

*Ohio Newspapers  
Foundation*

Lesson Plans for Ohio Teachers Using the Newspaper as Their Textbook

# Ohio Newspapers Foundation

Dear Educators,

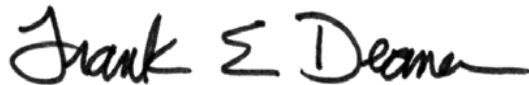
For over 40 years, teachers have used newspapers as a “living textbook” in classrooms across the country and around the world. The newspaper plays a vital role in daily studies, with educators discovering new dimensions every day. But with the full daily schedule experienced by Ohio teachers, the opportunity rarely surfaces to share these discoveries.

“Standard Recipes: Lesson Plans for Ohio Teachers Using the Newspaper as Their Textbook” showcases some of the most creative, tried-and-true Newspaper In Education (NIE) lessons and activities developed and used by teachers throughout Ohio. This guide has been produced through a grant from The Ohio Newspapers Foundation, a nonprofit charitable and educational organization affiliated with The Ohio Newspaper Association.

The “Standard Recipes” teacher’s guide has been distributed in electronic format to NIE coordinators and publishers at more than 250 daily and weekly newspapers in Ohio for use in local schools. We are particularly pleased that these curriculum materials have been designed to tie directly to curriculum standards of the Ohio Department of Education. We gratefully acknowledge the assistance of Janis Hunter, educational consultant.

Also assisting in the development of “Standard Recipes” were Sue Ann Taylor, The Vindicator, Youngstown; Shannon Krockner, New Philadelphia Times Reporter; Suzanne Rucker and Michelle Brown, Cox Ohio Publishing; and Anne Coburn-Griffis, The Lima News. All are members of the Foundation’s Ohio NIE Committee which has been publishing curriculum materials since 1984.

If you need any assistance with these classroom materials please contact us. We appreciate your support of NIE.



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### NIE Lesson Plan Format: WHAT'S YOUR NAME?

<p>Date: early in year Time: 30 minutes</p>	<p>Group: Kindergarten <span style="float: right;">Subject: Language Arts</span></p>	
<p>Academic Content Standards:  Distinguish and name all upper and lower case letters.</p>	<p>Instructional Objectives: The students will be able to identify the letters in their own name.</p>	
<p>Instructional Activities and Time Allotted:  1. Discuss the importance of their name and uses of the newspaper. 2. Model finding the letters of their name. 3. Discuss proper letter order in their name. 4. Cut and paste letters in their name. 5. Put it to dry.</p>	<p>Teaching Strategies: 1. Whole group for instructions. 2. Learning centers for the activity.</p>	
<p>Instructional Materials:  Newspapers, sheet of paper per student; glue; scissors.</p>		
<p>Lesson Environment:  Learning Centers.</p>	<p>Adaptations/Modifications:  Assist students who have difficulty cutting.  Assist students not yet able to identify letters, by circling them in the newspaper and allowing the student to cut them out.</p>	<p>Student Assessment:  Product of the student's correctly spelled name and observation of the process.</p>
<p>Technology:</p>		
<p>Student Follow-up:  The student can type their name in the computer and then print it.</p>		



**Subject: ENGLISH LANGUAGE ARTS**

**Standard: Phonemic Awareness, Word Recognition and Fluency**

Grades K-3, Benchmark A—Use letter-sound correspondence knowledge and structural analysis to decode words.

Grade K, Indicator 1—Read own first and last name.

Grade K, Indicator 4—Distinguish and name all upper- and lower-case letters.

Grade K, Indicator 5—Recognize, say and write the common sounds of letters.

**Standard: Writing Processes**

Grades K-3, Benchmark E—Edit to improve sentence fluency, grammar and usage.

Grade K, Indicator 5—Write from left to right and top to bottom.

**Standard: Writing Conventions**

Grades K-3, Benchmark A—Print legibly using appropriate spacing.

Grade K, Indicator 1—Print capital and lowercase letters, correctly spacing the letters.

Grades K-3, Benchmark B—Spell grade-level appropriate words correctly.

Grade K, Indicator 3—Show characteristics of early letter name-alphabetic spelling.

### NIE Lesson Plan Format: HEROES

Date:	Group: 5 <sup>th</sup> grade, gifted	Subject: Reading
<b>Academic Content Standards:</b>  Research, Grade 5 #1,6 Comm., Gr.5 #8 a,b,c,d, #9	<b>Instructional Objectives:</b>  To garner information focused on the topic of heroes and convey research into a speaking presentation and visual aid.	
<b>Instructional Activities &amp; Time Allotted:</b>  Directed lesson: 40 minutes. Research: 80 minutes. Independent work: 200 minutes. Presentation(s): 40 minutes.	<b>Teaching Strategies:</b> Whole group for instructions; Venn diagramming; facilitate research (lab, news articles, kit materials, application process to set high ability groups to do differentiated pieces.  Under the direction of the teacher, students will search local newspapers to find local heroes.	
<b>Instructional Materials:</b>  Local newspapers, Giraffe Heroes Project.		
<b>Lesson Environment:</b>  Classroom.	<b>Adaptations/Modifications:</b>  Low/average use thumbnail sketches provided in GH Kit. High ability use local newspapers and conduct live interviews.	<b>Student Assessment:</b>  Rubric for visual aid, analysis essays.
<b>Technology:</b>  Word processing and graphics, research.		
<b>Student Follow-up:</b>  Vocabulary to know: celebrity, hero, common good, persistence.		



**Subject: ENGLISH LANGUAGE ARTS**

**Standard: Research**

Grades 5-7, Benchmark A—Formulate open-ended research questions suitable for inquiry and investigation and develop a plan for gathering information.

Grades 5-7, Benchmark B—Locate and summarize important information from multiple sources.

Grades 5-7, Benchmark C—Organize information in a systematic way.

Grades 5-7, Benchmark D—Acknowledge quoted and paraphrased information and document sources used.

Grades 5-7, Benchmark E—Communicate findings orally, visually and in writing or through multimedia.

Grade 5, Indicator 1—Generate a topic, assigned or personal interest, and open-ended questions for research and develop a plan for gathering information.

Grade 5, Indicator 2—Locate and gather relevant information from multiple sources (e.g., school library catalogs, online databases, electronic resources and Internet-based resources).

Grade 5, Indicator 3—Identify important information found in sources and paraphrase the findings in a systematic way (e.g., notes, outlines, charts, tables or graphic organizers).

Grade 5, Indicator 6—Use a variety of communication techniques, including oral, visual, written or multimedia reports, to present information gathered.

Standard: Communication: Oral and Visual

Grades 5-7, Benchmark D—Select an organizational structure appropriate to the topic, audience, setting and purpose.

Grades 5-7, Benchmark E—Present ideas in a logical sequence and use effective introductions and conclusions that guide and inform a listener's understanding of key ideas.

Grades 5-7, Benchmark F—Give presentations using a variety of delivery methods, visual materials and technology.

Grade 5, Indicator 8—Deliver informational presentations (e.g., expository, research) that:

- a. demonstrate an understanding of the topic and present events or ideas in a logical sequence;
- b. support the main idea with relevant facts, details, examples, quotations, statistics, stories and anecdotes;
- c. organize information, including a clear introduction, body and conclusion and follow common organizational structures when appropriate (e.g., cause-effect, compare-contrast);
- d. use appropriate visual materials (e.g., diagrams, charts, illustrations) and available technology; and
- e. draw from several sources and identify sources used.

## NIE Lesson Plan Format: GOOD SPORTS

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: 3rd Grade Subject: Language Arts

<p><b>Curriculum Goals:</b></p> <p>Recognition of Proper Nouns. Correct capitalization of proper nouns.</p>	<p><b>Instructional Objectives:</b></p> <ol style="list-style-type: none"> <li>1. Recognition and correct capitalization of proper nouns.</li> <li>2. Categorizing of proper nouns with relation to common nouns.</li> </ol>	
<p><b>Instructional Activities and Time Allotted:</b></p> <p>Highlighting nouns in news/sports article, copying &amp; categorizing; approximately 40 minutes.</p>	<p><b>Teaching Strategies:</b></p> <ol style="list-style-type: none"> <li>1. Highlight all proper nouns in a sports article.</li> <li>2. Identify which letters need to be capitalized.</li> <li>3. Copy selected nouns onto loose-leaf paper, then put into categories by their related common nouns.</li> </ol> <p>Example: Jerome Bettis – player                      Steelers – team                      Cleveland - city                                   Tommy Maddox – player                      Browns – team                      Pittsburgh - city                                   Chris Gardocki – players</p>	
<p><b>Instructional Materials:</b></p> <p>One sports article and one sheet of paper per student. (Students should already have paper, pencils and highlighters.)</p>	<p>Alamo dome – stadium                                      Eddie Sutton – coach                      Cowboys – team mascot          Meadlowlands – stadium                                      Phil Martelli – coach                      Hawks – team mascot</p>	
<p><b>Lesson Environment:</b></p> <p>Classroom.</p>	<p><b>Adaptations/Modifications:</b></p> <p>Students can all use the same article, highlighting the same nouns or do different articles (challenge – higher level.)</p>	<p><b>Student Assessment:</b></p> <p>List of nouns on loose-leaf paper.</p>
<p><b>Technology:</b></p> <p>Students could find the article on-line.</p>		
<p><b>Student Follow-up:</b></p> <p>Try at home with family. See if you can find your favorite player, team, and city.</p>		



**Subject: ENGLISH LANGUAGE ARTS**

**Standard: Writing Conventions**

Grades 3-4, Benchmark C—Use conventions of punctuation and capitalization in written work.

Grade 3, Indicator 10—Use correct capitalization.

Grades 3-4, Benchmark D—Use grammatical structures to effectively communicate ideas in writing.

Grade 3, Indicator 11—Use nouns, verbs and adjectives correctly.

## NIE Lesson Plan Format: CREATE A PORTRAIT

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Partner \_\_\_\_\_ Subject: Language Arts

<p><b>Curriculum Goals:</b></p> <p>Increase proficiency in writing processes and in using writing conventions.</p>	<p><b>Instructional Objectives:</b></p> <p>Students will create a poster about a person profiled in the newspaper.            WC #6: Use various parts of speech.            WP#14: Use resources and reference materials to select effective vocabulary.            WP #17: Prepare for publication writing that follows a purposeful format and uses technology.</p>	
<p><b>Instructional Activities &amp; Time Allotted:</b></p> <p>Poster making – 2 class periods.</p>	<p><b>Teaching Strategies:</b></p> <ol style="list-style-type: none"> <li>1. Browse cuts and cut lines for one that lends itself to descriptors and contains a person.</li> <li>2. Use observation skills to make a list of 10 – 20 descriptors of the person: physical, emotional, social words are okay to use.</li> <li>3. Use dictionary / thesaurus to check spelling and to make better word choices.</li> <li>4. Narrow list of descriptors to the best “5”.</li> <li>5. Decide on how to use the adjectives in phrases.</li> <li>6. Assemble, cut and paste either by hand or by using computers.</li> </ol>	
<p><b>Instructional Materials:</b></p> <p>Newspaper, paper, pencil, white drawing paper, markers, colored pencils, scissors, thesaurus, dictionary</p>	<p><b>Adaptations/Modifications:</b></p> <p><u>Advanced:</u> Read entire article and require descriptors to reflect content knowledge and or include other parts of speech.  <u>Remedial:</u> Provide photo that is pre-selected and / or fill-in phrases.</p>	
<p><b>Lesson Environment:</b></p> <p>Grade 5 classroom and / or computer center</p>	<p><b>Student Assessment:</b></p> <p>Students will identify five quality adjectives.             Mechanics.</p>	<p><b>Technology:</b></p> <p>Use premade template to create poster.            Cut and paste picture(s).</p>
<p><b>Student Follow-up:</b></p> <p>Technology tie-in: Students can create “Lost Posters” utilizing adjectives to clearly describe the “wanted” individual, animal or object.</p>		



**Subject: ENGLISH LANGUAGE ARTS**

**Standard: Writing Processes**

Grades 5-7, Benchmark E—Select more effective vocabulary when editing by using a variety of resources and reference materials.

Grade 5, Indicator 14—Use resources and reference materials (e.g., dictionaries and thesauruses) to select more effective vocabulary.

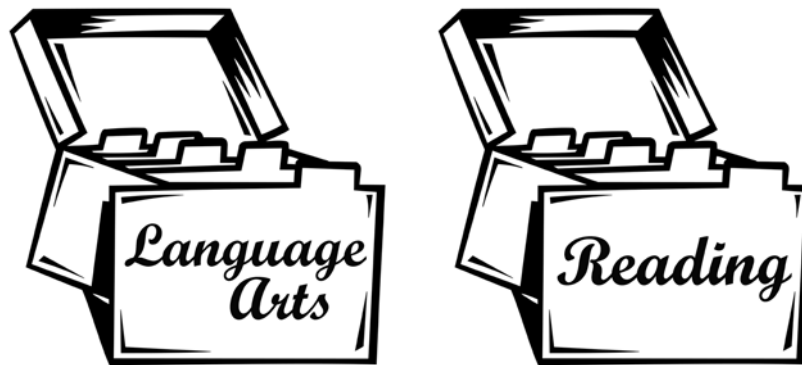
Grades 5-7, Benchmark H—Prepare writing for publication that is legible, follows an appropriate format and use techniques such as electronic resources and graphics.

Grade 5, Indicator 17—Prepare for publication (e.g., for display or for sharing with others), writing that follows a format appropriate to the purpose, using techniques such as electronic resources and graphics to enhance the final product.

**Standard: Writing Conventions**

Grades 5-7, Benchmark C—Use grammatical structures to effectively communicate ideas in writing.

Grade 5, Indicator 6—Use various parts of speech such as nouns, pronouns and verbs (regular and irregular).



### Additional Language Arts and Reading Activities

#### **Activity #1: Teacher Appreciation Week Activities**

Look through the newspaper and find a story about a person that inspires you, compare the feelings you have about the person in the story to how your favorite teacher inspires you. What qualities do they have in common? Make a list of the qualities. Do you share any of the same qualities?

#### **Subject: ENGLISH LANGUAGE ARTS**

Standard: Reading Process: Concepts of Print, Comprehension Strategies and Self-Monitoring Strategies

Grades 4-7, Benchmark A—Determine a purpose for reading and use a range of reading comprehension strategies to better understand text.

Grade 4, Indicator 1—Establish and adjust purposes for reading, including to find out, to understand, to interpret, to enjoy and to solve problems.

Grade 5, Indicator 1—Establish and adjust purposes for reading, including to find out, to understand, to interpret, to enjoy and to solve problems.

Grade 6, Indicator 1—Establish and adjust purposes for reading, including to find out, to understand, to interpret, to enjoy and to solve problems.

Grade 7, Indicator 1—Establish and adjust purposes for reading, including to find out, to understand, to interpret, to enjoy and to solve problems.

Grades 4-7, Benchmark B—Apply effective reading comprehension strategies, including summarizing and making predictions and comparisons, using information in text, between text and across subject areas.

Grade 4, Indicator 3—Compare and contrast information on a single topic or theme across different text and non-text resources.

Grade 4, Indicator 5—Make inferences or draw conclusions about what has been read and support those conclusions with textual evidence.

Grade 4, Indicator 6—Select, create and use graphic organizers to interpret textual information.

Grade 5, Indicator 2—Predict and support predictions with specific references to textual examples that may be in widely separated sections of text.

Grade 5, Indicator 6—Select, create and use graphic organizers to interpret textual information.

Grade 6, Indicator 4—Summarize the information in texts, recognizing important ideas and supporting details, and noting gaps or contradictions.

Grade 6, Indicator 5—Select, create and use graphic organizers to interpret textual information.

Grade 7, Indicator 3—Make critical comparisons across text, noting author’s style as well as literal and implied content of text.

Grade 7, Indicator 5—Select, create and use graphic organizers to interpret textual information.

Grades 4-7, Benchmark C—Make meaning through asking and responding to a variety of questions related to text.

Grade 4, Indicator 9—List questions and search for answers within the text to construct meaning.

Grade 5, Indicator 9—List questions and search for answers within the text to construct meaning.

Grade 5, Indicator 8—List questions and search for answers within the text to construct meaning.

Standard: Writing Processes

Grades 3-4, Benchmark A—Generate ideas and determine a topic suitable for writing.

Grade 3, Indicator 1—Generate writing ideas through discussions with others and from printed material.

Grade 4, Indicator 1—Generate writing ideas through discussions with others and from printed material.

Grades 3-4, Benchmark C—Apply knowledge of graphics or other organizers to clarify ideas of writing assessments.

Grade 3, Indicator 4—Use organizational strategies (e.g., brainstorming, lists, webs and Venn diagrams) to plan writing.

Grade 4, Indicator 4—Use organizational strategies (e.g., brainstorming, lists, webs and Venn diagrams) to plan writing.

Grades 5-7, Benchmark A—Generate writing topics and establish a purpose appropriate for the audience.

Grade 5, Indicator 1—Generate writing ideas through discussions with others and from printed material, and keep a list of writing ideas.

Grade 5, Indicator 2—Conduct background reading, interviews or surveys when appropriate.

Grade 6, Indicator 1—Generate writing ideas through discussions with others and from printed material, and keep a list of writing ideas.

Grade 6, Indicator 2—Conduct background reading, interviews or surveys when appropriate.

Grade 7, Indicator 1—Generate writing ideas through discussions with others and from printed material, and keep a list of writing ideas.

Grade 7, Indicator 2—Conduct background reading, interviews or surveys when appropriate.

Grades 5-7, Benchmark C—Clarify ideas for writing assignments by using graphics or other organizers.

Grade 5, Indicator 5—Use organizational strategies (e.g., rough outlines, diagrams, maps, webs and Venn diagrams) to plan writing.

Grade 6, Indicator 5—Use organizational strategies (e.g., rough outlines, diagrams, maps, webs and Venn diagrams) to plan writing.

Grade 7, Indicator 5—Use organizational strategies (e.g. rough outlines, diagrams, maps, webs and Venn diagrams) to plan writing.

Grades 8-10, Benchmark A—Formulate writing ideas and identify a topic appropriate to the purpose and audience.

Grade 8, Indicator 1—Generate writing ideas through discussions with others and from printed material, and keep a list of writing ideas.

Grade 9, Indicator 1—Generate writing ideas through discussions with others and from printed material, and keep a list of writing ideas.

Grade 10, Indicator 1—Generate writing ideas through discussions with others and from printed material, and keep a list of writing ideas.

Grades 8-10, Benchmark B—Determine the usefulness of organizers and apply appropriate pre-writing tasks.

Grade 8, Indicator 2—Conduct background reading, interviews or surveys when appropriate.

Grade 8, Indicator 5—Use organizational strategies (e.g., notes and outlines) to plan writing.

Grade 9, Indicator 2—Determine the usefulness of and apply appropriate pre-writing tasks (e.g., background reading, interviews or surveys).

Grade 9, Indicator 5—Use organizational strategies (e.g., notes and outlines) to plan writing.

Grade 10, Indicator 2- Determine the usefulness of and apply appropriate pre-writing tasks (e.g., background reading, interviews or surveys).

Grade 10, Indicator 5— Use organizational strategies (e.g., notes and outlines) to plan writing.

## **Activity #2: Goal Setting**

### **Things to remember about setting goals:**

- Be realistic, set small goals to start with, you can move to the bigger stuff when you get better at setting and reaching goals.
- Keep feeling positive. Don't let other people discourage you.
- Check your time line every day and read through your goal again.
- Believe you can do it.
- Keep adding more small steps if it doesn't look like you're making a lot of progress.
- Tell someone you trust about what you are doing. Talking about it will keep you feeling good and help you to work out your steps, what to learn and who can help.
- Don't stress. Learn to relax so that you have the energy to work through the steps.

Find a story in the newspaper that tells about people who have achieved a goal. It could be anything from a new business that has just opened to a sports team that won a game. Cut out the story and write about the steps you think the people might have taken to achieve their goal. Discuss your ideas with your classmates and teacher.

