

# SCIENCE BELT LOOP

Most of these activities can be completed at Fernbank Museum of Natural History. Don't forget to check your scout book to find additional activities on this subject and for ways you can use the Museum to work toward academic pins. You must complete all of the activities to earn your belt loop.

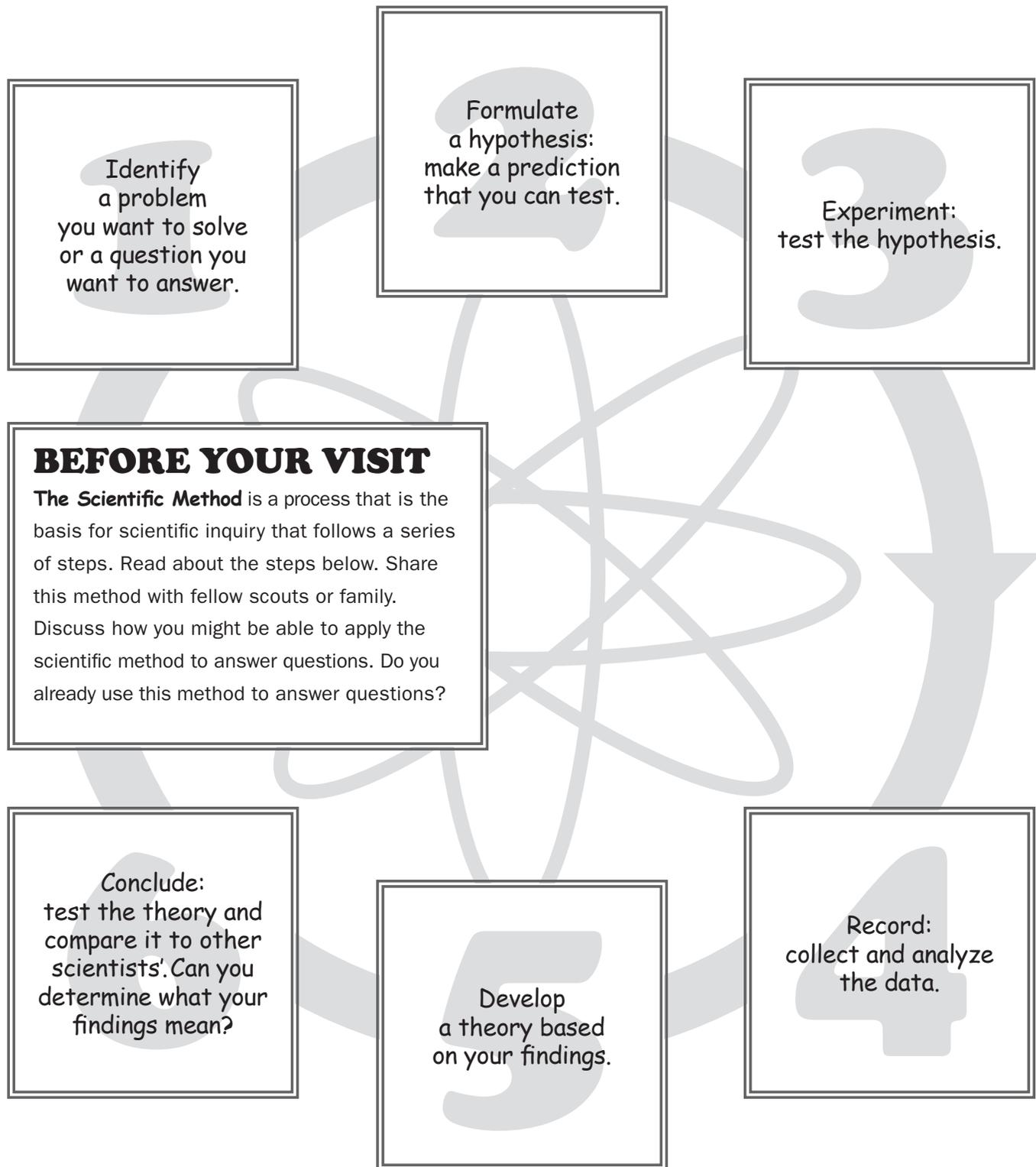
## Vocabulary

The following list of vocabulary words and definitions will help you to speak like a scientist.

**Hypothesis**—An idea that can be tested.

**Experiment**—The testing of a hypothesis or the act of conducting a controlled test or investigation.

**Theory**—An explanation to the question or problem raised, based on evidence.



**Pose a Question:**  
I wonder if birds live in every region of Georgia?

**Hypothesis:**  
I think that birds live everywhere in Georgia.

**Test it out**  
**(At the Museum):**  
Visit the exhibition *A Walk Through Time in Georgia* (Upper Level) and look for birds in each region.

## **AT THE MUSEUM**

**Apply the scientific method—  
Act like a scientist.**

You can learn about many different fields of science at the Museum. See if you can apply the scientific method to learn something or prove a point. Use the example on this page as a starting point. You can either follow the example experiment or apply the scientific method to another question.

**Count**  
the number of birds and where you find them. Keeping records like this could show you patterns you were unaware of.

**Conclusion:**  
Birds live across Georgia. I learned this at Fernbank Museum and other locations, read books at the library, and asked my teachers and friends.

**Retest**  
in other places and find other sources.

**Theory:**  
There are birds in every region of Georgia.

## YOUR TURN!

Experiment at Fernbank Museum  
or after your visit. Record your  
findings in the table below.

### 1 Identify the Question

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### 2 Hypothesis (make an educated guess)

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### 3 Experiment

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### 4 Collect Data

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### 5 Develop a Theory

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### 6 Conclusion

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### AFTER YOUR VISIT

Continue to test out your scientific theory or raise other questions to solve using the scientific method. See how your hypothesis applies to the real world. Did you find that your information answered your questions or raised new ones?

### ASK A SCIENTIST

Scientists are available at Fernbank Museum on special Family Days and at ongoing events such as *Ask a Geologist* and *Star Talks*. Refer to the calendar of events on our Web site ([www.ferbankmuseum.org](http://www.ferbankmuseum.org)) to learn more about opportunities to meet scientists.

Scientist \_\_\_\_\_

Field of Science \_\_\_\_\_

Cool Fact I learned \_\_\_\_\_