

GRADE SEVEN GRADE LEVEL EXPECTATIONS CORRELATED TO ENERGY ACTIVITIES

Activity	Grade level	Concept emphasized	Science GLE	Social Studies GLE	Math GLE	Language Arts GLE
Energy and Society Activity Guide						
1: Energy Detectives	3-8	<p>*Energy is what powers all activities and cycles throughout the world.</p> <p>*All living things need energy.</p> <p>*People use energy in many different ways. Their use of energy has social, economic, environmental, and health impacts.</p> <p>*People's energy use has changed over time and varies across societies.</p>	<p>12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6)</p> <p>36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1)</p> <p>39. Analyze the consequences of human activities on ecosystems (SE-M-A4)</p> <p>41. Describe the nitrogen cycle and explain why it is important for the survival of organisms (SE-M-A7)</p> <p>42. Describe how photosynthesis and respiration relate to the carbon cycle (SE-M-A7)</p> <p>43. Identify and analyze the environmental impact of humans' use of technology (e.g., energy production, agriculture, transportation, human habitation) (SE-M-A8)</p>	<p>9. Explain how the different physical environments in the American North and South led to different economic activities (G-1D-M2)</p>		<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4)</p> <p>GLE 15-46</p>
2: May the Source Be With You	4-8	<p>*There are multiple sources of energy.</p> <p>*The primary source of energy is the sun.</p> <p>*The sun's energy drives the earth's cycles.</p> <p>*People use energy from many different sources including the sun, wind, water, biomass, coal, geothermal, petroleum, natural gas and uranium.</p> <p>*Some sources of energy are renewable and others are nonrenewable.</p>	<p>24. Analyze food webs to determine energy transfer among organisms (LS-M-C2)</p> <p>35. Identify resources humans derive from ecosystems (SE-M-A1)</p> <p>36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1)</p>	<p>9. Explain how the different physical environments in the American North and South led to different economic activities (G-1D-M2)</p>		<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety of texts and make connections to real-life situations and other texts</p>

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2: May the Source Be With You			<p>40. Construct or draw food webs for various ecosystems (SE-M-A5)</p> <p>41. Describe the nitrogen cycle and explain why it is important for the survival of organisms (SE-M-A7)</p> <p>42. Describe how photosynthesis and respiration relate to the carbon cycle (SE-M-A7)</p>			<p>9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies. (ELA-7-M1)</p> <p>10. Explain the relationship between life experiences and texts to generate solutions to problems (ELA-7-M2)</p> <p>11. Use technical information and other available resources (e.g., Web sites, interviews) to solve problems (ELA-7-M2)</p> <p>13. Identify an author's bias (objectivity) for, against, or neutral toward an issue (ELA-7-M3)</p> <p>14. Analyze grade-appropriate print and nonprint texts using various reasoning skills(ELA-7-M4)</p> <p>GLE 15-46</p>
3: Energy Chains	5-8	<p>*Energy is what powers all activities and cycles throughout the world.</p> <p>*There are multiple sources of energy.</p> <p>*The primary source of energy is the sun.</p> <p>*The sun's energy drives the earth's cycles.</p>	<p>24. Analyze food webs to determine energy transfer among organisms (LS-M-C2)</p> <p>35. Identify resources humans derive from ecosystems (SE-M-A1)</p> <p>39. Analyze the consequences of human activities on ecosystems (SE-M-A4)</p> <p>41. Describe the nitrogen cycle and explain why it is important for the survival of organisms (SE-M-A7)</p> <p>42. Describe how photosynthesis and respiration relate to the carbon cycle (SE-M-A7)</p> <p>43. Identify and analyze the environmental impact of humans' use of technology (e.g., energy</p>			<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4)</p> <p>9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies,</p>

