

Earth Party!
An Early Introduction to the
System of Classification of Living Things
Unit Study
Next Generation Science & Common Core
Standards Alignment

Grade 1

Grade 1	Disciplinary Core Ideas	<i>Earth Party!</i> Section
LS1.A	Structure and Function: All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, etc. Plants also have different parts that help them to survive. (1-LS1-1)	2.2, 2.3, 3.2, 3.3, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.2, Projects 3, 4, 7, 8, 9, and 10
LS1.B	Growth and Development of Organisms: Adult plants and animals can have young. In many kinds of animals, parents and offspring themselves engage in behaviors that help offspring to survive. (1-LS1-2)	3.2, 3.3, 4.2, 5.2, 5.3, 6.2, Project 10
LS1.D	Information Processing: Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. Plants also respond to some external inputs. (1-LS1-1)	3.2, 4.2, 5.1 5.2, 5.3, 6.2, Project 2, 3, 4, 6, 7, 8, 9, 10
LS3.A	Inheritance of Traits: Young animals are very much, but not exactly alike their parents. Parents also are very much, but not exactly like their parents. (1-LS3-1)	2.2, 3.2, 4.2, 5.2, 5.3, 6.2
LS3.B	Variation of Traits: Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways. (1-LS3-1)	6.2

Common Core State Standards Connections*

ELA/Literacy –

- RI.1.1 Ask and answer questions about key details in a text (1-LS1-2). [Throughout Student Book]
- RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. [Throughout Student Book]
- RI.1.7 Use illustrations and details in a text to describe its key ideas. [Sections 2.2, 3.2, 4.2, 5.2, 5.3, 6.1]

- RI.1.10 With prompting and support, read informational texts appropriately complex for grade (1-LS1-2). [Curriculum reading]
- W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure. [Project 10]
- W.1.7 Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions). [Projects 3, 9]
- W.1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. [Section 6.2]
- SL.1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media. [Hearing read-alouds and answering comprehension questions]

Mathematics –

- MP.2 Reason abstractly and quantitatively. [Project 5]
- MP.5 Use appropriate tools strategically. [Project 5]

Grade 2

Grade 2	Disciplinary Core Ideas	<i>Earth Party!</i> Section
LS2.A	Interdependent Relationships in Ecosystems: Plants depend on water and light to grow. (2-LS2-1) Plants depend on animals for pollination or to move their seeds around. (2-LS2-2)	3.1, 3.2, 3.3, 4.2, 5.3, 6.2
2-LS4.D	Biodiversity and Humans: There are many different kinds of living things in any areas, and they exist in different places on land and in water. (2-LS4-1)	2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.2, 5.1, 5.2, 5.3, 6.1, 6.2, Project 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Common Core State Standards Connections*

ELA/Literacy –

- W.2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section. [Project 10]
- W.2.7 Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). [Projects 3, 9]
- W.2.8 Recall information from experiences or gather information from provided sources to answer a question (2-LS2-1). [Throughout Student Book]
- SL.2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media. [Hearing read-alouds and answering comprehension questions]
- SL.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue. [Curriculum comprehension questions]
- RL.2.3 Describe how characters in a story respond to major events and challenges. [Section 1.2]

Mathematics –

- MP.2 Reason abstractly and quantitatively (2-LS4-1.) [Project 5]
- MP.4 Model with mathematics (2-LS4-1.) [Project 5]

Grade 3

Grade 3	Disciplinary Core Ideas	<i>Earth Party!</i> Section
LS1.B	Growth and Development of Organisms: Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles (3-LS1-1).	2.2, 3.2, 3.3, 4.2, 5.1, 5.2, 5.3, 5.4, 6.2, Project 10
LS2.D	Social Interactions and Group Behavior: Being a part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may serve different functions and vary dramatically in size. (3-LS2-1)	4.2, 5.3, 6.2, Project 10
LS3.A	Inheritance of Traits: Many characteristics of organisms are inherited from their parents. (3-LS3-1), Other characteristics result from individuals' interactions with the environment, which can range from diet to learning. Many characteristics involve both inheritance and environment.	2.2, 3.2, 4.2, 5.2, 5.3, 6.2
LS3.B	Variation of Traits: Different organisms vary in how they look and function because they have different inherited information. (3-LS3-1), The environment also affects the traits that an organism develops. (3-LS3-2)	3.1, 4.1, 5.1, 5.2, 5.3, 6.2

Common Core State Standards Connections*

ELA/Literacy —

- RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. [Throughout Student Book]
- RI.3.3 Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. [Sections 1.2, 1.3]
- RI.3.7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur) . [Section 1.2, 1.3, 3.2]
- W.3.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. [Project 10]
- W.3.2.a Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. [Projects 5 and 10]
- W.3.2.b Develop the topic with facts, definitions, and details. [Projects 5 and 10]
- W.3.7 Conduct short research projects that build knowledge about a topic. [Project 10]
- W.3.8 Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories. [Characteristics of Kingdoms and Major Groups table]

Mathematics —

- MP.2 Reason abstractly and quantitatively. [Project 5]
- MP.4 Model with mathematics. [Project 5]

