




Science Forward is a skills-focused, interdisciplinary science curriculum customizable for a variety of student populations and classroom environments. It is all about having students hone their “Science Sense.” Students practice skills in three categories (Number Sense, Data Sense, and Knowledge Sense) to achieve learning outcomes related to understanding what science is and how it works. This document describes what we mean having Science Sense and which scientific skills are featured in each of our categories of Science Sense. Many of the skills featured below can be broken out into sub-skills, so there are many skills not explicitly listed here!

Science Sense is...

- Being able to distinguish science from non-science.
- The ability to recognize how people collect and process facts into knowledge.
- The ability to recognize how a collection of facts becomes knowledge.
- Being able to question and evaluate information that is presented as scientific.
- Being an informed consumer, evaluator, and practitioner of science.

Science Sense	Skills include
 NUMBER SENSE	Being able to apply basic mathematical reasoning Having a sense of scale Making order of magnitude estimates
 DATA SENSE	Making measurements Measuring uncertainty Recognizing bias Using proxies Managing data sets Doing statistical analysis Using mathematical models Finding relationships and trends Visualizing data Interpreting graphs
 KNOWLEDGE SENSE	Asking a scientific question Using proper experimental design Communicating results to scientists & the public Understanding how science makes progress Thinking critically Being reasonably skeptical Making evidence-based arguments Applying scientific knowledge Understanding the intersection of science & ethics Distinguishing science from pseudoscience