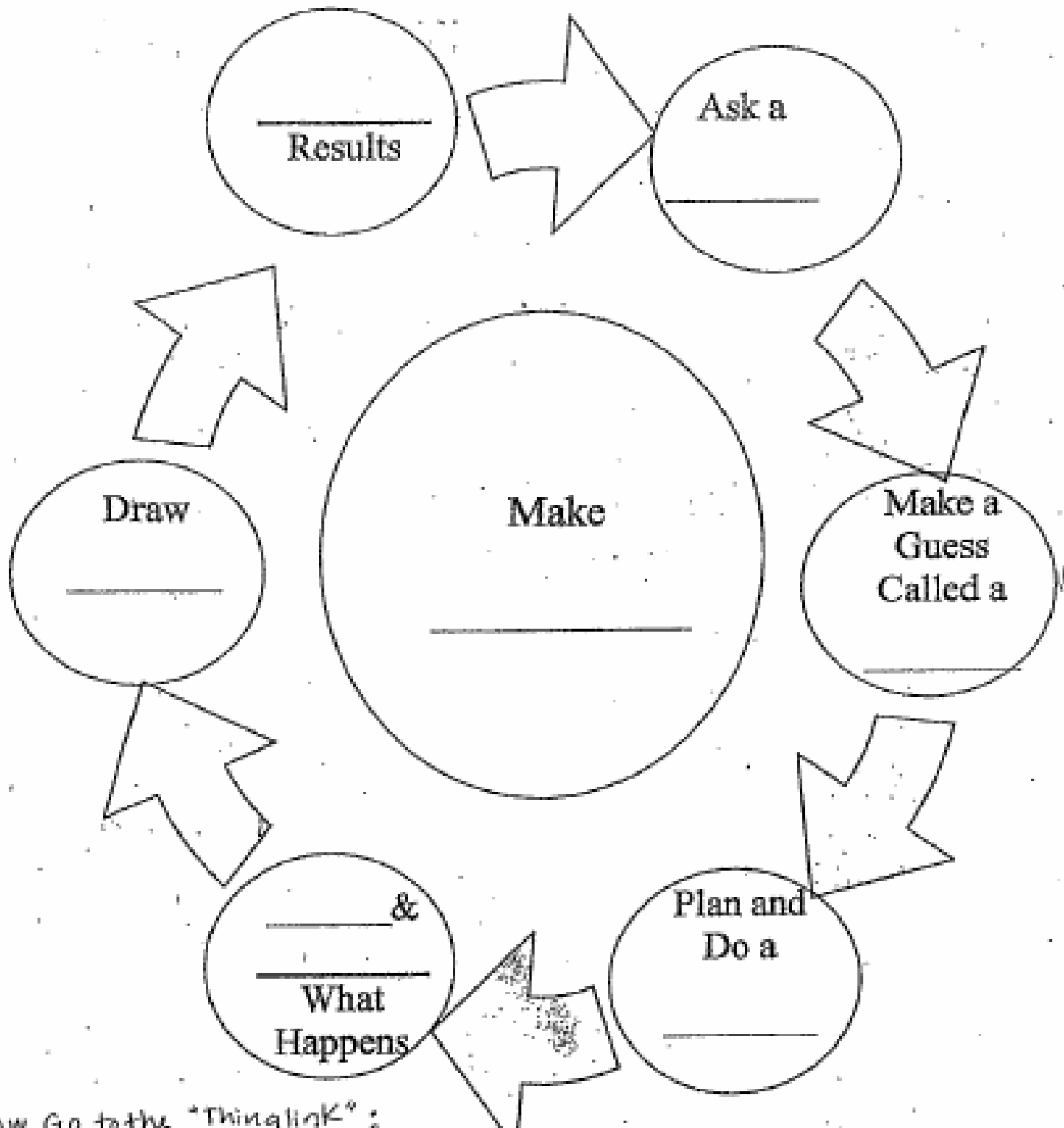
If the time of the sunset changes by one minute each day, think about what else the data shows you. Can you predict the time that the sun will set one month from now?

C

6) **COMMUNICATE** Results

Share your findings and ideas with other scientists. When ideas are shared, new hypotheses can be formed and discoveries can be made!

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Now Go to the "Thinking" :