### **Standards**

Language Arts

Grades 3 and 4

Prewriting: Generate ideas through discussions with others and from printed material.

Grades 5 and 6

Prewriting: Generate ideas through discussions with others and from printed material, and keep a list of writing ideas.

### **Subject: ENGLISH LANGUAGE ARTS**

Standard: Reading Process: Concepts of Print, Comprehension Strategies and Self-Monitoring Strategies

Grades 4-7, Benchmark A—Determine a purpose for reading and use a range of reading comprehension strategies to better understand text.

Grade 4, Indicator 1—Establish and adjust purposes for reading, including to find out, to understand, to interpret, to enjoy and to solve problems.

Grade 5, Indicator 1—Establish and adjust purposes for reading, including to find out, to understand, to interpret, to enjoy and to solve problems.

Grade 6, Indicator 1—Establish and adjust purposes for reading, including to find out, to understand, to interpret, to enjoy and to solve problems.

Grade 7, Indicator 1—Establish and adjust purposes for reading, including to find out, to understand, to interpret, to enjoy and to solve problems.

Grades 4-7, Benchmark B—Apply effective reading comprehension strategies, including summarizing and making predictions and comparisons, using information in text, between text and across subject areas.

Grade 4, Indicator 3—Compare and contrast information on a single topic or theme across different text and non-text resources.

Grade 4, Indicator 5—Make inferences or draw conclusions about what has been read and support those conclusions with textual evidence.

Grade 4, Indicator 6—Select, create and use graphic organizers to interpret textual information.

Grade 5, Indicator 2—Predict and support predictions with specific references to textual examples that may be in widely separated sections of text.

Grade 5, Indicator 6—Select, create and use graphic organizers to interpret textual information.

Grade 6, Indicator 4—Summarize the information in texts, recognizing important ideas and supporting details, and noting gaps or contradictions.

Grade 6, Indicator 5—Select, create and use graphic organizers to interpret textual information.

Grade 7, Indicator 3—Make critical comparisons across text, noting author’s style as well as literal and implied content of text.

Grade 7, Indicator 5—Select, create and use graphic organizers to interpret textual information.

Grades 4-7, Benchmark C—Make meaning through asking and responding to a variety of questions related to text.

Grade 4, Indicator 9—List questions and search for answers within the text to construct meaning.

Grade 5, Indicator 9—List questions and search for answers within the text to construct meaning.

Grade 5, Indicator 8—List questions and search for answers within the text to construct meaning.

Standard: Reading Applications: Informational, Technical and Persuasive Text

Grades 4-7, Benchmark B—Recognize the difference between cause and effect and fact and opinion to analyze text.

Grade 4, Indicator 4—Identify examples of cause and effect used in informational text.

Grade 4, Indicator 6—Clarify steps in a set of instructions for completeness.

Grade 5, Indicator 2—Identify, distinguish between and explain examples of cause and effect in informational text.

Grade 5, Indicator 6—Clarify steps in a set of instructions or procedures for proper sequencing and completeness and revise if necessary.

Grade 6, Indicator 2—Analyze examples of cause and effect and fact and opinion.

Grade 7, Indicator 2—Analyze examples of cause and effect and fact and opinion.

Grades 4-7, Benchmark F—Determine the extent to which a summary accurately reflects the main idea, critical details and underlying meaning of original text.

Grade 4, Indicator 2—Summarize main ideas in informational text, using supporting details as appropriate.

Grade 5, Indicator 4—Summarize the main ideas and supporting details.

Grade 6, Indicator 8—Summarize information from informational text, identifying the treatment, scope and organization of ideas.

Standard: Writing Processes

Grades 3-4, Benchmark A—Generate ideas and determine a topic suitable for writing.

Grade 3, Indicator 1—Generate writing ideas through discussions with others and from printed material.

Grade 4, Indicator 1—Generate writing ideas through discussions with others and from printed material.

Grades 3-4, Benchmark C—Apply knowledge of graphics or other organizers to clarify ideas of writing assessments.

Grade 3, Indicator 4—Use organizational strategies (e.g., brainstorming, lists, webs and Venn diagrams) to plan writing.

Grade 4, Indicator 4—Use organizational strategies (e.g., brainstorming, lists, webs and Venn diagrams) to plan writing.

Grades 5-7, Benchmark A—Generate writing topics and establish a purpose appropriate for the audience.

Grade 5, Indicator 1—Generate writing ideas through discussions with others and from printed material, and keep a list of writing ideas.

Grade 5, Indicator 2—Conduct background reading, interviews or surveys when appropriate.

Grade 6, Indicator 1—Generate writing ideas through discussions with others and from printed material, and keep a list of writing ideas.

Grade 6, Indicator 2—Conduct background reading, interviews or surveys when appropriate.

Grade 7, Indicator 1—Generate writing ideas through discussions with others and from printed material, and keep a list of writing ideas.

Grade 7, Indicator 2—Conduct background reading, interviews or surveys when appropriate.

Grades 5-7, Benchmark C—Clarify ideas for writing assignments by using graphics or other organizers.

Grade 5, Indicator 5—Use organizational strategies (e.g., rough outlines, diagrams, maps, webs and Venn diagrams) to plan writing.

Grade 6, Indicator 5—Use organizational strategies (e.g., rough outlines, diagrams, maps, webs and Venn diagrams) to plan writing.

Grade 7, Indicator 5—Use organizational strategies (e.g. rough outlines, diagrams, maps, webs and Venn diagrams) to plan writing.

### **Activity #3: Saving the Environment**

Look through today's newspaper and find articles of people or businesses working to help save the environment. Write your own article stating your ideas on how to protect the environment.

#### **Write it down!**

In small groups, make a list of good habits and a list of bad habits when it comes to protecting the earth. Explain to the class why it is important to have each of the good habits.

#### **Investigate!**

Explore other topics that cause the earth to be in danger (ex. global warming, endangered species, etc.) Discuss what the government is doing to address these issues? What can you do to help?

### **Standards**

Language Arts

Research—Grades 3&4

Select and summarize important information and sort key findings into categories about a topic.

Research—Grades 5-7

Locate and summarize important information from multiple sources.

### **Subject: English Language Arts**

Standard: Writing Processes

Grades 3-4, Benchmark A—Generate ideas and determine a topic suitable for writing.

Grade 3, Indicator 1—Generate writing ideas through discussions with others and from printed material.

Grade 3, Indicator 2—Develop clear main idea for writing.

Grade 4, Indicator 1—Generate writing ideas through discussions with others and from printed material.

Grade 4, Indicator 2—State and develop a clear main idea for writing.

Grades 3-4, Benchmark B—Determine audience and purpose for self-selected and assigned writing tasks.

Grade 3, Indicator 3—Develop a purpose and audience for writing.

Grade 4, Indicator 3— Develop a purpose and audience for writing.

Grades 3-4, Benchmark C—Apply knowledge of graphics or other organizers to clarify ideas of writing assessments.

Grade 3, Indicator 4—Use organizational strategies (e.g., brainstorming, lists, webs and Venn diagrams) to plan writing.

Grade 4, Indicator 4— Use organizational strategies (e.g., brainstorming, lists, webs and Venn diagrams) to plan writing.

Grades 5-7, Benchmark A—Generate writing topics and establish a purpose appropriate for the audience.

Grade 5, Indicator 1—Generate writing ideas through discussions with others and from printed material, and keep a list of writing ideas.

Grade 5, Indicator 2—Conduct background reading, interviews or surveys when appropriate.

Grade 5, Indicator 3—State and develop a clear main idea for writing.

Grade 6, Indicator 1— Generate writing ideas through discussions with others and from printed material, and keep a list of writing ideas.

Grade 6, Indicator 2— Conduct background reading, interviews or surveys when appropriate.

Grade 6, Indicator 3—Establish a thesis statement for informational writing or a plan for narrative writing.

Grade 7, Indicator 1— Generate writing ideas through discussions with others and from printed material, and keep a list of writing ideas.

Grade 7, Indicator 2— Conduct background reading, interviews or surveys when appropriate.

Grade 7, Indicator 3— Establish a thesis statement for informational writing or a plan for narrative writing.

Grades 5-7, Benchmark B—Determine audience and purpose for self-selected and assigned writing tasks.

Grade 5, Indicator 4—Determine a purpose and an audience.

Grade 6, Indicator 4— Determine a purpose and an audience.

Grade 7, Indicator 4— Determine a purpose and an audience.

Grades 5-7, Benchmark C—Clarify ideas for writing assignments by using graphics or other organizers.

Grade 5, Indicator 5—Use organizational strategies (e.g., rough outlines, diagrams, maps, webs and Venn diagrams) to plan writing.

Grade 6, Indicator 5— Use organizational strategies (e.g., rough outlines, diagrams, maps, webs and Venn diagrams) to plan writing.

Grade 7, Indicator 5— Use organizational strategies (e.g., rough outlines, diagrams, maps, webs and Venn diagrams) to plan writing.

Standard: Research

Grades 3-4, Benchmark A—Identify a topic of study, construct questions and determine appropriate sources for gathering information.

Grades 3-4, Benchmark B—Select and summarize important information and sort key findings into categories about a topic.

Grades 3-4, Benchmark C—Create a list of sources used for oral, visual, written or multimedia reports.

Grades 3-4, Benchmark D—Communicate findings orally visually and in writing or through multimedia.

Note: All 3-4 Research indicators could apply to this lesson.

Grades 5-7, Benchmark A—Formulate open-ended research questions suitable for inquiry and investigation and develop a plan for gathering information.

Grades 5-7, Benchmark B—Locate and summarize important information from multiple sources.

Grades 5-7, Benchmark C—Organize information in a systematic way.

Grades 5-7, Benchmark D—Acknowledge quoted and paraphrased information and document sources used.

Grades 5-7, Benchmark E—Communicate findings orally, visually and in writing or through multimedia.

Note: All 5-7 Research indicators could apply to this lesson.



## **Interdisciplinary Connections**

### **Subject: SCIENCE**

Standard: Earth and Space Sciences

Grades 3-5, Benchmark C—Describe Earth’s resources including rocks, soil, water, air, animals and plants and the ways in which they can be conserved.

Grade 5, Indicator 5—Explain how the supply of many non-renewable resources is limited and can be extended through reducing, reusing and recycling but cannot be extended indefinitely.

Grade 5, Indicator 6—Investigate ways Earth’s renewable resources (e.g., fresh water, air, wildlife and trees) can be maintained.

Grades 6-8, Benchmark C—Describe interactions of matter and energy throughout the lithosphere, hydrosphere and atmosphere (e.g., water cycle, weather and pollution).

Grade 7, Indicator 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.

Standard: Science and Technology

Grades 3-5, Benchmark A—Describe how technology affects human life.

Grade 5, Indicator 1—Investigate positive and negative impacts of human activity and technology on the environment.

Grades 6-8, Benchmark A—Give examples of how technological advances, influenced by scientific knowledge, affect the quality of life.

Grade 6, Indicator 2—Explain how decisions about the use of products and systems can result in desirable or undesirable consequences (e.g., social and environmental).

Grade 7, Indicator 2—Describe how decisions to develop and use technologies often put environmental and economic concerns in direct competition with each other.

#### **Activity #4: Point of View**

Study the Letters to the Editor section on the editorial page of the newspaper. Each letter tells how the person who wrote it feels about a certain subject. Find a letter you would like to answer. Your comments may support (agree with) or oppose (disagree with) the letter you choose. When you write your answer remember to state clearly why you feel as you do. Start a “Point of View” column for your classroom or school newspaper. Invite your classmates to write letters of opinion in response to the editorial page.

#### **Subject: ENGLISH LANGUAGE ARTS**

**Standard:** Reading Applications: Informational, Technical and Persuasive Text

Grades 4-7, Benchmark B—Recognize the difference between cause and effect and fact and opinion to analyze text.

Grade 4, Indicator 4—Identify examples of cause and effect used in informational text.

Grade 4, Indicator 7—Distinguish fact from opinion.

Grade 5, Indicator 2—Identify, distinguish between and explain examples of cause and effect in informational text.

Grade 5, Indicator 7—Analyze the difference between fact and opinion.

Grade 6, Indicator 2—Analyze examples of cause and effect and fact and opinion.

Grade 7, Indicator 2—Analyze examples of cause and effect and fact and opinion.

Grades 4-7, Benchmark C—Explain how main ideas connect to each other in a variety of sources.

Grade 4, Indicator 2—Summarize main ideas in informational text, using supporting details, as appropriate.

Grade 5, Indicator 4—Summarize the main idea and supporting details.

Grades 4-7, Benchmark D—Identify arguments and persuasive techniques used in informational text.

Grade 6, Indicator 6—Identify an author’s argument or viewpoint and assess the adequacy and accuracy of details used.

Grade 6, Indicator 7—Identify and understand an author’s purpose for writing, including to explain, entertain, persuade or inform.

Grade 7, Indicator 6—Assess the adequacy, accuracy and appropriateness of an author’s details, identifying persuasive techniques and examples of bias and stereotyping.

Grade 7, Indicator 7—Identify an author’s purpose for writing and explain an author’s argument, perspective or viewpoint in text.

Grades 8-10, Benchmark A—Evaluate how features and characteristics make information accessible and usable and how structures help authors achieve their purposes.

Grade 8, Indicator 1—Compare and contrast text features, including format and headers of various informational texts in terms of their structure and purpose.

Grade 8, Indicator 2—Identify and use the organizational structure of a text, such as chronological, compare-contrast, cause-effect, problem-solution, and evaluate its effectiveness.

Grade 8, Indicator 9—Distinguish the characteristics of consumer materials (e.g., warranties, product information, instructional materials), functional or workplace documents (e.g., job-related materials, memoranda, instructions) and public documents (e.g., speeches or newspaper editorials).

Grade 9, Indicator 1—Identify and understand organizational patterns (e.g., cause-effect, problem-solution) and techniques, including repetition of ideas, syntax and word choice that authors use to accomplish their purpose and reach their intended audience.

Grade 10, Indicator 1— Identify and understand organizational patterns (e.g., cause-effect, problem-solution) and techniques, including repetition of ideas, syntax and word choice that authors use to accomplish their purpose and reach their intended audience.

Grade 10, Indicator 7—Analyze the effectiveness of the features (e.g., format, graphics, sequence, headers) used in various consumer documents (e.g., warranties, product information, instructional materials), functional or workplace documents (e.g., job-related materials, memoranda, instructions) and public documents (e.g., speeches or newspaper editorials).

Grades 8-10, Benchmark B—Identify examples of rhetorical devices and valid and invalid inferences, and explain how authors use these devices to achieve their purposes and reach their intended audiences.

Grade 8, Indicator 5—Assess the adequacy, accuracy and appropriateness of an author’s details, identifying persuasive techniques (e.g., bandwagon, testimonial and emotional word repetition) and examples of bias and stereotyping.

Grade 9, Indicator 4— Assess the adequacy, accuracy and appropriateness of an author’s details, identifying persuasive techniques (e.g., bandwagon, testimonial, transfer, glittering generalities, emotional word repetition, bait and switch) and examples of propaganda, bias and stereotyping.

Grade 9, Indicator 8—Identify the features of rhetorical devices used in common types of public documents, including newspaper editorials and speeches.

Grade 10, Indicator 4— Assess the adequacy, accuracy and appropriateness of an author’s details, identifying persuasive techniques (e.g., transfer, glittering generalities, bait and switch) and examples of propaganda, bias and stereotyping.

Grade 10, Indicator 8— Identify the features of rhetorical devices used in common types of public documents, including newspaper editorials and speeches.

Grades 8-10, Benchmark D—Explain and analyze how an author appeals to an audience and develops an argument or viewpoint in text.

Grade 8, Indicator 6—Identify the author’s purpose and intended audience for the text.

Grade 8, Indicator 7—Analyze an author’s argument, perspective or viewpoint and explain the development of key points.

Grade 8, Indicator 8—Recognize how writers cite facts, draw inferences and present opinions in informational text.

Grade 9, Indicator 5—Analyze an author’s implicit and explicit argument, perspective or viewpoint in text.

Grade 9, Indicator 6—Analyze the author’s development of key points to support argument or point of view.

Grade 10, Indicator 5— Analyze an author’s implicit and explicit argument, perspective or viewpoint in text.

Grade 10, Indicator 6—Identify appeals to authority, reason and emotion.

Standard: Writing Applications

Grades 5-7, Benchmark C—Produce letters (e.g., business, letters to the editor, job applications) that address audience needs, stated purpose and context in a clear and efficient manner.

Grade 7, Indicator 3—Write business letters that are formatted to convey ideas, state problems, make requests or give compliments.

Grades 5-6, Benchmark E—Use persuasive strategies, including establishing a clear position in support of a proposition or a proposal with organized and relevant evidence.

Grade 6, Indicator 5—Write persuasive essays that establish a clear purpose and include organized and relevant information to support ideas.

Grade 7, Indicator 5—Write persuasive essays that establish a clear position and include relevant information to support ideas.

Grades 8-10, Benchmark C—Produce letters (e.g. business, letters to the editors, job applications) that follow the conventional style appropriate to the text and that include appropriate details and exclude extraneous details and inconsistencies.

Grade 8, Indicator 3—Write business letters, letters to the editor and job applications that:

- a. address audience needs, stated purpose and context in a clear and efficient manner;
- b. follow the conventional style appropriate to the text using proper technical terms;
- c. include appropriate facts and details;
- d. exclude extraneous details and inconsistencies; and
- e. provide a sense of closure to the writing.

Grade 9, Indicator 3— Write business letters, letters to the editor and job applications that:

- a. address audience needs, stated purpose and context in a clear and efficient manner;
- b. follow the conventional style appropriate to the text using proper technical terms;
- c. include appropriate facts and details;
- d. exclude extraneous details and inconsistencies; and
- e. provide a sense of closure to the writing.

Grade 10, Indicator 3— Write business letters, letters to the editor and job applications that:

- a. address audience needs, stated purpose and context in a clear and efficient manner;
- b. follow the conventional style appropriate to the text using proper technical terms;
- c. include appropriate facts and details;
- d. exclude extraneous details and inconsistencies; and
- e. provide a sense of closure to the writing.

Grades 8-10, Benchmark E—Write a persuasive piece that states a clear position, includes relevant information and offers compelling evidence in the form of facts and details.

Grade 8, Indicator 5—Write persuasive compositions that:

- a. establish and develop a controlling idea;
- b. support arguments with detailed evidence;
- c. exclude irrelevant information; and
- d. cite sources of information.

Grade 9, Indicator 5— Write persuasive compositions that:

- a. establish and develop a controlling idea;
- b. support arguments with detailed evidence;
- c. exclude irrelevant information; and
- d. cite sources of information.

Grade 10, Indicator 5— Write persuasive compositions that:

- a. support arguments with detailed evidence;
- b. exclude irrelevant information; and
- c. cite sources of information.

### **Activity #5: Door to Door Donuts**

Start your own business. Every Saturday morning, you have a route in your neighborhood selling donuts. How do you drum up new business? Prepare an ad. Do the writing and the artwork. Paste your writing and artwork together. If you need suggestions, study newspaper ads.

### **Subject: English Language Arts**

#### **Standard: Reading Applications: Informational, Technical and Persuasive Text**

Grades K-3, Benchmark D—Use visual aids as sources to gain additional information from text.

Grade 3, Indicator 4—Draw conclusions from information in maps, charts, graphs and diagrams.

Grades 4-7, Benchmark A—Use text features and graphics to organize, analyze and draw inferences from content and to gain additional information.

Grade 4, Indicator 5— Draw conclusions from information in maps, charts, graphs and diagrams.

Grade 5, Indicator 5—Analyze information found in maps, charts, tables, graphs and diagrams.

Grade 6, Indicator 5—Analyze information found in maps, charts, tables, graphs, diagrams and cutaways.

Grade 7, Indicator 5— Analyze information found in maps, charts, tables, graphs, diagrams, cutaways and overlays.

#### **Standard: Writing Processes**

Grades 3-4, Benchmark A—Generate ideas and determine a topic suitable for writing.

