

**Third Grade Life Science
Grade Standards, Supporting Skills, and Examples**

Indicator 1: Understand the fundamental structures, functions, classifications, and mechanisms found in living things.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Knowledge)	<p>3.L.1.1. Students are able to identify the basic structures, functions, and needs of plants in relation to their environment.</p> <p>Examples: leaves, stems, roots, flowers</p> <ul style="list-style-type: none"> • Differentiate between plants and animals.
(Knowledge)	<p>3.L.1.2. Students are able to identify characteristic features of animals and their related functions in relation to their environment.</p> <p>Examples: wings/ hollow bones, webbed feet, fins</p> <ul style="list-style-type: none"> • Differentiate between plants and animals.
(Comprehension)	<p>3.L.1.3. Students are able to describe life cycles, including growth and metamorphosis, of familiar organisms.</p> <ul style="list-style-type: none"> • Differentiate between adult males and females. <p>Example: dull-colored female birds/colorful male</p>

Indicator 2: Analyze various patterns and products of natural and induced biological change.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Analysis)	<p>3.L.2.1. Students are able to explain how animals instinctively meet basic needs in their environment.</p> <ul style="list-style-type: none"> • Give examples of basic needs. <p>Example: Instincts such as baby birds know to open their mouths for food; newborn turtles know to go to water.</p>

Indicator 3: Analyze how organisms are linked to one another and the environment.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Comprehension)	<p>3.L.3.1. Students are able to describe how species depend on one another and on the environment for survival.</p> <ul style="list-style-type: none"> Describe cause-and-effect relationships in living systems.
(Comprehension)	<p>3.L.3.2. Students are able to explain how environments support a diversity of plants and animals.</p> <ul style="list-style-type: none"> Describe types of environments. <p>Example: deserts and what lives there</p>
(Comprehension)	<p>3.L.3.3. Students are able to describe ways humans impact air, water, and habitat quality.</p> <p>Example: water pollution from chemical waste</p> <ul style="list-style-type: none"> Define pollution.
(Application)	<p>3.L.3.4. Students are able to examine fossils and describe how they provide evidence of change in organisms.</p> <ul style="list-style-type: none"> Define a fossil.

**Third Grade Life Science
Performance Descriptors**

Advanced	<p>Third grade students performing at the advanced level:</p> <ul style="list-style-type: none"> explain how an animal or plant is specially adapted to meet its survival needs; analyze the impact humans have on the environment.
Proficient	<p>Third grade students performing at the proficient level:</p> <ul style="list-style-type: none"> name the basic structures, functions, characteristics, and basic needs of plants and animals; describe life cycles, including growth and metamorphosis, of familiar organisms; describe how living things are supported by the environment, yet are diverse and interdependent; describe ways humans impact air, water, and habitat quality; describe how fossils provide evidence of change.
Basic	<p>Third grade students performing at the basic level:</p> <ul style="list-style-type: none"> explain the basic needs of plants and animals; explain how plants and animals adapt to their environment; name one way humans affect the environment; identify a fossil.

**Third Grade Life Science
ELL Performance Descriptors**

Proficient	<p>Third grade ELL students performing at the proficient level:</p> <ul style="list-style-type: none"> • explain the basic needs of plants and animals; • explain how plants and animals adapt to their environment; • name one way humans affect the environment; • identify a fossil; • ask questions related to science topics.
Intermediate	<p>Third grade ELL students performing at the intermediate level:</p> <ul style="list-style-type: none"> • explain the basic needs of plants or animals; • recognize that plants and animals adapt to their environment; • recognize that humans affect the environment; • identify a fossil; • 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"> • recognize that plants and animals have needs; • recognize that animals adapt to their environment; • identify pictures that reflect how humans impact the environment; • 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 Life Science
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Indicator 1: Understand the fundamental structures, functions, classifications, and mechanisms found in living things.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Knowledge)	<p>4.L.1.1. Students are able to identify the basic systems (digestive, skeletal, muscular, nervous, respiratory, and circulatory) and major organs.</p> <p>Examples: circulatory-heart, blood vessels, blood</p> <p>✓ Primary function in the human body.</p>
(Comprehension)	<p>4.L.1.2. Students are able to differentiate between vertebrates and invertebrates, and classify the five groups of vertebrates (mammal, reptile, amphibian, bird, and fish) based on characteristics.</p> <p>Examples: reproduction (live birth or eggs), body covering, respiration</p> <ul style="list-style-type: none"> • Define vertebrate and invertebrates.

Indicator 2: Analyze various patterns and products of natural and induced biological change.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Knowledge)	<p>4.L.2.1. Students are able to identify behavioral and structural adaptations that allow a plant or animal to survive in a particular environment.</p> <p>Examples: hibernation and migration</p> <ul style="list-style-type: none"> • Explain environments and adaptations.
(Analysis)	<p>4.L.2.2. Students are able to explain how a size of a population is dependent upon the available resources within its community.</p> <ul style="list-style-type: none"> • Know community resources. • Define population.

Indicator 3: Analyze how organisms are linked to one another and the environment.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Comprehension)	<p>4.L.3.1. Students are able to describe the flow of energy through food chains and webs.</p> <ul style="list-style-type: none"> • Understand food chains.

