

What is Science?



Science

Latin *scientia*= “knowledge”

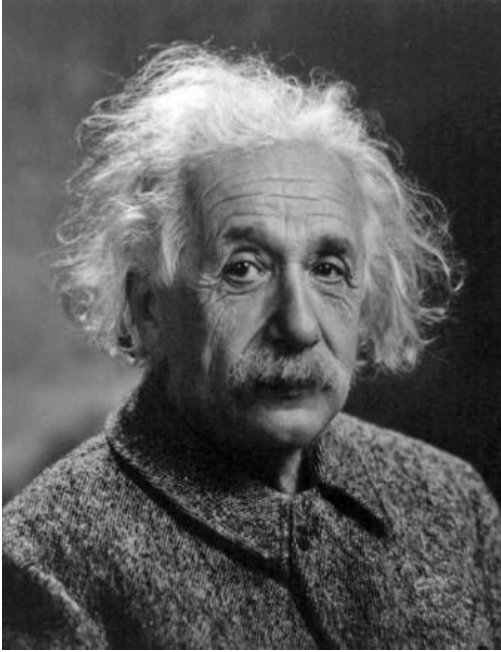
- an organized way of using evidence to learn about the natural world and encompassing universe

The **goal** of science is:

- to investigate and understand the natural world
- to explain events in the natural world
- to use scientific explanations to make useful predictions

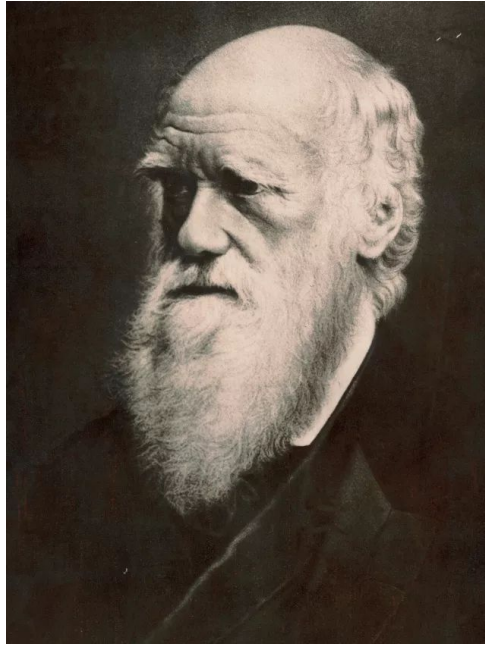


Science education involves learning the body of knowledge too



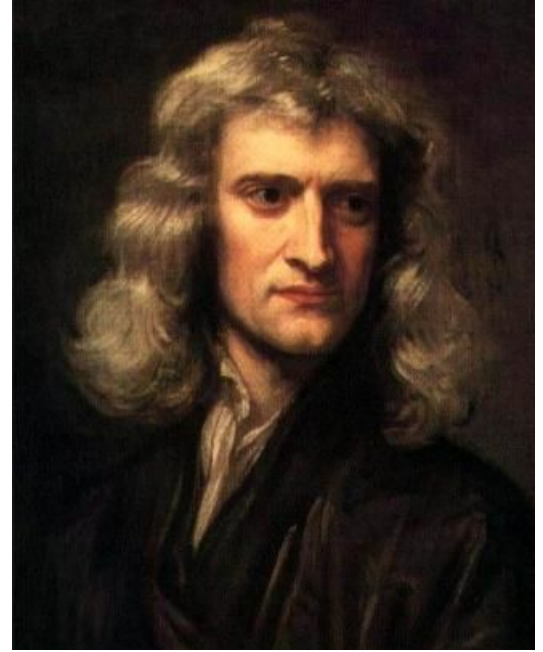
Albert Einstein

Developed the theory of relativity



Charles Darwin

Developed the theory of evolution



Sir Isaac Newton

Developed the laws of motion & universal gravitation

Several Truths about Science

- Science is an *ongoing process*
- Scientists are open-minded skeptics
- Scientists accept that the physical universe is a system with parts that interact.
- Natural laws govern all events and objects



How scientists design experiments

Ask a question

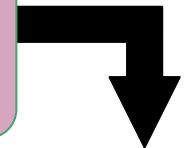
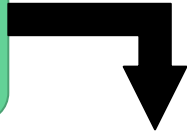
“The Scientific Method”

