

Unit Title: What's In It?

Essential Questions:

1. Is there life you cannot see?
2. What effect do humans have on it?
3. How does it affect your soil?
4. How can we affect the future of the environment after we are gone?

Core Content:

Writing:

WR-E-1.1.0

Purpose/Audience: Students will establish and maintain a focused purpose to communicate with an authentic audience by

- Narrowing the topic to create a specific purpose for writing
- Establishing a controlling idea, theme, or conclusion about the topic
- Choosing a perspective authentic to the writer

Analyzing and addressing the needs of the intended audience

WR-05-1.2.1

In Reflective Writing,

- Students will develop the connection between literacy skills (reading and writing) and understanding of content knowledge.

Arts and Humanities:

AH-05-1.4.2

Students will identify or describe how an artist uses various media and processes. DOK 2

Mathematics:

MA-05-1.1.1

Students will:

- apply multiple representations (e.g., drawings, manipulative, base-10 blocks, number lines, expanded form, symbols) to represent whole numbers (0 to 99,999,999);
- apply multiple representations (e.g., drawings, manipulative, base-10 blocks, number lines, symbols) to describe commonly-used fractions, mixed numbers, and decimals through thousandths;
- apply these numbers to represent real-world problems and
- Explain how the base 10 number system relates to place value.

DOK 2

Vocational Studies:

PL-05-4.1.4

Students will describe how knowing one's own interests and abilities are helpful when selecting and preparing for a career path.

DOK 2

Reading:

RD-05-2.0.5

Students will identify and explain the sequence of activities needed to carry out a procedure.

RD-05-2.0.7

Students will make inferences or draw conclusions based on what is read. DOK 3

RD-05-3.0.4

Students will identify main ideas and details that support them. DOK 3

RD-05-4.0.1

Students will connect information from a passage to students' lives (text-to-self), real world issues (text-to-world) or other texts (text-to-text - e.g., novel, short story, song, film, website, etc.).

Science:

SC-EP-1.1.2 Students will understand that objects have many observable properties such as size, mass, shape, color, temperature, magnetism, and the ability to interact and/or to react with other substances. Some properties can be measured using tools such as metric rulers, balances, and thermometers.

SC-EP-2.3.1 Students will describe earth materials (solid rocks, soils, water and gases of the atmosphere) using their properties.

SC-05-1.1.1

Students will describe the physical properties of substances (e.g., boiling point, solubility, density).

Social Studies:

SS-EP-1.3.2

Students will identify and give examples of good citizenship at home, at school and in the community (e.g., helping with chores, obeying rules, participating in community service projects such as recycling, conserving natural resources, donating food/supplies) and explain why civic engagement in the community is important. DOK 2

SS-05-4.3.1

Students will explain patterns of human settlement in the early development of the United States and explain how these patterns were influenced by physical characteristics (e.g., climate, landforms, and bodies of water). DOK 2

SS-EP-4.4.1

Students will describe ways people adapt to/modify the physical environment to meet their basic needs (food, shelter, and clothing). DOK 1

SS-05-4.4.1

Students will explain and give examples of how people adapted to/modified the physical environment (e.g., natural resources, physical geography, natural disasters) to meet their needs

during the history of the U.S. (Colonization, Expansion) and analyze the impact on their environment. DOK 3

SS-05-4.4.3

Students will describe how individuals/groups may have different perspectives about the use of land (e.g., farming, industrial, residential, recreational).

SS-EP-5.1.1

Students will use a variety of primary and secondary sources (e.g., artifacts, diaries, and timelines) to interpret the past.

Program of Studies:

Writing:

EL-5-WC-S-3

Students will write for a variety of authentic purposes and audiences:

- communicate about the significance personal experiences and relationships
- communicate through authentic literary forms to make meaning about the human condition
- communicate through authentic transitive purposes for writing (e.g. informing, describing, explaining, persuading, analyzing)
- analyze and communicate reflectively about literacy goals

EL-5-WC-S-6

Students will select and incorporate ideas or information (e.g., from research or reading), explaining reflections or related connections (e.g., identifying relationships and one's own experiences, offering support for conclusions, organizing prior knowledge about a topic)

Arts and Humanities:

AH-5-SA-S-VA2

Students will use the elements of art and principles of design in creating artworks independently and with others

Mathematics:

MA-5-NPO-S-NS1

Students will read, write, model, order, compare (using relative magnitude) and apply multiple representations of whole numbers.