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3: Energy Chains			production, agriculture, transportation, human habitation) (SE-M-A8)			14. Analyze grade-appropriate print and nonprint texts using various reasoning skills(ELA-7-M4) GLE 15-46
4: What Powers the Move?	3-8	<p>*There are multiple sources of energy.</p> <p>*Some sources of energy are renewable and others are nonrenewable.</p> <p>*The energy choices societies make affect people’s lives and the whole planet.</p> <p>*Decisions about energy use must be made with both short- and long-term impacts in mind.</p> <p>*Individuals can impact the environment through their energy choices.</p> <p>*Active citizenship involves making informed decisions about energy uses.</p>	<p>12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6)</p> <p>35. Identify resources humans derive from ecosystems (SE-M-A1)</p> <p>36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1)</p> <p>39. Analyze the consequences of human activities on ecosystems (SE-M-A4)</p> <p>43. Identify and analyze the environmental impact of humans’ use of technology (e.g., energy production, agriculture, transportation, human habitation) (SE-M-A8)</p>	<p>5. Explain patterns of rural/urban migration and the positive and negative consequences of urban development in the United States (G-1C-M3)</p> <p>32. Explain how changes are made in a democratic society (C-1B-M5)</p>	<p>1. Recognize and compute equivalent representations of fractions, decimals, and percents (i.e., halves, thirds, fourths, fifths, eighths, tenths, hundredths) (N-1-M)</p> <p>33. Analyze discrete and continuous data in real-life applications (D-2-M) (D-6-M)</p>	<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4)</p> <p>9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1)</p> <p>10. Explain the relationship between life experiences and texts to generate solutions to problems (ELA-7-M2)</p> <p>11. Use technical information and other available resources (e.g., Web sites, interviews) to solve problems (ELA-7-M2)</p> <p>GLE 15-46</p>
5: In the Driver’s Seat	5-8	<p>*People use energy in many different ways. Their use of energy has social, economic, environmental, and health impacts.</p> <p>*The energy choices societies make affect people’s lives and the whole planet.</p> <p>*Decisions about energy use must be made with both short- and long-term</p>	<p>12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6)</p> <p>36. Distinguish the essential roles played by biotic and abiotic components in various</p>	<p>5. Explain patterns of rural/urban migration and the positive and negative consequences of urban development in the United States (G-1C-M3)</p> <p>32. Explain how</p>	<p>1. Recognize and compute equivalent representations of fractions, decimals, and percents (i.e., halves, thirds, fourths, fifths, eighths, tenths,</p>	<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety</p>

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5: In the Driver's Seat		impacts in mind. *The allocation of energy resources can lead to conflicts within and between societies.	ecosystems (SE-M-A1) 39. Analyze the consequences of human activities on ecosystems (SE-M-A4) 43. Identify and analyze the environmental impact of humans' use of technology (e.g., energy production, agriculture, transportation, human habitation) (SE-M-A8)	changes are made in a democratic society (C-1B-M5)	hundredths) (N-1-M) 4. Model and apply the distributive property in real-life applications (N-4-M) 9. Determine when an estimate is sufficient and when an exact answer is needed in real-life problems using decimals and percents (N-7-M) (N-5-M) 10. Determine and apply rates and ratios (N-8-M) 33. Analyze discrete and continuous data in real-life applications (D-2-M) (D-6-M)	of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4) 9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1) 10. Explain the relationship between life experiences and texts to generate solutions to problems (ELA-7-M2) 11. Use technical information and other available resources (e.g., Web sites, interviews) to solve problems (ELA-7-M2) 13. Identify an author's bias (objectivity) for, against, or neutral toward an issue (ELA-7-M3) 14. Analyze grade-appropriate print and nonprint texts using various reasoning skills, for example: (ELA-7-M4) GLE 15-46
6: Energy Challenge Game	4-8	All energy concepts				
PreK-8 Activity Guide						
Activity	Grade level	Concept emphasized	Science GLE	Social Studies GLE	Math GLE	Language Arts GLE
14: Renewable or Not	4-8	*The standard of living of various peoples throughout the world depends on environmental quality, the availability, use and distribution of resources, and the.	12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use,	5. Explain patterns of rural/urban migration and the positive and negative consequences of urban	4. Model and apply the distributive property in real-life applications (N-4-M)	40. Participate in group and panel discussions (ELA-4-M6) 48. Interpret information