Grades 3-4, Benchmark B—Determine audience and purpose for self-selected and assigned writing tasks.

Grades 3-4, Benchmark C—Apply knowledge of graphics or other organizers to clarify ideas of writing assessments.

Grades 3-4, Benchmark D—Spend the necessary amount of time to revisit, rework and refine pieces of writing.

Grades 3-4, Benchmark E—Use revision strategies to improve the coherence of ideas, clarity of sentence structure and effectiveness of word choices.

Grades 3-4, Benchmark F—Use a variety of resources and reference materials to select more effective vocabulary when editing.

Grades 3-4, Benchmark G—Edit to improve sentence fluency, grammar and usage.

Grades 3-4, Benchmark H—Apply tools to judge the quality of writing.

Grades 3-4, Benchmark I—Prepare writing for publication that is legible, follows an appropriate format and uses techniques such as electronic resources and graphics.

Note: All 3-4 Writing Processes indicators could apply to this lesson.

Grades 5-7, Benchmark A—Generate writing topics and establish a purpose appropriate for the audience.

Grades 5-7, Benchmark B—Determine audience and purpose for self-selected and assigned writing tasks.

Grades 5-7, Benchmark C—Clarify ideas for writing assignments by using graphics or other organizers.

Grades 5-7, Benchmark D—Use revision strategies to improve the overall organization, the clarity and consistency of ideas within and among paragraphs and the logic and effectiveness of word choices.

Grades 5-7, Benchmark E—Select more effective vocabulary when editing by using a variety of resources and reference materials.

Grades 5-7, Benchmark F—Edit to improve sentence fluency, grammar and usage.

Grades 5-7, Benchmark G—Apply tools to judge the quality of writing.

Grades 5-7, Benchmark H—Prepare writing for publication that is legible, follows an appropriate format and uses techniques such as electronic resources and graphics.

Note: All 5-7 Writing Processes indicators could apply to this lesson.

Standard: Writing Conventions

Grades 3-4, Benchmark A: Write legibly in finished drafts.

Grades 3-4, Benchmark B: Spell grade-appropriate words correctly.

Grades 3-4, Benchmark C: Use conventions of punctuation and capitalization in written work.

Grades 3-4, Benchmark D: Use grammatical structures to effectively communicate ideas in writing.

Note: All 3-4 Writing Conventions indicators could apply to this lesson.

Grades 5-7, Benchmark A—Use correct spelling conventions.

Grades 5-7, Benchmark B—Use conventions of punctuation and capitalization in written work.

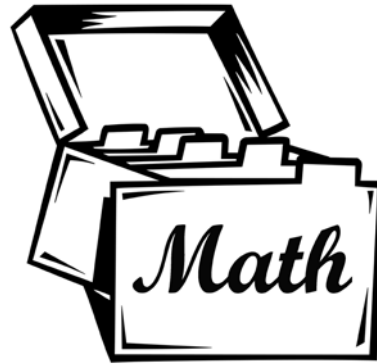
Grades 5-7, Benchmark C—Use grammatical structures to effectively communicate ideas in writing.

Note: All 5-7 Writing Conventions indicators could apply to this lesson.

### NIE Lesson Plan Format: FRONT PAGE MATH

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Subject: Mathematics

<p><b>Curriculum Goals:</b></p> <p>Increase knowledge of technology as it affects the environment.</p>	<p><b>Instructional Objectives:</b></p> <p>Students need to know the many ways numbers are used in everyday life. Guessing, estimating and finding numbers on the front page will give them that insight. Using their found numbers, have them create a graph to better understand their data.</p>	
<p><b>Instructional Activities &amp; Time Allotted:</b></p> <p>60 minutes for review and class discussion</p>	<p><b>Teaching Strategies:</b></p> <ol style="list-style-type: none"> <li>1. Give newspaper and highlighter to each student.               <ol style="list-style-type: none"> <li>A. Direct students to GUESS how many numbers (not digits) are on the front page. Have them put their guess in a circle at the top of the page.</li> <li>B. Direct students to fold the front page into fourths, with their guess in the circle at the top of one quarter page.</li> <li>C. Ask students to highlight all numbers (written, fractions, Roman numerals, ordinals, etc.) in that <math>\frac{1}{4}</math> page and count them.</li> <li>D. Direct students to ESTIMATE how many numbers are on the front page, using their <math>\frac{1}{4}</math> page as the basis for their estimate. Have them put their estimate inside a triangle next to the circled guess.</li> <li>E. Ask students to find ALL NUMBERS on the front page and count them. Put their FOUND numbers in a square next to the triangle.</li> <li>F. Direct them to make a ratio of the numbers found and number guessed.</li> </ol> </li> <li>2. Because students need to know how to graph raw data, use the numbers they have found to create a graph of front page numbers.               <ol style="list-style-type: none"> <li>A. Direct students to name their graph.</li> <li>B. Ask students to decide what type of graph they will create.</li> <li>C. Direct students to name nine different categories of numbers they found. Examples: ages, page numbers, dollar amounts, dates, addresses. For the 10<sup>th</sup> category, ask them to use 'Miscellaneous' for any number that does not match their first nine.</li> <li>D. Ask students to count and tally the found numbers and put them on their graph.</li> </ol> </li> </ol>	
<p><b>Instructional Materials:</b></p> <p>Newspaper, highlighter, paper, pencil</p>		
<p><b>Lesson Environment:</b></p> <p>Regular classroom</p>	<p><b>Adaptations/Modifications:</b></p>	<p><b>Student Assessment:</b></p> <p>Effective completion of graphs.</p>
<p><b>Technology:</b></p>		
<p><b>Student Follow-up:</b></p>		



**Subject: MATHEMATICS**

**Standard:** Number, Number Sense and Operations

Grades 3-4, Benchmark B—Recognize and generate equivalent representations for whole numbers, fractions and decimals.

Grade 3, Indicator 1—Identify and generate equivalent forms of whole numbers.

Grade 4, Indicator 1—Identify and generate equivalent forms of fractions and decimals.

Grades 3-4, Benchmark J—Estimate the results of whole number computations using a variety of strategies, and judge the reasonableness.

Grade 3, Indicator 15—Evaluate the reasonableness of computations based upon operations and the numbers involved; e.g., considering relative size, place value and estimates.

Grade 4, Indicator 9—Estimate the results of computations involving whole numbers, fractions and decimals, using a variety of strategies.

Grade 4, Indicator 11—Develop and explain strategies for performing computations mentally.

Grades 3-4, Benchmark K—Analyze and solve multi-step problems involving addition, subtraction, multiplications and division of whole numbers.

Grade 4, Indicator 12—Analyze and solve multi-step problems involving addition, subtraction, multiplication and division using an organized approach, and verify and interpret results with respect to the original problem.

Grades 3-4, Benchmark L—Use a variety of methods and appropriate tools (mental math, paper and pencil, calculators) for computing whole numbers.

Grade 4, Indicator 13—Use a variety of methods and appropriate tools for computing with whole numbers; e.g., mental math, paper and pencil and calculator.

Grades 5-7, Benchmark D—Use models and pictures to relate concepts of ratio, proportion and percent.

Grade 5, Indicator 1—Use models and visual representation to develop the concept of ratio as part-to-part and part-to-whole, and the concept of percent as part-to-whole.

Grade 6, Indicator 5—Use models and pictures to relate concepts of ratio, proportion and percent, including percents less than 1 and greater than 100.

Grades 5-7, Benchmark I—Use a variety of strategies, including proportional reasoning, to estimate, compute, solve and explain solutions to problems involving integers, fractions, decimals and percents.

Grade 5, Indicator 13—Estimate the results of computations involving whole numbers, fractions and decimals, using a variety of strategies.

Grade 6, Indicator 14—Use proportional reasoning, ratios and percents to represent problem situations and determine reasonableness of solutions.

Standard: Data Analysis and Probability Standard

Grades 3-4, Benchmark A—Gather and organize data from surveys and classroom experiments, including data collected over a period of time.

Grade 3, Indicator 1—Collect and organize data from an experiment, such as recording and classifying observations or measurements, in response to a question posed.

Grade 4, Indicator 1—Create a plan for collecting data for a specific purpose.

Grades 3-4, Benchmark C—Construct charts, tables and graphs to represent data, including picture graphs, line graphs, line plots and Venn diagrams.

Grade 3, Indicator 4—Support a conclusion or prediction orally and in writing, using information in a table or graph.

Grade 3, Indicator 5—Match a set of data with a graphical representation of the data.

Grade 4, Indicator 2—Represent and interpret data using tables, bar graphs, line plots and line graphs.

Grade 4, Indicator 4—Compare different representations of the same data to evaluate how well each representation shows important aspects of the data, and identify appropriate ways to display the data.

Grade 4, Indicator 5—Propose and explain interpretations and predictions based on data displayed in tables, charts and graphs.

Grades 5-7, Benchmark A—Read, create and use line graphs, histograms, circle graphs, box-and-whisker plots, stem-and-leaf plots, and other representations when appropriate.

Grade 5, Indicator 1—Read, construct and interpret frequency tables, circle graphs and line graphs.

Grade 6, Indicator 1—Read, construct and interpret line graphs, circle graphs and histograms.

Grade 7, Indicator 1—Read, create and interpret box-and-whisker plots, stem-and-leaf plots, and other types of graphs, when appropriate.

Grades 5-7, Benchmark E—Collect, organize, display and interpret data for a specific purpose or need.

Grade 5, Indicator 2—Select and use a graph that is appropriate for the type of data to be displayed; e.g., numerical vs. categorical data, discrete vs. continuous data.

Grade 5, Indicator 4—Determine appropriate data to be collected to answer questions posed by students or teacher, collect and display data, and clearly communicate findings.

Grade 6, Indicator 2—Select, create and use graphical representations that are appropriate for the type of data collected.

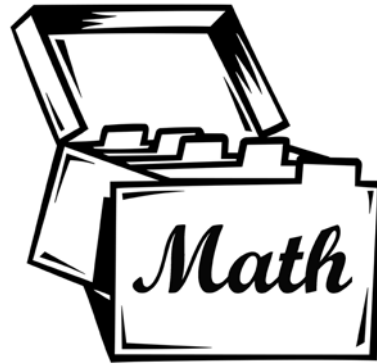
Grade 6, Indicator 3—Compare representations of the same data in different types of graphs, such as a bar graph and circle graph.

Grade 7, Indicator 2—Analyze how decisions about graphing affect the graphical representation; e.g., scale, size of classes in a histogram, number of categories in a circle graph.

## NIE Lesson Plan Format: WEATHER MAPS

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Subject: Mathematics

<p><b>Curriculum Goals:</b></p> <p>Read and use line graphs and interpret national and international weather trend data.</p>	<p><b>Instructional Objectives:</b></p> <p><b>Data Analysis and Probability Standard:</b> Read, construct and interpret line graphs, circle graphs and histograms.</p>	
<p><b>Instructional Activities &amp; Time Allotted:</b></p> <p>One hour – creating a multiple line graph</p>	<p><b>Teaching Strategies:</b></p> <ol style="list-style-type: none"> <li>1. Review reading double line graphs using overhead transparency.</li> <li>2. Using “The Valley’s Forecast” create a double line graph of high and low temperatures at overhead.</li> <li>3. Direct students to choose any U.S. city from the “U.S. Overview” section to create a double line graph of high and low temperatures on graph paper for a three day period.</li> </ol>	
<p><b>Instructional Materials:</b></p> <p>For each student: weather page of Vindicator, graph paper, colored pencils, ruler.</p>		
<p><b>Lesson Environment:</b></p> <p>Regular 6<sup>th</sup> grade classroom.</p>	<p><b>Adaptations/Modifications:</b></p> <p>Compare our city’s highs and lows with other cities for a period of eight days.</p>	<p><b>Student Assessment:</b></p> <p>Rubric – not for a grade .</p>
<p><b>Technology:</b></p> <p>Overhead.</p>		
<p><b>Student Follow-up:</b></p> <p>Students will choose a city from the “World Overview” to graph low and high temperatures for the course of eight days.</p>		



**Subject: MATHEMATICS**

**Standard: Data Analysis and Probability**

Grades 5-7, Benchmark A— Read and use line graphs, histograms, circle graphs, box-and-whisker plots, stem-and-leaf plots, and other representations when appropriate.

Grades 5-7, Benchmark B— Interpret data by looking for patterns and relationships, draw and justify conclusions, and answer related questions.

Grades 5-7, Benchmark C— Evaluate interpretations and conclusions as additional data are collected, modify conclusions and predictions, and justify new findings.

Grades 5-7, Benchmark D— Compare increasingly complex displays of data, such as multiple sets of data on the same graph.

Grades 5-7, Benchmark E—Collect, organize, display and interpret data for a specific purpose or need.

Grade 6, Indicator 1— Read, construct and interpret line graphs, circle graphs and histograms.

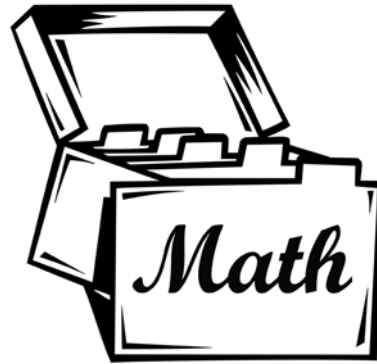
Grade 6, Indicator 2— Select, create and use graphical representations that are appropriate for the type of data collected.

Grade 6, Indicator 6— Make logical inferences from statistical data.

## NIE Lesson Plan Format: MEASURING A PICTURE

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Subject: Mathematics

<p><b>Curriculum Goals:</b></p> <p>Use of appropriate measurement tools and techniques to construct a figure or approximate an amount.</p>	<p><b>Instructional Objectives:</b></p> <p>Students will prove common sayings mathematically through the use of newspaper photos for math and writing exercises.</p>	
<p><b>Instructional Activities and Time Allotted:</b></p> <p>60 minutes for review and class discussion</p>	<p><b>Teaching Strategies:</b></p> <ol style="list-style-type: none"> <li>1. Tell students that newspapers are measured by the number of columns (width) by the number of inches long. Newspapers make their money by selling space. The resulting measurement gives <i>column inches</i>.</li> <li>2. Choose a large interesting photo. Have students determine how many columns wide it is and how deep it is. i.e. 3 columns by six inches long. <math>3 \times 6 = 18</math> <i>column inches</i>.</li> <li>3. Direct students to find one inch of printed words in the same width column and have them count the number of words in that one <i>column inch</i> of space. i.e. 36 words in one column inch.</li> <li>4. Direct students to take the number of column inches determined in #2 above and find how many words are in the picture space. Example: 18 column inches x 36 words in one column inch equals 648 words.</li> <li>5. Ask students if the photo is worth 1,000 words.</li> <li>6. In order to prove the old saying, direct students to write about the photo using the difference (<math>1,000 - 648 = 352</math> in words.)</li> </ol>	
<p><b>Instructional Materials:</b></p> <p>Newspaper, ruler, paper, pencil</p>	<p><b>Adaptations/Modifications:</b></p>	
<p><b>Lesson Environment:</b></p> <p>Regular classroom</p>	<p><b>Technology:</b></p>	<p><b>Student Assessment:</b></p> <p>It has been said that a picture is worth 1,000 words. Students will prove or disprove this old saying.</p>
<p><b>Student Follow-up:</b></p>		



**Subject Area: MATHEMATICS**

**Standard: Measurement**

Grades 3-4, Benchmark A—Select appropriate units for perimeter, area, weight, volume (capacity), time, and temperature.

Grade 3, Indicator 1—Identify and select appropriate units for measuring:

- a. length—miles, kilometers and other units of measure as appropriate;
- b. volume (capacity)—gallons;
- c. weight—ounces, pounds, grams, or kilograms;
- d. temperature—degrees (Fahrenheit or Celsius).

Grade 4, Indicator 3—Identify and select appropriate units to measure:

- a. perimeter—string or links (inches or centimeters);
- b. area—tiles (square inches or square centimeters);
- c. volume—cubes (cubic inches or cubic centimeters).

Grades 3-4, Benchmark C—Develop common referents for units of measure for length, weight, volume (capacity) and time to make comparisons and estimates.

Grade 3, Indicator 2—Establish personal or common referents to include additional units; e.g., a gallon container of milk; a postage stamp is about a square inch.

Grade 4, Indicator 1—Relate the number of units to the size of the units used to measure an object; e.g., compare the number of cups to fill a pitcher to the number of quarts to fill the same pitcher.

Grades 3-4, Benchmark D—Identify appropriate tools and apply counting techniques for measuring side lengths, perimeter and area of squares, rectangles, and simple irregular two-dimensional shapes, volume of rectangular prisms, and time and temperature.

Grade 3, Indicator 5—Estimate and measure length, weight and volume (capacity), using metric and U.S. customary units, accurate to the nearest  $\frac{1}{2}$  or  $\frac{1}{4}$  unit as appropriate.

Grade 3, Indicator 6—Use appropriate measurement tools and techniques to construct a figure or approximate an amount of specified length, weight or volume (capacity); e.g., construct a rectangle with length  $2\frac{1}{2}$  inches and width 3 inches, fill a measuring cup to the  $\frac{3}{4}$  cup mark.

Grades 5-7, Benchmark E—Use problem solving techniques and technology as needed to solve problems involving length, weight, perimeter, area, volume, time and temperature.

Grade 5, Indicator 6—Use strategies to develop formulas for determining perimeter and area of triangles, rectangles and parallelograms, and volume of rectangular prisms.

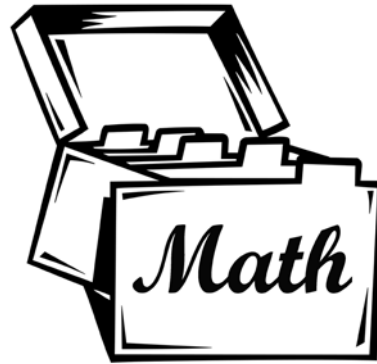
Grade 6, Indicator 4—Determine which measure (perimeter, surface area, volume) matches the context for a problem situation; e.g., perimeter is the context for fencing a garden, surface area is the context for painting a room.

Grade 7, Indicator 5—Analyze problem situations involving measurement concepts, select appropriate strategies, and use an organized approach to solve narrative and increasingly complex problems.

## NIE Lesson Plan Format: STATISTICS ON AGING

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Subject: Mathematics

<b>Curriculum Goals:</b>  Apply math skills to prove or disprove statistics.	<b>Instructional Objectives:</b>  Many studies exist on aging of the American population, i.e. “Americans over the age of 65 are the largest growing segment in the population.” Students will prove or disprove this statement for their community by researching death records recorded in the local newspaper.																																	
<b>Instructional Activities &amp; Time Allotted:</b>  20 minutes per day for two weeks (beginning and end of selected month)	<b>Teaching Strategies:</b> A. Beginning at the first of the month, direct students to record the number of deaths in your community each day as recorded in your local newspaper. <ol style="list-style-type: none"> <li>1. Tally per day the number of deaths by gender.</li> <li>2. Tally per day the number of deaths by age.</li> <li>3. Tally the number of persons married at death.</li> <li>4. Tally cause of death, i.e. home accident, car accident, natural death.</li> </ol> B. At the end of the month, ask students: <ol style="list-style-type: none"> <li>1. What day of the week has the most deaths? Monday is supposed to be the leading day for deaths in men. Do your statistics prove or disprove that?</li> <li>2. What is the ratio of deaths for men versus women?</li> <li>3. What is the ratio of deaths for each gender? Per age group?</li> <li>4. Which age at death was highest? Statistics say we are living longer. Do your figures support the statistic?</li> <li>5. How many persons were married at death? Married men statistically live longer than single men. What do your figures show?</li> </ol>																																	
<b>Instructional Materials:</b>  Newspaper, pencil, paper.	<table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 5%;">Date</th> <th style="width: 10%;">Men</th> <th style="width: 10%;">Married Men</th> <th style="width: 10%;">Women</th> <th style="width: 10%;">Married Women</th> <th style="width: 15%;">Age at death</th> <th style="width: 10%;">Cause of death</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						Date	Men	Married Men	Women	Married Women	Age at death	Cause of death	1							2							3						
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<b>Lesson Environment:</b>  Regular 5 <sup>th</sup> , 6 <sup>th</sup> , 7 <sup>th</sup> grade classrooms.	<b>Adaptations/Modifications:</b>  _____ _____			<b>Student Assessment:</b>  _____ _____																														
<b>Technology:</b>  Newspaper e-edition																																		
<b>Student Follow-up:</b>  _____ _____																																		



**Subject Area: MATHEMATICS**

**Standard:** Number, Number Sense and Operations

Grades 5-7, Benchmark D—Use models and pictures to relate concepts of ratio, proportion and percent.

