

STANDARD NAME	STANDARD DEFINITION	ADVANCED	PROFICIENT	DEVELOPING	EMERGING
<b>Astronomy</b>					
SC.AS.01.01.02	Compares and contrasts characteristics of planets and stars with regard to light reflecting, light emitting, orbiting, and composition	<ul style="list-style-type: none"> <li>*Describes the physical characteristics of all planets</li> <li>*Explains reasons for differences in light reflection between planets and stars</li> <li>*Illustrates and explains differences in light emission from various stars in the night sky</li> </ul>	<ul style="list-style-type: none"> <li>*Describes the physical characteristics of all planets</li> <li>*Identifies differences in light reflection between planets and stars</li> <li>*Can describe the differences of light emission from various stars in the night sky</li> </ul>	<ul style="list-style-type: none"> <li>*Describes the physical characteristics of four planets</li> <li>*Recognizes differences in light reflection between planets and stars</li> <li>*Understands there are differences of light emission from various stars in the night sky</li> </ul>	<ul style="list-style-type: none"> <li>*Understands there are differences in light reflection between planets and stars</li> <li>*Sees the differences of light emission from various stars in the night sky</li> </ul>
SC.AS.01.02.02	Uses light-years to describe distances between objects in the universe and compares the brightness of a star to its distance and size	<ul style="list-style-type: none"> <li>*Accurately defines light-year</li> <li>*Uses light-year units to determine distance between six or more celestial bodies</li> <li>*Accurately illustrates the relationship of size and brightness of a star to the distance from observer</li> </ul>	<ul style="list-style-type: none"> <li>*Accurately defines light-year</li> <li>*Uses light-year units to determine distance between four or more celestial bodies</li> <li>*Illustrates the relationship of size and brightness of a star to the distance from observer</li> </ul>	<ul style="list-style-type: none"> <li>*Defines light-year</li> <li>*Describes the relationship of size and brightness of a star to the distance from observer</li> </ul>	<ul style="list-style-type: none"> <li>*Understands the relationship of size and brightness of a star to the distance from observer</li> </ul>
SC.AS.01.03.02	Creates a model of the solar system illustrating size, location/position, composition, moons/rings, and conditions.	<ul style="list-style-type: none"> <li>* Lists the planets in order and gives at least three facts about each</li> <li>* Compares and orders distance from the sun, orbital circumference, day length, and year length of each planet</li> <li>* Explains and illustrates the components of a comet and its motion</li> <li>* Describes satellites, including their motion, function, and orbits</li> <li>* Explains and illustrates the life cycle of an asteroid traveling to the Earth</li> </ul>	<ul style="list-style-type: none"> <li>* Lists the planets in order and gives at least one fact about each</li> <li>* Compares and orders day length and year length of each planet</li> <li>* Explains the components of a comet and its motion</li> <li>* Defines satellites</li> <li>* Explains the life cycle of an asteroid traveling to the Earth</li> </ul>	<ul style="list-style-type: none"> <li>* Lists the planets in order</li> <li>* Determines the year length of each planet</li> <li>* Defines satellite, comet, and asteroid</li> </ul>	<ul style="list-style-type: none"> <li>* Names the planets</li> </ul>
<b>Climate, Weather and Water</b>					
SC.CW.01.01.02	Describes the weather using accepted meteorological terms, such as pressure systems, fronts, and precipitation	<ul style="list-style-type: none"> <li>* Explains and illustrates how the following instruments work and what they measure: barometer, hydrometer, thermometer, and anemometer</li> <li>* Predicts the weather and uses measurements to defend the prediction using at least three instruments</li> </ul>	<ul style="list-style-type: none"> <li>* Explains how the following instruments work and what they measure: barometer, hydrometer, thermometer, and anemometer</li> <li>* Predicts the weather and uses measurements to defend the prediction</li> </ul>	<ul style="list-style-type: none"> <li>* Explains how the following instruments work and what they measure: barometer, hydrometer, thermometer, and anemometer</li> <li>* Describes how to predict the weather with or without instruments</li> </ul>	<ul style="list-style-type: none"> <li>* Defines the following instruments and what they measure: barometer, hydrometer, thermometer, and anemometer</li> <li>* Briefly describes how others predict the weather</li> </ul>

