

Lenoir County Public School  
Curriculum and Pacing Guide 2006-2007

Subject Science Grade Level 8 1st 9 weeks

**COMPETENCY GOAL 1: The learner will design and conduct investigations to demonstrate an understanding of scientific inquiry.**  
*Goal 1 is to be integrated throughout the entire year.*

Objectives	Vocabulary	Essential Questions and Tasks	Resources
1.01 Identify and create questions and hypotheses that can be answered through scientific investigations.	Science Observation Hypothesis Theory Law Data	<ul style="list-style-type: none"> <li>Explain the steps of the scientific method.</li> <li>Solve a problem using the scientific method.</li> <li>In what ways can I use the scientific method to solve everyday problems?</li> </ul>	<i>Chapter Investigations</i> and <i>Think Science</i> pages in each unit <i>The Nature of Science xxxvi-xxxix</i> Scientific Thinking Handbook p R3 Lab handbook p.28-35
1.02 Develop appropriate experimental procedures for: <ul style="list-style-type: none"> <li>Given questions.</li> <li>Student generated questions.</li> </ul>	Research Experiment Purpose Materials	<ul style="list-style-type: none"> <li>How are research questions developed?</li> <li>Design an experiment using research questions.</li> </ul>	<i>Describe Your Own Investigation</i> in each unit  Lab Handbook p. R10-R3
1.03 Apply safety procedures in the laboratory and in field studies: <ul style="list-style-type: none"> <li>Recognize potential hazards</li> <li>Safely manipulate materials and equipment.</li> <li>Conduct appropriate procedures</li> </ul>	Symbols Electrical and Chemical safety Heating and fire Safety Animal safety Clean-up	<ul style="list-style-type: none"> <li>Why is safety important in the lab?</li> <li>What are the proper precautions to be take during a lab?</li> <li>Draw a poster demonstrating lab safety.</li> <li>Locate and explain the use of safety equipment in the lab.</li> </ul>	<i>Explores, Investigates</i> and <i>Chapter Investigations</i> in each chapter  Lab handbook p. R10-35
1.04 Analyze variables in scientific investigations: <ul style="list-style-type: none"> <li>Identify dependent and independent.</li> <li>Use of a control.</li> <li>Manipulate.</li> <li>Describe relationships between.</li> <li>Define operationally.</li> </ul>	Analysis Variable Independent variable Dependent variable Operational variable Control Constants	<ul style="list-style-type: none"> <li>Compare and contrast independent and dependent variables.</li> <li>Why is only one variable tested at a time?</li> </ul>	<i>Chapter Investigations</i> and <i>Think Science</i> pages in each unit  Lab handbook p. R30-35
1.05 Analyze evidence to: <ul style="list-style-type: none"> <li>Explain observations.</li> <li>Make inferences and predictions.</li> <li>Develop the relationship between evidence and explanation.</li> </ul>	Inference Prediction Evidence Explanation	<ul style="list-style-type: none"> <li>How are inferences made from experiment observations?</li> <li>Describe the role of inference and predictions in an experiment?</li> <li>What is the difference between a law and a theory?</li> </ul>	<i>Explores, Investigates</i> and <i>Chapter Investigations</i> in each chapter  <i>Scientific Thinking</i> handbook p R2-9 Lab handbook p R28-35

