

7th Grade Curriculum Map First 18 Weeks 2006-2007

Earth Science

Time Frame	FOSS Kit Section	Standard	Indicator	Additional Text Supplements	Other Resources Available
(Time Frames for each FOSS section are detailed in the FOSS Teacher's Guide for <u>Weather and Water</u>)	Weather and Water 1	Earth and Space Science	7.6: Determine how weather observations and measurements are combined to produce weather maps and that the data for a specific location at one point in time can be displayed in a station model. 7.7: Read a weather map to interpret local, regional and national weather.	Prentice Hall <i>Weather and Climate</i> Chapter 3, Section 4 <i>Weather and Climate</i> Chapter 3, Section 3	
	Weather and Water 2	Earth and Space Science	This section does not directly address any indicator, but is necessary for the continuity of the FOSS Kit.		
	Weather and Water 3	Earth and Space Science	This section does not directly address any indicator, but is necessary for the continuity of the FOSS Kit.		
	Weather and Water 4	Earth and Space Science	7.1: Explain the biogeochemical cycles which move materials between the lithosphere (land), hydrosphere (water) and atmosphere (air). 7.3: Describe the water cycle and explain the transfer of energy between the atmosphere and hydrosphere.	Prentice Hall <i>Weather and Climate</i> Chapter 2, Section 4 Prentice Hall <i>Earth's Waters</i> Chapter 1, Section 1	<i>Earth Science Day Book</i> Chapter 13, Lesson 38: "Up, Up and Away" <i>Earth Science Day Book</i> Chapter 9, Lesson 26: "Fog Catchers"
<i>***During the week of October 16-20, teachers will teach three health lessons that are currently being developed by the Health Committee. The lessons will be distributed to teachers upon completion.</i>					
	Weather and Water 5	Earth and Space Science	7.1: Explain the biogeochemical cycles which move materials between the lithosphere, hydrosphere and atmosphere.	Prentice Hall <i>Weather and Climate</i> Chapter 2, Section 4	

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(Time Frames for each FOSS section are detailed in the FOSS Teacher's Guide for <u>Weather and Water</u>)	Weather and Water 6	Earth and Space Science	<p>7.6: Explain the biogeochemical cycles which move materials between the lithosphere (land), hydrosphere (water) and atmosphere (air).</p> <p>7.3: Describe the water cycle and explain the transfer of energy between the atmosphere and hydrosphere.</p> <p>7.5: Make simple weather predictions based on the changing cloud types associated with frontal systems.</p>	<p>Prentice Hall <i>Weather and Climate</i> Chapter 2, Section 4</p> <p><i>Weather and Climate</i> Chapter 2, Section 4</p> <p><i>Weather and Climate</i> Chapter 3, Section 3</p>	<p><i>Earth Science Day Book</i> Chapter 9, Lesson 25: "Round and Round it Goes"</p> <p>Chapter 9, Lesson 26: "Fog Catchers"</p> <p>Chapter 13, Lesson 39: "Thar She Blows"</p>
	Weather and Water 7	Earth and Space Science	<p>7.4: Analyze data on the availability of fresh water that is essential for life and for most industrial and agricultural processes. Describe how rivers, lakes and groundwater can be depleted or polluted becoming less hospitable to life and even becoming unavailable or unsuitable for life.</p> <p>7.8: Describe how temperature and precipitation determine climatic zones (biomes) (e.g., desert, grassland, forests, tundra and alpine).</p>	<p>Prentice Hall <i>Earth's Waters</i> Chapter 1, Section 1</p> <p>Prentice Hall <i>Weather and Climate</i> Chapter 3, Sections 1-3</p> <p><i>Weather and Climate</i> Chapter 4, Section 2</p>	<p><i>Earth Science Day Book</i> Chapter 11, Lesson 31: "Freshwater Worries"</p>
	Weather and Water 8	Earth and Space Science	<p>7.1: Explain the biogeochemical cycles which move materials between the lithosphere, hydrosphere and atmosphere.</p> <p>7.6: Determine how weather observations and measurements are combined to produce weather maps and that data for a specific location at one point in time can be displayed in a station model.</p>	<p>Prentice Hall <i>Weather and Climate</i> Chapter 3, Section 4</p>	