Grade 5, Indicator 1—Use models and visual representation to develop the concept of ratio as part-to-part and part-to-whole, and the concept of percent as part-to-whole.

Grade 6, Indicator 5—Use models and pictures to relate concepts of ration, proportion and percent, including percents less than 1 and greater than 100.

**Standard:** Data Analysis and Probability

Grades 5-7, Benchmark A—Read, create and use line graphs, histograms, circle graphs, box-and-whisker plots, stem-and-leaf plots, and other representations when appropriate.

Grade 5, Indicator 1—Read, construct and interpret frequency tables, circle graphs and line graphs.

Grade 5, Indicator 2—Select and use a graph that is appropriate for the type of data to be displayed; e.g., numerical vs. categorical data, discrete vs. continuous data.

Grade 5, Indicator 3—Read and interpret increasingly complex displays of data, such as double bar graphs.

Grade 6, Indicator 1—Read, construct and interpret line graphs, circle graphs and histograms.

Grade 6, Indicator 2—Select, create and use graphical representations that are appropriate for the type of data collected.

Grade 7, Indicator 1—Read, create and interpret box-and-whisker plots, stem-and-leaf plots, and other types of graphs, when appropriate.

Grades 5-7, Benchmark B—Interpret data by looking for patterns and relationships, draw and justify conclusions, and answer related questions.

Grade 5, Indicator 4—Determine appropriate data to be collected to answer questions posed by students or teacher, collect and display data, and clearly communicate findings.

Grades 5-7, Benchmark C—Evaluate interpretations and conclusions as additional data are collected, modify conclusions and predictions, and justify new findings.

Grade 5, Indicator 5—Modify initial conclusions, propose and justify new interpretations and predictions as additional data are collected.

Grade 7, Indicator 2—Analyze how decisions about graphing affect the graphical representation; e.g., scale, size of classes in a histogram, number of categories in a circle graph.

Grades 5-7, Benchmark D—Compare increasingly complex displays of data, such as multiple sets of data on the same graph.

Grade 6, Indicator 3—Compare representations of the same data in different types of graphs, such as a bar graph and circle graph.

Grades 5-7, Benchmark E—Collect, organize, display and interpret data for a specific purpose or need.

Grades 5-7, Benchmark G—Evaluate conjectures and predictions based upon data presented in tables and graphs, and identify misuses of statistical data and displays.

Grade 5, Indicator 7—List and explain all possible outcomes in a given situation.

Grade 5, Indicator 10—Compare what should happen (theoretical/expected results) with what did happen (experimental/actual results) in a simple experiment.

Grade 5, Indicator 11—Make predictions based on experimental and theoretical probabilities.

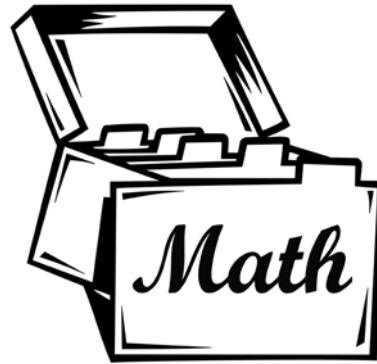
Grade 6, Indicator 6—Make logical inferences from statistical data.

Grade 6, Indicator 7—Design an experiment to test a theoretical probability and explain how the results may vary.

Grade 7, Indicator 4—Construct opposing arguments based on analysis of the same data, using different graphical representations.

Grade 7, Indicator 6—Identify misuses of statistical data in articles, advertisements, and other media.

Grade 7, Indicator 8—Make predictions based on theoretical probabilities, design and conduct an experiment to test the predictions, compare actual results to predicted results, and explain differences.



### Additional Mathematics Activities

#### **Activity #1: A Penny Saved**

Using the grocery advertisements in one newspaper, clip all of the “cents off” coupons. Compute the amount of the money you would save if you could use all of the coupons you have clipped. Start collecting coupons. Keep a record of the ones you would use each week. How much money could you save at the end of two weeks? Are coupons valuable? Is it wise to shop with coupons? Be prepared to show and discuss your findings with the class.

#### **Subject: MATHEMATICS**

Standard: Number, Number Sense and Operations

Grades 3-4, Benchmark F—Count money and make change using both coins and paper bills.

Grade 3, Indicator 4—Count money and make change using coins and paper bills to ten dollars.

Grade 4, Indicator 8—Solve problems involving counting money and making change, using both coins and paper bills.

Grades 3-4, Benchmark K—Analyze and solve multi-step problems involving addition, subtraction, multiplication and division of whole numbers.

Grade 3, Indicator 12—Add and subtract whole numbers with and without regrouping.

Grade 4, Indicator 9—Estimate the results of computations involving whole numbers, fractions and decimals, using a variety of strategies.

Grade 4, Indicator 12—Analyze and solve multi-step problems involving addition, subtraction, multiplication and division using an organized approach, and verify and interpret results with respect to the original problem.

Grades 3-4, Benchmark L—Use a variety of methods and appropriate tools (mental math, paper and pencil, calculators) for computing with whole numbers.

Grade 4, Indicator 11—Develop and explain strategies for performing computations mentally.

Grade 4, Indicator 13—Use a variety of methods and appropriate tools for computing with whole numbers: e.g., mental math, paper and pencil, and calculator.

Standard: Data Analysis and Probability

Grades 3-4, Benchmark A—Gather and organize data from surveys and classroom experiments, including data collected over a period of time.

Grade 3, Indicator 1—Collect and organize data from an experiment, such as recording and classifying observations or measurements, in response to a question posed.

Grade 4, Indicator 1—Create a plan for collecting data for a specific purpose.

Grades 3-4, Benchmark C—Construct charts, tables and graphs to represent data, including picture graphs, bar graphs, line graphs, line plots and Venn diagrams.

Standard: Mathematical Processes

Grades 3-4, Benchmark A—Apply and justify the use of a variety of problem-solving strategies, e.g., make an organized list, guess and check.

Grades 3-4, Benchmark B—Use an organized approach and appropriate strategies to solve multi-step problems.

Grades 3-4, Benchmark C—Use mathematical strategies to solve problems that relate to other curriculum areas and the real world; e.g., use a timeline to sequence events; use symmetry in artwork.

Grades 3-4, Benchmark G—Use reasoning skills to determine and explain the reasonableness of a solution with respect to the problem situation.

Grades 3-4, Benchmark J—Read, interpret, discuss and write about mathematical ideas and concepts using both everyday and mathematical language.

Grades 5-7, Benchmark A—Clarify problem-solving situation and identify potential solution processes; e.g., consider different strategies and approaches to a problem, restate problem from various perspectives.

Grades 5-7, Benchmark B—Apply and adapt problem-solving strategies to solve a variety of problems, including unfamiliar and non-routine situations.

Grades 5-7, Benchmark G—Relate mathematical ideas to one another and to other content areas; e.g., use area models for adding fractions, interpret graphs in reading, science and social studies.

Grades 5-7, Benchmark J—Communicate mathematical thinking to others and analyze the mathematical thinking and strategies of others.

## **Activity #2: Furnish a House**

Pretend you are going to furnish a room in your house. You have exactly \$2,000 to spend. Decide on the room you will furnish.

Using the newspaper, clip advertisements showing the furniture you will use in your room. Be sure to include the price tag. Glue your selections to a piece of paper. Total the cost of all the furniture you have placed in your room. Were you able to furnish it for \$2,000 or less?

Look up the word “necessity” in the dictionary. Can some items be considered necessities?

Make a list of the things you need to furnish your room. Make another list of the things you would like to have.

What can you say about the cost of the furniture?

## **Subject: MATHEMATICS**

Standard: Number/Number Sense

Grades 3-4, Benchmark F—Count money and make change using both coins and paper bills.

Grade 3, Indicator 4—Count money and make change using coins and paper bills to ten dollars.

Grade 4, Indicator 8—Solve problems involving counting money and making change, using both coins and paper bills.

Grades 3-4, Benchmark J—Estimate the results of whole number computations using a variety of strategies and judge the reasonableness.

Grade 3, Indicator 15—Evaluate the reasonableness of computations based upon operations and the numbers involved; e.g., considering relative size, place value and estimates.

Grade 4, Indicator 9—Estimate the results of computations involving whole numbers, fractions and decimals, using a variety of strategies.

Grades 3-4, Benchmark K—Analyze and solve multi-step problems involving addition, subtraction, multiplication and division of whole numbers.

Grade 3, Indicator 12—Add and subtract whole numbers with and without regrouping.

Grade 4, Indicator 12— Analyze and solve multi-step problems involving addition, subtraction, multiplication and division using an organized approach, and verify and interpret results with respect to the original problem.

Grade 4, Indicator 14—Demonstrate fluency in adding and subtracting whole numbers and in multiplying and dividing whole numbers by 1- and 2-digit numbers and multiples of ten.

Grades 3-4, Benchmark L—Use a variety of methods and appropriate tools (mental math, paper and pencil, calculators) for computing with whole numbers.

Grade 4, Indicator 11—Develop and explain strategies for performing computations.

Grade 4, Indicator 13—Use a variety of methods and appropriate tools for computing with whole numbers; e.g., mental math, paper and pencil, and calculators.

Standard: Data Analysis and Probability

Grades 3-4, Benchmark A— Gather and organize data from surveys and classroom experiments, including data collected over a period of time.

Grade 3, Indicator 1—Collect and organize data from an experiment, such as recording and classifying observations or measurements, in response to a question posed.

Grade 3, Indicator 4—Support a conclusion or prediction orally and in writing, using information in a table or graph.

Grade 4, Indicator 1—Create a plan for collecting data for a specific purpose.

Grades 3-4, Benchmark C—Construct charts, tables and graphs to represent data, including picture graphs, bar graphs, line graphs, line plots and Venn diagrams.

Grade 3, Indicator 5—Match a set of data with a graphical representation of the data.

Grade 4, Indicator 5—Propose and explain interpretations and predictions based on data displayed in tables, charts and graphs.

Grades 5-7, Benchmark B—Interpret data by looking for patterns and relationships, draw and justify conclusions, and answer related questions.

Grades 5-7, Benchmark C—Evaluate interpretations and conclusions as additional data are collected, modify conclusions and predictions, and justify new findings.

Grade 5, Indicator 5—Modify initial conclusions, propose and justify new interpretations and predictions as additional data are collected.

Grade 5, Indicator 10—Compare what should happen (theoretical/expected results) with what did happen (experimental/actual results) in a simple experiment.

Grades 5-7, Benchmark E—Collect, organize, display and interpret data for a specific purpose or need.

Grade 5, Indicator 4—Determine appropriate data to be collected to answer questions posed by students or teacher, collect and display data, and clearly communicate findings.

Standard: Mathematical Processes

Grades 3-4, Benchmark A—Apply and justify the use of a variety of problem-solving strategies, e.g., make an organized list, guess and check.

Grades 3-4, Benchmark B—Use an organized approach and appropriate strategies to solve multi-step problems.

Grades 3-4, Benchmark C—Use mathematical strategies to solve problems that relate to other curriculum areas and the real world; e.g., use a timeline to sequence events; use symmetry in artwork.

Grades 3-4, Benchmark G—Use reasoning skills to determine and explain the reasonableness of a solution with respect to the problem situation.

Grades 3-4, Benchmark J—Read, interpret, discuss and write about mathematical ideas and concepts using both everyday and mathematical language.

Grades 5-7, Benchmark A—Clarify problem-solving situation and identify potential solution processes; e.g., consider different strategies and approaches to a problem, restate problem from various perspectives.

Grades 5-7, Benchmark B—Apply and adapt problem-solving strategies to solve a variety of problems, including unfamiliar and non-routine situations.

Grades 5-7, Benchmark G—Relate mathematical ideas to one another and to other content areas; e.g., use area models for adding fractions, interpret graphs in reading, science and social studies.

Grades 5-7, Benchmark J—Communicate mathematical thinking to others and analyze the mathematical thinking and strategies of others.



## **Interdisciplinary Connections**

### **Subject: SOCIAL STUDIES**

Standard: Economics

Grades 3-5, Benchmark A—Explain the opportunity costs involved in the allocation of scarce productive resources.

Grade 4, Indicator 2—Explain how the availability of productive resources in Ohio promotes specialization in the production of goods and services and leads to trade.

Grades 3-5, Benchmark B—Explain why entrepreneurship, capital goods, technology, specialization and division of labor are important in the production of goods and services.

Grade 3, Indicator 2—Identify people who purchase goods and services as consumers and people who make goods or provide services as producers.

Grade 3, Indicator 3—Categorize economic activities as examples of production or consumption.

Grade 4, Indicator 4—Explain the advantages and disadvantages of specialization and the division of labor to produce items.

Grades 3-5, Benchmark C—Explain how competition affects producers and consumers in a market economy and why specialization facilitates trade.

Grade 3, Indicator 6—Explain how the local community is an example of a market where buyers and sellers exchange goods and services.

Grade 3, Indicator 7—Identify examples of economic competition in the local community.

Grade 5, Indicator 5—Explain the general relationship between supply, demand and price in a competitive market.

Grade 5, Indicator 6—Explain why competition among producers/sellers results in lower costs and prices, higher product quality, and better customer service.

Grade 5, Indicator 7—Explain why competition among consumers/buyers results in higher product prices.

### **Activity #3: Couch Potato**

Using the schedule page from the newspaper, pick out the television programs which you watch each day. List the programs and the length of time they are on the air. Total your time on hours and minutes for one day's TV viewing. If you spent the above amount of time each day for five days watching television, how many hours would you have watched television during the five days? Compute the number of hours you spend watching TV on the weekends.

### **Subject: MATHEMATICS**

Standard: Data Analysis and Probability

Grades 3-4, Benchmark A— Gather and organize data from surveys and classroom experiments, including data collected over a period of time.

Grade 3, Indicator 1—Collect and organize data from an experiment, such as recording and classifying observations or measurements, in response to a question posed.

Grade 4, Indicator 1—Create a plan for collecting data for a specific purpose.

Grades 3-4, Benchmark C—Construct charts, tables and graphs to represent data, including picture graphs, bar graphs, line graphs, line plots and Venn diagrams.

Grade 3, Indicator 4—Support a conclusion or prediction orally and in writing, using information in a table or graph.

Grade 4, Indicator 2—Represent and interpret data using tables, bar graphs, line plots and line graphs.

Grades 5-7, Benchmark B—Interpret data by looking for patterns and relationships, draw and justify conclusions, and answer related questions.

Grade 5, Indicator 4—Determine appropriate data to be collected to answer questions posed by students or teacher, collect and display data, and clearly communicate findings.

Grade 6, Indicator 6—Make logical inferences from statistical data.

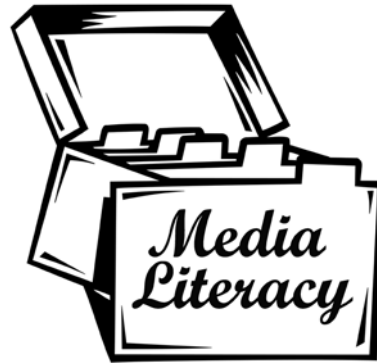
Grades 5-7, Benchmark C—Evaluate interpretations and conclusions as additional data are collected, modify conclusions and predictions, and justify new findings.

Grade 5, Indicator 5—Modify initial conclusions, propose and justify new interpretations and predictions as additional data are collected.

Grades 5-7, Benchmark E—Collect, organize, display and interpret data for a specific purpose or need.

Grade 5, Indicator 2—Select and use a graph that is appropriate for the type of data to be displayed; e.g., numerical vs. categorical data, discrete vs. continuous data.

Grade 6, Indicator 2—Select, create and use graphical representations that are appropriate for the type of data collected.



### **Interdisciplinary Connections**

#### **Subject: LIBRARY GUIDELINES**

Standard: Media Literacy

Grades 3-5, Benchmark A—Explain the intended effect of media communications and messages when delivered and received by various audiences and for various purposes.

Grade 3, Indicator 1—Know the formats and characteristics of familiar media and discuss how formats are used to gain attention of the audience (e.g., host/hostess, contestant, consumer, audience).

Grade 3, Indicator 3—Recognize what type of information is delivered through a specific media message and chosen format (e.g., informational, recreational, personal greeting).

Grade 4, Indicator 1—Interpret how an author's and/or artist's intent and choice of visual and text components in media communications and formats appeal to feelings and senses, suggest mood and meaning and influence audience understanding.

Grade 5, Indicator 1—Explain how multimedia visual and text components, production techniques, language choice, and facts and opinion are used in various combinations to shape listener, viewer and audience perception.

Grades 6-8, Benchmark A—Comprehend that media communications deliver information and messages to a specific audience for a specific purpose, and analyze the intended impact of media communications and messages when delivered and received by a specific audience.

Grade 6, Indicator 1—Discuss why print and nonprint media communications are directed towards specific listeners and viewers.

Grade 7, Indicator 2—Analyze how multimedia practices shape and alter personal perceptions and viewpoints of specific listeners and viewers, and the degree of impact.

Grade 8, Indicator 2—Assess the degree of impact information communicated and received has in informing, influencing or altering personal perception and viewpoint, and other listeners and viewers.

Grade 8, Indicator 3—Assess the format and medium of choice for delivery of media communications and messages, based on audience characteristics (e.g., level of understanding, level of interest).

Grades 6-8, Benchmark B—Analyze various combinations of media components and production techniques used to create and construct media communications for specific audiences and purposes.

Grade 6, Indicator 1—Explore why various physical combinations of media components, production techniques and medium formats are chosen and utilized in construction of media communications for specific audiences (e.g., visual design, text structures, language choice, sound and motion, and production special effects).

Grade 7, Indicator 1—Compare and contrast the various physical combinations of media components, production techniques and medium formats utilized in the construction of media communications for specific audiences (e.g., visual design, text structures, language choice, sound and motion, and production special effects).

Grade 8, Indicator 2—Assess the use and relationship between various multimedia components, production techniques and medium formats chosen to alter fact and data and develop persuasive key viewpoints for specific listeners and viewers based on age, gender, ethnicity, geography and social economics.

#### **Activity #4: Use of Space**

Choose an inside page of your newspaper from the first section. Count the number of news stories on the page. Now count the number of ads. Next take a ruler and measure the length of the columns used for news and the columns used for ads. Each column will be 2 or 3 inches wide. Measure the length by starting with the headline of a news story and multiply the width times the length to get the number of column inches. Count a picture as part of the article to which it refers. Measure the ads the same way.

Now make a bar graph comparing the amount of space used for news and the amount for ads.

#### **Subject: MATHEMATICS**

##### **Standard: Measurement**

Grades 3-4, Benchmark A—Select appropriate units for perimeter, area, weight, volume (capacity), time and temperature, using:

- objects of uniform size;
- U.S. customary units; e.g., mile, square inch, cubic inch, second, degree Fahrenheit, and other units, as appropriate.

Grade 3, Indicator 1—Identify and select appropriate units for measuring:

- a. length—miles, kilometers and other units of measure as appropriate.

Grade 3, Indicator 5—Estimate and measure length, weight and volume (capacity), using metric and U.S. customary units, accurate to the nearest  $\frac{1}{2}$  or  $\frac{1}{4}$  unit as appropriate.

Grade 4, Indicator 3—Identify and select appropriate units to measure:

- a. perimeter—string or links (inches or centimeters).
- b. area—tiles (square inches or square centimeters).
- c. volume—cubes (cubic inches or cubic centimeters).

