

**How science works**

- **EXPLORATION AND DISCOVERY**
  - Making observations
  - Asking questions
  - Sharing data and ideas
  - Reading about science discoveries

- **TESTING IDEAS**
  - Coming up with an explanation
  - Gathering data
  - Interpreting observations
  - Revising what I thought after more observations

- **BENEFITS AND OUTCOMES**
  - Learn more
  - Solve everyday problems
  - Satisfy curiosity
  - Answer questions

- **COMMUNITY ANALYSIS AND FEEDBACK**
  - Feedback and peer review
  - Discussing with classmates
  - Listening to classmates
  - Repeating the investigation
  - Coming up with new questions and ideas

**Science** is an exciting and dynamic process of discovery. This flowchart shows the real process of scientific inquiry. Use it to trace the development of scientific ideas or the research of individual scientists. You’ll see that each scientific journey is unique, shaped by specific people and events.

- There are many routes into the process—like making a surprising observation
- Science relies on a community—both within a research group and across all of science
- Testing ideas—as this scientist is doing in the field—is at the heart of science
- Science is intertwined with society and it affects our lives every day

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