



Disney Youth Education Series

Synergy in Science

National Standards

Science

Understands the nature of scientific knowledge

Grades K–2

- Knows that scientific investigations generally work the same way in different places and normally produce results that can be duplicated.

Grades 3–5

- Knows that good scientific explanations are based on evidence (observations) and scientific knowledge
- Knows that scientists review and ask questions about the result of other scientists' work

Understands the nature of scientific inquiry

Grades K–2

- Knows that learning can come from careful observation and simple experiments
- Knows the tools that can be used to gather information and extend the senses

Grades 3–5

- Plans and conducts simple investigations
- Uses simple tools to gather scientific data and extended senses
- Knows that good scientific explanations are based on evidence

Understands the scientific enterprise

Grades K–2

- Knows that in science it is helpful to work with a team and share findings with others

Grades 3–5

- Knows that scientist and engineers often work in teams to accomplish a task





Technology

Understands the nature and operation of systems

Grades K–2

- Knows that most things are made of parts and they may not work if some parts are missing
- Knows that when parts are put together, they can do things that they could not do by themselves
- Understands how some elements or components of simple systems work together

Grades 3–5

- Knows that when things are made up of many parts, the parts usually affect one another
- Identifies the relationships between elements

Life Skills

Understands and applies basic principles of hypothesis testing and scientific inquiry

Grades K–2

- Asks “how do you know” in appropriate situations and attempts to provide reasonable answers when others ask the same question

Grades 3–5

- Attempt to verify the results of experiments done by others
- Distinguishes between actual observations and ideas or conclusions about what was observed
- Makes records of observations regarding time and place to formulate hypotheses
- Understands that there are a variety of ways people can form hypotheses, including basing them on many observations, basing them on very few observations, and constructing them on only one or two observations
- Verifies results of experiments
- Understands that there may be more than one valid way to interpret a set of findings
- Reformulates a new hypothesis for study after an old hypothesis has been eliminated