SC.CW.01.02.02	Recognizes the relationship between the seasons and Earth's tilt relative to the sun and describes the day/night cycle as caused by the rotation of the Earth every 24 hours	<ul style="list-style-type: none"> <li>* Illustrates and labels the Earth's axis compared with its seasons, labeling distance from the sun during each season</li> <li>* Describes the need for leap years, and the historical use of calendars</li> <li>* Compares the climate of the northern and southern hemispheres through one year</li> <li>* Compares the day lengths at different latitudes, giving examples from 5 distinct regions on the globe</li> </ul>	<ul style="list-style-type: none"> <li>* Illustrates and labels the Earth's axis compared with its seasons</li> <li>* Describes the need for leap years</li> <li>* Compares the climate of the northern and southern hemispheres through one year</li> <li>* Compares the day lengths at different latitudes</li> </ul>	<ul style="list-style-type: none"> <li>* Explains the Earth's axis compared with its seasons</li> <li>* Describes leap years</li> <li>* Compares the day lengths in different seasons</li> </ul>	<ul style="list-style-type: none"> <li>* Identifies the rotation of the Earth around the sun with use of a reference</li> </ul>
SC.CW.01.03.02	Recognizes the relationship between phase changes (sublimation, condensation, evaporation) and energy transfer (convection, conduction, and radiation), and the affect on weather	<ul style="list-style-type: none"> <li>*Observes and describes sublimation, condensation and evaporation</li> <li>*Observes and describes energy transfer</li> <li>*Relates properties of matter and energy transfer to global systems such as weather and/or climate</li> </ul>	<ul style="list-style-type: none"> <li>*Observes and illustrates sublimation, condensation and evaporation</li> <li>*Observes and illustrates energy transfer</li> <li>*Relates properties of matter and energy transfer to weather patterns</li> </ul>	<ul style="list-style-type: none"> <li>*Describes sublimation, condensation and evaporation</li> <li>*Defines energy transfer</li> <li>*Lists properties of matter and energy transfer</li> </ul>	<ul style="list-style-type: none"> <li>*Defines sublimation, condensation and evaporation</li> <li>*Observes and illustrates energy transfer</li> <li>*Lists matter and energy transfer types</li> </ul>
<b>Energy can be transformed, transferred, and conserved</b>					
SC.EN.01.01.02	Explains that energy (i.e. heat, light, chemical, electrical, mechanical) can change form	<ul style="list-style-type: none"> <li>*Conducts experiments with energy transfer and describes 6 types of energy transfer</li> </ul>	<ul style="list-style-type: none"> <li>*Conducts experiments with energy transfer and describes at least 4 types of energy transfer</li> </ul>	<ul style="list-style-type: none"> <li>*Conducts experiments with energy transfer and describes at least 2 types of energy transfer</li> </ul>	<ul style="list-style-type: none"> <li>*Conducts experiments with energy transfer and describes 1 type of energy transfer</li> </ul>
SC.EN.01.02.02	Identifies the initial source and resulting change in forms of energy in common phenomena (e.g. sun to tree to wood to stove to cabin heat)	<ul style="list-style-type: none"> <li>*Models the process of energy transfer with five or more forms, in two unique systems</li> <li>*Labels model and identifies at least two types of transfer at each point</li> </ul>	<ul style="list-style-type: none"> <li>*Models the process of energy transfer with five or more forms, using a common system as an example (e.g. digestion)</li> <li>*Labels model and identifies at least two types of transfer at each point</li> </ul>	<ul style="list-style-type: none"> <li>*Describes the process of energy transfer</li> <li>*Describes four different types of energy transfer</li> </ul>	<ul style="list-style-type: none"> <li>*Defines energy transfer</li> <li>*Gives to examples of energy transfer</li> </ul>
<b>Forces that shape the Earth</b>					
