

**Third Grade Science, Technology, Environment, and Society
Grade Standards, Supporting Skills, and Examples**

Indicator 1: Analyze various implications/effects of scientific advancement within the environment and society.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Analysis)	<p>3.S.1.1. Students are able to recognize ways to recycle, reuse, and reduce consumption of natural resources.</p> <p>Example: using less water when brushing your teeth to reduce consumption of water</p> <ul style="list-style-type: none"> • Define recycle, reuse, and reduce.

Indicator 2: Analyze the relationships/interactions among science, technology, environment, and society.

Note: These skills should be taught and practiced in grade-level study of Physical, Life, and Earth/Space Science although mastery is not expected at these grade levels.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
	<ul style="list-style-type: none"> ✓ Investigate how natural events and human influences can affect the survival of species. Examples: rainfall, flooding, and drought Example: Hunting regulations have developed to control wildlife populations. ✓ Describe solutions to environmental problems. Example: planting grass to prevent erosion caused by runoff Example: using no-till farming to prevent erosion

**Third Grade Science Technology, Environment, and Society
Performance Descriptors**

Advanced	<p>Third grade students performing at the advanced level:</p> <ul style="list-style-type: none"> • analyze ways recycling, reusing, and reducing conserves natural resources.
Proficient	<p>Third grade students performing at the proficient level:</p> <ul style="list-style-type: none"> • recognize items for reuse or recycling.
Basic	<p>Third grade students performing at the basic level:</p> <ul style="list-style-type: none"> • recognize items for reuse or recycling.

**Third Grade Science Technology, Environment, and Society
ELL Performance Descriptors**

Proficient	<p>Third grade ELL students performing at the proficient level:</p> <ul style="list-style-type: none"> • recognize items for reuse or recycling; • ask questions related to science topics.
Intermediate	<p>Third grade ELL students performing at the intermediate level:</p> <ul style="list-style-type: none"> • identify the recycling symbol; • give simple oral responses to questions on topics presented in class.
Basic	<p>Third grade ELL students performing at the basic level:</p> <ul style="list-style-type: none"> • know that we can recycle many materials; • participate in science activities and experiments with other students; • use correct pronunciation of science words; • respond correctly to yes or no questions on topics presented in class.
Emergent	<p>Third grade ELL students performing at the emergent level:</p> <ul style="list-style-type: none"> • use correct pronunciation of science words; • use non-verbal communication to express scientific ideas.
Pre-emergent	<p>Third grade ELL students performing at the pre-emergent level:</p> <ul style="list-style-type: none"> • observe and model appropriate cultural and learning behaviors from peers and adults; • listen to and observe comprehensible instruction and communicate understanding non-verbally.

**Fourth Grade Science, Technology, Environment, and Society
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Indicator 1: Analyze various implications/effects of scientific advancement within the environment and society.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Comprehension)	<p>4.S.1.1. Students are able to describe how people continue to invent new ways of doing things, solving problems, and getting work done.</p> <ul style="list-style-type: none"> • Ways progress makes our lives easier • People and inventions can have tremendous impact on our daily lives. <p>Examples: CDs vs tapes; cell phones vs telephones; ziplock baggies vs wax paper</p>
(Comprehension)	<p>4.S.1.2. Students are able to explain how new ideas and inventions often affect people.</p> <ul style="list-style-type: none"> • Explain the benefits of new ideas and inventions. <p>Examples: television, electric lights</p>

Indicator 2: Analyze the relationships/interactions among science, technology, environment, and society.

Note: These skills should be taught and practiced in grade-level study of Physical, Life, and Earth/Space Science although mastery is not expected at these grade levels.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
	<p>✓ Identify South Dakota environmental concerns and describe possible solutions.</p> <p>Example: Pollution along our highways and roads led to our adopt-a-highway program.</p> <ul style="list-style-type: none"> • Describe the relationship between the use of natural resources and the environment. <p>Example: Open-pit mining in the Black Hills led to reclamation.</p>

**Fourth Grade Science, Technology, Environment, and Society
Performance Descriptors**

Advanced	<p>Fourth grade students performing at the advanced level:</p> <ul style="list-style-type: none"> analyze the positive and negative ways electricity has changed our lives.
Proficient	<p>Fourth grade students performing at the proficient level:</p> <ul style="list-style-type: none"> describe ways electricity has changed our lives.
Basic	<p>Fourth grade students performing at the basic level:</p> <ul style="list-style-type: none"> sequence a group of pictures depicting the progression of communication from the telegraph to cell phones.

