

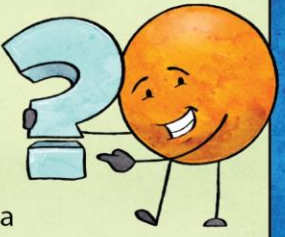
starts with a



# THE SCIENTIFIC METHOD

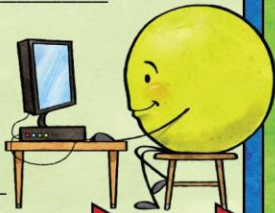
## QUESTION

The process starts when you ask a question about something you observe. Why? How? When? What? Needs to be a testable question, not one based upon opinion.



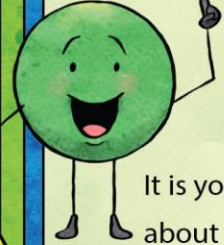
## RESEARCH

Research what is known about your question. Learn from others who may have already conducted experiments. Your question may already have been answered! You may go back and ask another question.



## HYPOTHESIS

A hypothesis is an educated guess about the answer to your question. It is your prediction about the outcome of any experiments you design. It should be measurable and not opinion based.



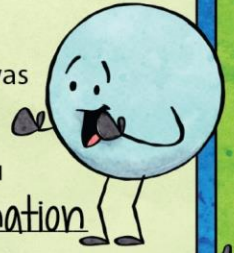
## EXPERIMENT

Designed to test your hypothesis. It should be a fair test with appropriate variables and controls. It should be able to be repeated by you and be able to be repeated by other scientists.



## REPORT

Regardless if your hypothesis was right or wrong, you now have information to share! It could be in a report to your classmates, science fair or even published in a science journal. Other scientists want to know what you've found!



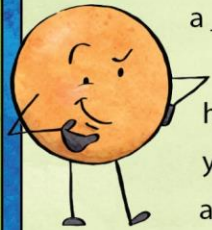
## CONCLUSION

Developing a conclusion is the point where you reach a determination about your hypothesis. Was it right or wrong? If it was wrong, you may go back to revise it and redesign your experiment.



## ANALYZE

Organize and analyze your data. It may help to use a chart or a graph to help visualize your data. Always ask yourself if you got any unexpected results or errors that might mean a problem with your experiment.



## COLLECT DATA

Collect all of your data and observations in a journal. Record it accurately and don't try to make it fit your hypothesis! Always use correct units in your measurements and be sure to write down the time and date.

