

| Standard ID | Standard Text | Edgenuity Lesson Name |
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| NGSS.MS-LS. | LIFE SCIENCE (NGSS) | |
| MS-LS1. | From Molecules to Organisms: Structures and Processes | |
| | Students who demonstrate understanding can: | |
| MS-LS1-1. | Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells. | Characteristics of Life Cell Theory Lab: Exploring Cells Bacteria Protists Fungi |
| MS-LS1-2. | Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function. | Cell Structure Animal and Plant Cells Lab: Exploring Cells Cellular Interactions with the Environment Photosynthesis Cellular Respiration Cell Cycle Meiosis Genetic Code Lab: Building Proteins from RNA |
| MS-LS1-3. | Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells. | Body Organization and Homeostasis The Musculoskeletal and Integumentary Systems The Nervous and Endocrine Systems The Circulatory and Respiratory Systems The Digestive and Excretory Systems The Reproductive System The Immune System |



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| MS-LS1-4. | Use argument based on empirical evidence and scientific reasoning to support an explanation for how | Overview of Plants |
| | characteristic animal behaviors and specialized plant structures affect the probability of successful | Seed Plants |
| | reproduction of animals and plants respectively. | Seedless Plants |
| | | Gymnosperms |
| | | Angiosperms |
| | | Lab: Flower Dissection |
| | | Plant Responses |
| | | Overview of Animals |
| | | Animal Behavior |
| | | Lab: Earthworm Behavior |
| MS-LS1-5. | Construct a scientific explanation based on evidence for how environmental and genetic factors | Genetic Code |
| | influence the growth of organisms. | DNA Mutations |
| | | Introduction to Heredity |
| | | Predicting Heredity |
| | | Lab: Heredity and Punnett Squares |
| | | Inheritance Patterns |
| | | Human Inheritance |
| | | Natural Selection |
| | | Lab: Natural Selection |
| | | Populations |
| MS-LS1-6. | Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of | Photosynthesis |
| | matter and flow of energy into and out of organisms. | Cycles of Matter |
| | | Energy Flow in Ecosystems |
| MS-LS1-7. | Develop a model to describe how food is rearranged through chemical reactions forming new | Building Blocks of Life |
| | molecules that support growth and/or release energy as this matter moves through an organism. | Catalysts |
| | | Lab: Identifying Nutrients |
| | | The Digestive and Excretory Systems |
| MS-LS1-8. | Gather and synthesize information that sensory receptors respond to stimuli by sending messages to | The Nervous and Endocrine Systems |
| | the brain for immediate behavior or storage as memories. | |



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| MS-LS2. | Ecosystems: Interactions, Energy, and Dynamics | |
| | Students who demonstrate understanding can: | |
| MS-LS2-1. | Analyze and interpret data to provide evidence for the effects of resource availability on organisms | Living Things and the Environment |
| | and populations of organisms in an ecosystem. | Biodiversity |
| | | Populations |
| | | Cycles of Matter |
| | | Energy Flow in Ecosystems |
| MS-LS2-2. | Construct an explanation that predicts patterns of interactions among organisms across multiple | Interactions among Living Things |
| | ecosystems. | Lab: Owl Pellets |
| | , | Lab: Interdependence of Organisms |
| | | Energy Flow in Ecosystems |
| | | Biomes |
| MS-LS2-3. | Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts | s Cycles of Matter |
| | of an ecosystem. | Energy Flow in Ecosystems |
| MS-LS2-4. | Construct an argument supported by empirical evidence that changes to physical or biological | Succession |
| | components of an ecosystem affect populations. | Lab: Ecological Succession |
| | | Natural Environmental Change |
| | | Human Impact on the Environment |
| MS-LS2-5. | Evaluate competing design solutions for maintaining biodiversity and ecosystem services. | Biodiversity |
| MS-LS3. | Heredity: Inheritance and Variation of Traits | |
| | Students who demonstrate understanding can: | |
| MS-LS3-1. | Develop and use a model to describe why structural changes to genes (mutations) located on | DNA Mutations |
| | chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the | |
| | structure and function of the organism. | |



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| MS-LS3-2. | Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation. | Cell Cycle Meiosis Asexual and Sexual Reproduction Introduction to Heredity Predicting Heredity Lab: Heredity and Punnett Squares Inheritance Patterns |
| MS-LS4. | Biological Evolution: Unity and Diversity | |
| | Students who demonstrate understanding can: | |
| MS-LS4-1. | Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past. | The Theory of Evolution The Fossil Record Evidence for Evolution |
| MS-LS4-2. | Apply scientific ideas to construct an explanation for the anatomical similarities and differences among modern organisms and between modern and fossil organisms to infer evolutionary relationships. | Evolutionary Relationships Introduction to Classification Classification of Living Things Dichotomous Keys Lab: Dichotomous Keys |
| MS-LS4-3. | Analyze displays of pictorial data to compare patterns of similarities in the embryological development across multiple species to identify relationships not evident in the fully formed anatomy. | Evidence for Evolution |
| MS-LS4-4. | Construct an explanation based on evidence that describes how genetic variations of traits in a population increase some individualsГÇÖ probability of surviving and reproducing in a specific environment. | Natural Selection |
| MS-LS4-5. | Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms. | Advances in Genetics |
| MS-LS4-6. | Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time. | Lab: Natural Selection |