Vocational Studies:

• **VS-5-CAEP-S-7**

Students will recognize how self-knowledge (e.g., interests, abilities) is helpful when selecting and preparing for a career path and that unique interests may lead to career choices

Reading:

EL-5-DIU-S-6

Students will paraphrase and summarize (e.g., to show relationships, relative importance of information), or sequence major events or steps in a process if appropriate

EL-5-DIU-S-7

Students will make text-based inferences; make and check predictions

EL-5-IT-S-6

Students will demonstrate understanding of informational passages/texts:

c) Use evidence/references from the text to state central/main idea and details that support them

EL-5-RRT-S-1

Students will use comprehension strategies while reading, listening to, or viewing literary and informational texts

To make connections

Science:

- SC-5-EU-U-1

- Students will understand that the earth's water supply has existed since the formation of the planet and is constantly cycled from the ocean to the atmosphere, allowing the same water to be endlessly reused without the creation of new water.

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- SC-5-EU-U-2

- Students will understand that water is a powerful solvent that dissolves earth materials, allowing them to impact the ocean system as water is cycled into it.

- SC-5-STM-U-1

- Students will understand that a substance has its own set of properties which allows it to be distinguished from other substances.

Social Studies:

- SS-5-GC-S-4

- Students will investigate the rights and responsibilities of U.S. citizens:

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Describe some of the responsibilities U.S. citizens have in order for democratic governments to function effectively (e.g. voting, community service, paying taxes) and find examples of civic participation in current events/news (e.g., television, radio, articles, Internet)

- SS-5-CS-S-3

- Students will describe conflicts that occurred among and between diverse groups (e.g., Native Americans and the early Explorers, Native Americans and the Colonists, the British Government and the English Colonists, Native Americans and the U.S. Government) during the settlement of the United States; explain the causes of these conflicts and the outcomes

- SS-5-G-S-3

- Students will investigate how humans modify the physical environment:

- a) describe how people modified the physical environment (e.g., dams, roads, bridges) to meet their needs during the early settlement of the United States

Technology:

T-I-ICP-S-C2

Students will participate in online group projects and learning activities using technology communications

TE-SK-I-ICP-3c

Students will use technology to collect data for content area assignments/projects

T-I-ICP-S-C4

Students will use a variety of tools and formats (oral presentations, journals and multimedia presentations) to summarize and communicate the results of observations and investigations

T-I-ICP-S-P1

Students will develop, publish and present information in print and digital formats

T-I-ICP-S-P2

Students will use productivity tools to produce content area assignments/projects

T-I-RIPSI-S-R1

Students will gather and use accurate information from a variety of electronic sources (e.g. teacher-selected Web sites, CDROM, encyclopedias and automated card catalog, online virtual library; word processing, database, spreadsheet) in all content areas

T-I-RIPSI-S-R2

Students will correctly cite sources

Curriculum Web:

Writing: information article, brochure, poetry, on-demand.

Research: Selecting internet and print sources for information for our transactional animal paragraph, information for vocational living brochure, styles of poetry.

Arts & Humanities: Collages of leaves, brochure design.

Math: Counting rings, analyzing rings and drawing conclusions.

Social Studies: Human activity on the environment, investigating the historical past through the environment.

Science: Water testing, observation, classification, soil testing, measurement.

Vocational Living: Forest Ranger, Soil Conservation agent, Water Conservation agent, Farmer, Waste Disposal Technician.

Language Arts: Research using print and non-print sources, poetry.

Culminating Performance:
Arts & Humanities

Collage of Leaves

- Identify
- Define collage
- Representation of something in nature
- Functions of a leaf

Language Arts

Research

- Research
- Identify genus and species
- Write poem
- Draw a picture or photograph

Vocational Living

- Research
- Brochure: what jobs are there? educational level needed, typical pay, brief job description, pictures

Science:

- Water test
- Soil test
- When to test
- Where to test
- What's good and not good?
- How do we do no harm while living in the environment?

Historical:

Uses of trees

Rings

Habitat for creatures that are food

Timeline

Lesson One Rubric: Water

4	<ul style="list-style-type: none">• Define what water testing is• Complete water test• Explains uses for information• Analyze the results of the water testing• Describe 4 ways to improve water conservation in your area
3	<ul style="list-style-type: none">• Define what water testing is• Complete water test• Explains uses for information• Describe 2 ways to improve water conservation in your area
2	<ul style="list-style-type: none">• Complete water test• Explains uses for information• Describe 1 way to improve water conservation in your area
1	<ul style="list-style-type: none">• Complete water test

Lesson 2 Rubric

4	<ul style="list-style-type: none">• Define what soil testing is• Complete soil test• Explain uses for information• Analyze the results• Describe 4 ways to improve soil conservation in your area.
3	<ul style="list-style-type: none">• Define what soil testing is• Complete soil test• Explain uses for information• Describe 2 ways to improve soil conservation in your area
2	<ul style="list-style-type: none">• Complete soil test• Explain uses for information• Describe 1 way to improve soil conservation in your area
1	<ul style="list-style-type: none">• Complete soil test