SC.FE.01.01.02	Identifies strategies for minimizing erosion, such as reforestation, dikes, wind breaks, and off road activity guidelines.	<ul style="list-style-type: none"> <li>*Describes five strategies to minimize human impact on erosion</li> <li>*Creates a document for the benefit of all to decrease human induced erosion (brochure, interpretative sign, speech, etc)</li> </ul>	<ul style="list-style-type: none"> <li>*Describes three strategies to minimize human impact on erosion</li> <li>*Creates a document for the benefit of all to decrease human induced erosion (brochure, interpretative sign, speech, etc)</li> </ul>	<ul style="list-style-type: none"> <li>*Describes a strategy to minimize human impact on erosion</li> <li>*Creates a document for the benefit of all to decrease human induced erosion (brochure, interpretative sign, speech, etc)</li> </ul>	<ul style="list-style-type: none"> <li>*Lists a strategy to minimize human impact on erosion</li> </ul>

SC.FE.01.02.02	Interprets topographical maps to identify features, such as mountains, lakes, tundra, permafrost, and describes how the movement of the tectonic plates results in both slow changes (formation of mountains, ocean floors, and basins) and short-term events (volcanic eruptions, seismic waves, and earthquakes) on the surface	* Explains how vertical elevations and horizontal distances can be measured using contour lines, and give appropriate units *Uses contour lines to measure both vertical and horizontal distance *Identify ten geologic features on a topographical map and determine formation type (long term vs short term)	* Describes how vertical elevations and horizontal distances can be measured using contour lines, and give appropriate units *Uses contour lines to measure both vertical and horizontal distance *Identify eight geologic features on a topographical map and determine formation type (long term vs. short term)	* Using contour lines, measure horizontal and vertical distance; use appropriate units *Identify five geologic features on a topographical map and determine formation type (long term vs. short term)	* Explains how vertical elevations and horizontal distances can be measured using contour lines, and give appropriate units *Identify ten geologic features on a topographical map and determine formation type (long term vs. short term)
SC.FE.01.03.02	Uses models to show the relationship between convection currents within the mantle and the large-scale movement of the surface	*Describes properties of convection currents *Illustrates the rock cycle and identifies convection currents *Maps the layers of the Earth's surface (asthenosphere and lithosphere) *Describes the movement of the mantle (long-term and short-term effects)	*Defines convection currents *Illustrates the rock cycle and identifies convection currents *Maps the layers of the Earth's surface (asthenosphere and lithosphere) *Describes the movement of the mantle (long-term and short-term effects)	*Defines convection currents *Illustrates the rock cycle and identifies convection currents *Maps the layers of the Earth's surface (asthenosphere and lithosphere) *Describes the movement of the mantle (long-term and short-term effects)	*Defines convection currents *Illustrates the rock cycle and identifies convection currents *Maps the layers of the Earth's surface (asthenosphere and lithosphere) *Describes the movement of the mantle (long-term and short-term effects)
<b>Force, motion, their characteristics, relationships, and effects</b>					
SC.FM.01.01.01	Describes Newton's laws of motion and illustrates unbalanced forces will cause an object to accelerate	*Describes in own words Newton's Laws of Motion *Defines Newton's Laws mathematically *Compares and contrasts equilibrium and acceleration *Describes the motion of an object in acceleration *Draw a free body diagram of one object at equilibrium *Draw a free body diagram of an object that is accelerating	*Describe Newton's Laws of Motion *Define equilibrium and acceleration *Describe the forces exerted on an object that is accelerating *Draw a free body diagram of an object in equilibrium	*Defines Newton's Laws of Motion *Define equilibrium and acceleration *Describe the motion of an object that is accelerating	*Defines equilibrium and acceleration *Draw a free body diagram of an object in equilibrium
SC.FM.01.02.01	Recognizes electric currents and magnets can exert a force on each other, and describes the interactions between electrical charges and the interactions between magnetic poles	*Illustrates the similarities and differences between electric and magnetic forces *Illustrates and describes the interactions of electric charges and compare to the interactions of magnetic poles	*Shows the similarities between electric and magnetic forces *Illustrates the interactions of electric charges and compare these to interactions of magnetic poles	*Defines electric force *Defines magnetic force *Compares electric force to magnetic force	*Defines electric force *Defines magnetic force

