

**Grade 8**

Science Standards Correlations

*For the*

SRP Water In-Service Tours and Workshops

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](http://www.ade.state.az.us/standards/science/articulated.asp)**Grade 8, Strand 1  
Inquiry Process****Concept One – Observations, Questions & Hypotheses**

<b>Coding</b>	<b>Performance Objective</b>
SC08-S1C1-01	Formulate questions based on observations that lead to the development of a hypothesis. (See M08-S2C1-01)
SC08-S1C1-02	Use appropriate research information, not limited to a single source, to use in the development of a testable hypothesis. (See R08-S3C2-03 and W-E8-01)
SC08-S1C1-03	Generate a hypothesis that can be tested.

**Concept Two – Scientific Testing (Investigating & Modeling)**

<b>Coding</b>	<b>Performance Objective</b>
SC08-S1C2-04	Perform measurements using appropriate scientific tools (e.g., balances, microscopes, probes, micrometers).
SC08-S1C2-05	Keep a record of observations, notes, sketches, questions, and ideas using tools such as written and/or computer logs.

**Concept Three – Analysis & Conclusions**

<b>Coding</b>	<b>Performance Objective</b>
SC08-S1C3-01	Analyze data obtained in a scientific investigation to identify trends. (See M08-S2C1-08)
SC08-S1C3-02	Form a logical argument about a correlation between variables or sequence of events (e.g., construct a cause-and-effect chain that explains a sequence of events).
SC08-S1C3-03	Interpret data that show a variety of possible relationships between two variables, including: <ul style="list-style-type: none"> <li>• positive relationship</li> <li>• negative relationship</li> <li>• no relationship</li> </ul>
SC08-S1C3-04	Formulate a future investigation based on the data collected.
SC08-S1C3-05	Explain how evidence supports the validity and reliability of a conclusion.
SC08-S1C3-06	Identify the potential investigational error that may occur (e.g., flawed investigational design, inaccurate measurement, computational errors, unethical reporting).
SC08-S1C3-07	Critique scientific reports from periodicals, television, or other media.
SC08-S1C3-08	Formulate new questions based on the results of a previous investigation.

**Grade 8, Strand 2  
Inquiry Process**

**Concept Two – Nature of Scientific Knowledge**

Coding	Performance Objective
SC08-S2C2-01	Apply the following scientific processes to other problem solving or decision making situations: <ul style="list-style-type: none"> <li>• observing</li> <li>• questioning</li> <li>• communicating</li> <li>• comparing</li> <li>• measuring</li> <li>• classifying</li> <li>• predicting</li> <li>• organizing data</li> <li>• inferring</li> <li>• generating hypotheses</li> <li>• identifying variables</li> </ul>
SC08-S2C2-02	Describe how scientific knowledge is subject to change as new information and/or technology challenges prevailing theories.

**Grade 8, Strand 3  
Science in Personal & Social Perspectives**

**Concept One – Changes in Environments**

Coding	Performance Objective
SC08-S3C1-01	Analyze the risk factors associated with natural, human induced, and/or biological hazards, including: <ul style="list-style-type: none"> <li>• waste disposal of industrial chemicals</li> <li>• greenhouse gases</li> </ul>