**Rubric for Lesson 3:
Leaf Collage**

4	<ul style="list-style-type: none"> • Shows functions of a leaf • Represents something in nature using leaves • Can identify 5 leaves and uses them in the collage • Defines collage
3	<ul style="list-style-type: none"> • Shows functions of a leaf • Represents something in nature using leaves • Can identify 4 leaves and uses them in the collage • Has some definition of collage
2	<ul style="list-style-type: none"> • Shows a function • Identify 2 leaves • Has a definition
1	<ul style="list-style-type: none"> • Just leaves on paper

Lesson 4 Rubric

4	<ul style="list-style-type: none"> • Gives 5 uses of trees over historical period • Explain how rings of a tree are used • Gives 3 habitats in the forest environments. • Completes timeline from first settlement to the present • Explains area uses of trees in the area
3	<ul style="list-style-type: none"> • Gives 3 uses of trees over historical period • Gives 2 habitats in the forest environments. • Provides parts of the timeline • Give 1 use of trees in the area
2	<ul style="list-style-type: none"> • Gives 2 uses of trees over historical period • Knows that there are rings on trees • Starts timeline
1	<ul style="list-style-type: none"> • Gives 1 use of trees over historical period • Knows that there are rings on the trees

Rubric for Lesson 5

4	<ul style="list-style-type: none"> • Identify sources • Identifies genus species • Draws or labels a picture or photograph • Writes poem using information found in research
3	<ul style="list-style-type: none"> • Identifies sources • Uses common names • Draws/does some labeling • Writes a poem about topic
2	<ul style="list-style-type: none"> • Uses common names • Draws picture • Writes a poem
1	<ul style="list-style-type: none"> • Draws picture • Writes something

Rubric for Lesson 6

4	<ul style="list-style-type: none"> • Research/identifies sources • Brochure has: <ol style="list-style-type: none"> 1. Vocation 2. Education required 3. Pay scale 4. Detailed job description 5. Pictures
3	<ul style="list-style-type: none"> • Identifies sources • Brochure has: <ol style="list-style-type: none"> 1. vocation 2. pay scale 3. brief job description 4. pictures
2	<ul style="list-style-type: none"> • Brochure has: <ol style="list-style-type: none"> 1. vocation 2. brief job description 3. pictures
1	<ul style="list-style-type: none"> • Job • pictures

Rubric for Lesson 7

4	<ul style="list-style-type: none">• Discuss how the unit has effected them emotionally• Give a response as to attitudes about recycling and environmental responsibility• Print out the Sierra Club homepage.
3	<ul style="list-style-type: none">• Either discuss feelings about the unit or give a response about your attitudes about recycling an environmental responsibility.• Print out the Sierra Club homepage
2	<ul style="list-style-type: none">• Give some type of response about the unit• Print out the Sierra Club homepage.
1	<ul style="list-style-type: none">• Print out the Sierra Club homepage.

Leaf Man by Lois Ehlert: The art technique of *collage* is used to create the main character of Leaf man who comes together because of the movement of the wind across the landscape. As the wind moves Leaf man through the countryside he meets many leaf collages of wildlife until he is dispersed.

John Muir, first environmentalist by Kathryn Lasky is a biography written on a 7th grade level, but is on a 3-8 interest level, and is easily understood as a read-aloud. This biography spans John's move as a 9 year old from Scotland to Wisconsin, his development as an avid student and inventor, his travels through America, and his beginning awareness of the impact of human activity on the environment. Although his observations were sometimes spurned by the scientists of his day, his influence on the American leaders he was a trail guide for, enabled future generations to benefit from the creation of a National Parks system. The Afterword page includes information on the origination of the Sierra Club and its continuing focus on protecting the environment. , The Sierra Club Youth organization and how to join via the website.

Screen of Frogs by Sheila Hamanaka is the retelling of an old Japanese tale of stewardship. The main character Koji , comes to realize that humans have great impact on the living world around them, and are, or should be, responsible for its care because all of life is interconnected.

Songs of the Water Boatman & other Pond Poems by Joyce Sidman

Not only is this a collection of poetry about aquatic life, but it is also a collection of informative science paragraphs about the same subjects as those used for the poems. Hand-colored woodcuts enhance this collection of aquatic life

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The Big Tree by Bruce Hiscock is the story of a tree from the viewpoint of the tree as witness to environmental changes, and time as viewed as people look at the rings the tree has produced over its lifespan.

“Trees” a poem by Joyce Kilmer is a view of trees from the aesthetic viewpoint. Trees are beautiful and lift our spirits by their presence and existence.

