Pacing Guide 2010-2011
Subject: Science
Grade Level : 6

Grading Period: First through Fourth Quarters

Approximate Time for Teaching Standards	Standard	Core Instructional Materials	Strategic Supplementary Materials	Assessment	
				Mat'ls	District
1 week (8/5-8/11) LAB SAFETY		Pg 648-650 in Science book	Lab Safety Book by Loose in the Lab	Lab Safety Test by loose in the lab	
2 weeks (8/12-8/26) Chapter 1 Mapping Earth's Surface	7b. Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data. 7c. Construct appropriate graphs from data and develop qualitative statements about the relationships between variables. 7f. Read a topographic map and a geologic map for evidence provided on the maps and construct and interpret a simple scale map. 7h. Identify changes in natural phenomena over time without manipulating the phenomena (e.g., a tree limb, a grove of trees, a stream, a hill slope).	Glencoe Focus on Earth Science Textbook	Landforms- drawing and reading contour lines- topographic maps Video- Topographic maps Mind Jogger Science Notebook 1-8 Chapter One Resources Reinforcement Chapter Review Pg 673 Topographic Map Symbols Construct a topographic map using foam forms	Chapter One test	

3 weeks (8/27-9/17) Chapter 2 Earth's Structure	1e. Students know major geologic events, such as earthquakes, volcanic eruptions, and mountain building, result from plate motions. 1f. Students know how to explain major features of California geology (including mountains, faults, volcanoes) in terms of plate tectonics 1b. Students know Earth is composed of several layers: a cold, brittle lithosphere; a hot, convecting mantle; and a dense, metallic core. 2a. Students know water running downhill is the dominant process in shaping the landscape, including California's landscape. 2c. Students know beaches are dynamic systems in which the sand is supplied by rivers and moved along the coast by the action of waves. 4c. Students know heat from Earth's interior reaches the surface primarily through convection. 6b. Students know different natural energy and material resources, including air, soil, rocks, minerals, petroleum, fresh water, wildlife, and forests, and know how to classify them as renewable or nonrenewable. 6c. Students know the natural origin of the materials used to make common objects. 7c. Construct appropriate graphs from data and develop qualitative statements about the relationships between variables. 7e. Recognize whether evidence is consistent with a proposed explanation. 7f. Read a topographic map and a geologic map for evidence provided on	Textbook	Lab: Minerals pg. 93 Earth's Layers diorama Mind Jogger Science Notebook 9-20 Chapter two resources Reinforcement Chapter Review	Chapter two test	

	the maps and construct and interpret a simple scale map. 7g. Interpret events by sequence and time from natural phenomena (e.g., the relative ages of rocks and intrusions).				
3 weeks (9/21-10/08) Chapter 3 Thermal Energy and Heat	3a. Students know energy can be carried from one place to another by heat flow or by waves, including water, light and sound waves, or by moving objects. 3b. Students know that when fuel is consumed, most of the energy released becomes heat energy. 3c. Students know heat flows in solids by conduction (which involves no flow of matter) and in fluids by conduction and by convection (which involves flow of matter). 3d. Students know heat energy is also transferred between objects by radiation (radiation can travel through space). 7a. Develop a hypothesis. 7c. Construct appropriate graphs from data and develop qualitative statements about the relationships between variables.	Textbook	Heating Friction Lab pg. 136 text Mind Jogger Science Notebook 21-34 Chapter three resources Reinforcement Chapter Review	Chapter three test Thermos Project Pg. 152-153	Quarter One Benchmark test (10/4-10/08)
3 days 10/11-10/13	**BENCHMARK REMEDIATION/ENRICHMENT ACTIVITIES**				
	1a. Students know evidence of plate	Textbook			

3 weeks (10/14-11/4) Chapter 4 Plate Tectonics	tectonics is derived from the fit of the continents; the location of earthquakes, volcanoes, and midocean ridges; and the distribution of fossils, rock types, and ancient climatic zones. 1b. Students know Earth is composed of several layers: a cold, brittle lithosphere; a hot, convecting mantle; and a dense, metallic core. 1c. Students know lithospheric plates the size of continents and oceans move at rates of centimeters per year in response to movements in the mantle. 4c. Students know heat from Earth's interior reaches the surface primarily through convection. 7e. Recognize whether evidence is consistent with a proposed explanation. 7g. Interpret events by sequence and time from natural phenomena (e.g., the relative ages of rocks and intrusions).		Continental Drift Lab pg. 172 Pangea- Magazine articles Science Notebook 35-46 Chapter four resources Reinforcement Chapter Review Mind Jogger	Chapter four test	
2 weeks (11/5-11/18) Chapter 5 Plate Boundaries and California	1c. Students know lithospheric plates the size of continents and oceans move at rates of centimeters per year in response to movements in the mantle. 1d. Students know the earthquakes are sudden motions along breaks in the crust called faults and that volcanoes and fissures are locations where magma reaches the surface. 1e. Students know major geologic events, such as earthquakes, volcanic eruptions, and mountain building, result from plate motions. 1f. Students know how to explain major features of California geology (including mountains, faults, volcanoes)	Textbook	Launch Lab pg 207 Science notebook 47-54 Chapter 5 resources Reinforcement Chapter review Mind Jogger	Chapter five test	