**Fourth Grade Life Science
Performance Descriptors**

Advanced	<p>Fourth grade students performing at the advanced level:</p> <ul style="list-style-type: none"> • create a visual representation of the body including the skeletal, muscular, digestive, nervous, respiratory, and circulatory systems; • differentiate between groups of vertebrates based on their characteristics; • construct a food web/chain.
Proficient	<p>Fourth grade students performing at the proficient level:</p> <ul style="list-style-type: none"> • name the basic body systems (digestive, skeletal, muscular, nervous, respiratory, and circulatory,) and explain their primary functions; • differentiate between vertebrates and invertebrates, and name five groups of vertebrates (mammal, amphibian, bird, fish, and reptile); • describe adaptations that allow plants and animals to survive; • describe the flow of energy through food chains and webs.
Basic	<p>Fourth grade students performing at the basic level:</p> <ul style="list-style-type: none"> • identify the skeletal system and describe one basic function; • name an animal without a backbone; • recognize plants and animals can change to survive; • identify the parts of a basic food chain.

**Fourth Grade Life Science
ELL Performance Descriptors**

Proficient	<p>Fourth grade ELL students performing at the proficient level:</p> <ul style="list-style-type: none"> • identify the skeletal system and describe one basic function; • name an animal without a backbone; • recognize plants and animals can change to survive; • identify the parts of a basic food chain; • ask questions related to science topics.
Intermediate	<p>Fourth grade ELL students performing at the intermediate level:</p> <ul style="list-style-type: none"> • identify the skeletal system; • identify an animal without a backbone; • recognize plants and animals can change; • identify two parts of a basic food chain; • 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"> • recognize the skeletal system; • recognize that some animals do not have a backbone; • recognize the change in animals; • identify that the food chain has parts; • 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 Life Science
Grade Standards, Supporting Skills, and Examples**

Indicator 1: Understand the fundamental structures, functions, classifications, and mechanisms found in living things.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Comprehension)	<p>5.L.1.1. Students are able to describe the basic process of photosynthesis and the role of light as a source of energy in plants.</p> <ul style="list-style-type: none"> • Use words to describe photosynthesis. <p>Example: Carbon dioxide + water → sunlight; chlorophyll = sugar and oxygen.</p>

Indicator 2: Analyze various patterns and products of natural and induced biological change.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Evaluation)	<p>5.L.2.1. Students are able to predict physical characteristics with family lineage.</p> <ul style="list-style-type: none"> • Describe family trees. • Explain how physical traits pass from generation to generation. <p>Examples: height, hair color, eye color</p>
(Comprehension)	<p>5.L.2.2. Students are able to describe structures and processes involved in plant reproduction.</p> <p>Example: fertilization</p> <ul style="list-style-type: none"> • Know parts of the plant.

Indicator 3: Analyze how organisms are linked to one another and the environment.

Bloom's Taxonomy Level	Standard, Supporting Skills, and Examples
(Comprehension)	<p>5.L.3.1. Students are able to describe how natural events and/or human influences may help or harm ecosystems.</p> <p>Example: biotic (over-population) and abiotic (floods)</p> <ul style="list-style-type: none">• Define ecosystem.
(Application)	<p>5.L.3.2. Students are able to analyze the roles of organisms to determine the transfer of energy using an energy pyramid model.</p> <p>Examples: producer, consumer, decomposer, herbivore, carnivore, omnivore, predator – prey</p> <ul style="list-style-type: none">• Define an energy pyramid.• Define an organism.
(Correspondence)	<p>5.L.3.3. Students are able to describe how interrelationships enable some organisms to survive.</p> <ul style="list-style-type: none">• Define interrelationships. <p>✓ Adaptation, parasitism, mutation</p>

**Fifth Grade Life Science
Performance Descriptors**

Advanced	<p>Fifth grade students performing at the advanced level:</p> <ul style="list-style-type: none"> • illustrate the roles of reactants (carbon dioxide and water), products (sugar and oxygen), and sunlight in photosynthesis; • describe characteristics of worms, mollusks, arthropods, and echinoderms; • predict outcomes of combinations of physical trait; • develop a plan to protect an ecosystem; • illustrate the transfer of energy in a food pyramid.
Proficient	<p>Fifth grade students performing at the proficient level:</p> <ul style="list-style-type: none"> • describe structures and life processes of plants; • predict physical characteristics of offspring; • describe how natural events, interrelationships of organisms, and/or human influences may help or harm ecosystems; • describe the roles of producers, consumers, and decomposers to determine the transfer of energy.
Basic	<p>Fifth grade students performing at the basic level:</p> <ul style="list-style-type: none"> • explain how plants get food; • describe how offspring resemble their parents; • explain the relationship between plants and animals.

**Fifth Grade Life Science
ELL Performance Descriptors**

Proficient	<p>Fifth grade ELL students performing at the proficient level:</p> <ul style="list-style-type: none"> • explain how plants get food; • describe how offspring resemble their parents (height, weight, hair color); • explain the relationship between plants and animals; • ask questions related to science topics.
Intermediate	<p>Fifth grade ELL students performing at the intermediate level:</p> <ul style="list-style-type: none"> • label a diagram to show how plants get food; • recognize that offspring resemble their parents; • recognize that plants and animals rely on each other; • give simple oral responses to questions on topics presented in class.

Basic	Fifth grade ELL students performing at the basic level: <ul style="list-style-type: none">• recognize that plants need food;• match pictures of offspring to parents;• name one way that animals rely on plants;• 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	Fifth grade ELL students performing at the emergent level: <ul style="list-style-type: none">• use correct pronunciation of science words;• use non-verbal communication to express scientific ideas.
Pre-emergent	Fifth grade ELL students performing at the pre-emergent level: <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.