Grades 3-4, Benchmark D—Identify appropriate tools and apply counting techniques for measuring side lengths, perimeter and area of squares, rectangles, and simple irregular two-dimensional shapes, volume of rectangular prisms, and time and temperature.

Grade 3, Indicator 6—Use appropriate measurement tools and techniques to construct a figure or approximate an amount of specified length, weight or volume (capacity); e.g. construct a rectangle with length  $2\frac{1}{2}$  inches and width 3 inches, fill a measuring cup to the  $\frac{3}{4}$  cup mark.

Grade 4, Indicator 6—Write, solve and verify solutions to multi-step problems involving measurement.

Grades 5-7, Benchmark A— Select appropriate units to measure angles, circumference, surface area, mass and volume, using:

- U.S. customary units; e.g., degrees, square feet, pounds, and other units as appropriate.

Grades 5-7, Benchmark D—Select a tool and measure accurately to a specified level of precision.

Grades 5-7, Benchmark E—Use problem solving techniques and technology as needed to solve problems involving length, weight, perimeter, area, volume, time and temperature.

Standard: Data Analysis and Probability

Grades 3-4, Benchmark A— Gather and organize data from surveys and classroom experiments, including data collected over a period of time.

Grade 3, Indicator 1—Collect and organize data from an experiment, such as recording and classifying observations or measurements, in response to a question posed.

Grade 4, Indicator 1—Create a plan for collecting data for a specific purpose.

Grades 3-4, Benchmark C—Construct charts, tables and graphs to represent data, including picture graphs, bar graphs, line graphs, line plots and Venn diagrams.

Grade 3, Indicator 3—Read, interpret and construct bar graphs with intervals greater than one.

Grade 3, Indicator 4—Support a conclusion or prediction orally and in writing, using information in a table or graph.

Grade 4, Indicator 2—Represent and interpret data using tables, bar graphs, line plots and line graphs.

Grade 4, Indicator 5—Propose and explain interpretations and predictions based on data displayed in tables, charts and graphs.

Grades 5-7, Benchmark A—Read, create and use line graphs, histograms, circle graphs, box-and-whisker plots, stem-and-leaf plots, and other representations when appropriate.

Grade 5, Indicator 2—Select and use a graph that is appropriate for the type of data to be displayed; e.g., numerical vs. categorical data, discrete vs. continuous data.

Grade 6, Indicator 2—Select, create and use graphical representations that are appropriate for the type of data collected.

Grade 7, Indicator 1—Read, create and interpret box-and-whisker plots, stem-and-leaf plots, and other types of graphs, when appropriate.

Grades 5-7, Benchmark B—Interpret data by looking for patterns and relationships, draw and justify conclusions, and answer related questions.

Grade 6, Indicator 6—Make logical inferences from statistical data.

Grades 5-7, Benchmark C—Evaluate interpretations and conclusions as additional data are collected, modify conclusions and predictions, and justify new findings.

Grade 5, Indicator 5—Modify initial conclusions, propose and justify new interpretations and predictions as additional data are collected.

Grades 5-7, Benchmark E—Collect, organize, display and interpret data for a specific purpose or need.

Grade 5, Indicator 4—Determine appropriate data to be collected to answer questions posed by students or teacher, collect and display data, and clearly communicate findings.

### **Activity #5: Comparison Shopping**

The newspaper can help you save money on groceries. Select two advertisements from the food section (be sure you have two different grocery stores.) Compare the prices of food products in two stores to determine which would be the best place to shop. Make a chart comparing the prices of at least four foods from each of the following categories:

**MEATS      VEGETABLES      FRUITS      DAIRY PRODUCTS**

- Which store has the cheapest prices?
- Why do you think prices are higher in one store than the other?
- Which store offers the most coupons?
- Which store has the largest ad in the paper?
- Do you think it is a good idea to compare prices before shopping? Why?
- Is it to your advantage to grocery shop in more than one store each week? Why? Why not?

### **Subject: MATHEMATICS**

Standard: Data Analysis and Probability

Grades 3-4, Benchmark A— Gather and organize data from surveys and classroom experiments, including data collected over a period of time.

Grade 3, Indicator 1—Collect and organize data from an experiment, such as recording and classifying observations or measurements, in response to a question posed.

Grade 4, Indicator 1—Create a plan for collecting data for a specific purpose.

Grades 3-4, Benchmark C—Construct charts, tables and graphs to represent data, including picture graphs, bar graphs, line graphs, line plots and Venn diagrams.

Grade 3, Indicator 5—Match a set of data with a graphical representation of the data.

Grade 3, Indicator 6—Translate information freely among charts, tables, line plots, picture graphs and bar graphs; e.g. create a bar graph from the information in a chart.

Grade 4, Indicator 2—Represent and interpret data using tables, bar graphs, line plots and line graphs.

Grades 3-4, Benchmark H—Use the set of possible outcomes to describe and predict events.

Grade 3, Indicator 4—Support a conclusion or prediction orally and in writing, using information in a table or graph.

Grade 4, Indicator 5—Propose and explain interpretations and predictions based on data displayed in tables, charts and graphs.

Grades 5-7, Benchmark A—Read, create and use line graphs, histograms, circle graphs, box-and-whisker plots, stem-and-leaf plots, and other representations when appropriate.

Grade 5, Indicator 2—Select and use a graph that is appropriate for the type of data to be displayed; e.g., numerical vs. categorical data, discrete vs. continuous data.

Grade 6, Indicator 2—Select, create and use graphical representations that are appropriate for the type of data collected.

Grade 7, Indicator 1—Read, create and interpret box-and-whisker plots, stem-and-leaf plots, and other types of graphs, when appropriate.

Grades 5-7, Benchmark B—Interpret data by looking for patterns and relationships, draw and justify conclusions, and answer related questions.

Grade 5, Indicator 4—Determine appropriate data to be collected to answer questions posed by students or teacher, collect and display data, and clearly communicate findings.

Grade 6, Indicator 6—Make logical inferences from statistical data.

Grades 5-7, Benchmark C—Evaluate interpretations and conclusions as additional data are collected, modify conclusions and predictions, and justify new findings.

Grade 5, Indicator 5—Modify initial conclusions, propose and justify new interpretations and predictions as additional data are collected.

Grades 5-7, Benchmark E—Collect, organize, display and interpret data for a specific purpose or need.

Grades 5-7, Benchmark G—Evaluate conjectures and predictions based upon data presented in tables and graphs, and identify misuses of statistical data and displays.

Grades 5-7, Benchmark K—Make and justify predictions based on experimental and theoretical probabilities.

Grade 5, Indicator 11—Make predictions based on experimental and theoretical probabilities.

Grade 6, Indicator 7—Design an experiment to test a theoretical probability and explain how the results may vary.

Grade 7, Indicator 8—Make predictions based on theoretical probabilities, design and conduct an experiment to test the predictions, compare actual results to predicted results, and explain differences.

Standard: Mathematical Processes

Grades 3-4, Benchmark A—Apply and justify the use of a variety of problem-solving strategies, e.g., make an organized list, guess and check.

Grades 3-4, Benchmark B—Use an organized approach and appropriate strategies to solve multi-step problems.

Grades 3-4, Benchmark C—Use mathematical strategies to solve problems that relate to other curriculum areas and the real world; e.g., use a timeline to sequence events; use symmetry in artwork.

Grades 3-4, Benchmark G—Use reasoning skills to determine and explain the reasonableness of a solution with respect to the problem situation.

Grades 3-4, Benchmark J—Read, interpret, discuss and write about mathematical ideas and concepts using both everyday and mathematical language.

Grades 5-7, Benchmark A—Clarify problem-solving situation and identify potential solution processes; e.g., consider different strategies and approaches to a problem, restate problem from various perspectives.

Grades 5-7, Benchmark B—Apply and adapt problem-solving strategies to solve a variety of problems, including unfamiliar and non-routine situations.

Grades 5-7, Benchmark G—Relate mathematical ideas to one another and to other content areas; e.g., use area models for adding fractions, interpret graphs in reading, science and social studies.

Grades 5-7, Benchmark J—Communicate mathematical thinking to others and analyze the mathematical thinking and strategies of others.

NIE Lesson Plan Format: **BRANCHES OF GOVERNMENT**

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Subject: Social Studies

<p>Academic Content Standards:  Government</p>	<p>Instructional Objectives:  To explain major responsibilities of each of the three branches of the U.S. government.</p>	
<p>Instructional Activities &amp; Time Allotted:  KWL Chart – 15 minutes Newspaper Children’s Page - 10 minutes Textbook – Social Studies – 10 minutes School House Rock Video (American Rocks) – 5 minutes Presentation(s): 40 minutes.</p>	<p>Teaching Strategies:  Infer what students already know about the three branches of government. Oral reading and discussions about United States government.  Resource materials concerning lessons (read and discuss.) Show section on branches of government.</p>	
<p>Instructional Materials: White board and markers; Mini-Page from Vindicator; student textbooks; Video: <i>America Rocks.</i>”</p>	<p>Oral group lesson of KWL chart. Each student has own copy of Constitution Reinforce lesson on three branches of government. Search local newspapers to find local heroes.</p>	
<p>Lesson Environment:  Whole class lesson, 5<sup>th</sup> grade</p>	<p>Adaptations/Modifications:  -Small guided reading groups (recommend use nonfiction trade books as reference lesson.)  -United Streaming program from computer along with LCD projector showing short lessons dealing with United States government.</p>	<p>Student Assessment:  Results of OAT test on social studies.</p>
<p>Technology:  Video (School House Rock), VCR, LCD Projector – United Streaming program.</p>		
<p>Student Follow-up:  Vocabulary to know: Separation of Powers, Checks and balances, veto.</p>		



**Subject: SOCIAL STUDIES**

**Standard: Government**

Grades 3-5, Benchmark A—Identify the responsibilities of the branches of the U.S. government and explain why they are necessary.

Grade 5, Indicator 1: Explain major responsibilities of each of the three branches of the U.S. government:

- a. The legislative branch, headed by Congress, passes laws.
- b. The executive branch, headed by the President, carries out and enforces the laws made by Congress.
- c. The judicial branch, headed by the Supreme Court, interprets and applies the law.

Grade 5, Indicator 2: Explain the essential characteristics of American democracy including:

- a. The people are the source of the government's authority.
- b. All citizens have the right and responsibility to vote and influence the decisions of the government.
- c. The government is run directly by the people or through elected representatives.
- d. The powers of government are limited by law.
- e. Basic rights of individuals are guaranteed by the Constitution.

Grades 3-5, Benchmark B—Give examples of documents that specify the structure of state and national government in the United States and explain how these documents foster self-government in a democracy.

Grade 5, Indicator 3—Explain the significance of the Declaration of Independence and the U.S. Constitution.

### NIE Lesson Plan Format: BILL OF RIGHTS

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Subject: Social Studies

<b>Curriculum Goals:</b>  Increase knowledge of the Bill of Rights.	<b>Instructional Objectives:</b>  Pupils to become knowledgeable of the Bill of Rights. Pupils will see the use of the Bill of Rights in every day events. Pupils to become aware of the necessity of the Bill of Rights.	
<b>Instructional Activities &amp; Time Allotted:</b>  One hour each day for a week.	<b>Teaching Strategies:</b> 1. Have students read the Bill of Rights. 2. Have students write their thoughts as to what is allowed and not allowed in each ‘Right.’ 3. After reading the paper, have students find articles in which the Bill of Rights are mentioned or invoked. i.e. police stopping and searching a car for drugs / drinking; a defendent in a trial invoking the 5 <sup>th</sup> Amendment.	
<b>Instructional Materials:</b>  Newspapers, paper, pencils, copy of the Bill of Rights.		
<b>Lesson Environment:</b>  Regular classroom.	<b>Adaptations/Modifications:</b>  Students could decide which articles would not be allowed in the newspaper if we didn’t have the freedom of speech (1 <sup>st</sup> Amendment) or the right to a fair trial.	<b>Student Assessment:</b>  Class participation in discussion. Student paper on what is and is not allowed in each of the first ten Amendments.
<b>Technology:</b>  Copies of the Bill of Rights.		
<b>Student Follow-up:</b>  Students will learn and recognize that the Bill of Rights is not just an historical document, but a healthy, well used group of laws necessary for our democracy.		



**Subject: SOCIAL STUDIES**

**Standard: Government**

Grades 3-5, Benchmark A—Identify the responsibilities of the branches of the U.S. government and explain why they are necessary.

Grade 3, Indicator 6—Explain why the use of power without legitimate authority is unjust (e.g., bullying stealing).

Grade 5, Indicator 2—Explain the essential characteristics of American democracy including:

- a. The people are the source of the government’s authority.
- b. All citizens have the right and responsibility to vote and influence the decisions of the government.
- c. The government is run directly by the people or through elected representatives.
- d. The powers of government are limited by law.
- e. Basic rights of individuals are guaranteed by the Constitution.

Grades 3-5, Benchmark B—Give examples of documents that specify the structure of state and national governments in the United States and explain how these documents foster self-government in a democracy.

Grade 4, Indicator 3—Explain the purpose of a democratic constitution.

- a. To provide a framework for government;
- b. To limit the power of government;
- c. To define the authority of elected officials.

Grade 5, Indicator 3—Explain the significance of the Declaration of Independence and the U.S. Constitution.

Grades 6-8, Benchmark A—Explain why people institute governments, how they influence governments, and how governments interact with each other.

Grade 6, Indicator 1—Explain reasons for the creation of governments such as:

- a. Protecting lives, liberty and property;
- b. Providing services that individuals cannot provide for themselves.

Grade 8, Indicator 1—Analyze the principles of self-government and natural rights expressed in the Declaration of Independence and their relationship to Enlightenment ideas.

Grades 6-8, Benchmark B—Explain how the Declaration of Independence, the U.S. Constitution, including the Bill of Rights, and the Northwest Ordinance have provided for the protection of rights and long-term future of a growing democracy.

Grade 8, Indicator 4—Explain the political concepts expressed in the U.S. Constitution:

- a. Representative democracy;
- b. Federalism;
- c. Bicameralism;
- d. Separation of powers;
- e. Checks and balances.

Grade 8, Indicator 5—Explain how the U.S. Constitution protects the rights of citizens, regulates the use of territory, manages conflict and establishes order and security.

Grade 8, Indicator 6—Explain how specific provisions of the U.S. Constitution, including the Bill of Rights, limit the powers of government in order to protect the rights of individuals with emphasis on:

- a. Freedom of religion, speech, press, assembly and petition;
- b. Right to trial by jury and the right to counsel;
- c. Due process and the equal protection of the laws.

Standard: Citizenship Rights and Responsibilities

Grades 3-5, Benchmark B—Identify rights and responsibilities of citizenship in the United States that are important for preserving democratic government.

Grade 5, Indicator 3—Explain the significance of the rights that are protected by the First Amendment including:

- a. Freedom of religion;
- b. Freedom of speech;
- c. Freedom of the press;
- d. Right of petition and assembly.

Grades 6-8, Benchmark B—Identify historical origins that influenced the rights U.S. citizens have today.

Grade 6, Indicator 2—Compare the rights and responsibilities of citizens living under various forms of government.

Grade 7, Indicator 2—Describe the rights found in the Magna Carta and show connections to rights Americans have today.

Grade 8, Indicator 4—Show connections between the rights and responsibilities of citizenship including:

- a. Voting and staying informed on issues;
- b. Being tried by a jury and serving on juries;
- c. Having rights and respecting the rights of others.

### NIE Lesson Plan Format: CAMPAIGN COSTS

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Subject: Social Studies

<p>Curriculum Goals:</p> <p>Increase student knowledge of campaigning for public office process.</p>	<p>Instructional Objectives:</p> <p>Pupils to become knowledgeable of the campaign trail.  Pupils will see the use of propaganda / persuasion/ public speaking.  Pupils to become aware of the costs of a campaign – Money necessary for travel, time needed, knowledge of issues, etc.</p>	
<p>Instructional Activities &amp; Time Allotted:</p> <p>One-half hour each day for a week.</p>	<p>Teaching Strategies:</p> <ol style="list-style-type: none"> <li>1. Have students decide on the candidate of their choice to follow.</li> <li>2. Have students read the paper and note in a logbook where the candidate is each day, the number of persons reached personally, the issues mentioned, their suggested solution(s) for issues discussed.</li> <li>3. Students will compute the number of hours spent each day campaigning at \$250 per hour, miles traveled at 58.5 cents* per mile, \$50 for food per day and \$100 for lodging. (Please remind students these prices are not for presidential candidates who spend much more for the incidentals.)</li> </ol>	
<p>Instructional Materials:</p> <p>Newspapers, paper, pencils, copy of a map.</p>	<p>Adaptations/Modifications:</p> <p>Students could follow both nominees on the campaign trail, comparing how many people were reached per stop.</p>	
<p>Lesson Environment:</p> <p>Regular classroom.</p>	<p>Student Assessment:</p> <p>Log book of where the candidate has traveled and his costs.</p>	<p>Technology:</p> <p>The Web for instant news and statistics.</p>
<p>Student Follow-up:</p> <p>Students will learn about the campaign trail on the way to election process. Ask the students whether the job is worth the time and expense necessary to win.</p>		

\*The Internal Revenue Service (IRS) rate for mileage



**Subject: SOCIAL STUDIES**

**Standard: Government**

Grades 3-5, Benchmark A— Identify the responsibilities of the branches of the U.S. government and explain why they are necessary.

Grade 4, Indicator 2— Explain why elections are used to select leaders and decide issues.

Grade 5, Indicator 2— Explain the essential characteristics of American democracy including:

- a. The people are the source of the government's authority.
- b. All citizens have the right and responsibility to vote and influence the decisions of the government.
- c. The government is run directly by the people or through elected representatives.
- d. The powers of government are limited by law.
- e. Basic rights of individuals are guaranteed by the Constitution.

Grades 6-8, Benchmark A—Explain why people institute governments, how they influence governments, and how governments interact with each other.

Grade 8, Indicator 1—Explain how political parties developed as a result of attempts to resolve issues in the early years of the United States including:

- a. Payment of debt;
- b. Establishment of a national bank;
- c. Strict or loose interpretation of the Constitution;
- d. Support for England or France.

**Standard: Citizenship Rights and Responsibilities**

Grades 3-5, Benchmark A— Explain how citizens take part in civic life in order to promote the common good.

Grade 4, Indicator 1— Describe the ways in which citizens can promote the common good and influence their government including:

- a. Voting;
- b. Communicating with officials;
- c. Participating in civic and service organizations;
- d. Performing voluntary service.

Grades 3-5, Benchmark B— Identify rights and responsibilities of citizenship in the United States that are important for preserving democratic government.

Grade 3, Indicator 1— Describe the responsibilities of citizenship with emphasis on:

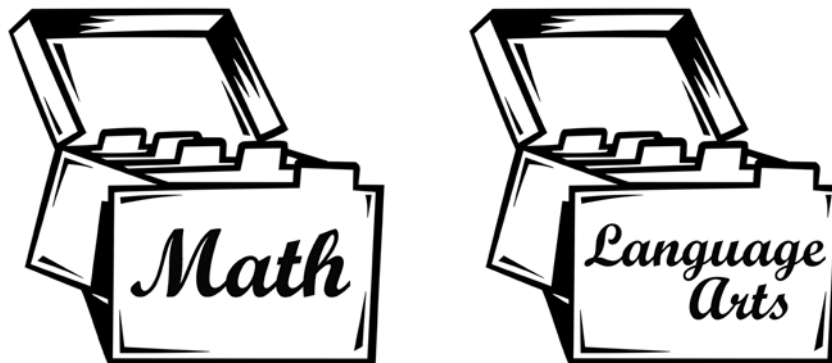
- a. Voting;
- b. Obeying laws;
- c. Respecting the rights of others;
- d. Being informed about current issues;
- e. Paying taxes.

Grade 4, Indicator 3— Explain the importance of leadership and public service.