Lenoir County Public School  
Curriculum and Pacing Guide 2006-2007

**Subject** Science **Grade Level** 8 **1st** 9 weeks

1.06 Use mathematics to gather, organize, and present quantitative data resulting from scientific investigations: <ul style="list-style-type: none"> <li>• Measurement</li> <li>• Analysis of data.</li> <li>• Graphing.</li> <li>• Prediction models</li> </ul>	Measurement Graph International System (SI) Precision and Accuracy	<ul style="list-style-type: none"> <li>• What is quantitative data?</li> <li>• Graph data from a scientific experiment.</li> <li>• How is the metric system different from the standard (customary) system?</li> <li>• What type of graph is appropriate for each type of data?</li> <li>• Why is it necessary that scientist use the SI for measurement?</li> </ul>	<p><b>Chapter Investigations</b> and <b>Math in Science</b> pages in each chapter</p> <p>Lab Handbook p R10-35 <b>Math handbook</b> p R36-44</p>
1.07 Prepare models and/or computer simulations to: <ul style="list-style-type: none"> <li>• Test hypotheses.</li> <li>• Evaluate how data fit.</li> <li>• Make predictions.</li> </ul>	Computer simulations Models	<ul style="list-style-type: none"> <li>• How can investigations be visually demonstrated? (3D model, PowerPoint, etc.)</li> <li>• Develop experimental design to test hypothesis.</li> </ul>	<p><b>Explores, Investigates,</b> and <b>Chapter Investigations</b> in each unit</p> <p><b>Explore the Big Idea</b> in each chapter</p>
1.08 Use oral and written language to: <ul style="list-style-type: none"> <li>• Communicate findings.</li> <li>• Defend conclusions of scientific investigations.</li> <li>• Describe strengths and weaknesses of claims, arguments, and/or data.</li> </ul>		<ul style="list-style-type: none"> <li>• How can an experiment be written about?</li> <li>• Design and present a scientific experiment where a conclusion must be defended using observations, data, etc.</li> </ul>	<p><b>Unit Projects</b> beginning of each unit. <b>Timeline in Science</b> in each Unit</p>
1.09 Use technologies and information systems to: <ul style="list-style-type: none"> <li>• Research.</li> <li>• Gather and analyze data.</li> <li>• Visualize data.</li> <li>• Disseminate findings to others.</li> </ul>		<ul style="list-style-type: none"> <li>• How can a computer be used to conduct research?</li> <li>• Research a project using the internet.</li> </ul>	<p><b>Unit Projects</b> beginning of each unit. <b>Explore the Big Idea</b> in each chapter <b>Teaching with Technology</b> in each chapter section cd available for students <b>Connecting Sciences</b> and <b>Think Science</b> in each unit.</p>
1.10 Analyze and evaluate information from a scientifically literate viewpoint by reading, hearing, and/or viewing: <ul style="list-style-type: none"> <li>• Scientific text.</li> <li>• Articles.</li> <li>• Events in the popular press</li> </ul>		<ul style="list-style-type: none"> <li>• What steps are needed to evaluate science information?</li> <li>• What media can be used to analyze and evaluate data?</li> <li>• Evaluate a science event reported in the local newspaper or magazine.</li> </ul>	<p><b>Frontiers in Science</b> beginning each unit- features Scientific American Frontiers video Internet resources at <a href="http://www.classzone.com">www.classzone.com</a> and NSTA <a href="http://www.Scilinks.org">www.Scilinks.org</a></p> <p>Scientific Handbook p R2-9</p>

