

Science Process Skills

Use science process skills to build a conceptual understanding of science content: where you can grasp concepts or ideas, connect them to each other and to what you already know, and apply them in new situations, even outside of class.

Each science process skill:

- can be practiced at simple and increasingly complex levels
- can be practiced separately, but in reality are used as intertwined, coherent sets of skills.

Observing

Planning & Investigating

Questioning

Interpreting

Hypothesizing

Communicating

Predicting

OBSERVING

Using the senses and appropriate tools to gather information about an object, event, or phenomenon.

QUESTIONING

Raising questions about an object, event, or phenomenon.

HYPOTHESIZING

Giving a tentative explanation, based on experience, of a phenomenon, event, or the nature of an object. A hypothesis is testable.

PREDICTING

Forecasting the outcome of a specific future event based on a pattern of evidence or a hypothesis.

PLANNING & INVESTIGATING

Designing an investigation that includes procedures to collect reliable data.

INTERPRETING

Answering the question, "What do your findings tell you?"

COMMUNICATING

Representing observations, ideas, theoretical models, or conclusions by talking, writing, drawing, making physical models, and so forth.