SC.FM.01.03.01	Describes the characteristics of a wave in terms of amplitude, wavelength, and frequency	<ul style="list-style-type: none"> <li>*Defines amplitude, wavelength and frequency</li> <li>*Calculates wavelength, amplitude and frequency</li> <li>*Illustrates and describes how different wavelengths within the electromagnetic spectrum are commonly used (radio, x-rays, ultraviolet, visible light, etc)</li> <li>*Describes two types of waves</li> </ul>	<ul style="list-style-type: none"> <li>*Defines amplitude, wavelength and frequency</li> <li>*Describes how to calculate wavelength and frequency</li> <li>*Describes how different wavelengths (within the electromagnetic spectrum) are commonly used (radio, x-rays, ultraviolet, visible light etc)</li> </ul>	<ul style="list-style-type: none"> <li>*Defines two of the following: amplitude, wavelength, frequency</li> <li>*Can accurately calculate wavelength or frequency</li> </ul>	<ul style="list-style-type: none"> <li>*Defines one of the following: amplitude, wavelength, frequency</li> <li>*Knows formula for wavelength or frequency</li> </ul>
SC.FM.01.04.01	Demonstrates and explains circular motion	<ul style="list-style-type: none"> <li>*Illustrates and describes a body in uniform circular motion</li> <li>*Describes uniform circular motion</li> <li>*Compares uniform circular motion to no uniform circular motion</li> <li>*Labels vector forces of motion</li> </ul>	<ul style="list-style-type: none"> <li>*Illustrates a body in uniform circular motion with vector forces labeled</li> <li>*Illustrates a body in nonuniform circular motion with vector forces labeled</li> <li>*Describes nonuniform circular motion</li> <li>*Describes uniform circular motion</li> </ul>	<ul style="list-style-type: none"> <li>*Defines uniform circular motion</li> <li>*Defines nonuniform circular motion</li> <li>*Illustrates a body in uniform circular motion</li> </ul>	<ul style="list-style-type: none"> <li>*Defines uniform circular motion</li> </ul>
<b>Geochemical Cycles</b>					
SC.GC.01.01.02	<ul style="list-style-type: none"> <li>*Describes the rock cycle and its relationship to igneous, metamorphic, and sedimentary rocks</li> <li>*Illustrates and describes mechanism for physical change</li> </ul>	<ul style="list-style-type: none"> <li>*Describes all phases of the rock cycle</li> <li>*Describes mechanisms for physical changes (rock)</li> <li>*Describes igneous, metamorphic and sedimentary rock</li> </ul>	<ul style="list-style-type: none"> <li>*Models all phases of the rock cycle</li> <li>*Identifies mechanisms for physical change</li> <li>*Clearly labels rock at all three phases: igneous, metamorphic and sedimentary</li> </ul>	<ul style="list-style-type: none"> <li>*Models two phases of the rock cycle</li> <li>*Identifies mechanisms for physical change</li> <li>*Defines igneous, metamorphic and sedimentary</li> </ul>	<ul style="list-style-type: none"> <li>*Models a phase of the rock cycle</li> <li>*Defines two of the following terms: igneous, metamorphic, sedimentary</li> </ul>
SC.GC.01.02.02	Makes connections between components of the locally observable geologic environment and the rock cycle	<ul style="list-style-type: none"> <li>*Conducts research on a local landform (Cook Inlet, Flat Top, Eklutna, Sleeping Lady, Iliamna, etc) and reports on research</li> <li>*Illustrates and describes the phases of the rock cycle on local landform</li> </ul>	<ul style="list-style-type: none"> <li>*Conducts research on a local landform (Cook Inlet, Flat Top, Eklutna, Sleeping Lady, Iliamna, etc) and describes research</li> <li>*Illustrates the phases of the rock cycle on local landform</li> </ul>	<ul style="list-style-type: none"> <li>*Conducts research on local landform (Cook Inlet, Flat Top, Eklutna, Sleeping Lady, Iliamna, etc)</li> </ul>	<ul style="list-style-type: none"> <li>*Reads about local landform (Cook Inlet, Flat Top, Eklutna, Sleeping Lady, Iliamna, etc)</li> </ul>