Lesson Plan Format

Name: Kristy Gillock, Sheila Bloyd, Elizabeth Mikowski Date:9/22/06 Age/Grade Level: 5th grade

of Students: 76 # of IEP Students: 11 # of GSSP Students 3 # of LEP Students: 0

Subject: Science Major Content: Water Content Lesson Length: 2 days

Unit Title: What's In It? Lesson Number and Title: Lesson 1 : Water

Context

- This lesson relates to the scientific understanding of the natural world.

Objectives

Students will be able to state what water is and what water does.

Connections

Program of Studies
2.2

Assessment Plan

In tabular format, organize how each objective will be assessed. Include copies of assessment instruments and rubrics (if applicable to the lesson plan).

Objective/Assessment Plan Organizer (Sample)

Objective Number	Type of Assessment	Description of Assessment	Adaptations and/or Accommodations
Objective 1	Formative or Summative	Open Response (Rubric is attached)	See Appendix

Resources, media and technology

- Water kits
- Screen of Frogs by Shelia Hamanaka
- Chart paper
- Project Wild Lesson Plan

Procedures

- Have the class brainstorm about “ Why preserving the environment important to humans?” and “Ways we can study the environment?” Write their ideas on chart paper.
- Introduce water and soil testing
- What is in the water? (Lesson from Project Wild: Aquatic , See Appendix)
- The students will collect water from the creek next to the school
- The students will use the water sample they collected and the water sample collected from Green River to conduct water testing.
- They will record their findings in a journal
- Students will draw conclusions about human impact on the water from comparing their findings, and complete open response question

Open Response Question

After testing the water samples from Green River and the creek by the school:

- Define what water testing is, in detail.
- Analyze the results of the testing and explain uses for the information.
- Describe 4 ways to improve water conservation in your area.

Lesson One Rubric: Water

4	<ul style="list-style-type: none">• Define what water testing is• Complete water test• Explains uses for information• Analyze the results of the water testing• Describe 4 ways to improve water conservation in your area
3	<ul style="list-style-type: none">• Define what water testing is• Complete water test• Explains uses for information• Describe 2 ways to improve water conservation in your area
2	<ul style="list-style-type: none">• Complete water test• Explains uses for information• Describe 1 way to improve water conservation in your area
1	<ul style="list-style-type: none">• Complete water test

Lesson 1 Accommodations

ADHD:

This lesson is a very hands-on lesson, which works well with a child who has ADHD. Because children with ADHD usually have poor impulse control, it is recommended that extra supervision be provided with that child during the water collection field trip. Also, when doing the water testing, the teacher should provide the student with simple one or two step directions at a time, instead of all of the directions at one time.

Visual Impairment:

A student with a visual impairment will need quite a bit of assistance during this lesson. They will need constant supervision during the water collection portion of the lesson. Depending on the severity of the vision loss the student will need help measuring during the water test, As well as someone to describe the visual components of the chemical reaction.

Deaf or Hard of Hearing:

Depending on the amount of hearing loss the deaf or hard of hearing student will have different needs. If the student uses a manual communication system, then an interpreter will need to be provided for all parts of this lesson. If the student communicates using spoken language, then the teacher will need to be sure that the student has visual contact with them at all times, especially when the student is at the creek gathering water. Inability to have visual contact with an adult at this time could be hazardous. The teacher will need to provide simply written one step at a time directions for the student to conduct the experiment. During class discussion the class should sit in a circle so that the deaf or hard of hearing student can see all speakers when they are speaking, in order to be able to speech read them.

Non-Reader/Writer:

A non-reader/writer can be very involved in this lesson. They will be able to collect the water, as well as conduct the experiment. Provided that they have a reader or a group member to tell them the procedure for the experiment. They will be able to participate in the discussion and tell the things that they observed during the experiment.

Lesson 2 Accommodations

ADHD:

This lesson is a very hands-on lesson, which works well with a child who has ADHD. Because children with ADHD usually have poor impulse control, it is recommended that extra supervision be provided with that child during the soil collection field trip. Also, when doing the soil testing, the teacher should provide the student with simple one or two step directions at a time, instead of all of the directions at one time.

Visual Impairment:

A student with a visual impairment will some assistance during this lesson. They will need help finding appropriate soil for the test. Depending on the severity of the vision loss the student will need help measuring during the soil test, as well as someone to describe the visual components of the testing procedures.

Deaf or Hard of Hearing:

Depending on the amount of hearing loss a deaf or hard of hearing student will have different needs. If the student uses a manual communication system, then an interpreter will need to be provided for all parts of this lesson. If the student communicates using spoken language, then the teacher will need to be sure that the student has visual contact with them at all times, especially when the student is at the creek gathering soil. The teacher will need to provide simply written one step at a time directions for the student to conduct the experiment. During class discussion the class should sit in a circle so that the deaf or hard of hearing student can see all speakers when they are speaking, in order to be able to speech read them. For the written portion of the lesson all accommodations on the students IEP must be followed.