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Time Frame	FOSS Kit Section	Standard	Indicator	Additional Text Supplements	Other Resources Available
(Time Frames for each FOSS section are detailed in the FOSS Teacher's Guide for <u>Weather and Water</u>)	Weather and Water 8 (continued)	Earth and Space Science	7.7: Read a weather map to interpret local, regional and national weather.	Prentice Hall <i>Weather and Climate</i> Chapter 3, Section 3	
	Weather and Water 9	Earth and Space Science	<p>7.1: Explain the biogeochemical cycles which move materials between the lithosphere (land), hydrosphere (water) and atmosphere (air).</p> <p>7.2: Explain that Earth's capacity to absorb and recycle materials naturally (e.g., smoke, smog and sewage) can change the environmental quality depending on the length of time involved (e.g. global warming).</p> <p>7.5: Make simple weather predictions based on the changing cloud types associate with frontal systems.</p> <p>7.6: Determine how weather observations and measurements are combined to produce weather maps and that data for a specific location at one point in time can be displayed in a station model.</p> <p>7.7: Read a weather map to interpret local, regional and national weather.</p> <p>7.8: Describe how temperature and precipitation determine climatic zones (biomes) (e.g., desert, grassland, forests, tundra and alpine).</p>	<p>Prentice Hall <i>Weather and Climate</i> Chapter 2, Section 4</p> <p><i>Weather and Climate</i> Chapter 4, Section 4</p> <p><i>Weather and Climate</i> Chapter 3, Section 4</p> <p><i>Weather and Climate</i> Chapter 3, Section 3</p> <p><i>Weather and Climate</i> Chapter 4, Section 2</p>	<p><i>Earth Science Day Book</i> Chapter 16, Lesson 48: "Meltdown?"</p> <p><i>Earth Science Day Book</i> Chapter 14, Lesson 40: "Predicting a Storm"</p>

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Time Frame	FOSS Kit Section	Standard	Indicator	Additional Text Supplements	Other Resources Available
(Time Frames for each FOSS section are detailed in the FOSS Teacher's Guide for <u>Weather and Water</u>)	Weather and Water 9 (continued)	Earth and Space Science	7.9: Describe the connection between the water cycle and weather-related phenomenon (e.g., tornadoes, floods, droughts and hurricanes).	Prentice Hall <i>Weather and Climate</i> Chapter 3, Section 3	<i>Earth Science Day Book</i> Chapter 14, Lesson 41: "A Storm Like No Other" Chapter 14, Lesson 42: "At Sea in a Storm" Chapter 15, Lesson 43: "Down Tornado Alley" Chapter 15, Lesson 45: "Digging Out"
Time Permitting	Teacher's Discretion	Scientific Inquiry	7.5: Analyze alternative scientific explanations and predictions and recognize there may be more than one good way to interpret a given set of data. 7.7: Use graphs, tables and chart to study physical phenomena and infer mathematical relationships between variables (e.g., density). 7.2: Identify simple independent and dependent variables.		
		Science and Technology	7.2: Describe how decisions to develop and use technologies often put environmental and economic concerns in direct competition with each other.		

At the end of the 18 week Earth Science study, all seventh grade students will take a Common Assessment over the material covered.