Grades 6-8, Benchmark A— Show the relationship between civic participation and attainment of civic and public goals.

Grade 8, Indicator 1— Explain how opportunities for civic participation expanded during the first half of the 19<sup>th</sup> century including:

- a. Nominating conventions;
- b. Expansion of the franchise;
- c. Active campaigning.



## **Interdisciplinary Connections**

### **Subject: MATHEMATICS**

Standard: Mathematical Processes

Grades 3-4, Benchmark B—Use an organized approach and appropriate strategies to solve multi-step problems.

Grades 3-4, Benchmark D—Use mathematical strategies to solve problems that relate to other curriculum areas and the real world; e.g., use a timeline to sequence events; use symmetry in artwork.

Grades 5-7, Benchmark G—Relate mathematical ideas to one another and to other content areas; e.g., use area models for adding fractions, interpret graphs in reading, science and social studies.

Grades 6-8, Benchmark A—Formulate a problem or mathematical model in response to a specific need or situation, determine information required to solve the problem, choose method for obtaining this information, and set limits for acceptable solution.

Grades 6-8, Benchmark B—Apply mathematical knowledge and skills routinely in other content areas and practical situations.

Grades 6-8, Benchmark E—Use a variety of mathematical representations flexibly and appropriately to organize, record and communicate mathematical ideas.

**Subject: ENGLISH LANGUAGE ARTS**

**Standard: Reading Applications, Informational, Technical and Persuasive Text**

Grades 8-10, Benchmark B—Identify examples of rhetorical devices and valid and invalid inferences, and explain how authors use these devices to achieve their purposes and reach their intended audiences.

Grade 8, Indicator 5—Assess the adequacy, accuracy and appropriateness of an author’s details, identifying persuasive techniques (e.g., bandwagon, testimonial and emotional word repetition) and examples of bias and stereotyping.

Grades 8-10, Benchmark D—Explain and analyze how an author appeals to an audience and develops an argument or viewpoint in text.

Grade 8, Indicator 6—Identify the author’s purpose and intended audience for the text.

Grade 8, Indicator 7—Identify an author’s argument, perspective or viewpoint and explain the development of key points.

Grade 8, Indicator 8—Recognize how writers cite facts, draw inferences and present opinions in informational text.

**Standard: Communication: Oral and Visual**

Grades 5-7, Benchmark B—Explain a speaker’s point of view and use of persuasive techniques in presentations and visual media.

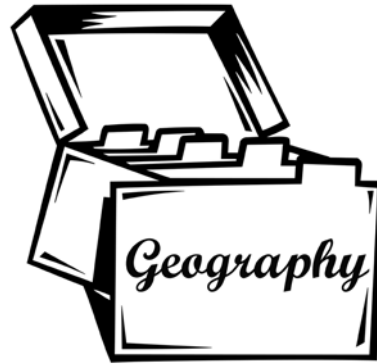
Grades 8-10, Benchmark B—Analyze the techniques used by speakers and media to influence an audience, and evaluate the effect this has on the credibility of a speaker or media message.

Grades 8-10, Benchmark C—Evaluate the content and purpose of a presentation by analyzing the language and delivery choices made by a speaker.

## NIE Lesson Plan Format: LEADERS IN THE NEWS

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Subject: Social Studies

<p><b>Curriculum Goals:</b></p> <p>Increase knowledge of persons and where they live.</p>	<p><b>Instructional Objectives:</b></p> <p>Pupils to become knowledgeable of world leaders and the location of the country the person represents.  Pupils to become familiar with world geography.  Pupils to become knowledgeable about the many ways people represent their countries.</p>	
<p><b>Instructional Activities &amp; Time Allotted:</b></p> <p>Half hour each day for a week.</p>	<p><b>Teaching Strategies:</b></p> <p>1. Using photographs of people in the new, students will make a scrapbook of the people, identifying them by why they are in the news, their occupation, what country they are from, and be able to locate the country on a world globe or map.</p>	
<p><b>Instructional Materials:</b></p> <p>For class: world map/atlas.</p> <p>For each student: newspaper, unlined paper, folder, colored pencils.</p>		
<p><b>Lesson Environment:</b></p> <p>Regular classroom.</p>	<p><b>Adaptations/Modifications:</b></p> <p>Students could create a scrapbook of photos of sports figures, politicians, movie stars, recording stars, etc.</p>	<p><b>Student Assessment:</b></p> <p>Photos of people in the news with their name and country, a sentence about why they are in the news, and the location of their home state or country on a map.</p>
<p><b>Technology:</b></p> <p>Photos from books or on-line.</p>	<p>Students could do research on stars of a different decade or era and compare similarities and differences.</p>	
<p><b>Student Follow-up:</b></p> <p>Students will create a scrapbook of people in the news for future reference.</p>		



**Subject: SOCIAL STUDIES**

**Standard: Geography**

Grades 3-5, Benchmark A—Use map elements or coordinates to locate physical and human features of North America.

Grade 3, Indicator 2—Use a compass rose and cardinal directions to describe the relative location of places.

Grade 3, Indicator 4—Use a number/letter grid system to locate physical and human features on a map.

Grade 4, Indicator 1—Use a linear scale to measure the distance between places on a map.

Grade 4, Indicator 2—Use cardinal and intermediate directions to describe the relative location of places.

Grade 4, Indicator 3—Describe the location of Ohio relative to other states and countries.

Grade 5, Indicator 2—Use maps to identify the location of:

- a. The three largest countries of North America;
- b. The 50 states of the United States;
- c. The Rocky and Appalachian mountain systems;
- d. The Mississippi, Rio Grande and St. Lawrence rivers;
- e. The Great Lakes.

Grades 6-8, Benchmark A—Identify on a map the location of major physical and human features of each continent.

Grade 6, Indicator 1—Place countries, cities, deserts, mountain ranges and bodies of water on the continents on which they are located.

Grade 6, Indicator 2—Use coordinates of latitude and longitude to locate points on a world map.

Standard: Citizenship Rights and Responsibilities

Grades 3-5, Benchmark A—Explain how citizens take part in civic life to promote the common good.

Grade 3, Indicator 1—Describe how people help to make the community a better place in which to live including:

- a. Working to preserve the environment;
- b. Helping the homeless;
- c. Restoring houses in low-income areas;
- d. Supporting education;
- e. Planning community events;
- f. Starting a business.

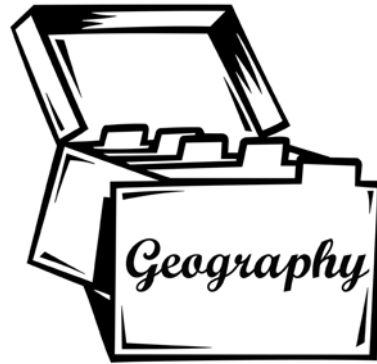
Grade 4, Indicator 1—Describe the ways in which citizens can promote the common good and influence their government including:

- a. Voting;
- b. Communicating with officials;
- c. Participating in civic and service organizations;
- d. Performing voluntary service.

### NIE Lesson Plan Format: STATES IN THE NEWS

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Subject: Social Studies

<p><b>Curriculum Goals:</b></p> <p>Increase knowledge of the states within the United States where news of persons and events occur.</p>	<p><b>Instructional Objectives:</b></p> <p>Through the study of newspaper coverage, students will become knowledgeable about the individual U.S. states.</p>	
<p><b>Instructional Activities &amp; Time Allotted:</b></p> <p>Half hour each day for a week.</p>	<p><b>Teaching Strategies:</b></p> <p>1. Using photographs of people or articles in the news, students will make a scrapbook / folder of the United States. They will glue or staple the photo or article onto an outline of the state where the person or article is from.</p>	
<p><b>Instructional Materials:</b></p> <p>For class: U.S. map showing state outlines.</p> <p>For each student: newspaper, unlined paper, folder, colored pencils.</p>	<p>2. As part of the class, one article per state is placed on the class map each day.</p>	
<p><b>Lesson Environment:</b></p> <p>Regular classroom.</p>	<p><b>Adaptations/Modifications:</b></p> <p>Students could graph the number of articles / photos from each state to see which state is in the news most often.</p>	<p><b>Student Assessment:</b></p> <p>-Pages in the folder of photos and names of people or articles in the news with the state's name and the location of the home state on a map.</p>
<p><b>Technology:</b></p> <p>Copies of state maps.</p>	<p>-Number of states included in folder</p>	
<p><b>Student Follow-up:</b></p> <p>Students will learn and know the states by their shape and location on a U.S. map. They may realize generalities like hurricanes hit the southeast coast of the United States and wild fires are destructive in the southwest and California.</p>		



**Subject: SOCIAL STUDIES**

**Standard: Geography**

Grades 3-5, Benchmark A—Use map elements or coordinates to locate physical and human features of North America.

Grade 3, Indicator 2—Use a compass rose and cardinal directions to describe the relative location of places.

Grade 3, Indicator 4—Use a number/letter grid system to locate physical and human features on a map.

Grade 4, Indicator 1—Use a linear scale to measure the distance between places on a map.

Grade 4, Indicator 2—Use cardinal and intermediate directions to describe the relative location of places.

Grade 4, Indicator 3—Describe the location of Ohio relative to other states and countries.

Grade 5, Indicator 2—Use maps to identify the location of:

- a. The three largest countries of North America;
- b. The 50 states of the United States;
- c. The Rocky and Appalachian mountain systems;
- d. The Mississippi, Rio Grande and St. Lawrence rivers;
- e. The Great Lakes.

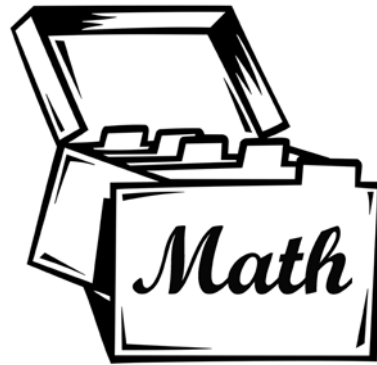
Grades 3-5, Benchmark B—Identify the physical and human characteristics of places and regions in North America.

Grade 5, Indicator 3—Describe the landforms, climates, population, culture and economic characteristics of places and regions in North America.

Grade 5, Indicator 4—Explain how climate is influenced by:

- a. Earth-sun relationships;
- b. Landforms;
- c. Vegetation.

Grade 5, Indicator 5—Explain, by identifying patterns on thematic maps, how physical and human characteristics can be used to define regions in North America.



### **Interdisciplinary Connections**

**Subject: MATHEMATICS**

**Standard: Data Analysis and Probability**

Grades 5-7, Benchmark A— Read and use line graphs, histograms, circle graphs, box-and-whisker plots, stem-and-leaf plots, and other representations when appropriate.

Grades 5-7, Benchmark B— Interpret data by looking for patterns and relationships, draw and justify conclusions, and answer related questions.

Grades 5-7, Benchmark C— Evaluate interpretations and conclusions as additional data are collected, modify conclusions and predictions, and justify new findings.

Grades 5-7, Benchmark E— Collect, organize, display and interpret data for a specific purpose or need.

## NIE Lesson Plan Format: TIMELINES

Date:                      Time:                      Group:                      Subject: Social Studies

<p><b>Curriculum Goals:</b></p> <p>Increase knowledge of historical persons and events.</p>	<p><b>Instructional Objectives:</b></p> <p>Students will learn that history is relevant to them. They will also see that history repeats itself over time and will learn about counting time into decades and centuries when they create timelines of historical happenings.</p>	
<p><b>Instructional Activities &amp; Time Allotted:</b></p> <p>One hour each day for a week.</p>	<p><b>Teaching Strategies:</b></p> <p>1. Using “Years Ago” column from <i>The Vindicator</i>, or a similar history column from your local newspaper, have students categorize events by centuries and place the historical items on a time line, marking the timeline by centuries and decades.</p>	
<p><b>Instructional Materials:</b></p> <p>For each student: newspaper, unlined paper, ruler, colored pencils.</p>		
<p><b>Lesson Environment:</b></p> <p>Regular classroom.</p>	<p><b>Adaptations/Modifications:</b></p> <p>Compare day’s history items with articles in today’s news.</p>	<p><b>Student Assessment:</b></p> <p>Timeline of events, including items from 25, 50 and 75 years ago.</p>
<p><b>Technology:</b></p> <p>Overhead of a timeline.</p>	<p>Do History timeline for a month.</p> <p>Categorize historical events by people, events, countries, etc.</p>	
<p><b>Student Follow-up:</b></p> <p>Students will write a paper comparing today’s events with those of the past to see if history does repeat itself.</p>		



**Subject: SOCIAL STUDIES**

**Standard: History**

Grades 3-5, Benchmark A—Construct time lines to demonstrate an understanding of units of time and chronological order.

Grade 3, Indicator 1—Define and measure time by years, decades and centuries.

Grade 3, Indicator 2—Place local historical events in sequential order on a time line.

Grade 4, Indicator 1—Construct time lines with evenly space intervals for years, decades and centuries to show the order of significant events in Ohio history.

Grade 5, Indicator 1—Create time lines and identify possible relationships between events.

Grades 6-8, Benchmark A—Interpret relationships between events shown on multiple-tier time lines.

Grade 6, Indicator 1—Construct a multiple-tier time line from a list of events and interpret the relationships between the events.

Grade 7, Indicator 1—Group events by broadly defined historical eras and enter onto multiple-tier time lines.

Grade 8, Indicator 1—Select events and construct a multiple-tier time line to show relationships among events.

### NIE Lesson Plan Format: POLITICAL CARTOONS

Date:	Time:	Group:	Subject: Social Studies
Curriculum Goals:	Instructional Objectives:  1. To have students understand the use of satire. 2. To have students understand the use of propaganda. 3. To analyze current local/state/federal issues.		
Instructional Activities & Time Allotted:  Class: 11:57 a.m. – 12:38 p.m.	Teaching Strategies: 1. Describe the use of editorial cartoons: i.e. Newspapers use Uncle Sam – government; Democratic Party - donkey Republican Party - elephant 2. Have students clip several editorial cartoons and chose one to answer the following:		
Instructional Materials:  Editorial cartoons clipped from newspapers.	A. Who is the cartoonist? B. What symbols are used? C. What is the subject of the cartoon? D. What opinion is being expressed? E. Name the people or idea the caricature(s) may represent.		
Lesson Environment:  Grade 8 classroom.	Adaptations/Modifications:	Student Assessment:  Complete the questions on the editorial cartoon sheet.	
Technology:			
Student Follow-up:  Students may draw their own political cartoon(s). Exchange cartoons to see if other classmates can answer the questions listed above.			



**Subject: SOCIAL STUDIES**

**Standard: History**

Grades 6-8, Benchmark E—Explain the causes and consequences of the American Revolution, with emphasis on both Colonial and British perspectives.

Grade 8, Indicator 3—Identify and explain the sources of conflict which led to the American Revolution, with emphasis on the perspectives of the Patriots, Loyalists, neutral colonists and the British concerning;

- a. The Proclamation of 1763, the Stamp Act, the Townshend Acts, the Tea Act and the Intolerable Acts;
- b. The Boston Tea Party, the boycotts, the Sons of Liberty and petitions and appeals to Parliament.

Grades 6-8, Benchmark F—Explain the political and economic challenges faced by the United States after the Revolutionary War and the actions that resulted in the adoption of the U.S. Constitution.

Grade 8, Indicator 6—Explain the challenges in writing and ratifying the U.S. Constitution including:

- a. Issues debated during the convention resulting in compromises (i.e., the Great Compromise, the Three-Fifths Compromise and the compromise over the slave trade);
- b. The Federalist/Anti-Federalist debate;
- c. The debate over a Bill of Rights.

**Standard: People in Societies**

Grades 6-8, Benchmark C—Explain how contact between different cultures impacts the diffusion of belief systems, art, science, technology, language and forms of government.

Grade 8, Indicator 6—Explain how the diverse peoples of the United States developed a common national identity.

Standard: Government

Grades 6-8, Benchmark A—Explain why people institute governments, how they influence governments, and how governments interact with each other.

Grades 8, Indicator 2—Explain how political parties developed as a result of attempts to resolve issues in the early years of the United States including:

- a. Payment of debt;
- b. Establishment of a national bank;
- c. Strict or loose interpretation of the Constitution;
- d. Support for England or France.

Standard: Citizenship Rights and Responsibilities

Grades 6-8, Benchmark A—Show the relationship between civic participation and attainment of civic and public goals.

Grade 8, Indicator 1—Show the relationship between participating in civic and political life and the attainment of individual and public goals including:

- a. The Sons of Liberty and Committees of Correspondence/ American independence.
- b. The Underground Railroad and the abolitionist movement/Abolition of slavery.

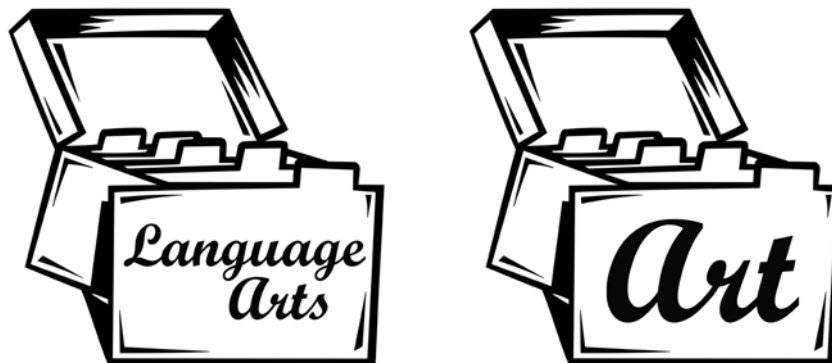
Grade 8, Indicator 2—Explain how the opportunities for civic participation expanded during the first half of the 19<sup>th</sup> century including:

- a. Nominating conventions;
- b. Expansion of the franchise;
- c. Active campaigning.

Standard: Social Studies Skills and Methods

Grades 6-8, Benchmark A—Analyze different perspectives on a topic obtained from a variety of sources.

Grade 8, Indicator 1—Compare accuracy and point of view of fiction and nonfiction sources about a particular era or event.



## **Interdisciplinary Connections**

### **Subject: ENGLISH LANGUAGE ARTS**

Standard: Reading Applications: Informational, Technical and Persuasive Text

Grades 8-10, Benchmark B—Identify examples of rhetorical devices and valid and invalid inferences, and explain how authors use these devices to achieve their purposes and reach their intended audiences.

Grade 8, Indicator 5—Assess the adequacy, accuracy and appropriateness of an author’s details, identifying persuasive techniques (e.g. bandwagon, testimonial and emotional word repetition) and examples of bias and stereotyping.

Grade 8, Indicator 6—Identify the author’s purpose and intended audience for the text.

Grades 8-10, Benchmark C—Analyze whether graphics supplement textual information and promote the author’s purpose.

Grades 8-10, Benchmark D—Explain and analyze how an author appeals to an audience and develops an argument or viewpoint in text.

Grade 8, Indicator 7—Analyze an author’s argument, perspective or viewpoint and present opinions in informational text.

### **Subject: VISUAL ART**

Standard: Historical, Cultural and Social Contexts

Grades 5-8, Benchmark C--Demonstrate knowledge of historical influences on contemporary works of art and make predictions about influences on the future of visual art.

Grade 8, Indicator 4—Identify examples of visual culture (e.g., advertising, political cartoons, product design and theme parks) and discuss how visual art is used to shape people’s tastes, choices, values, buying habits and opinions.