Non-Reader/Writer:

A non-reader/writer can be very involved in this lesson. They will be able to collect the water, as well as conduct the experiment. Provided that they have a reader or a group member to tell them the procedure for the experiment. They will be able to participate in the discussion and tell the things that they observed during the experiment.

Lesson 3 Accommodations

ADHD:

For a student with ADHD teachers should provide opportunities for movement and actual samples of tree bark and leaves. So that the student can work within his attention span it is recommended that teachers change activities within the lesson every 10-15 minutes. If this is not possible the teacher should provide the student with a physical outlet for the student's need for movement. (Ex: allow the student to stand beside his/her desk while completing some activities, allow the student to use a stress relief ball during lectures or other times the student is required to sit still and quietly.)

Visual Impairment:

This lesson could be difficult for a student with a visual impairment. The teacher will need to provide actual samples of tree bark and leaves. The student will not be able to identify trees by sight so they will have to rely on the sense of touch. They will also have difficulty with learning to distinguish trees using the guide book. They will either need to be excused from this portion of the lesson or provided with *detailed* descriptions or the pictures in the book. The rubric may also need to be modified for the collage. The student could have difficulty making the collage to look like something in nature.

Deaf or hard of hearing:

Depending on the amount of hearing loss the deaf or hard of hearing student will have different needs. If the student uses a manual communication system, then an interpreter will need to be provided for all parts of this lesson. If the student communicates using spoken language, then the teacher will need to be sure that the student has visual contact with them at all times. The teacher will need to provide actual samples of tree bark and leaves. Having a diminished capacity to hear, means that the student must rely on his/her other senses to understand content, the visual and tactual elements of the real life materials will help the student to discriminate between the different trees. Most deaf or hard of hearing students present with a language delay, so therefore they might need to have the identification guides read to them, in order to be able to distinguish between the different trees.

Non-reader/writer:

The teacher will need to provide actual samples of tree bark and leaves. Not having the ability to read, means that the student needs to have access to the content in as many other ways as possible. The student will need to have the identification guides read to them, in order to be able to distinguish between the different trees.

Lesson 4 Accommodations

ADHD:

For a student with ADHD teachers should provide opportunities for movement and actual samples of tree slabs with rings. So that the student can work within his attention span it is recommended that teachers change activities within the lesson every 10-15 minutes. If this is not possible the teacher should provide a physical outlet for the student's need for movement. (Ex: allow the student to stand beside his/her desk while completing some activities, allow the student to use a stress relief ball during lectures or other times the student is required to sit still and quietly.)

Visual Impairment:

This lesson could be difficult for a student with a visual impairment. The teacher will need to provide actual samples of tree slabs with rings. The student will not be able to see tree rings so they will rely on the sense of touch. The teacher will need to already have the student's tree rings marked with pins so that the student can feel the pins and count those. When making the timeline the student may need to have a scribe, depending on the severity of the vision impairment.

Deaf or hard of hearing:

Depending on the amount of hearing loss the deaf or hard of hearing student will have different needs. If the student uses a manual communication system, then an interpreter will need to be provided for all parts of this lesson. If the student communicates using spoken language, then the teacher will need to be sure that the student has visual contact with them at all times. During class discussion the class should sit in a circle so that the deaf or hard of hearing student can see all speakers when they are speaking, in order to be able to speech read them.

Non-reader/writer:

This student will need to be provided with a scribe when making the timeline.

Lesson 5 Accomodations

ADHD:

So that the student can work with in his attention span it is recommended that teachers change activites within the lesson every 10-15 minutes. If this is not possible the teacher should provide a physical outlet for the students need for movement. (Ex: allow the student to stand beside his/her desk while completing some activities, allow the student to use a stress relief ball during lectures or other times the student is required to sit still and quietly.)

Visual Impairment:

The student with a visual impairment will need a reader to assist him/her during the research portion of this lesson. If they are researching on the computer then there are text readers such as Read and Write Gold, that are available to them. Depending on the severity of the vision impairment the student may also need a scribe for writing the paragraph and poem.

Deaf or hard of hearing:

Depending on the amount of hearing loss the deaf or hard of hearing student will have different needs. If the student uses a manual communication system, then an interpreter will need to be provided for all parts of this lesson. If the student communicates using spoken language, then the teacher will need to be sure that the student has visual contact with them at all times. Poetry can be a difficult subject matter for deaf students. If you can not hear sound it can be rather difficult to hear words whose endings sound the same, especially if they do not look the same. So for this assignment it is recommended that the student is introduced to the idea of free form poems that do not rhyme or that the student is allowed to turn in his/her research in report form.