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| WA.RST.6-8. | Reading Standards for Literacy in Science and Technical Subjects | |
| | Key Ideas and Details | |
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| RST.6-8.1. | Cite specific textual evidence to support analysis of science and technical texts. | Characteristics of Life |
| RST.6-8.2. | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. | Characteristics of Life |
| RST.6-8.3. | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. | Lab: Natural Selection |
| | Craft and Structure | |
| 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. | Classification of Living Things |
| RST.6-8.5. | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. | Genetic Code |
| RST.6-8.6. | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. | Genetic Code |
| | Integration of Knowledge and Ideas | |
| 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). | Cell Structure |
| RST.6-8.8. | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. | Populations |
| RST.6-8.9. | Compare and contrast the information gained from experiments, simulations, video, or multimedia | Genetic Code |

sources with that gained from reading a text on the same topic.



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| | Range of Reading and Level of Text Complexity | |
| RST.6-8.10. | By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently. | Genetic Code |
| WA.WHST.6- 8. | Writing Standards for Literacy in Science and Technical Subjects | |
| | Text Types and Purposes | |
| WHST.6-8.1. | Write arguments focused on discipline-specific content. | |
| WHST.6- 8.1(a) | Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. | Advances in Genetics |
| WHST.6- 8.1(b) | Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. | Advances in Genetics |
| WHST.6- 8.1(c) | Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. | Advances in Genetics |
| WHST.6- 8.1(d) | Establish and maintain a formal style. | Advances in Genetics |
| WHST.6- 8.1(e) | Provide a concluding statement or section that follows from and supports the argument presented. | Advances in Genetics |
| WHST.6-8.2. | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. | |
| WHST.6- 8.2(a) | Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. | Lab: Dichotomous Keys |
| WHST.6- 8.2(b) | Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. | Lab: Dichotomous Keys |
| WHST.6- 8.2(c) | Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. | Lab: Dichotomous Keys |



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| WHST.6- | Use precise language and domain-specific vocabulary to inform about or explain the topic. | Lab: Dichotomous Keys |
| 8.2(d) | | |
| WHST.6- | Establish and maintain a formal style and objective tone. | Lab: Dichotomous Keys |
| 8.2(e) | | |
| WHST.6- | Provide a concluding statement or section that follows from and supports the information or | Lab: Dichotomous Keys |
| 8.2(f) | explanation presented. | |
| WHST.6-8.3. | (See note; not applicable as a separate requirement) | |
| WHST.6- | Note: Students' narrative skills continue to grow in these grades. The Standards require that students | omega standard |
| 8.3(a) | be able to incorporate narrative elements effectively into arguments and informative/explanatory | |
| | texts. In science and technical subjects, students must be able to write precise enough descriptions of | |
| | the step-by-step procedures they use in their investigations or technical work that others can | |
| | replicate them and (possibly) reach the same results. | |
| | | |
| | Production and Distribution of Writing | |
| WHST.6-8.4. | Produce clear and coherent writing in which the development, organization, and style are | Lab: Exploring Cells |
| | appropriate to task, purpose, and audience. | |
| WHST.6-8.5. | With some guidance and support from peers and adults, develop and strengthen writing as needed | Advances in Genetics |
| | by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and | |
| | audience have been addressed. | |
| WHST.6-8.6. | Use technology, including the Internet, to produce and publish writing and present the relationships | The Nervous and Endocrine Systems |
| | between information and ideas clearly and efficiently. | |
| | Research to Build and Present Knowledge | |
| | | |
| WHST.6-8.7. | Conduct short research projects to answer a question (including a self-generated question), drawing | The Nervous and Endocrine Systems |
| | on several sources and generating additional related, focused questions that allow for multiple | |
| | avenues of exploration. | |



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| WHST.6-8.8. | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. | The Nervous and Endocrine Systems |
| WHST.6-8.9. | Draw evidence from informational texts to support analysis reflection, and research. | The Nervous and Endocrine Systems |
| | Range of Writing | |
| | Multiple section by several sections of the second section and sections and sections and sections for second sections for second sections and sections are set of the second section and sections are set of the section and sections are set of the section are set of the sector are set of the | Laby Evaluating Calls |

WHST.6- Write routinely over extended time frames (time for reflection and revision) and shorter time frames Lab: Exploring Cells
8.10. (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.