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14: Renewable or Not		<p>societies' political structure and culture.</p> <p>*Resource management and technological systems help societies to meet, within limits, the needs of a growing human population.</p> <p>*Conservation technology enables humans to maintain and extend the productivity of vital resources</p>	<p>exercise) (LS-M-A6)</p> <p>24. Analyze food webs to determine energy transfer among organisms (LS-M-C2)</p> <p>35. Identify resources humans derive from ecosystems (SE-M-A1)</p> <p>36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1)</p> <p>37. Identify and describe the effects of limiting factors on a given population (SE-M-A2)</p> <p>38. Evaluate the carrying capacity of an ecosystem (SE-M-A2)</p> <p>39. Analyze the consequences of human activities on ecosystems (SE-M-A4)</p> <p>43. Identify and analyze the environmental impact of humans' use of technology (e.g., energy production, agriculture, transportation, human habitation) (SE-M-A8)</p>	<p>development in the United States (G-1C-M3)</p> <p>9. Explain how the different physical environments in the American North and South led to different economic activities (G-1D-M2)</p> <p>35. Explain various processes/strategies nations use to interact (C-1C-M1)</p> <p>36. Explain how U.S. foreign policy is formed and carried out (C-1C-M2)</p> <p>37. Identify types of foreign policy issues with reference to current and historical examples (e.g., Middle East conflicts) (C-1C-M3)</p>	<p>10. Determine and apply rates and ratios (N-8-M)</p> <p>33. Analyze discrete and continuous data in real-life applications (D-2-M) (D-6-M)</p>	<p>from a variety of graphic organizers, including timelines, charts, schedules, tables, diagrams, and maps in grade-appropriate sources (ELA-5-M6)</p>
36: Pollution Search	<p>A: 2-6</p> <p>B: PreK-2</p>	<p>*Altering the environment affects all life forms—including humans—and the interrelationships that link them.</p> <p>*Pollutants are harmful by-products of human and natural systems which can enter ecosystems in various ways.</p> <p>*Ecosystems possess measurable indicators of environmental health.</p> <p>*The application of scientific knowledge and technological systems can have positive or negative effects on the environment.</p>	<p>12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6)</p> <p>32. Describe changes that can occur in various ecosystems and relate the changes to the ability of an organism to survive (LS-M-D2)</p> <p>34. Explain how environmental factors impact survival of a population (LS-M-D2)</p> <p>36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1)</p> <p>37. Identify and describe the effects of limiting factors on a given population (SE-M-A2)</p> <p>39. Analyze the consequences of human activities on ecosystems (SE-M-A4)</p> <p>43. Identify and analyze the environmental impact of humans' use of technology (e.g., energy production, agriculture, transportation, human habitation) (SE-M-A8)</p>	<p>5. Explain patterns of rural/urban migration and the positive and negative consequences of urban development in the United States (G-1C-M3)</p>		<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4)</p> <p>9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1)</p> <p>10. Explain the relationship between life experiences and texts to generate solutions to problems (ELA-7-M2)</p> <p>11. Use technical information and other available resources (e.g., Web sites, interviews) to solve problems (ELA-7-M2)</p>

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36: Pollution Search						<p>13. Identify an author's bias (objectivity) for, against, or neutral toward an issue (ELA-7-M3)</p> <p>14. Analyze grade-appropriate print and nonprint texts using various reasoning skills, for example: (ELA-7-M4)</p> <p>GLE 15-46</p>
39: Energy Sleuths	4-8	<p>*Resource management technologies interact and influence environmental quality; the acquisition, extraction and transportation of natural resources; and all life forms.</p> <p>*While technology advances decrease the incidence of disease and death, the ever-increasing world population is placing heavy demands on the finite resources of the Earth.</p> <p>*By reducing waste and recycling materials, individuals and societies can extend the value and utility of resources and promote environmental quality.</p> <p>*Conservation and management technologies, when appropriately applied to the use or preservation of natural resources, can enhance and extend the usefulness of the resource as well as the quality of the environment.</p>	<p>12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6)</p> <p>32. Describe changes that can occur in various ecosystems and relate the changes to the ability of an organism to survive (LS-M-D2)</p> <p>34. Explain how environmental factors impact survival of a population (LS-M-D2)</p> <p>35. Identify resources humans derive from ecosystems (SE-M-A1)</p> <p>36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1)</p> <p>37. Identify and describe the effects of limiting factors on a given population (SE-M-A2)</p> <p>39. Analyze the consequences of human activities on ecosystems (SE-M-A4)</p> <p>43. Identify and analyze the environmental impact of humans' use of technology (e.g., energy production, agriculture, transportation, human habitation) (SE-M-A8)</p>			<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4)</p> <p>9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1)</p> <p>10. Explain the relationship between life experiences and texts to generate solutions to problems (ELA-7-M2)</p> <p>11. Use technical information and other available resources (e.g., Web sites, interviews) to solve problems (ELA-7-M2)</p> <p>13. Identify an author's bias (objectivity) for, against, or neutral toward an issue (ELA-7-M3)</p> <p>14. Analyze grade-appropriate print and nonprint texts using various reasoning skills, for example: (ELA-7-M4)</p> <p>GLE 15-46</p>

