

Did you enjoy this kit? We'd love to see how you used it! Tag us on social media and let us know! #APLstem

Twitter: @anchlibrary

Facebook & Instagram: @anchoragelibrary



## Scientific Method

### Ask questions, test the answers, do it again.

That's the process scientists use when they tackle a problem.

**Observations** lead to a question. Possible answers are called **hypotheses**. You can test these in many ways such as with an experiment, a mathematical analysis, creating a model, and more observation.

Next the scientists **analyze** their results to come to a **conclusion** that supports or rejects their hypothesis.

Sometimes this process leads to new observations which lead to new questions.

Experiments need to be repeatable by other teams to see if they get the same results. A hypothesis that repeatedly is validated (found to be true in testing) can become a scientific theory.

**Scientists are always observing, questioning, and repeating experiments to keep learning!**



This kit generously sponsored by:



This material is based upon work supported by the National Science Foundation under Grant Number DRL-1657593. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.

## J-KIT STEM

# Measurement

Scientific Concept: Math

Recommended Ages: 4 to 10

Scientific Practice: Observation, Computation

## What to Know About This Kit

Measuring is one of the fundamental math skills that students learn. Use this kit to explore different types of measurements (volume, weight, mass, length, etc) as well as different measuring systems. We include standard/English measurements and metric measurements. But can you discover another way to measure? How many paperclips tall are you for example? This kit includes two books of ideas and two discovery sheets for you to take your own measurements.

Please note: This kit must be returned to a **staff member** at an **Anchorage Public Library** location.



Kit Contents & Replacement Costs		
Item Type	Description	Cost
Object	Bucket Balance	\$20
Object	Metric Weight Set	\$30
Object	Standard Weight Set	\$20
Object	Liquid Measuring Set	\$30
Object	2 Measuring Tapes	\$3
Book	<i>Measurement Mania</i>	\$16
Book	<i>Measuring Penny</i>	\$8
Packaging & Processing Fee:		\$25
Total Kit Replacement Cost:		\$152



Please wash and dry all the measuring cups you used.  
Please verify all parts are present before returning.