SC.GC.01.03.02	Illustrates the water cycle and applies knowledge of the water cycle to explain changes in the Earth's surface	<ul style="list-style-type: none"> <li>*Illustrates and describes the water cycle</li> <li>*Describes seasonal changes of salinity and turbidity of water</li> <li>*Researches and reports on three water issues in the United States due to water cycle abnormalities (both short term and long term)</li> <li>*Researches and reports on a geologically historic event which resulted in water loss or abundance (glaciation, desertification, ice age, flooding, etc)</li> </ul>	<ul style="list-style-type: none"> <li>*Illustrates the water cycle</li> <li>*Researches and describes two water issues in the United States due to water cycle abnormalities (both short term and long term)</li> <li>*Researches and describes a geologically historic event which resulted in water loss or abundance (glaciation, desertification, ice age, flooding, etc)</li> </ul>	<ul style="list-style-type: none"> <li>*Illustrates the water cycle</li> <li>*Researches a water issue in the United States due to water cycle abnormalities (both short term and long term)</li> <li>*Researches a geologically historic event which resulted in water loss or abundance (glaciation, desertification, ice age, flooding, etc)</li> </ul>	<ul style="list-style-type: none"> <li>*Defines the water cycle</li> <li>*Lists some geologically historical events in which the water cycle changed the surface of the Earth</li> </ul>
<b>Scientific Process</b>					

SC.SP.01.01.02	Asks testable questions	<ul style="list-style-type: none"> <li>*Describes testable and non-testable questions</li> <li>*Formulates and defends testable questions derived by emerging patterns in a complex system</li> </ul>	<ul style="list-style-type: none"> <li>*Defines testable and non-testable questions</li> <li>*Formulates testable questions that lead to information about a complex system</li> </ul>	<ul style="list-style-type: none"> <li>*Compares and contrasts testable and non-testable questions</li> </ul>	<ul style="list-style-type: none"> <li>*Recognizes a testable question</li> </ul>
SC.SP.01.02.02	Predict outcome and develop a hypothesis based on a testable question	<ul style="list-style-type: none"> <li>*Develops and defends a hypothesis based on a testable question</li> <li>*Predicts and defends an outcome based on emerging patterns in a complex system</li> </ul>	<ul style="list-style-type: none"> <li>*Develops a hypothesis based on a testable question</li> <li>*Predicts an outcome based on evidence</li> </ul>	<ul style="list-style-type: none"> <li>*Develops a hypothesis based on background knowledge</li> </ul>	<ul style="list-style-type: none"> <li>*Identifies a hypothesis</li> <li>*Predicts an outcome</li> </ul>
SC.SP.01.03.02	Collaborate to design and conduct simple repeatable investigations	<ul style="list-style-type: none"> <li>*Designs and conducts investigations in a group multiple times that are valid and reliable</li> <li>*Reflects on investigations as a group</li> <li>*Identifies control groups and dependent and independent variables</li> </ul>	<ul style="list-style-type: none"> <li>*Designs investigations as a group that are valid or reliable using all steps of the scientific method</li> <li>*Conducts investigations as designed</li> <li>*Identifies experimental or control groups</li> <li>*Identifies dependent and independent variables</li> </ul>	<ul style="list-style-type: none"> <li>*Designs investigations as a group using one or more steps of the scientific method</li> <li>*Conducts investigations as designed</li> <li>*Identifies dependent or independent variables</li> </ul>	<ul style="list-style-type: none"> <li>*Designs investigations as a group</li> <li>*Conducts investigations with changes to design</li> <li>*Identifies variables</li> </ul>
SC.SP.01.04.02	Collect and record data using appropriate tools, include measurements, observations, descriptions, and classifications when appropriate	<ul style="list-style-type: none"> <li>*Collects and records data throughout each trial for a valid number of trials</li> <li>*Uses and describes appropriate measurement tools for data collection</li> <li>*Shows evidence of appropriate safety methods used in data collection</li> <li>*Describes appropriate safety methods used in data collection</li> </ul>	<ul style="list-style-type: none"> <li>*Collects and records data at beginning and end of each trial for a valid number of trials</li> <li>*Uses appropriate measurement tools for data collection</li> <li>*Shows evidence of appropriate safety methods used in data collection</li> </ul>	<ul style="list-style-type: none"> <li>*Collects and records data from each trial for a valid number of trials</li> <li>*Uses some appropriate measurement tools for data collection</li> <li>*Shows evidence of knowledge of appropriate safety methods used in data collection</li> </ul>	<ul style="list-style-type: none"> <li>*Collects and records data for data collection</li> <li>*Uses measurement tools for data collection</li> <li>*Identifies safety methods in data collection</li> </ul>