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44: Water Wonders	4-8	<p>*In biological systems, energy flows and materials continually cycle in predictable and measurable patterns.</p> <p>*Conservation technology enables humans to maintain and extend the productivity of vital resources.</p> <p>*Populations of organisms exhibit variations in size and structure as a result of their adaptation to their habitats.</p>	<p>30. Differentiate between structural and behavioral adaptations in a variety of organisms (LS-M-D1)</p> <p>32. Describe changes that can occur in various ecosystems and relate the changes to the ability of an organism to survive (LS-M-D2)</p> <p>34. Explain how environmental factors impact survival of a population (LS-M-D2)</p> <p>36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1)</p> <p>37. Identify and describe the effects of limiting factors on a given population (SE-M-A2)</p> <p>39. Analyze the consequences of human activities on ecosystems (SE-M-A4)</p> <p>43. Identify and analyze the environmental impact of humans' use of technology (e.g., energy production, agriculture, transportation, human habitation) (SE-M-A8)</p> <p>35. Identify resources humans derive from ecosystems (SE-M-A1)</p>	<p>5. Explain patterns of rural/urban migration and the positive and negative consequences of urban development in the United States (G-1C-M3)</p>		<p>40. Participate in group and panel discussions (ELA-4-M6)</p> <p>48. Interpret information from a variety of graphic organizers, including timelines, charts, schedules, tables, diagrams, and maps in grade-appropriate sources (ELA-5-M6)</p>
52: A Look at Aluminum	5-8	<p>*Resource management and technological systems help societies to meet, within limits, the needs of a growing human population.</p> <p>*Conservation technology enables humans to maintain and extend the productivity of vital resources.</p> <p>*All humans consume products and thereby affect the availability of renewable and nonrenewable natural resources.</p>	<p>35. Identify resources humans derive from ecosystems (SE-M-A1)</p> <p>37. Identify and describe the effects of limiting factors on a given population (SE-M-A2)</p> <p>43. Identify and analyze the environmental impact of humans' use of technology (e.g., energy production, agriculture, transportation, human habitation) (SE-M-A8)</p>	<p>9. Explain how the different physical environments in the American North and South led to different economic activities (G-1D-M2)</p>	<p>1. Recognize and compute equivalent representations of fractions, decimals, and percents (i.e., halves, thirds, fourths, fifths, eighths, tenths, hundredths)</p> <p>4. Model and apply the distributive property in real-life applications</p> <p>9. Determine when an estimate is sufficient and when an exact answer is needed in real-life problems using decimals and percents</p> <p>10. Determine and apply rates and ratios</p> <p>33. Analyze discrete and continuous data in real-life applications</p>	<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4)</p> <p>9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1)</p> <p>14. Analyze grade-appropriate print and nonprint texts using various reasoning skills (ELA-7-M4)</p> <p style="text-align: center;">GLE 15-46</p>