### NIE Lesson Plan Format: CUSTOMIZED CARS

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Subject: Science

<p><b>Curriculum Goals:</b></p> <p>Increase knowledge of technology as it affects the environment.</p>	<p><b>Instructional Objectives:</b></p> <p>Students will develop and demonstrate an understanding of changes in the auto industry and will be able to determine why those changes were made (technological advances influenced by scientific knowledge to improve the quality of the environment, individual consumer needs, etc.)</p>	
<p><b>Instructional Activities &amp; Time Allotted:</b></p> <p>60 minutes for review and class discussion</p>	<p><b>Teaching Strategies:</b></p> <ol style="list-style-type: none"> <li>1. Direct students to search the newspaper for automobile ads and articles about the auto industry.</li> <li>2. Direct students to write down at least 10 examples of sports, safety, comfort or luxury features and environmentally-friendly measures that can be found in cars today that did not exist 10 years ago.</li> <li>3. Ask students to determine how each of these examples changes the car's operation and how the alteration is environmentally-friendly or environmentally harmful.</li> </ol>	
<p><b>Instructional Materials:</b></p> <p>Newspapers, paper, pencils</p>		
<p><b>Lesson Environment:</b></p> <p>Regular classroom</p>	<p><b>Adaptations/Modifications:</b></p> <p>Students could decide which features exist in automobiles today that may not exist 10 years from today and then explain why.</p>	<p><b>Student Assessment:</b></p> <p>Class participation in discussion.</p>
<p><b>Technology:</b></p> <p>Auto ads from newspaper e-edition</p>		
<p><b>Student Follow-up:</b></p> <p>Using details from classroom discussion and car images from the newspaper, students may design and “customize” an auto to make it environmentally-friendly.</p>		



**Subject: SCIENCE**

**Standard: Earth and Space Sciences**

Grades 3-5, Benchmark C—Describe Earth’s resources including rocks, soil, water, air, animals and plants and the ways in which they can be conserved.

Grade 5, Indicator 5— Explain how the supply of many non-renewable resources is limited and can be extended through reducing, reusing and recycling but cannot be extended indefinitely.

Grade 5, Indicator 6— Investigate ways Earth’s renewable resources (e.g., fresh water, air, wildlife and trees) can be maintained.

Grades 6-8, Benchmark C— Describe interactions of matter and energy throughout the lithosphere, hydrosphere and atmosphere (e.g., water cycle, weather and pollution).

Grade 7, Indicator 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).

**Standard: Physical Sciences**

Grades 6-8, Benchmark C— Describe renewable and nonrenewable sources of energy (e.g., solar, wind, fossil fuels, biomass, hydroelectricity, geothermal and nuclear energy) and the management of these sources.

Grade 6, Indicator 5— Explain that the energy found in nonrenewable resources such as fossil fuels (e.g., oil, coal and natural gas) originally came from the sun and may renew slowly over millions of years.

Grade 6, Indicator 8— Describe how renewable and nonrenewable energy resources can be managed (e.g., fossil fuels, trees and water).

Standard: Science and Technology

Grades 3-5, Benchmark A— Describe how technology affects human life.

Grade 3, Indicator 1— Describe how technology can extend human abilities (e.g., to move things and to extend senses).

Grade 3, Indicator 2— Describe ways that using technology can have helpful and/or harmful results.

Grade 3, Indicator 3— Investigate ways that the results of technology may affect the individual, family and community.

Grade 4, Indicator 1— Explain how technology from different areas (e.g., transportation, communication, nutrition, healthcare, agriculture, entertainment and manufacturing) has improved human lives.

Grade 4, Indicator 2— Investigate how technology and inventions change to meet peoples' needs and wants.

Grade 5, Indicator 1— Investigate positive and negative impacts of human activity and technology on the environment.

Grades 3-5, Benchmark B— Describe and illustrate the design process.

Grade 3, Indicator 4— Use a simple design process to solve a problem (e.g., identify a problem, identify possible solutions and design a solution).

Grade 3, Indicator 5— Describe possible solutions to a design problem (e.g., how to hold down paper in the wind).

Grade 4, Indicator 3— Describe, illustrate and evaluate the design process used to solve a problem.

Grade 5, Indicator 2— Revise an existing design used to solve a problem based on peer review.

Grade 5, Indicator 3— Explain how the solution to one problem may create other problems.

Grades 6-8, Benchmark A— Give examples of how technological advances, influenced by scientific knowledge, affect the quality of life.

Grade 6, Indicator 1— Explain how technology influences the quality of life.

Grade 6, Indicator 2— Explain how decisions about the use of products and systems can result in desirable or undesirable consequences (e.g., social and environmental)

Grade 6, Indicator 3—Describe how automation (e.g., robots) has changed manufacturing including manual labor being replaced by highly-skilled jobs.

Grade 6, Indicator 4—Explain how the usefulness of manufactured parts of an object depend on how well their properties allow them to fit and interact with other materials.

Grade 7, Indicator 1—Explain how needs, attitudes and values influence the direction of technological development in various cultures.

Grade 7, Indicator 2—Describe how decisions to develop and use technologies often put environmental and economic concerns in direct competition with each other.

Grade 7, Indicator 3—Recognize that science can only answer some questions and technology can only solve some human problems.

Grade 8, Indicator 1—Examine how science and technology have advanced through the contributions of many different people, cultures and times in history.

Grade 8, Indicator 2—Examine how choices regarding the use of technology are influenced by constraints caused by various unavoidable factors (e.g., geographic location, limited resources, social, political and economic considerations).



## **Interdisciplinary Connections**

### **Subject: TECHNOLOGY**

Standard: Nature of Technology

Grades 3-5, Benchmark A—Compare and discuss the characteristics of technology in our community.

Grade 4, Indicator 3—Describe ways creative thinking, economic and cultural influences shape technological development (eg. Wright Brothers, powered flight, air commerce).

Grade 4, Indicator 4—Recognize that creative thinking, economics and culture influence technological development (e.g., a city may need to design a mass transit system for transportation while a small town may use person vehicles).

Grade 5, Indicator 3—Demonstrate the use of technology in daily life, noting the advantages and disadvantages those uses provide.

Grades 3-5, Benchmark B—Identify, describe and discuss the core concepts of technology.

Grade 4, Indicator 3—Cite examples of how tools and machines extend human capabilities (e.g., automobiles are more efficient than walking great distances).

Grade 5, Indicator 3—Demonstrate how tools and machines extend human capabilities.

Grade 5, Indicator 4—Recognize that requirements are the limits to designing or making a product or system.

Grades 3-5, Benchmark C—Compare and discuss the relationships among technologies, and the connections between technology and other fields of study.

Grade 4, Indicator 1—Describe what is needed to cause a technology to develop further in each of the technological systems (e.g., business support and research initiatives).

Grades 6-8, Benchmark A—Analyze information relative to the characteristics of technology and apply in a practical setting.

Grade 6, Indicator 1—Recognize that there are multiple factors associated with developing products and systems.

Grade 6, Indicator 4—Cite examples of how characteristics of technology are evident in daily life:

- a. Technology is based on human knowledge;
- b. Technology involves tools, materials and systems;
- c. Application of technology results in artifacts (things or items);
- d. Technology is developed by people to control natural and human-made environments.

Grade 7, Indicator 1—Describe the factors involved in developing products and systems using technology (e.g. market survey, design development, prototyping, assessing, producing, quality assurance, marketing).

Grade 7, Indicator 3—Discuss ways that technology is linked to creativity and innovation.

Grade 8, Indicator 2—Interpret the interrelationship between technology, creativity and innovation.

Grades 6-8, Benchmark C—Analyze the relationship among technologies and explore the connections between technology and other fields of study.

Grade 6, Indicator 1—Identify technological systems that interrelate (e.g., computer peripherals, the engine and transmission of an automobile).

Grade 6, Indicator 3—Recognize that knowledge from other fields of study impacts the development of technological systems and products.

Grade 7, Indicator 1—Describe the situational interdependence of technologies (e.g., space shuttle crew depends on communication technologies in order to maneuver the craft).

Grade 7, Indicator 3—Explain how knowledge from other fields of study may impact the development of technological systems and products.

Grade 8, Indicator 1—Demonstrate ways that technological systems interrelate.

Grade 8, Indicator 3—Explain ways that invention and innovation within one field of can transfer into other areas of technology.

Grade 8, Indicator 5—Describe and cite examples of how different technologies require different processes.

Standard: Technology and Society Interaction

Grades 3-5, Benchmark A—Define responsible citizenship relative to technology.

Grade 3, Indicator 1—Discuss how technology may have positive and/or negative consequences.

Grade 3, Indicator 2—Identify and discuss how products are developed and modified to meet changing individual needs and wants.

Grade 4, Indicator 1—Explore and compare common uses of technology in daily life, and the advantages and disadvantages those uses provide.

Grade 5, Indicator 2—Analyze common uses of technology in daily life and the advantages and disadvantages those uses provide (e.g. how technology helps us communicate).

Grades 3-5, Benchmark B—Investigate and explain the interrelationships between technology and the environment.

Grade 3, Indicator 1—Describe how technology affects the environment in positive and/or negative ways.

Grade 4, Indicator 1—Describe how appropriate management of resources and waste can prevent harm to the environment.

Grade 5, Indicator 1—Investigate alternative methods for the protection of the environment.

Grades 6-8, Benchmark A—Analyze technologically responsible citizenship.

Grade 6, Indicator 1—Discuss how new technologies have resulted from the demands, values and interests of individuals, businesses, industries and societies.

Grade 6, Indicator 2—Describe how new technologies have resulted from the demands values and interests of individuals, businesses, industries and societies.

Grade 7, Indicator 1—Classify how new technologies have resulted from the demand, values and interests of individuals, businesses, industries and societies.

Grade 7, Indicator 2—Relate ways that the uses of inventions and innovations have led to changes in society and the creation of new needs and wants.

Grade 7, Indicator 3—Identify how societal expectations drive the acceptance and use of products and systems (e.g., impact of the automobile in Ohio 1891 to the present).

Grade 8, Indicator 1—Explain how economic, political and cultural issues are influenced by the development and use of technology.

Grade 8, Indicator 2—Describe how societal expectations drive the acceptance and use of products and systems.

Grade 8, Indicator 3—Describe how the use of technology affects humans in various ways, including their safety, comfort, choices and attitudes about technology's development and use.

Grades 6-8, Benchmark B—Describe and explain the impact of technology on the environment.

Grade 6, Indicator 1—Describe and give examples of why and how the management of waste produced by technological systems is an important societal issue.

Grade 7, Indicator 1—Explain how the development and use of technologies often put environmental and economic concerns in direct competition with one another.

## NIE Lesson Plan Format: GOOD TIMING

Date:                      Time:                      Group:                      Subject: Science

<p><b>Curriculum Goals:</b></p> <p>Understand the need for standard observation of measurement of time as individuals and in society.</p>	<p><b>Instructional Objectives:</b></p> <p>Students will better understand how the current measurement of time was developed, and why humans use a standard measure of time.</p> <p>.</p>	
<p><b>Instructional Activities &amp; Time Allotted:</b></p> <p>60 minutes</p>	<p><b>Teaching Strategies:</b></p> <ol style="list-style-type: none"> <li>1. As a class, discuss different methods of tracking time. If time and technology permit, access “Calendars Through the Ages” online.</li> <li>2. Direct students to examine a current issue of the newspaper and highlight every reference to time they can find, including dates, days, hours and minutes.</li> <li>3. Have students consider how things might look or work differently if people didn't use a standard way of measuring and observing time. Examples could be bus and airlines schedules, mail deliveries, meeting with friends, business hours of retail stores and restaurants, movie times, etc.</li> </ol>	
<p><b>Instructional Materials:</b></p> <p>Newspapers, paper, pencils, markers or crayons</p>	<p><b>Adaptations/Modifications:</b></p> <p>Acting as though there were no standard method of measuring and observing time, students act as “watchmakers” to make different types of timekeeping devices for different customers.</p>	
<p><b>Lesson Environment:</b></p> <p>Regular classroom.</p>	<p><b>Student Assessment:</b></p> <p>Class participation in discussion.</p>	
<p><b>Technology:</b></p> <p>Online “Calendars Through the Ages”  <a href="http://www.webexhibits.org/calendars/index.html">http://www.webexhibits.org/calendars/index.html</a></p>		
<p><b>Student Follow-up:</b></p>		



**Subject: SCIENCE**

**Standard: Scientific Inquiry**

Grades K-2, Benchmark A— Ask a testable question.

Grade K, Indicator 1— Ask “what if” questions.

Grade K, Indicator 2— Explore and pursue student-generated “what if” questions.

Grade 1, Indicator 1—Ask “what happens when” questions.

Grade 1, Indicator 2— Explore and pursue student-generated “what happens when” questions.

Grade 2, Indicator 1— Ask “how can I/we” questions.

Grade 2, Indicator 2— Ask “how do you know” questions (not “why” questions) in appropriate situations and attempt to give reasonable answers when others ask questions.

Grade 2, Indicator 3— Explore and pursue student-generated “how” questions.

**Standard: Science and Technology**

Grades K-2, Benchmark A— Explain why people, when building or making something, need to determine what it will be made of, how it will affect other people and the environment.

Grade 2, Indicator 2— Investigate why people make new products or invent new ways to meet their individual wants and needs.

Grades K-2, Benchmark B— Explain that to construct something requires planning, communication, problem solving and tools.

Grade 1, Indicator 2— Explain that when trying to build something or get something to work better, it helps to follow directions and ask someone who has done it before.

Grade 1, Indicator 6— Investigate that tools are used to help make things and some things cannot be made without tools.

Grade 1, Indicator 7— Explore that several steps are usually needed to make things (e.g., building with blocks).

Grade 1, Indicator 8— Investigate that when parts are put together they can do things that they could not do by themselves (e.g., blocks, gears and wheels).

Grade 2, Indicator 4— Communicate orally, pictorially, or in written form the design process used to make something.

Grades 3-5, Benchmark A— Describe how technology affects human life.

Grade 3, Indicator 1— Describe how technology can extend human abilities (e.g., to move things and to extend senses).

Grade 3, Indicator 2— Describe ways that using technology can have helpful and/or harmful results.

Grade 3, Indicator 3— Investigate ways that the results of technology may affect the individual, family and community.

Grade 4, Indicator 1— Explain how technology from different areas (e.g., transportation, communication, nutrition, healthcare, agriculture, entertainment and manufacturing) has improved human lives.

Grade 4, Indicator 2— Investigate how technology and inventions change to meet peoples' needs and wants.

Grades 3-5, Benchmark B— Describe and illustrate the design process.

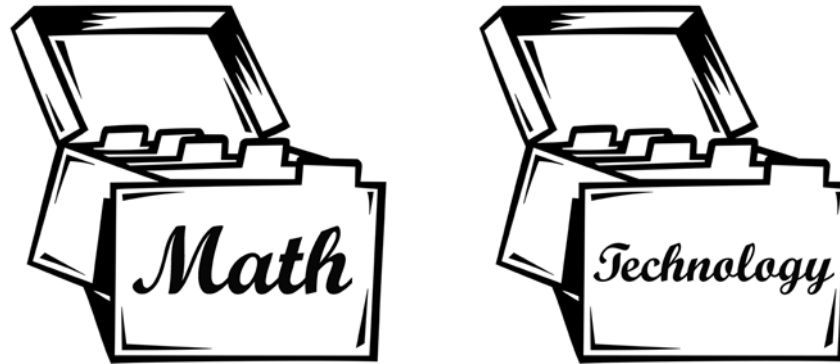
Grade 3, Indicator 4— Use a simple design process to solve a problem (e.g., identify a problem, identify possible solutions and design a solution).

Grade 3, Indicator 5— Describe possible solutions to a design problem (e.g., how to hold down paper in the wind).

Grade 4, Indicator 3— Describe, illustrate and evaluate the design process used to solve a problem.

Grade 5, Indicator 2— Revise an existing design used to solve a problem based on peer review.

Grade 5, Indicator 3— Explain how the solution to one problem may create other problems.



### **Interdisciplinary Connections**

**Subject: MATHEMATICS**

**Standard: Measurement**

Grades K-2, Benchmark A—Explain the need for standard units of measure.

Grades K-2, Benchmark C—Develop common referents for units of measure for length, weight, volume (capacity) and time to make comparisons and estimates.

Grades K-2, Benchmark E—Recognize that using different units of measurement will yield different numbers for the same measurement.

Grades 3-4, Benchmark C—Develop common referents for units of measure for length, weight, volume (capacity) and time to make comparisons and estimates.

Grades 5-7, Benchmark E—Use problem solving techniques and technology as needed to solve problems involving length, weight, perimeter, area, volume, time and temperature.

**Subject: TECHNOLOGY**

**Standard: Design**

Grades K-2, Benchmark A—Identify problems and potential technological solutions.

Grades K-2, Benchmark B—Understand that changes in design can be used to strengthen or improve an object.

Grades K-2, Benchmark C—Explore how products are invented and repaired.

Grades 3-5, Benchmark A—Describe and apply a design process to solve a problem.

Grades 3-5, Benchmark B—Describe how engineers and designers define a problem, creatively solve it and evaluate the solution.

**NIE Lesson Plan Format: HOME WANTED**

Date:                      Time:                      Group:                      Subject: Science

<p>Curriculum Goals:</p> <p>Increase knowledge of types of habitat and the basic needs of living things.</p>	<p>Instructional Objectives:</p> <p>Students will become aware of the basic needs of living things and the best types of habitat needed for each to survive.</p>	
<p>Instructional Activities &amp; Time Allotted:</p> <p>60 minutes</p>	<p>Teaching Strategies:</p> <ol style="list-style-type: none"> <li>1. After reading the paper, direct students to find photos of or articles about animals or birds.</li> <li>2. Have students list what all living things need to survive.</li> <li>3. Ask students to look through the newspaper to find the best available food source, water source, and shelter for each selected animal or bird.</li> </ol>	
<p>Instructional Materials:</p> <p>Newspapers, paper, pencils, markers or crayons</p>		
<p>Lesson Environment:</p> <p>Regular classroom.</p>	<p>Adaptations/Modifications:</p> <p>Students may design a “want ad” inviting animals or birds to a new home that lists or illustrates all the necessary basic needs for that living creature.</p>	<p>Student Assessment:</p> <p>Class participation in discussion. Student designs “want ad” soliciting new home for animal or bird.</p>
<p>Technology:</p>		
<p>Student Follow-up:</p>		



**Subject: SCIENCE**

Standard: Life Sciences

Grades K-2, Benchmark A— Discover that there are living things, non-living things and pretend things, and describe the basic needs of living things (organisms).

Grade 1, Indicator 1— Explore that organisms, including people, have basic needs which include air, water, food, living space and shelter.

Grade 1, Indicator 4— Investigate that animals eat plants and/or other animals for food and may also use plants or other animals for shelter and nesting.

Grade 2, Indicator 1— Explain that animals, including people, need air, water, food, living space and shelter; plants need air, water, nutrients (e.g., minerals), living space and light to survive.

Grade 2, Indicator 5— Explain that food is a basic need of plants and animals (e.g., plants need sunlight to make food and to grow, animals eat plants and/or other animals for food, food chain) and is important because it is a source of energy (e.g., energy used to play, ride bicycles, read, etc.).

Grades K-2, Benchmark B— Explain how organisms function and interact with their physical environment.

Grade K, Indicator 5— Investigate observable features of plants and animals that help them live in different kinds of places.

Grade K, Indicator 6— Investigate the habitats of many different kinds of local plants and animals and some of the ways in which animals depend on plants and each other in our community.

Grade 1, Indicator 3— Explore that humans and other animals have body parts that help to seek, find and take in food when they are hungry (e.g., sharp teeth, flat teeth, good nose and sharp vision).

Grade 1, Indicator 4— Recognize that seasonal changes can influence the health, survival or activities of organisms.

Grade 2, Indicator 2— Identify that there are many distinct environments that support different kinds of organisms.

Grade 2, Indicator 3— Explain why organisms can survive only in environments that meet their needs (e.g., organisms that once lived on Earth have disappeared for different reasons such as natural forces or human-caused effects).

Grade 2, Indicator 6— Investigate the different structures of plants and animals that help them live in different environments (e.g., lungs, gills, leaves and roots).

Grade 2, Indicator 7— Compare the habitats of many different kinds of Ohio plants and animals and some of the ways animals depend on plants and each other.

Grade 2, Indicator 8— Compare the activities of Ohio's common animals (e.g., squirrels, chipmunks, deer, butterflies, bees, ants, bats and frogs) during the different seasons by describing changes in their behaviors and body covering.