Non-reader/writer:

This student will need to be provided with a scribe when making the poem, and a reader when conducting his/her research.

Lesson 6 Accommodations

ADHD:

So that the student can work within his attention span it is recommended that teachers change activities within the lesson every 10-15 minutes. If this is not possible the teacher should provide a physical outlet for the student's need for movement. (Ex: allow the student to stand beside his/her desk while completing some activities, allow the student to use a stress relief ball during lectures or other times the student is required to sit still and quietly.)

Visual Impairment:

The student with a visual impairment will need a reader to assist him/her during the research portion of this lesson. If they are researching on the computer then there are text readers such as Read and Write Gold, that are available to them. Depending on the severity of the vision impairment the student may also need a scribe for creating the brochure.

Deaf or hard of hearing:

Depending on the amount of hearing loss the deaf or hard of hearing student will have different needs. If the student uses a manual communication system, then an interpreter will need to be provided for all parts of this lesson. If the student communicates using spoken language, then the teacher will need to be sure that the student has visual contact with them at all times. If the student has language delays due to his/her hearing loss, then a scribe and a reader will need to be provided during the research and brochure creation.

Non-reader/writer:

This student will need to be provided with a scribe when making the brochure, and a reader when conducting his/her research.

Lesson 7 Accomadations

ADHD:

For a student with ADHD teachers should provide opportunities for movement and actual samples of tree slabs with rings. So that the student can work with in his attention span it is recommended that teachers change activites within the lesson every 10-15 minutes. If this is not possible the teacher should provide a physical outlet for the students need for movement. (Ex: allow the student to stand beside his/her desk while completing some activities, allow the student to use a stress relief ball during lectures or other times the student is required to sit still and quietly.)

Visual Impairment:

The student with a visual impairment will need a reader to assist him/her when going on the internet. There are text readers such as Read and Write Gold, that are available to them.

Deaf or hard of hearing:

Depending on the amount of hearing loss the deaf or hard of hearing student will have different needs. If the student uses a manual communication system, then an interpreter will need to be provided for all parts of this lesson. If the student communicates using spoken language, then the teacher will need to be sure that the student has visual contact with them at all times. During class discussion the class should sit in a circle so that the deaf or hard of hearing student can see all speakers when they are speaking, in order to be able to speech read them.

Non-reader/ Writer

The student will need a reader while visiting the Sierra Club Web Site.

Lesson Plan Format

Name: Kristy Gillock, Sheila Bloyd, Elizabeth Mikowski Date: 9/22/06 Age/Grade Level: 5th grade

of Students: 76 # of IEP Students: 11 # of GSSP Students 3 # of LEP Students: 0

Subject: Science Major Content: Lesson Length: 2 days

Unit Title: What's In It? Lesson Number and Title: Lesson 2: Soil

Context

- This lesson relates to the scientific understanding of the natural world.

Objectives

State what students will demonstrate as a result of this lesson. Objectives must be student-centered and observable/measurable.

Connections

Program of Studies
2.2

Assessment Plan

In tabular format, organize how each objective will be assessed. Include copies of assessment instruments and rubrics (if applicable to the lesson plan).

Objective/Assessment Plan Organizer (Sample)

Objective Number	Type of Assessment	Description of Assessment	Adaptations and/or Accommodations
Objective 1	Formative or Summative	Open Response (See attached rubric and question)	See Appendix

Resources, media and technology

- Soil Samples: One from home, one from creek area
- Soil Testing Kits
- journals

Procedures

- Students will bring in one cup of soil from home and collect one cup of soil from around the creek where the water collection was done.
- Students will test both samples
- Students will record findings in their journals and draw conclusion based their findings.
- Based on results of both tests students will conjecture on human activity impacts on the soil and complete the open response question.

Open Response Question

After testing the soil from your home and the creek area by the school:

- Define what soil testing is.
- Analyze and explain uses for the information found.
- Describe 4 ways to improve soil conservation in your area.

Lesson 2 Rubric

4	<ul style="list-style-type: none">• Define what soil testing is• Complete soil test• Explain uses for information• Analyze the results• Describe 4 ways to improve soil conservation in your area.
3	<ul style="list-style-type: none">• Define what soil testing is• Complete soil test• Explain uses for information• Describe 2 ways to improve soil conservation in your area
2	<ul style="list-style-type: none">• Complete soil test• Explain uses for information• Describe 1 way to improve soil conservation in your area
1	<ul style="list-style-type: none">• Complete soil test

Lesson Plan Format

Name: Kristy Gillock, Sheila Bloyd, Elizabeth Mikowski Date: 9/22/06 Age/Grade Level: 5th grade

of Students: 76 # of IEP Students: 11 # of GSSP Students 3 # of LEP Students: 0

Subject: Science Major Content: Lesson Length: 2 days

Unit Title: What's In It? Lesson Number and Title: Lesson 3: Trees

Context

- This lesson relates to the scientific understanding of the natural world.