7th Grade Curriculum Map Second 18 Weeks 2006-2007 Life Science

Time Frame	FOSS Kit Section	Standard	Indicator	Additional Text Supplements	Other Resources Available
2-4 days	This indicator has no FOSS tie-in	Life Science	7.1: Investigate the great variety of body plans and internal structures found in multicellular organisms.	Prentice Hall <i>Animals</i> Chapter 1, Section 2	
(Time Frames for each FOSS section are detailed in the FOSS Teacher Guide for <u>Populations and Ecosystems</u>)	Populations and Ecosystems 1	Life Science	This section does not directly address any indicator, but is necessary for the continuity of the FOSS Kit.		
	Populations and Ecosystems 2	Life Science	7.3: Explain how the number of organisms an ecosystems can support depends on adequate biotic (living) resources (e.g., plants, animals) and abiotic (non-living) resources (e.g., light, water and soil).	Prentice Hall <i>Environmental Science</i> Chapter 1, Sections 1,3	
	Populations and Ecosystems 3	Life Science	7.2: Investigate how organisms or populations may interact with one another through symbiotic relationships and how some species have become so adapted to each other that neither could survive without the other (e.g., predator-prey, parasitism, mutualism and commensalism). 7.3: Explain how the number of organisms an ecosystem can support depends on adequate biotic resources and abiotic Resources. 7.4: Investigate how overpopulation impacts an ecosystem. 7.8: Investigate the great diversity among organisms.	Prentice Hall <i>Environmental Science</i> Chapter 1, Sections 1,3 Chapter 3, Section 3 Prentice Hall <i>Bacteria to Plants</i> Chapter 1 all Chapter 3, Section 1	<i>Life Science Day Book</i> Chapter 7, Lesson 19: “The Right Stuff” Chapter 7, Lesson 21: “New and Improved” <i>Life Science Day Book</i> Chapter 18, Lesson 53: “A Place of Their Own” <i>Life Science Day Book</i> Chapter 17, Lesson 50: “Poison Toads” Chapter 20, Lesson 60: “Be an Eco-Hero”

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Time Frame	FOSS Kit Section	Standard	Indicator	Additional Text Supplements	Other Resources Available
(Time Frames for each FOSS section are detailed in the FOSS Teacher's Guide for <u>Populations And Ecosystems</u>)	Populations and Ecosystems 4	Life Science	<p>7.2: Investigate how organisms or populations may interact with one another through symbiotic relationships and how some species have become so adapted to each other that neither could survive without the other.</p> <p>7.3: Explain how the number of organisms an ecosystem can support depends on adequate biotic resources and abiotic resources.</p> <p>7.5: Explain that some environmental changes occur slowly while others occur rapidly (e.g., forest and pond succession, fires and decomposition).</p> <p>7.6: Summarize the ways that natural occurrences and human Activity affect the transfer of energy in Earth's ecosystems (e.g., fire, hurricanes, roads and oil spills).</p> <p>7.7: Explain that photosynthetic cells convert solar energy into chemical energy that is used to carry on life functions or is transferred to consumers and used to carry on their life functions.</p> <p>7.8: Investigate the great diversity among organisms.</p>	<p>Prentice Hall <i>Environmental Science</i> Chapter 1, Section 1,3 Chapter 2, Section 1,5 Chapter 5, Section 2</p> <p>Prentice Hall <i>Bacteria to Plants</i> Chapter 1 all Chapter 3, Section 1 Chapter 4, Section 1</p>	<p><i>Life Science Day Book</i> Chapter 17, Lesson 49: "Cane Toad Invasion"</p> <p><i>Life Science Day Book</i> Chapter 19, Lesson 56: "The Seeds of Biodiversity"</p> <p><i>Life Science Day Book</i> Chapter 18, Lesson 54: "The Fragile Land" Chapter 19, Lesson 57: "Going, Going...Gone?" Chapter 2, Lesson 5 "Photosynthesis"</p>
	Populations and Ecosystems 5	Life Science	<p>7.2: Investigate how organisms or populations may interact with one another through symbiotic relationships and how Some species have become so adapted to each other that Neither could survive without the other.</p>	<p>Prentice Hall <i>Environmental Science</i> Chapter 1, Section 1,3 Chapter 3, Section 3</p>	<p><i>Life Science Day Book</i> Chapter 17, Lesson 50 "Poison Toads"</p>