## NIE Lesson Plan Format: STORM DRAINAGE IN YOUR WATERSHED

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Subject: Science

<p>Curriculum Goals:</p> <p>Increase proficiency in Earth and Life Sciences</p>	<p>Instructional Objectives:</p> <ol style="list-style-type: none"> <li>1. Scientific Inquiry: Students develop scientific habits of mind as they use the processes of scientific inquiry to ask valid questions and to gather and analyze information.</li> <li>2. Students will demonstrate an understanding of how their interaction with the natural local physical environment can effect an entire watershed system.</li> <li>3. Students will also be able to demonstrate the ability to communicate their findings to others.</li> </ol>	
<p>Instructional Activities &amp; Time Allotted:</p> <p>One hour – locate five storms drains in town; map them and describe physically in a journal</p> <p>One hour –write news article about effect of described storm drains on watershed</p>	<p>Teaching Strategies:</p> <ol style="list-style-type: none"> <li>1. Review of local watershed map (including streams, creeks, lakes or rivers.).</li> <li>2. Take your class on a hike through town to locate five storm drains.</li> <li>3. Direct students to note storm drain locations and describe condition of each in journal. Include observation of what appears to flow into each drain. Record the WHO, WHAT, WHEN, WHERE, and WHY of each drainage impact.</li> <li>4. Students search local newspaper for local environmental concerns and discuss how drainage in community may be cause or contributor to these issues.</li> </ol>	
<p>Instructional Materials:</p> <p>For each student: regional newspaper, city map, journal</p>		
<p>Lesson Environment:</p> <p>Surrounding neighborhood and regular classroom.</p>	<p>Adaptations/Modifications:</p> <p>Revisit mapped drains after weather events to discover if original drainage theories were correct.</p>	<p>Student Assessment:</p> <p>Class participation in discussion. Student news article describing condition of local drainage system and local impact on larger watershed.</p>
<p>Technology:</p> <p>Regional or state watershed map</p>		
<p>Student Follow-up: Students use the five Ws noted in Teaching Strategy #3 to write a newspaper article about local drainage impacts on local watershed.</p>		
<p>Students will choose a city from the “World Overview” to graph low and high temperatures for the course of eight days.</p>		



**Subject: SCIENCE**

**Standard:** Earth and Space Sciences

Grades 6-8, Benchmark C— Describe interactions of matter and energy throughout the lithosphere, hydrosphere and atmosphere (e.g., water cycle, weather and pollution).

Grade 7, Indicator 1— Explain the biogeochemical cycles which move materials between the lithosphere (land), hydrosphere (water) and atmosphere (air).

Grade 7, Indicator 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).

Grade 7, Indicator 3— Describe the water cycle and explain the transfer of energy between the atmosphere and hydrosphere.

Grade 7, Indicator 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.

Grade 7, Indicator 9— Describe the connection between the water cycle and weather-related phenomenon (e.g., tornadoes, floods, droughts and hurricanes).

Grades 9-10, Benchmark D— Describe the finite nature of Earth's resources and those human activities that can conserve or deplete Earth's resources.

Grade 10, Indicator 5— Explain how the acquisition and use of resources, urban growth and waste disposal can accelerate natural change and impact the quality of life.

Grade 10, Indicator 6— Describe ways that human activity can alter biogeochemical cycles (e.g., carbon and nitrogen cycles) as well as food webs and energy pyramids (e.g., pest control, legume rotation crops vs. chemical fertilizers).

Standard: Life Sciences

Grades 6-8, Benchmark C— Explain how energy entering the ecosystems as sunlight supports the life of organisms through photosynthesis and the transfer of energy through the interactions of organisms and the environment.

Grade 7, Indicator 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).

Grades 6-8, Benchmark D— Explain how extinction of a species occurs when the environment changes and its adaptive characteristics are insufficient to allow survival (as seen in evidence of the fossil record).

Grade 7, Indicator 5— Explain that some environmental changes occur slowly while others occur rapidly (e.g., forest and pond succession, fires and decomposition).

Grades 9-10, Benchmark G— Describe how human activities can impact the status of natural systems.

Grade 10, Indicator 18— Describe ways that human activities can deliberately or inadvertently alter the equilibrium in ecosystems. Explain how changes in technology/biotechnology can cause significant changes, either positive or negative, in environmental quality and carrying capacity.

Grade 10, Indicator 19— Illustrate how uses of resources at local, state, regional, national, and global levels have affected the quality of life (e.g., energy production and sustainable vs. nonsustainable agriculture).

Standard: Physical Sciences

Grades 6-8, Benchmark C— Describe renewable and nonrenewable sources of energy (e.g., solar, wind, fossil fuels, biomass, hydroelectricity, geothermal and nuclear energy) and the management of these sources.

Grade 6, Indicator 6— Explain that energy derived from renewable resources such as wind and water is assumed to be available indefinitely.

Grade 6, Indicator 8— Describe how renewable and nonrenewable energy resources can be managed (e.g., fossil fuels, trees and water).

Standard: Scientific Inquiry

Grades 6-8, Benchmark A— Explain that there are differing sets of procedures for guiding scientific investigations and procedures are determined by the nature of the investigation, safety considerations and appropriate tools.

Grade 6, Indicator 1— Explain that there are not fixed procedures for guiding scientific investigations; however, the nature of an investigation determines the procedures needed.

Grade 6, Indicator 2— Choose the appropriate tools or instruments and use relevant safety procedures to complete scientific investigations.

Grade 7, Indicator 1— Explain that variables and controls can affect the results of an investigation and that ideally one variable should be tested at a time; however it is not always possible to control all variables.

Grade 7, Indicator 2— Identify simple independent and dependent variables.

Grade 7, Indicator 3— Formulate and identify questions to guide scientific investigations that connect to science concepts and can be answered through scientific investigations.

Grade 7, Indicator 4— Choose the appropriate tools and instruments and use relevant safety procedures to complete scientific investigations.

Grade 8, Indicator 1— Choose the appropriate tools or instruments and use relevant safety procedures to complete scientific investigations.

Grade 8, Indicator 2— Describe the concepts of sample size and control and explain how these affect scientific investigations.

Grades 6-8, Benchmark B— Analyze and interpret data from scientific investigations using appropriate mathematical skills in order to draw valid conclusions.

Grade 6, Indicator 3— Distinguish between observation and inference.

Grade 6, Indicator 4— Explain that a single example can never prove that something is always correct, but sometimes a single example can disprove something.

Grade 7, Indicator 5— Analyze alternative scientific explanations and predictions and recognize that there may be more than one good way to interpret a given set of data.

Grade 7, Indicator 6— Identify faulty reasoning and statements that go beyond the evidence or misinterpret the evidence.

Grade 7, Indicator 7— Use graphs, tables and charts to study physical phenomena and infer mathematical relationships between variables (e.g., speed and density).

Grade 8, Indicator 3— Read, construct and interpret data in various forms produced by self and others in both written and oral form (e.g., tables, charts, maps, graphs, diagrams and symbols).

Grade 8, Indicator 4— Apply appropriate math skills to interpret quantitative data (e.g., mean, median and mode).

Grades 9-10, Benchmark A— Participate in and apply the processes of scientific investigation to create models and to design, conduct, evaluate and communicate the results of these investigations.

Grade 10, Indicator 1— Research and apply appropriate safety precautions when designing and conducting scientific investigations (e.g. OSHA, MSDS, eyewash, goggles and ventilation).

Grade 10, Indicator 2— Present scientific findings using clear language, accurate data, appropriate graphs, tables, maps and available technology.

Grade 10, Indicator 3— Use mathematical models to predict and analyze natural phenomena.

Grade 10, Indicator 4— Draw conclusions from inquiries based on scientific knowledge and principles, the use of logic and evidence (data) from investigations.

Grade 10, Indicator 5— Explain how new scientific data can cause any existing scientific explanation to be supported, revised or rejected.

Standard: Scientific Ways of Knowing

Grades 6-8, Benchmark A— Use skills of scientific inquiry processes (e.g., hypothesis, record keeping, description and explanation).

Grade 6, Indicator 1— Identify that hypotheses are valuable even when they are not supported.

Grade 6, Indicator 2— Describe why it is important to keep clear, thorough and accurate records.

Grade 8, Indicator 1— Identify the difference between description (e.g., observation and summary) and explanation (e.g., inference, prediction, significance and importance).

Grades 6-8, Benchmark C— Give examples of how thinking scientifically is helpful in daily life.

Grade 6, Indicator 3— Identify ways scientific thinking is helpful in a variety of everyday settings.

Grade 6, Indicator 4— Describe how the pursuit of scientific knowledge is beneficial for any career and for daily life.

Grade 7, Indicator 3— Describe how the work of science requires a variety of human abilities and qualities that are helpful in daily life (e.g., reasoning, creativity, skepticism and openness).

Grades 9-10, Benchmark A— Explain that scientific knowledge must be based on evidence, be predictive, logical, subject to modification and limited to the natural world.

Grade 10, Indicator 3— Demonstrate that reliable scientific evidence improves the ability of scientists to offer accurate predictions.

## NIE Lesson Plan Format: THE GREAT LAKES EFFECT

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Subject: Science

<p>Curriculum Goals:</p> <p>Increase proficiency in Earth Science</p>	<p>Instructional Objectives:</p> <p>Students will demonstrate an understanding of how the concepts and principles of energy, matter, motion and forces explain Earth systems.</p>	
<p>Instructional Activities &amp; Time Allotted:</p> <p>One hour each day for a week.</p>	<p>Teaching Strategies:</p> <ol style="list-style-type: none"> <li>1. Direct students to locate weather page from newspaper.</li> <li>2. Each student shall review and document reported daily temperatures in their hometown and around the coast of Lake Erie.</li> <li>3. At the end of the week, each student shall compare the recorded temperatures of the two locations and determine if and how the Great Lakes effect local weather patterns.</li> </ol>	
<p>Instructional Materials:</p> <p>Ohio newspaper weather page</p>		
<p>Lesson Environment:</p> <p>Regular classroom.</p>	<p>Adaptations/Modifications:</p> <p>Revisit mapped drains after weather events to discover if original drainage theories were correct.</p>	<p>Student Assessment:</p> <p>Class participation in discussion. Student analysis of average temperatures in their community as compared to region impacted by lake effect.</p>
<p>Technology:</p> <p>Average temperatures over Great Lakes Region <a href="http://coastwatch.glerl.noaa.gov/statistic/statistic.html">http://coastwatch.glerl.noaa.gov/statistic/statistic.html</a></p>		
<p>Student Follow-up:</p> <p>Students may review satellite imagery of weather patterns of the Great Lakes at <a href="http://coastwatch.glerl.noaa.gov/modis/region_map.html">http://coastwatch.glerl.noaa.gov/modis/region_map.html</a></p>		



**Subject: SCIENCE**

**Standard:** Earth and Space Science

Grades 3-5, Benchmark B— Summarize the processes that shape Earth’s surface and describe evidence of those processes.

Grade 4, Indicator 8— Describe how wind, water and ice shape and reshape Earth’s land surface by eroding rock and soil in some areas and depositing them in other areas producing characteristic landforms (e.g., dunes, deltas and glacial moraines).

Grade 4, Indicator 9— Identify and describe how freezing, thawing and plant growth reshape the land surface by causing the weathering of rock.

Grade 4, Indicator 10— Describe evidence of changes on Earth’s surface in terms of slow processes (e.g., erosion, weathering, mountain building and deposition) and rapid processes (e.g. volcanic eruptions, earthquakes and landslides).

Grades 3-5, Benchmark C— Describe Earth’s resources including rocks, soil, water, air, animals and plants and the ways in which they can be conserved.

Grade 5, Indicator 6— Investigate ways Earth’s renewable resources (e.g., fresh water, air, wildlife and trees) can be maintained.

Grades 3-5, Benchmark D— Analyze weather and changes that occur over a period of time.

Grade 4, Indicator 1— Explain that air surrounds us, takes up space, moves around us as wind, and may be measured using barometric pressure.

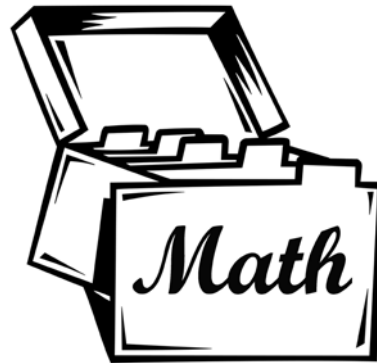
Grade 4, Indicator 2— Identify how water exists in the air in different forms (e.g., in clouds, fog, rain, snow and hail).

Grade 4, Indicator 3— Investigate how water changes from one state to another (e.g., freezing, melting, condensation and evaporation).

Grade 4, Indicator 4— Describe weather by measurable quantities such as temperature, wind direction, wind speed, precipitation and barometric pressure.

Grade 4, Indicator 5— Record local weather information on a calendar or map and describe changes over a period of time (e.g., barometric pressure, temperature, precipitation symbols and cloud conditions).

Grade 4, Indicator 6— Trace how weather patterns generally move from west to east in the United States.



### **Interdisciplinary Connections**

**Subject: MATHEMATICS**

**Standard: Data Analysis and Probability**

Grades 3-4, Benchmark A—Gather and organize data from surveys and classroom experiments, including data collected over a period of time.

Grades 3-4, Benchmark B—Read and interpret tables, charts, graphs (bar, picture, line, line plot), and timelines as sources of information, identify main idea, draw conclusions, and make predictions.

Grades 3-4, Benchmark C—Construct charts, tables, and graphs to represent data, including picture graphs, bar graphs, line graphs, line plots and Venn diagrams.

Grades 5-7, Benchmark A—Read, create and use line graphs, histograms, circle graphs, box-and-whisker plots, stem-and-leaf plots, and other representations when appropriate.

Grades 5-7, Benchmark B—Interpret data by looking for patterns and relationships, draw and justify conclusions, and answer related questions.

Grades 5-7, Benchmark C—Evaluate interpretations and conclusions as additional data are collected, modify conclusions and predictions, and justify new findings.

Grades 5-7, Benchmark D—Compare increasingly complex displays of data, such as multiple sets of data on the same graph.

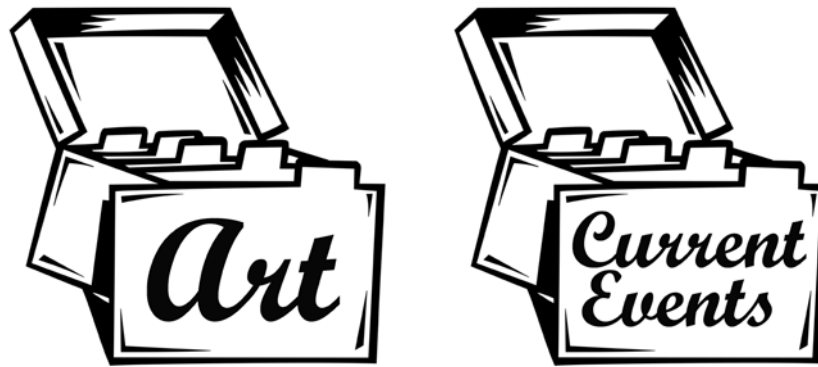
Grades 5-7, Benchmark E—Collect, organize, display and interpret data for a specific purpose or need.

Grades 5-7, Benchmark G—Evaluate conjectures and predictions based upon data presented in tables and graphs, and identify misuses of statistical data and displays.

### NIE Lesson Plan Format: PICTURE TODAY

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Group: \_\_\_\_\_ Subject: Art

<p><b>Curriculum Goals:</b></p> <p>Using the newspaper to obtain information for a visual piece of art work.</p>	<p><b>Instructional Objectives:</b></p> <p>To teach students how to visually communicate current events using the newspaper as a resource and an actual art media.</p>	
<p><b>Instructional Activities &amp; Time Allotted:</b></p> <p>Create a mixed media piece of artwork, visually commenting on a current event.</p>	<p><b>Teaching Strategies:</b></p> <ol style="list-style-type: none"> <li>1. Choose / select a current event.</li> <li>2. Discuss how the current event makes you feel.</li> <li>3. Take picture of eyes that communicate your feeling.</li> <li>4. Collage, by using newspaper images, etc. Enlarge or reduce items if needed.</li> <li>5. Use charcoal to draw eyes.</li> <li>6. Add color</li> </ol>	
<p><b>Instructional Materials:</b></p> <p>Newspaper, copy machine, scissors, glue, 12"x 18" tag board, watercolor paints, digital camera</p>	<p><b>Adaptations/Modifications:</b></p> <p>None.</p>	
<p><b>Lesson Environment:</b></p> <p>Art room.</p>	<p><b>Student Assessment:</b></p> <p>Use of the elements and principles of design in the composition and to communicate the mood that reflects the piece.</p>	<p><b>Technology:</b></p> <p>Students may decide to rewrite script to adjust size and font for a more effective means of communication.</p>
<p><b>Student Follow-up:</b></p> <p>Discuss each students work as a class to evaluate the strong and weak points of the piece and their effectiveness as a means of communication.</p>		



**Subject area: VISUAL ART**

**Standard:** Creative Expression and Communication

Grades K-4, Benchmark B—Use the elements and principles of art as a means to express ideas, emotions and experiences.

Grade 3, Indicator 3—Create two-and three-dimensional works that demonstrate awareness of space and composition (e.g., relate art elements to one another and to the space as a whole).

Grade 4, Indicator 3—Initiate and use strategies to solve visual problems (e.g., construct three-dimensional art objects that have structural integrity and a sense of completeness).

Grades 5-8, Benchmark A—Apply knowledge of materials, tools, media, techniques and processes to communicate subject matter, themes or ideas in a variety of visual forms.

Grade 5, Indicator 2—Explore different approaches to creating art (e.g., by artist, style or historical period).

Grade 6, Indicator 2—Recognize and demonstrate the qualities and characteristics of craftsmanship in original works or art.

Grades 5-8, Benchmark B—Create two- and three-dimensional artwork that demonstrates personal visual expression and communication.

Grade 5, Indicator 3—Identify and communicate sources of ideas (e.g. personal experience, interests, nature or common objects) for their artworks.

Grade 6, Indicator 3—Explore ways that art making functions as a means of personal identification and expression.

Grade 6, Indicator 4—Use observation, life experiences and imagination as sources for visual symbols and images.

Grade 7, Indicator 3—Use a variety of sources to generate original ideas for art making.

Grade 8, Indicator 2—Demonstrate an enhanced level of craftsmanship in original two- and three-dimensional art products.

Grades 5-8, Benchmark D—Use current, available technology to refine an idea and create an original, imaginative work of art.

Grade 5, Indicator 5—Use current, available technology to explore imagery and create visual effects.

Grade 6, Indicator 6—Use current, available technology to create original artworks.

Grade 7, Indicator 5—Use current, available technology as the primary medium to create an original work of art.

Grade 8, Indicator 4—Demonstrate increased technical skill by using more complex processes to design and create two-and three-dimensional artworks.

Grades 9-12, Benchmark B—Create expressive artworks that demonstrate a sense of purpose and understanding of the relationship among form, materials, techniques and subject matter.

Grade 9, Indicator 2—Use available technology (e.g., digital imagery, video and computer graphics) as a tool to explore art techniques and to express ideas.

Grade 10, Indicator 2—Evaluate their choices of compositional elements in terms of how those choices affect the subject matter of the work.

Grade 10, Indicator 3—Trace the origin of symbolism, imagery and metaphor in art and demonstrate the use of these visual devices in their artworks.

Standard: Valuing the Arts/Aesthetic Reflection

Grades K-4, Benchmark C—Distinguish and describe the aesthetic qualities in works of art.

Grade 3, Indicator 3—Distinguish between technical and expressive qualities in their own artworks.

Grade 4, Indicator 4—Describe the successful use of one expressive element in an artwork, using sensory details and descriptive language.

Standard: Connections, Relationships and Applications

Grades K-4, Benchmark B—Use the visual arts as a means to understand concepts and topics studied in disciplines outside the arts.

Grades 5-8, Benchmark C—Use key concepts, issues and themes to connect visual art to various content areas.