**Fourth Grade Science, Technology, Environment, and Society
ELL Performance Descriptors**

Proficient	<p>Fourth grade ELL students performing at the proficient level:</p> <ul style="list-style-type: none"> sequence a group of pictures depicting the progression of communication from the telegraph to cell phones; ask questions related to science topics.
Intermediate	<p>Fourth grade ELL students performing at the intermediate level:</p> <ul style="list-style-type: none"> recognize that technology and communication has changed over time; give simple oral responses to questions on topics presented in class.
Basic	<p>Fourth grade ELL students performing at the basic level:</p> <ul style="list-style-type: none"> sequence a group of pictures depicting the change of technology and communication over time; participate in science activities and experiments with other students; use correct pronunciation of science words; respond correctly to yes or no questions on topics presented in class.
Emergent	<p>Fourth grade ELL students performing at the emergent level:</p> <ul style="list-style-type: none"> use correct pronunciation of science words; use non-verbal communication to express scientific ideas.
Pre-emergent	<p>Fourth grade ELL students performing at the pre-emergent level:</p> <ul style="list-style-type: none"> observe and model appropriate cultural and learning behaviors from peers and adults; listen to and observe comprehensible instruction and communicate understanding non-verbally.

**Fifth Grade Science, Technology, Environment, and Society
Grade Standards, Supporting Skills, and Examples**

Indicator 1: Analyze various implications/effects of scientific advancement within the environment and society.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Knowledge)	5.S.1.1. Students are able to identify scientific changes that have affected transportation, health, sanitation, and communication.
(Comprehension)	<p>5.S.1.2. Students are able to describe how designing a solution may have constraints.</p> <p>Examples: costs, time, space, materials, and safety</p> <ul style="list-style-type: none"> • Explain why the benefits of science and technology are not available to all people. • Describe the consumption of resources over time. <p>Examples: oil, gold, and coal</p>

Indicator 2: Analyze the relationships/interactions among science, technology, environment, and society.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Evaluation)	<p>5.S.2.1. Students are able to explain the interrelationship of populations, resources, and environments.</p> <p>Example: human populations encroaching upon wildlife habitat</p> <p>Example: Technology such as fish finders affects fish population.</p> <ul style="list-style-type: none"> • Define interrelationships. <p>✓ Describe conservation practices.</p> <p>Examples: crop rotation, shelter belts, fishing limits, hybrid automobiles</p>

**Fifth Grade Science, Technology, Environment, and Society
Performance Descriptors**

Advanced	<p>Fifth grade students performing at the advanced level:</p> <ul style="list-style-type: none"> • evaluate positive and negative effects of modern transportation, health, sanitation, and communication; • given a specific issue or problem, identify and explain constraints that would prohibit the implementation of the solution; • develop a solution to a human/animal cohabitation problem.
Proficient	<p>Fifth grade students performing at the proficient level:</p> <ul style="list-style-type: none"> • list ways that modern transportation, health, communication, and sanitation has changed our lives; • explain how factors such as cost, time, and resources affect problem solving; • explain the effects of humans encroaching on wildlife habitats.
Basic	<p>Fifth grade students performing at the basic level:</p> <ul style="list-style-type: none"> • identify ways modern transportation has changed our lives; • name a constraint in solving a problem; • name one effect of humans encroaching on wildlife habitat.

**Fifth Grade Science, Technology, Environment, and Society
ELL Performance Descriptors**

Proficient	<p>Fifth grade ELL students performing at the proficient level:</p> <ul style="list-style-type: none"> • identify ways modern transportation has changed our lives; • name a constraint in solving a problem; • name one effect of humans encroaching on wildlife habitat; • ask questions related to science topics.
Intermediate	<p>Fifth grade ELL students performing at the intermediate level:</p> <ul style="list-style-type: none"> • identify modes of modern transportation; • recognize limitations in solving a problem; • recognize that humans encroach on wildlife habitat; • give simple oral responses to questions on topics presented in class.
Basic	<p>Fifth grade ELL students performing at the basic level:</p> <ul style="list-style-type: none"> • identify a mode of transportation; • recognize that scientific problems exist; • identify different wildlife habitats;

	<ul style="list-style-type: none"> • participate in science activities and experiments with other students; • use correct pronunciation of science words; • respond correctly to yes or no questions on topics presented in class.
Emergent	<p>Fifth grade ELL students performing at the emergent level:</p> <ul style="list-style-type: none"> • use correct pronunciation of science words; • use non-verbal communication to express scientific ideas.
Pre-emergent	<p>Fifth grade ELL students performing at the pre-emergent level:</p> <ul style="list-style-type: none"> • observe and model appropriate cultural and learning behaviors from peers and adults; • listen to and observe comprehensible instruction and communicate understanding non-verbally.