Objectives

Students will be able to identify a variety of trees.

Connections

Program of Studies

2.2

Assessment Plan

In tabular format, organize how each objective will be assessed. Include copies of assessment instruments and rubrics (if applicable to the lesson plan).

Objective/Assessment Plan Organizer (Sample)

Objective Number	Type of Assessment	Description of Assessment	Adaptations and/or Accommodations
Objective 1	Formative or Summative	Collage of leaves	See appendix

Resources, media and technology

- Tree bark samples
- Leaf samples
- Identification guides
- Leaf Man by Lois Ehlert
- Trees by Joyce Kilmer

Procedures

- The teacher will read the poem Trees by Joyce Kilmer
- The class will discuss the characteristics of trees and begin to classify them in to groups
- The students will begin to identify trees using leaves and identification guides and discuss the function of leaves.
- The teacher will read the book Leaf Man by Lois Ehlert
- The students will make a collage using the leaves that were brought in for classification.

Rubric for Lesson 3: Leaf Collage

4	<ul style="list-style-type: none">• Shows functions of a leaf• Represents something in nature using leaves• Can identify 5 leaves and uses them in the collage• Defines collage
3	<ul style="list-style-type: none">• Shows functions of a leaf• Represents something in nature using leaves• Can identify 4 leaves and uses them in the collage• Has some definition of collage
2	<ul style="list-style-type: none">• Shows a function• Identify 2 leaves• Has a definition
1	<ul style="list-style-type: none">• Just leaves on paper

Lesson Plan Format

Name: Kristy Gillock, Sheila Bloyd, Elizabeth Mikowski Date: 9/22/06 Age/Grade Level: 5th grade

of Students: 76 # of IEP Students: 11 # of GSSP Students 3 # of LEP Students: 0

Subject: Science Major Content: Lesson Length: 1 day

Unit Title: What's In It? Lesson Number and Title: Lesson 4: Trees Too

Context

- This lesson shows how the natural world has an impact on human existence and vice versa.

Objectives

Students will be able to explain the historic and economical importance of trees.

Connections

Program of Studies

2.2,
2.3

Assessment Plan

Objective/Assessment Plan Organizer (Sample)

Objective Number	Type of Assessment	Description of Assessment	Adaptations and/or Accommodations
Objective 1	Formative or Summative	On demand writing	See appendix

Resources, media and technology

- Read The Big Tree by Bruce Hiscock
- Chart paper
- Example of sections of a tree trunk
- Pins

Procedures

- Make a chart of the use of trees.
- Discuss tree rings.
- Observe tree rings, parallel historical and climatic information.
- Tell the life story of this tree using information from tree rings on a timeline.
- Discuss "Who would live in a forest habitat?"
- Make chart uses of Green County trees.

Lesson 4 Rubric

4	<ul style="list-style-type: none">• Gives 5 uses of trees over historical period• Explain how rings of a tree are used• Gives 3 habitats in the forest environments.• Completes timeline from first settlement to the present• Explains area uses of trees in the area
3	<ul style="list-style-type: none">• Gives 3 uses of trees over historical period• Gives 2 habitats in the forest environments.• Provides parts of the timeline• Give 1 use of trees in the area
2	<ul style="list-style-type: none">• Gives 2 uses of trees over historical period• Knows that there are rings on trees• Starts timeline
1	<ul style="list-style-type: none">• Gives 1 use of trees over historical period• Knows that there are rings on the trees

Lesson Plan Format

Name: Kristy Gillock, Sheila Bloyd, Elizabeth Mikowski Date: 9/22/06 Age/Grade Level: 5th grade

of Students: 76 # of IEP Students: 11 # of GSSP Students 3 # of LEP Students: 0

Subject: Science Major Content: Lesson Length: 2 day

Unit Title: What's In It? Lesson Number and Title: Lesson 5: Aquatic Life

Context

- This lesson shows how the aquatic life is influence by water and soil and forest habitats.

Objectives

Students will be able to identify those animals that are aquatic.

Connections

Program of Studies

1.16

2.3

Assessment Plan

Objective/Assessment Plan Organizer (Sample)

Objective Number	Type of Assessment	Description of Assessment	Adaptations and/or Accommodations
Objective 1	Formative or Summative	Informative paragraph & poem	See appendix
Objective 2 (Insert row to add more objectives)	Formative or Summative	Use website and correctly match animals with their habitat	

Resources, media and technology

- Read Songs of the Water Boatman and Other Pond Poems
- Internet
- Print materials from Library Media Center

Procedures

Librarian will read Songs of the Water Boatman and Other Pond Poems by Joyce Sidman

Library Media Specialist will instruct students on researching their topic.

