





Unit of Study	The sequence of Units of Study provides a coherent flow to science instruction throughout the year.
Interconnections Lessons	Specific lessons, listed in order of which Essential Question they correspond to, are listed in the map to help plan your pacing of material.
Science Content/Language Objectives	The Science Content and Language Objectives are to be posted for each lesson, restated to students during the lesson, and revisited at the end of each lesson. These are written as “I Can” statements.
Key Concepts for Differentiation 	<p>In an effort to assist teachers in the process of differentiation in Tier I teaching, Key Concepts have been identified in the curriculum maps as those specific objectives a teacher would focus on during small group instruction with struggling students.</p> <p>Key concepts cover minimum, basic skills and knowledge every student must master. Key Concepts are <u>not</u> an alternative to teaching the entire Utah Core Standards, rather they emphasize which concepts to prioritize for differentiation.</p>
Vocabulary	Use in word walls, or in science notebooks and graphic organizers.
Additional Resources/Notes	Teachers are encouraged to make notes or jot down resources they find useful for each unit.
Assessment	Each Interconnection lesson has an assessment, but you may also look at more general options such as Exit slips, graphic organizers, class discussion, homework

Unit of Study 1	5 th Grade	Quarter 1		Science Mar 2013 ed.
Concepts:			Skills:	
change, cause and effect			observation, sort, sequence, measure, compare, classify	
Standards:				
Standard II: Students will understand that volcanoes, earthquakes, uplift, weathering, and erosion reshape Earth's surface.				
Objective 1: Describe how weathering and erosion change Earth's surface.				
Objective 2: Explain how volcanoes, earthquakes, and uplift affect Earth's surface.				
Objective 3: Relate the building up and breaking down of Earth's surface over time to the various physical land features.				
Science Content Objectives		Vocabulary students should use		Lessons
<p>Key I can describe how weathering and erosion change Earth's surface.</p> <ul style="list-style-type: none"> I can explain how volcanoes, earthquakes, and uplift affect Earth's surface. I can relate the building up and breaking down of Earth's surface over time to the various physical land features. 		<ul style="list-style-type: none"> earthquakes erode erosion faults uplift volcanoes 	<ul style="list-style-type: none"> weathering buttes arches glaciers geological deposition 	<p><u>Essential Question #1</u></p> <ul style="list-style-type: none"> Shaping the Land* Earthquakes and Plate Tectonics <p><u>Essential Question #2</u></p> <ul style="list-style-type: none"> It Takes Time <p><u>Essential Question #3</u></p> <ul style="list-style-type: none"> Earth's Past <p><i>*Key Concepts covered in these lessons.</i></p> <p>Additional Resources:</p>
Science Language Objectives				
<ul style="list-style-type: none"> Explain the relationships or interactions between concepts in a scientific text. Determine the meaning of academic words and phrases. Compare/contrast ideas in a scientific text. Analyze multiple accounts of the same topic, noting similarities and differences. Draw on information from multiple sources to answer a question. Read informational science texts. Write informative texts to clearly explain a topic. Produce clear, coherent writing appropriate to the task. Use technology to produce writing. Conduct short research projects. Draw evidence from informational texts to support analysis, reflection and research. Participate in collaborative discussions 				
Assessment Options: Interconnections lessons-each lesson contains an assessment				
General: Homework, lab notebooks, quiz, class discussion, projects, graphic organizers				

Unit of Study 3	5 th Grade	Quarter 2		Science Mar 2013 ed.
Concepts:		Skills:		
change, cause and effect		observation, use supporting evidence, description		
Standards:				
Standard V: Students will understand that traits are passed from the parent organism to their offspring, and that sometimes the offspring may possess variations of these traits that may help or hinder survival in a given environment.				
Objective 1: Using supporting evidence, show that traits are transferred from a parent organism to its offspring.				
Objective 2: Describe how some characteristics could give a species a survival advantage in a particular environment.				
Science Content Objectives		Vocabulary students should use		Lessons
<p> I can use supporting evidence to show that traits are transferred from a parent organism to its offspring.</p> <ul style="list-style-type: none"> I can describe how some characteristics could give a species a survival advantage in a particular environment. 		<ul style="list-style-type: none"> inherited environment species offspring traits variations survival instincts 	<ul style="list-style-type: none"> population specialized structure organism life cycle parent organism learned behavior 	<p><u>Essential Question #1</u></p> <ul style="list-style-type: none"> Inherited Traits Introduction* Hey Good Looking!* <p><u>Essential Question #2</u></p> <ul style="list-style-type: none"> Inherited Traits and Life Cycles* <p><u>Essential Question #3</u></p> <ul style="list-style-type: none"> Survival Advantage Introduction Adaptations, Populations & Variations Change of Address* <p>Essential Question #4</p> <ul style="list-style-type: none"> Inherited vs. Learned* <p><i>*Key Concepts covered in these lessons.</i></p> <p>Additional Resources:</p>
Science Language Objectives				
<ul style="list-style-type: none"> Explain the relationships or interactions between concepts in a scientific text. Determine the meaning of academic words and phrases. Compare/contrast ideas in a scientific text. Analyze multiple accounts of the same topic, noting similarities and differences. Draw on information from multiple sources to answer a question. Read informational science texts. Write informative texts to clearly explain a topic. Produce clear, coherent writing appropriate to the task. Use technology to produce writing. Conduct short research projects. Draw evidence from informational texts to support analysis, reflection and research. Participate in collaborative discussions 				
Assessment Options: Interconnections lessons-each lesson contains an assessment				
General: Homework, lab notebooks, quiz, class discussion, projects, graphic organizers				