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53: On the Move	4-8	<p>*The application of scientific knowledge and technological systems can have positive or negative effects on the environment.</p> <p>*Conservation technology enables humans to maintain and extend the productivity of vital resources.</p>	<p>12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6)</p> <p>36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1)</p> <p>43. Identify and analyze the environmental impact of humans' use of technology (e.g., energy production, agriculture, transportation, human habitation) (SE-M-A8)</p>	<p>5. Explain patterns of rural/urban migration and the positive and negative consequences of urban development in the United States (G-1C-M3)</p> <p>9. Explain how the different physical environments in the American North and South led to different economic activities (G-1D-M2)</p>	<p>4. Model and apply the distributive property in real-life applications (N-4-M)</p> <p>9. Determine when an estimate is sufficient and when an exact answer is needed in real-life problems using decimals and percents (N-7-M) (N-5-M)</p> <p>10. Determine and apply rates and ratios (N-8-M)</p> <p>33. Analyze discrete and continuous data in real-life applications (D-2-M) (D-6-M)</p>	<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4)</p> <p>9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1)</p> <p>11. Use technical information and other available resources (e.g., Web sites, interviews) to solve problems (ELA-7-M2)</p> <p>13. Identify an author's bias (objectivity) for, against, or neutral toward an issue (ELA-7-M3)</p> <p>Analyze grade-appropriate print and nonprint texts using various reasoning skills,(ELA-7-M4)</p> <p>GLE 15-46</p>
55: Planning the Ideal Community	4-8	<p>*Many cultures have beliefs, values, and traditions that shape human interactions with the environment and its resources.</p>	<p>35. Identify resources humans derive from ecosystems (SE-M-A1)</p> <p>39. Analyze the consequences of human activities on ecosystems (SE-M-A4)</p>	<p>2. Explain how physical features and climate affected migration, settlement patterns, and land use in the United States through 1877 (G-1B-M1)</p>		<p>9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1)</p> <p>10. Explain the relationship between life experiences and texts to generate solutions to problems (ELA-7-M2)</p> <p>11. Use technical information and other available resources (e.g., Web sites, interviews) to solve problems (ELA-7-M2)</p> <p>GLE 15-46</p>

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57: Democracy in Action	5-8	<p>*In democratic societies, citizens have a voice in shaping resource policies. They also share in the responsibility of conserving resources and behaving in an environmentally responsible manner.</p> <p>*In democratic societies, individuals and groups, working through governmental channels, can influence the way public and private lands and resources are managed.</p> <p>*Effective citizen involvement in the environmental decision-making process involves a careful study of all sides of the issues, along with ability to differentiate between honest, factually accurate information and propaganda.</p>	<p>12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6)</p> <p>39. Analyze the consequences of human activities on ecosystems (SE-M-A4)</p>	<p>32. Explain how changes are made in a democratic society (C-1B-M5)</p>		<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4)</p> <p>9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1)</p> <p>13. Identify an author’s bias (objectivity) for, against, or neutral toward an issue (ELA-7-M3)</p> <p>14. Analyze grade-appropriate print and nonprint texts using various reasoning skills (ELA-7-M4)</p> <p>GLE 15-46</p>
72: Air We Breathe	6-8	<p>*Pollutants are harmful by-products of human and natural systems which can enter ecosystems in various ways.</p> <p>*The structure and scale of an ecosystem are influenced by factors such as soil type, climate, availability of water, and human activities.</p> <p>*When the Earth is studied as an interacting ecological system, every action, regardless of its scale, affects the biosphere in some way.</p>	<p>12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6)</p> <p>32. Describe changes that can occur in various ecosystems and relate the changes to the ability of an organism to survive (LS-M-D2)</p> <p>34. Explain how environmental factors impact survival of a population (LS-M-D2)</p> <p>36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1)</p> <p>39. Analyze the consequences of human activities on ecosystems (SE-M-A4)</p>		<p>33. Analyze discrete and continuous data in real-life applications (D-2-M) (D-6-M)</p>	<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4)</p> <p>9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1)</p> <p>10. Explain the relationship between life experiences and texts to generate solutions to problems (ELA-7-M2)</p> <p>11. Use technical information and other available resources (e.g.,</p>