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Time Frame	FOSS Kit Section	Standard	Indicator	Additional Text Supplements	Other Resources Available
(Time Frames for each FOSS section are detailed in the FOSS Teacher's Guide for <u>Populations And Ecosystems</u>)	Populations and Ecosystems 5 (continued)	Life Science	<p>7.3: Explain how the number of organisms an ecosystem can support depends on adequate biotic and abiotic resources.</p> <p>7.4: Investigate how overpopulation impacts and ecosystem.</p> <p>7.7: Explain that photosynthetic cells convert solar energy into chemical energy that is used to carry on life functions or is transferred to consumers and used to carry on their life functions.</p>		<p><i>Life Science Day Book</i> Chapter 18, Lesson 53: "A Place of Their Own" Chapter 18, Lesson 54: "The Fragile Land" Chapter 2, Lesson 6: "All Together Now"</p>
	Populations and Ecosystems 6	Life Science	<p>7.2: Investigate how organisms or populations may interact with one another through symbiotic relationships and how some species have become so adapted to each other that neither could survive without the other.</p> <p>7.3: Explain how the number of organisms an ecosystem can support depends on adequate biotic and abiotic resources.</p> <p>7.4: Investigate how overpopulation impacts and ecosystem.</p>	<p>Prentice Hall <i>Environmental Science</i> Chapter 1, Section 1,3</p> <p>Prentice Hall <i>Bacteria to Plants</i> Chapter 3, Section 1</p>	<p><i>Life Science Day Book</i> Chapter 17, Lesson 51: "Bad Neighbors"</p> <p><i>Life Science Day Book</i> Chapter 20, Lesson 59: "People Make a Difference"</p>

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Time Frame	FOSS Kit Section	Standard	Indicator	Additional Text Supplements	Other Resources Available
(Time Frames for each FOSS section are detailed in the FOSS Teacher's Guide for <u>Populations And Ecosystems</u>)	Populations and Ecosystems 7	Life Science	<p>7.2: Investigate how organisms or populations may interact with one another through symbiotic relationships and how some species have become so adapted to each other that neither could survive without the other.</p> <p>7.3: Explain how the number of organisms an ecosystem can support depends on adequate biotic and abiotic resources.</p> <p>7.5: Explain that some environmental changes occur slowly while others occur rapidly.</p> <p>7.6: Summarize the ways that natural occurrences and human Activity affect the transfer of energy in Earth's ecosystems.</p> <p>7.8: Investigate the great diversity among organisms.</p>	Prentice Hall <i>Environmental Science</i> Chapter 2, Section 1,5	<p><i>Life Science Day Book</i> Chapter 18, Lesson 52: "Eat or Be Eaten"</p> <p><i>Life Science Day Book</i> Chapter 20, Lesson 58: "The Lesson of Easter Island"</p>
	Populations and Ecosystems 8	Life Science	<p>7.2: Investigate how organisms or populations may interact with one another through symbiotic relationships and how some species have become so adapted to each other that neither could survive without the other.</p>	Prentice Hall <i>Environmental Science</i> Chapter 1, Section 1,3	<p><i>Life Science Day Book</i> Chapter 19, Lesson 55: "Let It Rain"</p>

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(Time Frames for each FOSS section are detailed in the FOSS Teacher's Guide for <u>Populations And Ecosystems</u>)	Populations and Ecosystems 8, 9, 10	Life Science	<p>8.2: Recognize that in sexual reproduction new combinations of traits are produced which may increase or decrease an organism's chances for survival.</p> <p>8.3: Explain how variations in structure, behavior or physiology allow some organisms to enhance their reproductive success and survival in a particular environment.</p> <p>8.4: Explain that diversity of species is developed through gradual processes over many generations (e.g., fossil record).</p> <p>8.5: Investigate how an organism adapted to a particular environment may become extinct if the environment, as shown by the fossil record, changes.</p>	Prentice Hall <i>Cells and Heredity</i> Chapter 3, Sections 1-3 Prentice Hall <i>Cells and Heredity</i> Chapter 5, Sections 1-3	<i>Life Science Day Book</i> Chapter 7, Lesson 20: "Tall, Gray and Tuskless" <i>Life Science Day Book</i> Chapter 7, Lesson 19: "The Right Stuff"
At the end of the 18 week Life Science study, all seventh grade students will take a Common Assessment over the material covered.					