SC.SP.01.05.02	Analyze data for range, mean, median, and mode	<ul style="list-style-type: none"> <li>*Describes the use of the following terms for data analysis: Mean, median, mode and range</li> <li>*Organizes data and tests for range, mean, median and mode</li> <li>*Explains various analyses using two of the following: range, mean, median or mode</li> </ul>	<ul style="list-style-type: none"> <li>*Defines the following terms: Mean, median, mode and range</li> <li>*Organizes data and tests for range, mean, median and mode</li> </ul>	<ul style="list-style-type: none"> <li>*Defines mean, median, mode or range</li> <li>*Describes how data is organized</li> <li>*Explains how to test for range, mean, median and mode</li> </ul>	<ul style="list-style-type: none"> <li>*Defines mean</li> <li>*Describes why data should be organized</li> <li>*Describes how to test for mean</li> </ul>
SC.SP.01.06.02	Interpret data and make conclusions with reference to hypothesis	<ul style="list-style-type: none"> <li>*Constructs and defends conclusions based on data, observations and findings</li> <li>*Includes more than one specific reason to support or refine hypothesis</li> <li>*Reflects on study and makes appropriate revisions</li> </ul>	<ul style="list-style-type: none"> <li>*Constructs conclusions based on data, observations and findings</li> <li>*Includes detailed evaluation of hypothesis</li> <li>*Includes one specific reason to support or reject hypothesis</li> </ul>	<ul style="list-style-type: none"> <li>*Constructs conclusions based on data, observations or findings</li> <li>*Includes broad evaluation of hypothesis</li> <li>*Determines whether to support or reject hypothesis</li> </ul>	<ul style="list-style-type: none"> <li>*Constructs conclusions</li> <li>*Includes an evaluation of hypothesis</li> </ul>

SC.SP.01.07.02	Communicate experimental findings and explains differences in results of repeated experiments	<ul style="list-style-type: none"> <li>*Prepares professional presentation media</li> <li>*Presents and defends investigation, including methods and results to audience</li> <li>*Defends conclusions to audience using specific examples from investigation</li> <li>*Includes data trends, errors and discrepancies, and cause and effect</li> </ul>	<ul style="list-style-type: none"> <li>*Prepares presentation media</li> <li>*Presents investigation, including methods and results to audience</li> <li>*Defends conclusions to audience using general examples from investigation</li> <li>*Includes data trends, errors and discrepancies, or cause and effect</li> </ul>	<ul style="list-style-type: none"> <li>*Prepares presentation media</li> <li>*Presents investigation</li> <li>*Describes conclusions to audience using an example from investigation</li> <li>*Includes data trends or cause and effect</li> </ul>	<ul style="list-style-type: none"> <li>*Prepares presentation</li> <li>*Presents investigation</li> <li>*Describes conclusions to audience</li> <li>*Includes data trends</li> </ul>
SC.SP.01.08.02	Identify and evaluate the sources used to support scientific statements and revises a personal idea when presented with data inconsistent with that personal idea (e.g. rates of falling bodies of different masses)	<ul style="list-style-type: none"> <li>*Compares and contrast valid and invalid sources of information</li> <li>*Evaluates multiple sources used to support scientific statements</li> <li>*Describes a personal scientific idea</li> <li>*Defends the idea based on multiple sources of information</li> <li>*Revises personal scientific idea</li> </ul>	<ul style="list-style-type: none"> <li>*Describes five valid sources of information</li> <li>*Evaluates two or more sources used to support scientific statements</li> <li>*Describes a personal scientific idea</li> <li>*Refines personal scientific idea based on sources of information (expands or revises)</li> </ul>	<ul style="list-style-type: none"> <li>*Lists five valid sources of information</li> <li>*Describes one source used to support scientific statements</li> <li>*Defines a personal scientific idea</li> </ul>	<ul style="list-style-type: none"> <li>*Lists some valid sources of scientific information</li> <li>*States a personal scientific idea</li> </ul>
SC.SP.01.09.02	Design and conduct a simple investigation about the local environment	<ul style="list-style-type: none"> <li>*Designs and conducts a local study to gain scientific knowledge of environment</li> <li>*Presents and defends conclusions to multiple members of the community</li> </ul>	<ul style="list-style-type: none"> <li>*Designs and conducts a local study of interest</li> <li>*Presents conclusions of study</li> </ul>	<ul style="list-style-type: none"> <li>*Designs a local study of interest</li> <li>*Conducts a local study of interest</li> </ul>	<ul style="list-style-type: none"> <li>*Designs a local study of interest</li> </ul>
