Grade 6
Science Standards Correlations
For the
SRP Power In-Service Workshops and Tour
Please note: Science standards correlations are based upon the
Arizona Department of Education's Science Standard Crosswalk
www.ade.state.az.us/standards/science/articulated.asp

Strand 1: Inquiry Process

Concept 1: Observations, Questions, and Hypotheses Formulate predictions, questions, or hypotheses based on observations. Locate appropriate resources.
PO 1. Differentiate among a question, hypothesis, and prediction. PO 2. Formulate questions based on observations that lead to the development of a hypothesis. (See M06-S2C1-01) PO 3. Locate research information, not limited to a single source, for use in the design of a controlled investigation. (See W06-S3C6-01, R06-S3C1-06, and R06-S3C2-03).

Concept 2: Scientific Testing (Investigating and Modeling) Design and conduct controlled investigations.
PO 2. Design an investigation to test individual variables using scientific processes. PO 3. Conduct a controlled investigation using scientific processes. PO 4. Perform measurements using appropriate scientific tools (e.g., balances, microscopes, probes, micrometers). (See M06-S4C4-02) PO 5. Keep a record of observations, notes, sketches, questions, and ideas using tools such as written and/or computer logs. (See W06-S3C2-01 and W06-S3C3-01)

Concept 3: Analysis and Conclusions Analyze and interpret data to explain correlations and results; formulate new questions.
PO 1. Analyze data obtained in a scientific investigation to identify trends. (See M06-S2C1-03) PO 6. Formulate new questions based on the results of a completed investigation.

Concept 4: Communication Communicate results of investigations.
PO 2. Display data collected from a controlled investigation. (See M06-S2C1-02) PO 3. Communicate the results of an investigation with appropriate use of qualitative and quantitative information. (See W06-S3C2-01) PO 5. Communicate the results and conclusion of the investigation. (See W06-S3C6-02)

Strand 2: History and Nature of Science

Concept 1: History of Science as a Human Endeavor Identify individual, cultural, and technological contributions to scientific knowledge.
PO 2. Describe how a major milestone in science or technology has revolutionized the thinking of the time. PO 3. Analyze the impact of a major scientific development occurring within the past decade. PO 4. Describe the use of technology in science-related careers.

Concept 2: Nature of Scientific Knowledge
Understand how science is a process for generating knowledge.

PO 1. Describe how science is an ongoing process that changes in response to new information and discoveries.
PO 2. Describe how scientific knowledge is subject to change as new information and/or technology challenges prevailing theories.
PO 3. Apply the following scientific processes to other problem solving or decision making situations:

- observing
- questioning
- communicating
- comparing
- measuring
- classifying
- predicting
- organizing data
- inferring
- generating hypotheses
- identifying variables

Strand 3: Science in Personal and Social Perspectives

Concept 2: Science and Technology in Society
Develop viable solutions to a need or problem.

PO 1. Propose viable methods of responding to an identified need or problem.
PO 2. Compare possible solutions to best address an identified need or problem.

PO 3. Design and construct a solution to an identified need or problem using simple classroom materials.
PO 4. Describe a technological discovery that influences science.

Strand 5: Physical Science

Concept 3: Transfer of Energy
Understand that energy can be stored and transferred.

PO 1. Identify various ways in which electrical energy is generated using renewable and nonrenewable resources (e.g., wind, dams, fossil fuels, nuclear reactions).
PO 2. Identify several ways in which energy may be stored.
PO 3. Compare the following ways in which energy may be transformed:

- mechanical to electrical
- electrical to thermal