	in terms of plate tectonics. 7a. Develop a hypothesis. 7bSelect and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data. 7e. Recognize whether evidence is consistent with a proposed explanation. 7g. Interpret events by sequence and time from natural phenomena (e.g., the relative ages of rocks and intrusions).				
3 weeks (11/19- 12/14) Chapter 6 Earthquakes	1d. Students know that earthquakes are sudden motions along breaks in the crust called faults and that volcanoes and fissures are locations where magma reaches the surface. 1e. Students know major geologic events, such as earthquakes, volcanic eruptions, and mountain building, result from plate motions. 1g. Students know how to determine the epicenter of an earthquake and know that the effects of an earthquake on any region vary, depending on the size of the earthquake, the distance of the region from the epicenter, the local geology, and the type of construction in the region. 2d. Students know earthquakes, volcanic eruptions, landslides, and floods change human and wildlife habitats. 7e. Recognize whether evidence is consistent with a proposed explanation.	Textbook	Earthquakes Lab 45-47 (4 in 1 lab book) Modified Mercalli Scale 39-43 (4 in 1 lab book) Science notebook 55-68 Chapter 6 resources Reinforcement Chapter Review Mind Jogger	Chapter six test	

12/15-12/17 2 weeks (1/6-1/20) Chapter 7 Volcanoes	**BENCHMARK ENRICHMENT AND REMEDIATION ACTIVITIES** 1d. Students know that earthquakes are sudden motions along breaks in the crust called faults and that volcanoes and fissures are locations where magma reaches the surface. 1e. Students know major geologic events, such as earthquakes, volcanic eruptions, and mountain building, result from plate motions. 1f. Students know how to explain major features of California geology (including mountains, faults, volcanoes) in terms of plate tectonics. 2d. Students know earthquakes, volcanic eruptions, landslides, and floods change human and wildlife habitats. 7a. Develop a hypothesis 7bSelect and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data. 7d Communicate the steps and results from an investigation in written reports and oral presentations. 7g Interpret events by sequence and time from natural phenomena (e.g., the relative ages of rocks and intrusions). 7h Identify changes in natural phenomena over time without manipulating the phenomena (e.g., a tree limb, a grove of trees, a stream, a hill slope).	Textbook	Science Notebook 69-80 Chapter 7 resources Reinforcement Chapter Review Mind Jogger Volcano Video Virtual Lab: Volcanic Eruptions Volcano Project	Chapter seven test Volcano Project Rubric	

3 weeks (1/21-2/11) Chapter 8 Weathering and Erosion	1f. Students know how to explain major features of California geology (including mountains, faults, volcanoes) in terms of plate tectonics. 2a. Students know water running downhill is the dominant process in shaping the landscape, including California's landscape. 2b. Students know rivers and streams are dynamic systems that erode, transport sediment, change course, and flood their banks in natural and recurring patterns. 2c. Students know beaches are dynamic systems in which the sand is supplied by rivers and moved along the coast by the action of waves. 2d. Students know earthquakes, volcanic eruptions, landslides, and floods change human and wildlife habitats. 7e. Recognize whether evidence is consistent with a proposed explanation.	Textbook	Science Notebook 81-92 Chapter 8 resources Reinforcement Chapter Review Stream Table Lab pg. 364-365 Virtual Lab: Weathering Mind Jogger	Chapter 8 test	
3 weeks (2/14-3/4) Chapter 9 Earth's Atmosphere	3c. Students know heat flows in solids by conduction (which involves no flow of matter) and in fluids by conduction and by convection (which involves flow of matter). 3d. Students know heat energy is also transferred between objects by radiation (radiation can travel through space). 4a. Students know the sun is the major source of energy for phenomena on Earth's surface; it powers winds, ocean currents, and the water cycle.	Textbook	Science Notebook 93-104 Chapter 9 resources Reinforcement Chapter Review Earth's Atmosphere Video Mind Jogger Virtual Lab: Describe	Chapter 9 test	