Lenoir County Public School  
Curriculum and Pacing Guide 2006-2007

Subject Science Grade Level 8 1st 9 weeks

**COMPETENCY GOAL 2: The learner will demonstrate an understanding of technological design.**

*Goal 2 is to be integrated throughout the entire year.*

Objectives	Vocabulary	Essential Questions and Tasks	Resources
2.01 Explore evidence that "technology" has many definitions. <ul style="list-style-type: none"> <li>Artifact or hardware.</li> <li>Methodology or technique.</li> <li>System of production.</li> <li>Social-technical system</li> </ul>	Technology Artifact Hardware Methodology	<ul style="list-style-type: none"> <li>What is technology?</li> <li>Research the evolution of technology.</li> <li>How is the scientific method a good way to solve a problem?</li> <li>What is the benefit of science journals?</li> <li>How does technology affect society?</li> </ul>	<b>The Nature of Technology</b> (p. xl-xli) <i>Frontiers in Science and Timelines in Science</i> features in each unit
2.02 Use information systems to: <ul style="list-style-type: none"> <li>Identify scientific needs, human needs, or problems that are subject to technological solution.</li> <li>Locate resources to obtain and test ideas.</li> </ul>	Prototype Brainstorming	<ul style="list-style-type: none"> <li>Identify a problem scientific technology could be used to solve.</li> <li>Given technology, retrace its path of development. i.e. air bags</li> <li>How can information systems be used to locate resources needed to research a problem and test ideas?</li> </ul>	Resource centers Media centers NSTA <a href="http://www.scilinks.org">www.scilinks.org</a>  <a href="http://www.gk-12.osu.edu/Docs/Technological%20Design.ppt#257.2.What%20is%20design?">http://www.gk-12.osu.edu/Docs/Technological%20Design.ppt#257.2.What is design?</a> Powerpoint
2.03 Evaluate technological designs for: <ul style="list-style-type: none"> <li>Application of scientific principles.</li> <li>Risks and benefits.</li> <li>Constraints of design.</li> <li>Consistent testing protocols.</li> </ul>	Technological design Risk-benefit analysis Constraint Protocol	<ul style="list-style-type: none"> <li>How does technology help and/or harm our life?</li> <li>How can technological design allow for consistent testing protocol?</li> <li>Why must testing be consistent?</li> </ul>	<b>Science on the Job</b> B97; C67; D85 xl-xli,  <b>Technology Timeline</b> in each unit <a href="http://school.discovery.com/lessonplans/programs/inventioncomputertechnology/">http://school.discovery.com/lessonplans/programs/inventioncomputertechnology/</a>
2.04 Apply tenets of technological design to make informed consumer decisions about: <ul style="list-style-type: none"> <li>Products.</li> <li>Processes.</li> <li>Systems</li> </ul>	System Process Feedback Input/Output	<ul style="list-style-type: none"> <li>What affect does technological design have on consumer decisions?</li> </ul>	Unit D p.145, 153, 167-169 Unit E p. 111,123

Lenoir County Public School  
Curriculum and Pacing Guide 2006-2007

Subject Science Grade Level 8 1st 9 weeks

**COMPETENCY GOAL 4: The learner will conduct investigations and utilize technology and information systems to build an understanding of chemistry.**