Activity	Grade level	Concept emphasized	Science GLE	Social Studies GLE	Math GLE	Language Arts GLE
72: Air We Breathe						Web sites, interviews) to solve problems (ELA-7-M2) 14. Analyze grade-appropriate print and nonprint texts using various reasoning skills(ELA-7-M4) GLE 15-46
73: Waste Watchers	4-8	*Conservation and management technologies, when appropriately applied to the use or preservation of natural resources, can enhance and extend the usefulness of the resource as well as the quality of the environment. *If planned, constructed, and landscaped to be compatible with the environment in which they will be located, human-built environments can conserve resources, enhance environmental quality, and promote the comfort and well-being of those who will live within them.	12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6) 32. Describe changes that can occur in various ecosystems and relate the changes to the ability of an organism to survive (LS-M-D2) 34. Explain how environmental factors impact survival of a population (LS-M-D2) 35. Identify resources humans derive from ecosystems (SE-M-A1) 39. Analyze the consequences of human activities on ecosystems (SE-M-A4) 43. Identify and analyze the environmental impact of humans' use of technology (e.g., energy production, agriculture, transportation, human habitation) (SE-M-A8)	32. Explain how changes are made in a democratic society (C-1B-M5)	1. Recognize and compute equivalent representations of fractions, decimals, and percents (i.e., halves, thirds, fourths, fifths, eighths, tenths, hundredths) (N-1-M) 4. Model and apply the distributive property in real-life applications (N-4-M) 9. Determine when an estimate is sufficient and when an exact answer is needed in real-life problems using decimals and percents (N-7-M) (N-5-M) 10. Determine and apply rates and ratios (N-8-M) 33. Analyze discrete and continuous data in real-life applications (D-2-M) (D-6-M)	4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts 5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4) 9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1) 10. Explain the relationship between life experiences and texts to generate solutions to problems (ELA-7-M2) 11. Use technical information and other available resources (e.g., Web sites, interviews) to solve problems (ELA-7-M2) 14. Analyze grade-appropriate print and nonprint texts using various reasoning skills(ELA-7-M4) GLE 15-46
82: Resource Go Round	4-8	*Human societies and cultures throughout the world interact with each other and affect natural systems upon which they depend. *Consumers “drive” the marketplace with their demands for goods and services. Such demands shift with time and may have positive or negative effects on the availability of natural resources and environmental quality.	12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6) 36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1) 39. Analyze the consequences of human activities on ecosystems (SE-M-A4)	32. Explain how changes are made in a democratic society (C-1B-M5) 35. Explain various processes/strategies nations use to interact (C-1C-M1) 36. Explain how U.S. foreign policy is formed and carried out (C-1C-M2) 37. Identify types of		4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts 5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4)

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82: Resource Go Round		*Industries usually respond to consumer demand for recyclable, recycled or otherwise environmentally friendly products		foreign policy issues with reference to current and historical examples (e.g., Middle East conflicts) (C-1C-M3)		<p>9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1)</p> <p>10. Explain the relationship between life experiences and texts to generate solutions to problems (ELA-7-M2)</p> <p>11. Use technical information and other available resources (e.g., Web sites, interviews) to solve problems (ELA-7-M2)</p> <p>14. Analyze grade-appropriate print and nonprint texts using various reasoning skills(ELA-7-M4)</p> <p style="text-align: center;">GLE 15-46</p>
85: In the Driver's Seat	5-8	<p>*By reducing waste and recycling materials, individuals and societies can extend the value and utility of resources and promote environmental quality.</p> <p>*Consumers "drive" the marketplace with their demands for goods and services. Such demands shift with time and may have positive or negative effects on the availability of natural resources and environmental quality.</p> <p>*Increased public knowledge of the environment and the need for conservation of natural resources have resulted in lifestyle changes in many cultures.</p>	<p>12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6)</p> <p>39. Analyze the consequences of human activities on ecosystems (SE-M-A4)</p> <p>34. Explain how environmental factors impact survival of a population (LS-M-D2)</p> <p>35. Identify resources humans derive from ecosystems (SE-M-A1)</p>	32. Explain how changes are made in a democratic society (C-1B-M5)	<p>1. Recognize and compute equivalent representations of fractions, decimals, and percents (i.e., halves, thirds, fourths, fifths, eighths, tenths, hundredths) (N-1-M)</p> <p>4. Model and apply the distributive property in real-life applications (N-4-M)</p> <p>9. Determine when an estimate is sufficient and when an exact answer is needed in real-life problems using decimals and percents (N-7-M) (N-5-M)</p> <p>10. Determine and apply rates and ratios (N-8-M)</p> <p>33. Analyze discrete and continuous data in real-life applications (D-2-M) (D-6-M)</p>	<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4)</p> <p>9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1)</p> <p>10. Explain the relationship between life experiences and texts to generate solutions to problems (ELA-7-M2)</p> <p>11. Use technical information and other available resources (e.g., Web sites, interviews) to solve problems (ELA-7-M2)</p> <p>13. Identify an author's bias (objectivity) for, against, or neutral toward an issue (ELA-7-M3)</p>