Grade 4

Grade 4	Disciplinary Core Ideas	<i>Earth Party!</i> Section
LS1.A	Structure and Function: Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction. (4-LS1-1)	2.2, 2.3, 3.2, 3.3, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.2, Projects 3, 4, 7, 8, 9, and 10
LS1.D	Information Processing: Different sense receptors are specialized for particular kinds of information, which may be then processed by the animal's brain. Animals are able to use their perceptions and memories to guide their actions. (4-LS1-2)	4.2, 5.1, 5.2, 5.3, 6.2

Common Core State Standards Connections*

ELA/Literacy -

- RL.4.3 Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions). [Sections 1.2, 1.3]
- RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. [Throughout Student Book]
- RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text. [Sections 1.2, 1.3]
- RI.4.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. [Sections 1.2, 1.3, 2.2, 3.2]
- W.4.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. [Project 10]
- W.4.2.a Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. [Project 10]
- W.4.2.b Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. [Project 10]
- W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic. [Section 6.2]
- SL.4.5 Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes (4-LS1-2). [Project 4]

Mathematics -

- MP.2 Reason abstractly and quantitatively. [Project 5]
- MP.4 Model with mathematics. [Project 5]

Grade 5

Grade 5	Disciplinary Core Ideas	<i>Earth Party!</i> Section
LS1.C	Organization for Matter and Energy Flow in Organisms: Plants acquire their material for growth chiefly from air and water. (5-LS1-1)	3.1, 3.2, 3.3
LS2.A	Interdependent Relationships in Ecosystems: The food of almost any kind of animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. Some organisms, such as fungi and bacteria, break down dead organisms (both plants or plants parts and animals) and therefore operate as “decomposers.” Decomposition eventually restores (recycles) some materials back to the soil. Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. Newly introduced species can damage the balance of an ecosystem.	2.1, 2.2, 2.3, 3.1, 3.2, 4.1, 4.2, 5.2, 5.3, 6.2, Project 10
LS2.B	Cycles of Matter and Energy Transfer in Ecosystems: Matter cycles between the air and soil and among plants, animals, and microbes as these organisms live and die. Organisms obtain gases, and water, from the environment, and release waste matter (gas, liquid, or solid) back into the environment.	2.1, 2.2, 2.3, 3.1, 3.2, 4.1, 4.2, 5.1, 5.2, 5.3, 6.2
PS3.D	Energy in Chemical Processes and Everyday Life: The energy released [from] food was once energy from the sun that was captured by plants in the chemical process that forms plant matter (from air and water). (5-PS3-1)	3.1, 3.2, 4.1, 4.2, 5.1, 5.2, 5.3, 6.2
LS1.C	Organization for Matter and Energy Flow in Organisms: Food provides animals with the materials they need for body repair and growth and the energy they need to maintain body warmth and for motion. (secondary to 5-PS3-1)	3.1, 3.2, 4.1, 4.2, 5.1, 5.2, 5.3, 6.2, Project 10

Common Core State Standards Connections (Grade 5, continued)*

ELA/Literacy -

- RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably (5-LS1-1). [Project 10]
- RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text. [Section 1.2, 1.3]
- RI.5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 5 topic or subject area*. [Throughout curriculum]
- W.5.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. [Project 10]
- W.5.2.a Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. [Project 10]
- W.5.2.b Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. [Project 10]
- W.5.7 Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. [Section 6.2, Project 10]
- SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. [Project 9]

Mathematics -

- MP.2 Reason abstractly and quantitatively. [Project 5]
- MP.4 Model with mathematics. [Project 5]

Grade 6

Grade 6	Disciplinary Core Ideas	<i>Earth Party!</i> Section
LS1.A	Structure and Function: All living things are made up of cells, which is the smallest unit that can be said to be alive. An organism may consist of one single cell (unicellular) or many different numbers and types of cells (multicellular) (MS-LS1-1). Within cells, special structures are responsible for particular functions, and the cell membrane forms the boundary that controls what enters and leaves the cell. (MS-LS1-2)	2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 6.2, Projects 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10
LS1.C	Organization for Matter and Energy Flow in Organisms: Plants, algae (including phytoplankton), and many microorganisms use the energy from light to make sugars (food) from carbon dioxide from the atmosphere and water through the process of photosynthesis, which also releases oxygen. These sugars can be used immediately or stored for growth or later use.	2.1, 2.2, 2.3, 3.1, 3.2, 3.3
PS3.D	Energy in Chemical Processes and Everyday Life: The chemical reaction by which plants produce complex food molecules (sugars) requires an energy input (i.e., from sunlight) to occur. In this reaction, carbon dioxide and water combine to form carbon-based organic molecules and release oxygen. (secondary)	3.1, 3.2, 3.3

Common Core State Standards Connections*

ELA/Literacy -

- RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. [Student Book]
- RI.6.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings. [Throughout curriculum]
- RI.6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue. [Throughout curriculum]
- WST.6.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.) [Project 10]
- W.6.7 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate. [Section 6.2, Project 10]

- W.6.8 Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources. [Project 10]
- WHST.6-8.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. [Project 10]
- WHST.6-8.9 Draw evidence from informational texts to support analysis, reflection, and research. [Student Book]
- L.6.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression. [Throughout curriculum]
- RST.6-8.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. [Sections 2.3, 3.3, 4.3, 5.4]
- RST.6-8.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 6-8 texts and topics*. [Throughout curriculum]
- RST.6-8.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). [Project 5]
- Mathematics -
- 6.SP.B.4 Summarize numerical data sets in relation to their context (MS-LS1-5). [Project 5]

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