Days 23	Objective	Vocabulary	Essential Questions and Tasks:	Resources
1 days	4.01 Understand that both naturally occurring and synthetic substances are chemicals.  <b>Benchmarks:</b> <ul style="list-style-type: none"> <li>Students will be able to identify the physical properties of an element.</li> <li>Students will be able to give examples of substances that are natural and man-made.</li> </ul>	Atom Elements Chemical Atomic number Atomic mass number Proton Neutron Electron Physical properties Chemical properties Synthetic Mendeleev	<ul style="list-style-type: none"> <li>Define naturally occurring and synthetic substance.</li> <li>What are the different ways to identify a substance?</li> <li>How can you determine if a substance is man-made or natural?</li> <li>Identify careers and fields of study that involve chemistry.</li> </ul>	Unit D Chapter 1 Unit Project p5 Model Medicine  <i>NC Handbook</i> p. 18-20 <i>Support documents</i> p.5  <b>NIH Chemicals, the Environment and You Lesson 1</b> <a href="http://science.education.nih.gov/supplements/nih2/chemicals/default.htm">http://science.education.nih.gov/supplements/nih2/chemicals/default.htm</a>  <a href="http://www.chem4kids.com">www.chem4kids.com</a>
3 days	4.03 Explain how the periodic table is a model for: <ul style="list-style-type: none"> <li>Classifying elements.</li> <li>Identifying the properties of elements.</li> </ul> <b>Benchmarks:</b> <ul style="list-style-type: none"> <li>Students will be able to compare metals, nonmetals, and metalloids based on their properties and location on the periodic table.</li> </ul>	Periodic table Groups Periods Metalloids Metals Nonmetals	<ul style="list-style-type: none"> <li>What are elements?</li> <li>How can the placement of elements on the periodic table help to identify their properties?</li> <li>Why do elements in the same group have similar properties?</li> <li>Given information about an unknown, where would it appear on the periodic table?</li> </ul>	Unit D Chapter 1 Lab Manual p111-119  <i>Support Documents</i> p. 6 <i>w/Labs and activities</i> p. 17 -23 <i>Adopt-an- Element Periodic Pun</i>  <a href="http://www.classzone.com">www.classzone.com</a> It's Elemental and more Build an Atom simulation  <a href="http://www.nc.msscience.com">www.nc.msscience.com</a> Units 3 & 4-various chapters
2 days	4.02 Evaluate evidence that elements combine in a multitude of ways to produce compounds that account for all living and nonliving substances.  <b>Benchmarks:</b> <ul style="list-style-type: none"> <li>Students will be able to describe the difference between covalent, metallic,</li> </ul>	Chemical Reaction Ionic, covalent and polar covalent bonding Compounds Physical changes Chemical changes Valence electrons	<ul style="list-style-type: none"> <li>What are the different ways elements combine?</li> <li>Explain some ways compounds are formed.</li> <li>How do the properties of elements change when they combine with other elements?</li> <li>What types of chemicals are most common in nonliving things? In living things?</li> </ul>	Unit D Chapter 2 &3 Unit Resource book p 110-118  <i>Support Documents</i> p.5 <a href="http://www.hardin.k12.ky.us/res_techn/download/atom_s.ppt">http://www.hardin.k12.ky.us/res_techn/download/atom_s.ppt</a> Jeopardy game  <a href="http://www.classzone.com">www.classzone.com</a> Bonds <a href="http://www.visionlearning.com/library/module_viewer.php?mid=55">www.visionlearning.com/library/module_viewer.php?mid=55</a>