Activity	Grade level	Concept emphasized	Science GLE	Social Studies GLE	Math GLE	Language Arts GLE
85: In the Driver's Seat						14. Analyze grade-appropriate print and nonprint texts using various reasoning skills(ELA-7-M4) GLE 15-46
86 Our Changing World	5-8	<p>*Ecosystems change over time through patterns of growth and succession. They are also affected by other phenomena such as disease, insects, fire, weather and human intervention.</p> <p>*Our increasing knowledge of the Earth's ecosystems influences strategies used for forest management and environmental stewardship.</p> <p>*Altering the environment affects all life forms—including humans—and the interrelationships that link them.</p>	<p>12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6)</p> <p>32. Describe changes that can occur in various ecosystems and relate the changes to the ability of an organism to survive (LS-M-D2)</p> <p>34. Explain how environmental factors impact survival of a population (LS-M-D2)</p> <p>35. Identify resources humans derive from ecosystems (SE-M-A1)</p> <p>36. Distinguish the essential roles played by biotic and abiotic components in various ecosystems (SE-M-A1)</p> <p>37. Identify and describe the effects of limiting factors on a given population (SE-M-A2)</p> <p>39. Analyze the consequences of human activities on ecosystems (SE-M-A4)</p>	<p>2. Explain how physical features and climate affected migration, settlement patterns, and land use in the United States through 1877 (G-1B-M1)</p> <p>5. Explain patterns of rural/urban migration and the positive and negative consequences of urban development in the United States (G-1C-M3)</p>		<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and lyrics, and make connections to real-life situations and other texts (ELA-1-M4)</p> <p>9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1)</p> <p>10. Explain the relationship between life experiences and texts to generate solutions to problems (ELA-7-M2)</p> <p>11. Use technical information and other available resources (e.g., Web sites, interviews) to solve problems (ELA-7-M2)</p> <p>13. Identify an author's bias (objectivity) for, against, or neutral toward an issue (ELA-7-M3)</p> <p>14. Analyze grade-appropriate print and nonprint texts using various reasoning skills(ELA-7-M4) GLE 15-46</p>
92: A Look at Lifestyles	5-8	<p>*Increased public knowledge of the environment and the need for conservation of natural resources have resulted in lifestyle changes in many cultures.</p> <p>*Humans throughout the world create differing social, cultural and economic systems and organizations to help them meet their physical and spiritual needs.</p>	<p>12. Explain how external factors and genetics can influence the quality and length of human life (e.g., nutrition, smoking, drug use, exercise) (LS-M-A6)</p> <p>35. Identify resources humans derive from ecosystems (SE-M-A1)</p> <p>36. Distinguish the essential roles played by biotic and abiotic</p>	<p>1. Analyze various types of maps, charts, graphs, and diagrams related to U.S. history (G-1A-M2)</p> <p>2. Explain how physical features and climate affected migration, settlement patterns, and</p>		<p>4. Draw conclusions and make inferences in oral and written responses about ideas and information in grade-appropriate texts</p> <p>5. Interpret ideas and information in a variety of texts, including periodical articles, editorials, and</p>

Activity	Grade level	Concept emphasized	Science GLE	Social Studies GLE	Math GLE	Language Arts GLE
92: A Look at Lifestyles		*The standard of living of various peoples throughout the world depends on environmental quality, the availability, use and distribution of resources, and the societies' political structure and culture.	components in various ecosystems (SE-M-A1) 39. Analyze the consequences of human activities on ecosystems (SE-M-A4) 43. Identify and analyze the environmental impact of humans' use of technology (e.g., energy production, agriculture, transportation, human habitation) (SE-M-A8)	land use in the United States through 1877 (G-1B-M1) 5. Explain patterns of rural/urban migration and the positive and negative consequences of urban development in the United States (G-1C-M3) 9. Explain how the different physical environments in the American North and South led to different economic activities (G-1D-M2)		lyrics, and make connections to real-life situations and other texts (ELA-1-M4) 9. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, (ELA-7-M1) 10. Explain the relationship between life experiences and texts to generate solutions to problems (ELA-7-M2) 11. Use technical information and other available resources (e.g., Web sites, interviews) to solve problems (ELA-7-M2) 13. Identify an author's bias (objectivity) for, against, or neutral toward an issue (ELA-7-M3) 14. Analyze grade-appropriate print and nonprint texts using various reasoning skills(ELA-7-M4) GLE 15-46