Unit of Study 5A	5 th Grade	Quarter 3 & 4	Science Mar 2013 ed.
Concepts:		Skills:	
change, cause and effect, change over time		description, evaluation, investigation, comparison, hypothesize	
Standards:			
<p>Standard I: Students will understand that chemical and physical changes occur in matter.</p> <p>Objective 1: Describe that matter is neither created nor destroyed even though it may undergo change.</p> <p>Objective 2: Evaluate evidence that indicates a physical change has occurred.</p> <p>Objective 3: Investigate evidence for changes in matter that occur during a chemical reaction.</p>			
Science Content Objectives	Vocabulary students should use		Lessons
<ul style="list-style-type: none"> I can describe that matter is neither created nor destroyed even though it may undergo change. 🔑 I can evaluate evidence that indicates a physical change has occurred. 🔑 I can investigate evidence for changes in matter that occur during a chemical reaction. 	<ul style="list-style-type: none"> heat substance chemical change dissolve physical change matter 	<ul style="list-style-type: none"> product reactants solid liquid weight 	<p>Quarter 3:</p> <p><u>Essential Question #1</u></p> <ul style="list-style-type: none"> What is Matter? Solid, Liquid & Gas* Conservation of Matter Physical Change* Chromatography* Chemical Reactions* Cookie Caper: A Chemistry Mystery* <p>*Key Concepts covered in these lessons.</p> <p>Additional Resources:</p>
Science Language Objectives			
<ul style="list-style-type: none"> Explain the relationships or interactions between concepts in a scientific text. Determine the meaning of academic words and phrases. Compare/contrast ideas in a scientific text. Analyze multiple accounts of the same topic, noting similarities and differences. Draw on information from multiple sources to answer a question. Read informational science texts. Write informative texts to clearly explain a topic. Produce clear, coherent writing appropriate to the task. Use technology to produce writing. Conduct short research projects. Draw evidence from informational texts to support analysis, reflection and research. Participate in collaborative discussions 			
<p>Assessment Options: Interconnections lessons-each lesson contains an assessment</p> <p>General: Homework, lab notebooks, quiz, class discussion, projects, graphic organizers</p>			

Unit of Study 5B	5 th Grade	Quarter 3 & 4	Science Mar 2013 ed.
Concepts:		Skills:	
change, cause and effect, change over time		description, evaluation, investigation, comparison, hypothesize	
Standards:			
<p>Standard III: Students will understand that magnetism can be observed when there is an interaction between the magnetic fields of magnets or between a magnet and materials made of iron.</p> <p>Objective 1: Investigate and compare the behavior of magnetism using magnets.</p> <p>Objective 2: Describe how the magnetic field of Earth and a magnet are similar.</p> <p>Standard IV: Students will understand features of static and current electricity.</p> <p>Objective 1: Describe the behavior of static electricity as observed in nature and everyday occurrences.</p> <p>Objective 2: Analyze the behavior of current electricity.</p>			
Science Content Objectives	Vocabulary students should use	Lessons	
<p> I can investigate and compare the behavior of magnetism using magnets.</p> <ul style="list-style-type: none"> I can describe how the magnetic field of Earth and a magnet are similar. I can describe the behavior of static electricity as observed in nature and everyday occurrences. <p> I can analyze the behavior of electrical current.</p>	<ul style="list-style-type: none"> battery complete circuit incomplete circuit current conductor insulator pathway power source attract compass electro-magnetism 	<ul style="list-style-type: none"> magnetic force magnetic field natural magnet permanent magnet properties repel static electricity temporary magnet switch load 	<p>Quarter 4:</p> <p><u>Essential Question #2</u></p> <ul style="list-style-type: none"> Magnet and Compass Investigation* <p><u>Essential Question #3</u></p> <ul style="list-style-type: none"> Magnet Investigation* <p><u>Essential Question #4</u></p> <ul style="list-style-type: none"> Static Electricity Static Electricity & Lightning <p><u>Essential Question #5</u></p> <ul style="list-style-type: none"> Insulator or Conductor?* Simple Circuits* Circuit Projects* <p><i>*Key Concepts covered in these lessons.</i></p> <p>Additional Resources:</p>
Science Language Objectives			
<ul style="list-style-type: none"> Explain the relationships or interactions between concepts in a text. Determine the meaning of academic words and phrases. Compare/contrast ideas in a scientific text. Analyze multiple accounts of the same topic, noting similarities and differences. Draw on information from multiple sources to answer a question. Read informational science texts. Write informative texts to clearly explain a topic. Produce clear, coherent writing appropriate to the task. Use technology to produce writing. Conduct short research projects. Draw evidence from informational texts to support analysis, reflection and research. Participate in collaborative discussions 			
<p>Assessment Options: Interconnections lessons-each lesson contains an assessment</p> <p>General: Homework, lab notebooks, quiz, class discussion, projects, graphic organizers</p>			