Lenoir County Public School  
Curriculum and Pacing Guide 2006-2007

Subject Science Grade Level 8 1st 9 weeks

	<p>and ionic bonding.</p> <ul style="list-style-type: none"> <li>Students will be able to predict whether an atom is likely to form a chemical bond.</li> </ul>			<p><i>Great animations for bonding.</i></p> <p><a href="http://go.hrw.com/resources/go_sc/hst/ia/hstp14.htm">http://go.hrw.com/resources/go_sc/hst/ia/hstp14.htm</a> Make a mini-brochure</p>
3 days	<p>4.05 Identify substances based on characteristic physical properties:</p> <ul style="list-style-type: none"> <li>Density.</li> <li>Boiling/Melting points.</li> <li>Solubility.</li> <li>Chemical reactivity.</li> <li>Specific heat</li> </ul> <p><b>Benchmarks:</b></p> <ul style="list-style-type: none"> <li>Students will be able to identify the physical properties of an element</li> </ul>	<p>Matter Corrosion Solvent Solute Solubility Boiling/Melting points Specific heat</p>	<ul style="list-style-type: none"> <li>What are the physical properties of matter?</li> <li>How can certain physical properties help you identify a substance?</li> <li>Determine the identity of an unknown given tables with physical properties.</li> </ul>	<p>Unit D Chapter 3.3 and 4</p> <p><i>NC Handbook</i> p 25-27 <i>Support Documents</i> p.9 <b>w/Lab</b> p. 29-32</p> <p>Lab chemical change w/lesson plan <a href="http://www.eduref.org/cgi-bin/printlessons.cgi/Virtual/Lessons/Science/Chemistry/CHM0008.html">http://www.eduref.org/cgi-bin/printlessons.cgi/Virtual/Lessons/Science/Chemistry/CHM0008.html</a></p> <p><a href="http://webwiser.nlm.nih.gov/initSearch.do">http://webwiser.nlm.nih.gov/initSearch.do</a> You choose properties and it identifies a substance.</p> <p><a href="http://www.oakland.k12.mi.us/scope/seventh_lessons/science/unit3/SC070309.DOC">http://www.oakland.k12.mi.us/scope/seventh_lessons/science/unit3/SC070309.DOC</a> MYSTERY POWDERS LAB</p>
2 days	<p>4.04 Describe the suitability of materials for use in technological design:</p> <ul style="list-style-type: none"> <li>Electrical Conductivity</li> <li>Density</li> <li>Magnetism</li> <li>Solubility</li> <li>Malleability</li> </ul> <p><b>Benchmarks</b></p> <ul style="list-style-type: none"> <li>Given a piece of technology, the students will explain what elements may have been used in the device.</li> </ul>	<p>Technological design Conductivity Conduction Voltage Density Magnetism Solubility Malleability Ductility Exothermic Reaction Endothermic Reaction</p>	<ul style="list-style-type: none"> <li>How does knowing an element's properties help create proper technological design?</li> <li>What materials are needed for magnetic levitation?</li> </ul>	<p><b>Unit D</b> Chapter 1.2 p22-23 Chapter 1.3; 2.3 ; 3.4 &amp; Chapter 4 Lab Investigate Mixed Substances p27</p> <p><i>NC Handbook</i> p 25-27 <i>Support Documents</i> p7-9 <b>w/Labs</b> p 25-31</p> <p><a href="http://www.classzone.com">www.classzone.com</a> Endothermic and Exothermic simulations Unit D</p> <p><a href="http://www.learnnc.org/lessons/trishloudermilt172005567">http://www.learnnc.org/lessons/trishloudermilt172005567</a> Does it Float? (density)</p> <p><a href="http://www.abc.net.au/science/surfingscientist/pdf/lesson_plan11.pdf">http://www.abc.net.au/science/surfingscientist/pdf/lesson_plan11.pdf</a> (conductivity)</p>