	4b. Students know solar energy reaches Earth through radiation, mostly in the form of visible light. 4d. Students know convection currents distribute heat in the atmosphere and oceans. 4e. Students know differences in pressure, heat, air movement, and humidity result in changes of weather. 7c. Construct appropriate graphs from data and develop qualitative statements about the relationships between variables.				
3/7-3/9 2 ½ weeks (3/10-3/25) Chapter 10 Oceans	**BENCHMARK REMEDIATION AND ENRICHMENT ACTIVITIES** 1e. Students know major geologic events, such as earthquakes, volcanic eruptions, and mountain building, result from plate motions. 2c. Students know beaches are dynamic systems in which the sand is supplied by rivers and moved along the coast by the action of waves. 4a. Students know the sun is the major source of energy for phenomena on Earth's surface; it powers winds, ocean currents, and the water cycle. 4d. Students know convection currents distribute heat in the atmosphere and oceans. 7c. Construct appropriate graphs from data and develop qualitative statements about the relationships between variables. 7f. Read a topographic map and a geologic map for evidence provided on the maps and construct and interpret a simple scale map.	Textbook	Science Notebook 105-118 Chapter 10 resources Reinforcement Chapter Review Mind Jogger Ocean Video Virtual Lab: Tides	Chapter 10 test	Quarter three Benchmark test (3/9-3/12)

2 weeks (3/28-4/8) Chapter 11 Weather and Climate	2d. Students know earthquakes, volcanic eruptions, landslides, and floods change human and wildlife habitats. 4a. Students know the sun is the major source of energy for phenomena on Earth's surface; it powers winds, ocean currents, and the water cycle. 4e. Students know differences in pressure, heat, air movement, and humidity result in changes of weather. 7d. Communicate the steps and results from an investigation in written reports and oral presentations 7h. Identify changes in natural phenomena over time without manipulating the phenomena (e.g., a tree limb, a grove of trees, a stream, a hill slope).	Textbook	Science notebook 119-132 Chapter 11 resources Reinforcement Chapter Review Mind Jogger Diagram of the Water Cycle pg. 465 Weather and Climate Video	Chapter 11 test	
1 ½ weeks (4/11-4/20) Chapter 12 Ecological Roles	4a. Students know the sun is the major source of energy for phenomena on Earth's surface; it powers winds, ocean currents, and the water cycle. 5c. Students know populations of organisms can be categorized by the functions they serve in an ecosystem. 5d. Students know different kinds of organisms may play similar ecological roles in similar biomes. 5e. Students know the number and types of organisms an ecosystem can support depends on the resources available and on abiotic factors, such as quantities of light and water, a range of temperatures, and soil composition. 7a. Develop a hypothesis. 7b. Select and use appropriate tools and technology (including calculators,	Textbook	Science Notebook 133-140 Chapter 12 resources Reinforcement Chapter Review Mind Jogger Life Web pg. 513 Biome Video(s) Virtual Lab: Biomes	Chapter 12 test	

	computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data. 7c. Construct appropriate graphs from data and develop qualitative statements about the relationships between variables. 7d. Communicate the steps and results from an investigation in written reports and oral presentations.				
2 weeks (4/27-5/11) Chapter 13 Energy and Matter in Ecosystems	5a. Students know energy entering ecosystems as sunlight is transferred by producers into chemical energy through photosynthesis and then from organism to organism through food webs. 5b. Students know matter is transferred over time from one organism to others in the food web and between organisms and the physical environment. 5c. Students know populations of organisms can be categorized by the functions they serve in an ecosystem. 7b. Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data. 7g. Interpret events by sequence and time from natural phenomena (e.g., the relative ages of rocks and intrusions).	Textbook	Science Notebook 141-152 Chapter 13 resources Reinforcement Chapter Review Mind Jogger Virtual Lab: Food Web	Chapter 13 test	

2 weeks (5/12-5/26) Chapter 14 Resources	6a. Students know the utility of energy sources is determined by factors that are involved in converting these sources to useful forms and the consequences of the conversion process. 6b. Students know different natural energy and material resources, including air, soil, rocks, minerals, petroleum, fresh water, wildlife, and forests, and know how to classify them as renewable or nonrenewable. 6c. Students know the natural origin of the materials used to make common objects. 7a. Develop a hypothesis. 7b. Select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data, and display data. 7c. Construct appropriate graphs from data and develop qualitative statements about the relationships between variables. 7d. Communicate the steps and results from an investigation in written reports and oral presentations. 7e. Recognize whether evidence is consistent with a proposed explanation.	Textbook	Science notebook 153-164 Chapter 14 resources Reinforcement Chapter Review Virtual Lab: Recycling Mind Jogger	Chapter 14 test	