Form a hypothesis

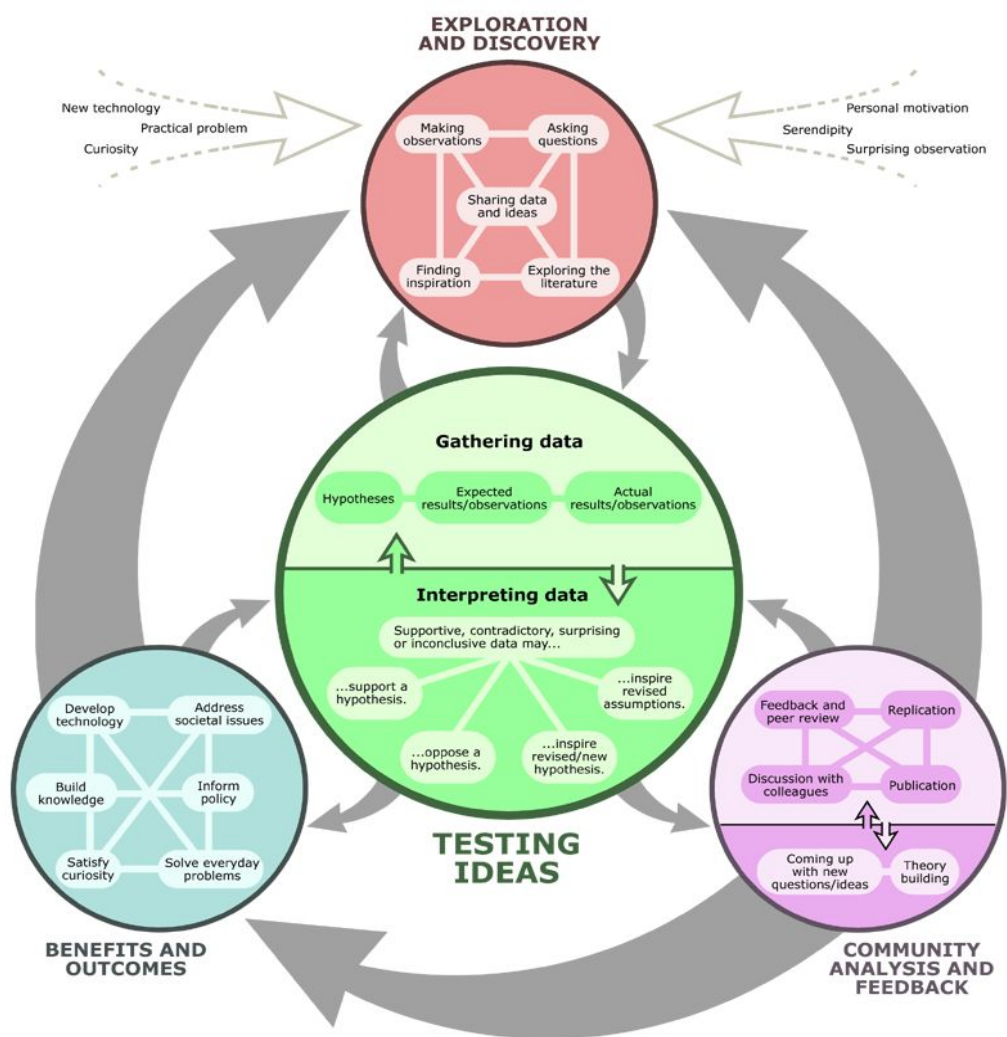
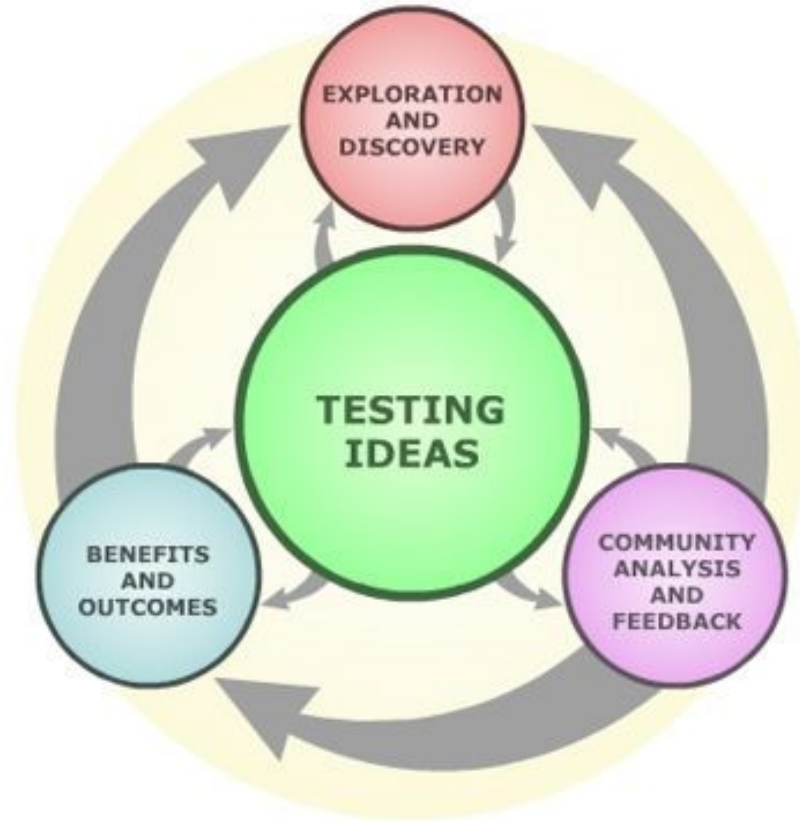
Set up a controlled experiment

Record and analyze results

Draw a conclusion



Scientific Inquiry



Science and Engineering Practices



Asking
Questions
Defining
Problems

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Using
Models

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Conducting
Investigations

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Analyzing
Data

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Using
Mathematics

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Constructing
Explanations
Designing
Solutions

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Arguing From
Evidence

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Communicating
Information

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