Lenoir County Public School  
Curriculum and Pacing Guide 2006-2007

Subject Science Grade Level 8 1st 9 weeks

2 days	<p>4.06 Describe and measure quantities related to chemical/physical changes within a system:</p> <ul style="list-style-type: none"> <li>• Temperature.</li> <li>• Volume.</li> <li>• Mass.</li> <li>• Precipitate.</li> <li>• Gas production.</li> </ul> <p><b>Benchmarks:</b></p> <ul style="list-style-type: none"> <li>• Students will be able to measure the temperature and mass change of a substance during a chemical reaction</li> </ul>	<p>Mass Volume Temperature Precipitate Reactivity</p>	<ul style="list-style-type: none"> <li>• Define chemical and physical change.</li> <li>• Experiment to show precipitates, gas, and temperature changes.</li> <li>• What are some indicators that a physical or chemical change has occurred in a substance?</li> <li>• How can the quantities of a chemical/physical change be measured in a substance?</li> </ul>	<p>Unit D chapter 3.2; 3.3 p72 <i>Teacher Demo</i> Unit Resource Book p139 &amp; 189-197 <b>Support Documents</b> p. 9</p> <p><a href="http://www.chem4kids.com/files/matter_chemphys.html">http://www.chem4kids.com/files/matter_chemphys.html</a> chemical and physical changes</p> <p><a href="http://apps.caes.uga.edu/sbof/main/lessonPlan/Chemical%20Reactions%20Antacid%20Products.pdf">http://apps.caes.uga.edu/sbof/main/lessonPlan/Chemical%20Reactions%20Antacid%20Products.pdf</a> form precipitates</p> <p><a href="http://www.teach-nology.com/teachers/lesson_plans/science/chemistry/reactions/">http://www.teach-nology.com/teachers/lesson_plans/science/chemistry/reactions/</a> Different labs/lesson plans</p>
2 days	<p>4.07 Identify evidence supporting the law of conservation of matter.</p> <ul style="list-style-type: none"> <li>• During an ordinary chemical reaction matter cannot be created or destroyed.</li> <li>• In a chemical reaction, the total mass of the reactants equals the total mass of the products mass of the products.</li> </ul> <p><b>Benchmarks:</b></p> <ul style="list-style-type: none"> <li>• Students will be able to write balanced chemical equations for various chemical reactions.</li> </ul>	<p>Lavoisier Law of Conservation of Mass Reactants Products Balanced Equations</p>	<ul style="list-style-type: none"> <li>• Experiment to show the law of conservation of matter is valid.</li> <li>• How does the reactant side of a chemical equation compare to the product side?</li> <li>• How does the production of new substances prove the law of conservation of matter?</li> <li>• How is the law of conservation of matter maintained in a balanced chemical equation?</li> </ul>	<p>Unit D Chapter 3.2 inc lab p.79 Unit Resource Book p. 150</p> <p><b>Support Documents</b> p.10 <b>w/Lab</b> p34-36</p> <p><a href="http://www.iit.edu/~smile/ch9403.html">http://www.iit.edu/~smile/ch9403.html</a> lab demonstrating conservation of mass</p> <p><a href="http://www.wfu.edu/~ylwong/balanceeq/balanceeq.html">http://www.wfu.edu/~ylwong/balanceeq/balanceeq.html</a> Tutorial on balancing equations</p>
2 days	<p>4.08 Identify evidence that some chemicals may contribute to human health conditions including:</p>	<p>Toxic Toxicology Autoimmune Diabetes Asthma</p>	<ul style="list-style-type: none"> <li>• What are some ways chemicals may contribute to the human health ?</li> <li>• How do chemicals improve human health.? Write a report on studies</li> </ul>	<p><b>NIH Chemicals, the Environment and You Lesson 2 and Lesson 5</b></p> <p><a href="http://scienceeducation.nih.gov/supplements/nih2/chemicals/default.htm">http://scienceeducation.nih.gov/supplements/nih2/chemicals/default.htm</a></p>

Lenoir County Public School  
Curriculum and Pacing Guide 2006-2007

Subject Science Grade Level 8 1st 9 weeks

	<ul style="list-style-type: none"> <li>• Cancer.</li> <li>• Autoimmune disease.</li> <li>• Birth defects.</li> <li>• Heart disease.</li> <li>• Diabetes.</li> <li>• Learning and behavioral disorders</li> <li>• Kidney disease.</li> <li>• Asthma</li> </ul> <p><b>Benchmarks:</b></p> <ul style="list-style-type: none"> <li>• Students will have an understanding of the importance of chemicals to the human health condition.</li> </ul>	<p>Cancer Alcohol Drug abuse</p>	<p>connecting human disease to chemicals.</p> <ul style="list-style-type: none"> <li>• Report on chemicals that enhance human health.</li> <li>• After viewing data connecting human disease to chemical contact, how should a determination be made regarding its validity?</li> <li>• Identify the role of scientists in researching and conducting experiments and investigations in order to find medicines and cures for various human health conditions. (Ethics in science)</li> </ul>	<p><b>Support documents</b>-p 11 <b>NC handbook</b> p16-20</p> <p><a href="http://www.classzone.com">www.classzone.com</a> Unit E Chapter 4 links to the following site and others like it <a href="http://www.bbc.co.uk/health/conditions/asthma/">http://www.bbc.co.uk/health/conditions/asthma/</a></p> <p>Scientific American Frontiers video “<i>Endangered Wonder Drug</i>” segment</p>
2 days	<p>4.09 Describe factors that determine the effects a chemical has on a living organism including:</p> <ul style="list-style-type: none"> <li>• Exposure.</li> <li>• Potency.</li> <li>• Dose and the resultant concentration of chemical in the organism.</li> <li>• Individual susceptibility.</li> <li>• Possible means to eliminate or reduce effects.</li> </ul> <p><b>Benchmarks:</b></p> <ul style="list-style-type: none"> <li>• Students will understand the effect excessive sun exposure has on a person’s health.</li> <li>• Students will explain why it is important to follow prescription labels on medicines.</li> </ul>	<p>Potency Resultant concentration Dosage Inhalation Ingestion Absorption Exposure Susceptibility Risks &amp; Benefits</p>	<ul style="list-style-type: none"> <li>• How do certain physical factors determine the effects a chemical has on a living organism?</li> <li>• Why do individuals react differently to similar chemical exposure?</li> <li>• Show how concentrations can be increased or decreased.</li> <li>• Describe the connections between concentration and potency.</li> <li>• Predict how changes in exposure will decrease or increase the susceptibility of the individual.</li> <li>• Predict how changing concentrations will change the effects on people.</li> <li>• What measures can be taken to reduce people’s risk of exposure to dangerous chemicals?</li> </ul>	<p>Unit E 4.3 Lab p 122-123</p> <p><b>NC handbook</b> p 16-20 <b>Support documents</b> p. 12-13 <b>Law of Definite Proportions</b></p> <p>Many Research Projects NIH <i>Chemicals, the Environment and You</i> <b>Lesson 5 and 6</b> <a href="http://scienceeducation.nih.gov/supplements/nih2/chemicals/default.htm">http://scienceeducation.nih.gov/supplements/nih2/chemicals/default.htm</a></p> <p><a href="http://www.niehs.nih.gov/multimedia/qt/psa/elecnc320.mov">www.niehs.nih.gov/multimedia/qt/psa/elecnc320.mov</a> short movie on NIEHS</p>

