

ARIZONA DEPARTMENT OF EDUCATION ACADEMIC STANDARDS

The *Tucson Toolkit* program addresses the following Academic Standards. (Complete versions of the Academic Standards are available at <http://www.ade.state.az.us>.)

SCIENCE STANDARDS	UNIT 1 – WATER CYCLE	UNIT 2 – WATER SUPPLY	UNIT 3 – WATER ATTITUDES	UNIT 4 – WATER ISSUES	UNIT 5 – CONSERVATION
SC06-S1C2-03 Conduct a controlled investigation using scientific processes.				✓	
SC06-S1C2-05 Keep a record of observations, notes, sketches, questions, and ideas using tools such as written and/or computer logs.	✓	✓		✓	
SC06-S1C3-01 Analyze data obtained in a scientific investigation to identify trends.	✓	✓		✓	
SC06-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).	✓	✓		✓	
SC06-S1C3-03 Evaluate the observations and data reported by others.	✓	✓			
SC06-S4C1-01 Explain the importance of water to organisms.	✓		✓		
SC06-S4C1-06 Relate the following structures of living organisms to their functions: Animals: respiration – gills, lungs; digestion – stomach, intestines; circulation – heart, veins, arteries, capillaries; locomotion – muscles, skeleton; Plants: <u>transpiration</u> – stomata, roots, xylem, phloem; absorption – roots, xylem, phloem; response to stimulus (phototropism, hydrotropism, geotropism) – roots, xylem, phloem.	✓				
SC06-S4C3-02 Describe how the following environmental conditions affect the quality of life: water quality, climate, population density, smog.				✓	
SC06-S6C1-04 Analyze the interactions between the Earth’s atmosphere and the Earth’s bodies of water (water cycle).	✓		✓		
SC06-S6C2-01 Explain how water is cycled in nature.	✓	✓	✓		
SC07-S1C2-05 Keep a record of observations, notes, sketches, questions, and ideas using tools such as written and/or computer logs.	✓	✓		✓	
SC07-S1C3-01 Analyze data obtained in a scientific investigation to identify trends.	✓	✓		✓	

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SCIENCE STANDARDS CON'T	UNIT 1 – WATER CYCLE	UNIT 2 – WATER SUPPLY	UNIT 3 – WATER ATTITUDES	UNIT 4 – WATER ISSUES	UNIT 5 – CONSERVATION
SC07-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).	✓	✓		✓	
SC07-S1C3-03 Analyze results of data collection in order to accept or reject the hypothesis.	✓	✓		✓	
SC07-S1C3-05 Formulate a conclusion based on data analysis.	✓	✓		✓	
SC07-S3C1-01 Analyze environmental risks (e.g., pollution, destruction of habitat) caused by human interaction with biological or geological systems.				✓	
SC08-S1C2-05 Keep a record of observations, notes, sketches, questions, and ideas using tools such as written and/or computer logs.	✓	✓		✓	
SC08-S1C3-01 Analyze data obtained in a scientific investigation to identify trends.	✓	✓		✓	
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-S3C1-01 Analyze the risk factors associated with natural, human induced, and/or biological hazards, including: <u>waste disposal of industrial chemicals</u> ; greenhouse gases.				✓	
MATHEMATICS STANDARDS					
M06-S2C1-05 Find the <u>mean</u> , median (odd number of data points), mode, range, and extreme values of a given numerical data set.					✓
M06-S2C1-06 Identify a trend (variable increasing, decreasing, remaining constant) from displayed data.	✓	✓		✓	
M06-S4C4-03 Determine a linear measurement to the appropriate degree of accuracy.	✓			✓	
M07-S2C1-06 Find the <u>mean</u> , median, mode, and range of a given numerical data set.					✓

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M07-S2C1-07 Interpret trends from displayed data.	✓	✓		✓	
M07-S4C4-02 Measure to the appropriate degree of accuracy.	✓	✓		✓	✓
SOCIAL STUDIES STANDARDS					
SS06-S1C1-07 Analyze cause and effect relationships between and among individuals and/or historical events.		✓	✓	✓	
SS06-S3C4-01 Describe ways an individual can contribute to a school or community.					✓
SS06-S4C1-03 Interpret maps, charts, and geographic databases using geographic information.	✓	✓			
SS06-S4C1-04 Locate physical and human features (e.g., significant waterways, mountain ranges, cities, countries) in the United States and in regions of the world on a map.	✓	✓			
SS06-S4C2-02 Describe the factors that cause regions and places to change.		✓	✓	✓	
SS06-S4C3-01 Identify the physical processes that influence the formation and location of resources such as oil, coal, diamonds, and copper.	✓	✓			
SS06-S4C3 Correlates with SC06-S4C3.				✓	
SS06-S4C3 Correlates with SC06-S6C1.	✓		✓		
SS06-S4C3 Correlates with SC06-S6C2.	✓	✓	✓		
SS06-S4C5-01 Describe ways that human dependence on natural resources influences economic development, settlement, trade, and migration.		✓			
SS06-S4C5-02 Describe the intended and unintended consequences of human modification (e.g., irrigation, aqueducts, canals) on the environment.		✓	✓	✓	✓