SC.SP.01.10.02	Investigates the basis of local knowledge (e.g. describing and predicting weather) and shares that information	<ul style="list-style-type: none"> <li>*Researches the local knowledge of 3 systems</li> <li>*Presents the sources of information upon which the local knowledge is based</li> </ul>	<ul style="list-style-type: none"> <li>*Researches the local knowledge of one system</li> <li>*Describes the sources of information which the local knowledge is based upon</li> </ul>	<ul style="list-style-type: none"> <li>*Researches knowledge of a system</li> <li>*Lists the sources of information which the local knowledge is based upon</li> </ul>	<ul style="list-style-type: none"> <li>*Researches a system</li> <li>*Lists a source of information which local knowledge is based upon</li> </ul>
SC.SP.01.11.02	Compares own work to the work of peers in order to identify multiple paths used to investigate and evaluate potential solutions to a question or problem	<ul style="list-style-type: none"> <li>*Presents an independent investigation to a group of peers</li> <li>*Compares and contrasts methods of investigations</li> <li>*Evaluates potential solutions to a specific questions or problem within the investigation as identified by the group</li> <li>*Describes alternative designs for investigation</li> </ul>	<ul style="list-style-type: none"> <li>*Describes an independent investigation to a group of peers</li> <li>*Compares own methods to those of a peer</li> <li>*Identifies alternative paths taken to investigate</li> <li>*Evaluates potential solutions to questions or problems within the investigation</li> </ul>	<ul style="list-style-type: none"> <li>*Describes an independent investigation</li> <li>*Compares own methods to those of a peer</li> <li>*Identifies potential paths to take for investigation</li> <li>*Identifies potential solutions to questions or problems within the investigation</li> </ul>	<ul style="list-style-type: none"> <li>*Describes an investigation</li> <li>*Identifies alternative paths taken to investigate</li> <li>*Identifies questions or problems within the investigation</li> </ul>

SC.SP.01.12.02	Describes how public policy affects own life using scientific knowledge and technology	<ul style="list-style-type: none"> <li>*Presents 4 specific public policies which affect own life to members of the community</li> <li>*Uses appropriate scientific knowledge in presentation</li> <li>*Uses appropriate technology</li> <li>*Consistently uses appropriate scientific and technological terminology</li> </ul>	<ul style="list-style-type: none"> <li>*Presents 2 specific public policies which affect own life, to peers</li> <li>*Shows scientific knowledge in presentation</li> <li>*Uses appropriate technology</li> <li>*Often uses appropriate scientific and technological vocabulary</li> </ul>	<ul style="list-style-type: none"> <li>*Presents on a specific public policy which affects own life</li> <li>*Shows some scientific knowledge</li> <li>*Uses technology</li> <li>*Uses some appropriate scientific and technological vocabulary</li> </ul>	<ul style="list-style-type: none"> <li>*Describes a public policy which affects own life</li> <li>*Shows some scientific knowledge</li> <li>*Uses some appropriate scientific or technological vocabulary</li> </ul>
SC.SP.01.13.02	Recognizes the effects on our lives and society of a past scientific discovery, invention or scientific breakthrough (space discovery, DDT, internal combustion engine)	<ul style="list-style-type: none"> <li>*Describes a historical scientific event (discovery, invention or breakthrough) and directly connects this event to our society today</li> <li>*Presents on the life and/or career of a historically significant scientist</li> </ul>	<ul style="list-style-type: none"> <li>*Describes a historical scientific event (discovery, invention or breakthrough) and directly connects this event to own self or our society today</li> <li>*Describes the life and/or career of a historically significant scientist</li> </ul>	<ul style="list-style-type: none"> <li>*Describes a historical scientific event (discovery, invention or breakthrough)</li> <li>*Describes the career of a historically significant scientist</li> </ul>	<ul style="list-style-type: none"> <li>*Identifies a historical scientific event (discovery, invention or breakthrough)</li> </ul>