Lenoir County Public School  
Curriculum and Pacing Guide 2006-2007

Subject Science Grade Level 8 1st 9 weeks

2 days	<p>4.10 Describe risks and benefits of chemicals including:</p> <ul style="list-style-type: none"> <li>• Medicines.</li> <li>• Food preservatives.</li> <li>• Crop yield.</li> <li>• Sanitation.</li> </ul> <p><b>Benchmarks:</b></p> <ul style="list-style-type: none"> <li>• Students will be able to list ways chemicals can be both helpful and harmful to a person's health.</li> <li>• Students will be able to identify the need to establish regulations regarding the use of chemicals in all aspects of life.</li> </ul>	<p>Preservatives Crop yield Sanitation Quality control Technology</p>	<ul style="list-style-type: none"> <li>• How are chemicals important in everyday life?</li> <li>• Classify the chemicals that are dangerous/beneficial in food preservatives.</li> <li>• Describe the known effects of three chemicals on human health.</li> <li>• What role do chemicals play in agriculture?</li> <li>• Given a warning label on products and medicines, show a chemicals risks and benefits?</li> <li>• Do the benefits of using chemicals justify their risks to humans and their environment?</li> <li>• Why is it important to monitor the soil of landfills?</li> </ul>	<p>Unit C 27; E 4.2</p> <p><i>NC handbook</i> p 16-20 <i>Support documents</i> p. 14</p> <p><b>NIH Chemicals, the Environment and You Lesson 6</b>  <a href="http://science-education.nih.gov/supplements/nih2/chemicals/activities/lesson6_database.htm">http://science-education.nih.gov/supplements/nih2/chemicals/activities/lesson6_database.htm</a> very good info and activities</p> <p><a href="http://www.carolina.com/manuals/manuals8/Foiling_Spoilage.pdf">http://www.carolina.com/manuals/manuals8/Foiling_Spoilage.pdf</a></p> <p><a href="http://www.epa.gov/pesticides/about/">www.epa.gov/pesticides/about/</a></p> <p>For discussion-organic vs. inorganic  <a href="http://www.ota.com/organic_and_you/10reasons.html">http://www.ota.com/organic_and_you/10reasons.html</a></p>
2 days for Review, Project, and assessment				