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SOCIAL STUDIES STANDARDS CON'T	UNIT 1 – WATER CYCLE	UNIT 2 – WATER SUPPLY	UNIT 3 – WATER ATTITUDES	UNIT 4 – WATER ISSUES	UNIT 5 – CONSERVATION
SS06-S4C5-03 Explain how changes in the natural environment (e.g., flooding of the Nile) can increase or diminish its capacity to support human activities.		✓	✓	✓	
SS06-S5C1-01 Identify how limited resources and unlimited human wants cause people to choose some things and give up others.		✓	✓		✓
SS07-S1C1-07 Analyze cause and effect relationships between and among individuals and/or historical events.		✓	✓	✓	
SS-07-S4C1-03 Interpret maps, charts, and geographical databases using geographic information.	✓	✓			
SS07-S4C1-04 Locate physical and cultural features (e.g., continents, cities, countries, significant waterways, mountain ranges, climate zones, major water bodies, landforms) throughout the world.	✓	✓			
SS07-S4C2-04 Describe how a place changes over time. (Connect with content studied.)		✓	✓	✓	
SS07-S4C3 Correlates with SC07-S3C1.				✓	
SS07-S4C5-01 Identify the physical processes (e.g., conservation of natural resources, mining, water distribution in Arizona) that influence the formation and location of resources.	✓	✓			
SS07-S4C5-03 Describe how humans modify environments (e.g., conservation, deforestation, dams) and adapt to the environment.		✓	✓	✓	✓
SS07-S4C5-04 Describe the positive and negative outcomes of human modification on the environment.		✓	✓	✓	✓
SS07-S4C5-05 Explain how modification in one place (e.g., canals, dams, farming techniques, industrialization) often leads to changes in other locations.		✓	✓	✓	
SS07-S4C5-06 Describe the ways human population growth can affect environments and the capacity of environments to support populations.		✓	✓	✓	

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SS07-S5C1-01 Explain how limited resources and unlimited human wants cause people to choose some things and give up others.		✓	✓		✓
SS08-S1C1-07 Analyze cause and effect relationships between and among individuals and/or historical events.		✓	✓	✓	
SS08-S4C1-03 Interpret maps, charts, and geographic databases using geographic information.	✓	✓			
SS08-S4C1-04 Locate physical and cultural features (e.g., continents, cities, countries, bodies of water, landforms, mountain ranges, climate zones) throughout the world.	✓	✓			
SS08-S4C2-05 Describe how a place changes over time. (Connect with content studied.)		✓	✓	✓	
SS08-S4C3 Correlates with SS08-S3C1.				✓	
SS08-S4C5-01 Describe how (e.g., deforestation, desertification) humans modify ecosystems.		✓	✓	✓	
SS08-S4C5-02 Describe why (e.g., resources, economic livelihood) humans modify ecosystems.		✓	✓	✓	✓
SS08-S4C5-03 Explain how changes in the natural environment can increase or diminish its capacity to support human activities.		✓	✓	✓	
SS08-S4C5-04 Explain how technology positively and negatively affects the environment.		✓	✓	✓	
SS08-S4C5-05 Analyze changing ideas and viewpoints on the best use of natural resources (e.g., value of oil, water use, forest management).					✓
SS08-S5C1-01 Explain how limited resources and unlimited human wants cause people to choose some things and give up others.		✓		✓	✓

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READING STANDARDS	UNIT 1 – WATER CYCLE	UNIT 2 – WATER SUPPLY	UNIT 3 – WATER ATTITUDES	UNIT 4 – WATER ISSUES	UNIT 5 – CONSERVATION
<p>R06-S1C6-07, R07-S1C6-07, R08-S1C6-07 Use reading strategies (e.g., drawing conclusions, determining cause and effect, making inferences, sequencing) to comprehend text.</p>	✓	✓	✓	✓	✓
<p>R06-S3C1-07, R07-S3C1-08, R08-S3C1-08 Interpret graphic features (e.g., charts, maps, diagrams, illustrations, tables, timelines, graphs) of expository text.</p>	✓	✓	✓	✓	✓
<p>R06-S3C2-01, R07-S3C2-01, R08-S3C2-01 Use information from text and text features to determine the sequence of activities needed to carry out a procedure.</p>	✓	✓	✓	✓	✓
<p>R06-S3C2-03 Interpret details from functional text for a specific purpose (e.g., to follow directions, to solve a problem, to perform a procedure, to answer questions).</p>	✓	✓	✓	✓	✓
WRITING STANDARDS					
<p>A variety of standards from Strand 1 (writing process), Strand 2 (writing elements) and Strand 3 (writing applications) may be addressed in Activity 3.2, based on how it is assigned by the teacher.</p>			✓		
LANGUAGE ARTS STANDARDS					
<p>LS-E2 Prepare and deliver an oral report in a content area and effectively convey the information through verbal and non-verbal communications with a specific audience.</p>		✓			