Students will choose and aquatic animal to research

Students will write an informative paragraph on their subject.

Students will write a poem using information from their information on their animal/insect of choice.

Rubric for Lesson 5

4	<ul style="list-style-type: none">• Identify sources• Identifies genus species• Draws or labels a picture or photograph• Writes poem using information found in research
3	<ul style="list-style-type: none">• Identifies sources• Uses common names• Draws/does some labeling• Writes a poem about topic
2	<ul style="list-style-type: none">• Uses common names• Draws picture• Writes a poem
1	<ul style="list-style-type: none">• Draws picture• Writes something

Lesson Plan Format

Name: Kristy Gillock, Sheila Bloyd, Elizabeth Mikowski Date: 9/22/06 Age/Grade Level: 5th grade

of Students: 76 # of IEP Students: 11 # of GSSP Students 3 # of LEP Students: 0

Subject: Science Major Content: Lesson Length: 2 days

Unit Title: What's In It? Lesson Number and Title: Lesson 6: Biological Science Vocations

Context

- This lesson shows how man uses the natural world to provide a living and habitat for himself.

Objectives

Students will be able to name at least four vocations that are associated with environmental sciences.

Connections

Program of Studies

1.16

2.36

2.37

5.4

Assessment Plan

Objective/Assessment Plan Organizer (Sample)

Objective Number	Type of Assessment	Description of Assessment	Adaptations and/or Accommodations
Objective 1	Formative or Summative	Brochure	See appendix

Resources, media and technology

- Internet
- Books of Occupations

Procedures

- Students will research occupations dealing with wood industry, water and soil.
- Students will include: educational level needed, pay scale, job description in detail, show pictures of selected occupations, potential areas needed for occupation, and expected area of need.
- Students will create a brochure with information gathered in research.

Rubric for Lesson 6

4	<ul style="list-style-type: none">• Research/identifies sources• Brochure has:<ol style="list-style-type: none">1. Vocation2. Education required3. Pay scale4. Detailed job description5. Pictures
3	<ul style="list-style-type: none">• Identifies sources• Brochure has:<ol style="list-style-type: none">1. vocation2. pay scale3. brief job description4. pictures
2	<ul style="list-style-type: none">• Brochure has:<ol style="list-style-type: none">1. vocation2. brief job description3. pictures
1	<ul style="list-style-type: none">• Job• pictures

Lesson Plan Format

Name: Kristy Gillock, Sheila Bloyd, Elizabeth Mikowski Date:9/22/06 Age/Grade Level: 5th grade

of Students: 76 # of IEP Students: 11 # of GSSP Students 3 # of LEP Students: 0

Subject: Science Major Content: Lesson Length: 1 day

Unit Title: What's In It? Lesson Number and Title: Lesson 7: Reflection

Context

- This lesson increases student awareness for their responsibility of the environment and shows them how to be proactive towards the environment.

Objectives

Students will be able to engage in a discuss about aspects in the environment for which they are grateful.

Connections

Program of Studies
Core Content RD-0 5.41

Assessment Plan

Objective/Assessment Plan Organizer (Sample)

Objective Number	Type of Assessment	Description of Assessment	Adaptations and/or Accommodations
Objective 1	Formative or Summative	Students will print out the homepage for the Sierra Club	

Resources, media and technology

- Read John Muir, first environmentalist by Kathryn Lasky
- Internet

Procedures

After studying water, soil, and trees, students will sit in a circle and discuss what they have learned, things they are still concerned about, and how this unit has effected and affected them in a way that is not intellectual.

How have these experiences made you feel?

Has it changed your feelings about recycling and environmental responsibilities?

Rubric for Lesson 7

4	<ul style="list-style-type: none">• Discuss how the unit has effected them emotionally• Give a response as to attitudes about recycling and environmental responsibility• Print out the Sierra Club homepage.
3	<ul style="list-style-type: none">• Either discuss feelings about the unit or give a response about your attitudes about recycling an environmental responsibility.• Print out the Sierra Club homepage
2	<ul style="list-style-type: none">• Give some type of response about the unit• Print out the Sierra Club homepage.
1	<ul style="list-style-type: none">• Print out the Sierra Club homepage.

On Demand Writing

Lesson 4

Situation:

Your class has been studying forestry. The county has been discussing the placement of a new shopping mall. This would mean doing away with the forest where students learn about conservation.

Writing Prompt:

Write a letter to the Department of Urban Development explaining your views on the placement of the mall.