

	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
	Process Standards - K.1-K.5	Process Standards - 1.1-1.5	Process Standards - 2.1-2.5	Process Standards - 3.1-3.5	Process Standards - 4.1-4.5	Process Standards - 5.1-5.5
Matter and its properties (K-3)/ Matter and energy (4-5)	Properties of Matter - K.6 <ul style="list-style-type: none"> Physical Properties - K.6(A) 	Properties of Matter - 1.6 <ul style="list-style-type: none"> Physical Properties - 1.6(A), 1.6(B) Systems - 1.6(C) 	Properties of Matter - 2.6 <ul style="list-style-type: none"> Physical Properties - 2.6(A), 2.6(B) Materials Science - 2.6(C) 	Properties of Matter - 3.6 <ul style="list-style-type: none"> Physical Properties - 3.6(A), 3.6(B), 3.6(C) Materials Science - 3.6(D) 	Properties of Matter - 4.6 <ul style="list-style-type: none"> Physical Properties - 4.6(A) Mixtures - 4.6(B), 4.6(C) 	Properties of Matter - 5.6 <ul style="list-style-type: none"> Physical Properties - 5.6(A), 3.6(C) Mixtures - 5.6(B), 5.6(C) Atomic Theory - 5.6(D)
Force, motion, and energy	Force and Motion - K.7 <ul style="list-style-type: none"> Magnets - K.7(A) 	Force and Motion - 1.7 <ul style="list-style-type: none"> Force Interactions - 1.7(A) Investigating Force and Motion - 1.7(B) 	Force and Motion - 2.7 <ul style="list-style-type: none"> Force Interactions - 2.7(A) Investigating Force and Motion - 2.7(B) 	Force and Motion - 3.7 <ul style="list-style-type: none"> Force Interactions - 3.7(A), - Investigating Force and Motion - 3.7(B) 	Force and Motion - 4.7 <ul style="list-style-type: none"> Investigating Force - 4.7(A) 	Force and Motion - 5.7 <ul style="list-style-type: none"> Investigating Forces - 5.7(A) 5.7(B), 3.7(A), 3.7(B)
	Light Energy - K.8 <ul style="list-style-type: none"> Light - K.8(A), K.8(B) 	Heat Energy - 1.8 <ul style="list-style-type: none"> Heat - 1.8(A), 1.8(B) 	Sound Energy - 2.8 <ul style="list-style-type: none"> Sound - 2.8(A), 2.8(B), 2.8(C) 	Energy - 3.8 <ul style="list-style-type: none"> Examples of Energy - 3.8(A) Mechanical Energy - 3.8(B) 	Energy - 4.8 <ul style="list-style-type: none"> Transfer of Energy - 4.8(A) Electrical Energy - 4.8(B), 4.8(C) 	Energy - 5.8 <ul style="list-style-type: none"> Transfer of Energy - 5.8(A), 4.8(A) Electrical Energy - 5.8(B) Light - 5.8(C)
Earth and space	Patterns in Nature - K.9 <ul style="list-style-type: none"> Day and Night - K.9(A) Observing Objects in the Sky - K.9(B) 	Patterns in Nature - 1.9 <ul style="list-style-type: none"> Seasons - 1.9(A) 	Space - 2.9 <ul style="list-style-type: none"> Sun, Earth, and Moon - 2.9(A) Observing Objects in the Sky - 2.9(B) 	Space - 3.9 <ul style="list-style-type: none"> The Solar System - 3.9(A), 3.9(B) 	Space - 4.9 <ul style="list-style-type: none"> Seasons - 4.9(A) Appearance of the Moon - 4.9(B) 	Space - 5.9 <ul style="list-style-type: none"> Earth's Movement - 5.9(A), 4.9(A), 4.9(B) The Solar System - 3.9(B)
	Earth, Air, and Weather - K.10 <ul style="list-style-type: none"> Properties of Rocks - K.10(A) Weather Changes and Patterns - K.10(B), K.10(C) 	Earth, Water, and Weather - 1.10 <ul style="list-style-type: none"> Soil - 1.10(A) Erosion - 1.10(B) Water - 1.10(C) Weather - 1.10(D) 	Earth's Weather and Processes - 2.10 <ul style="list-style-type: none"> Erosion - 2.10(A) Weather - 2.10(B), 2.10(C) 	Earth's Processes - 3.10 <ul style="list-style-type: none"> Weather - 3.10(A) Soil Formation - 3.10(B) Earth's Changing Surface - 3.10(C) 	Earth's Processes - 4.10 <ul style="list-style-type: none"> Water Cycle - 4.10(A) Earth's Changing Surface - 4.10(B) Weather and Climate - 4.10(C) 	Earth's Processes - 5.10 <ul style="list-style-type: none"> Water Cycle - 5.10(A), 4.10(A), 4.10(C) Rock Cycle - 5.10(B) Landforms - 5.10(C), 4.10(B), 3.10(C)
	Earth's Resources - K.11 <ul style="list-style-type: none"> Uses of Rocks, Soil, and Water - K.11(A) 	Earth's Resources - 1.11 <ul style="list-style-type: none"> Uses of Rocks, Soil, and Water - 1.11(A) Water Conservation - 1.11(B), 1.11(C) 	Earth's Resources - 2.11 <ul style="list-style-type: none"> Resources - 2.11(A) Resource Management - 2.11(B) 	Earth's Resources - 3.11 <ul style="list-style-type: none"> Natural Resources - 3.11(A) Conservation of Natural Resources - 3.11(B), 3.11(C) 	Earth's Resources - 4.11 <ul style="list-style-type: none"> Renewable and Nonrenewable Resources - 4.11(A) Resource Management - 4.11(B) Properties of Rocks - 4.11(C) 	Earth's Resources - 5.11 <ul style="list-style-type: none"> Fossil Fuels - 5.10(B) Resource Management - 5.11(A), 4.11(A)
Organisms and environments	Basic Needs of Organisms - K.12 <ul style="list-style-type: none"> Basic Needs of Plants - K.12(A) Basic Needs of Animals - K.12(B) 	Interactions in Environments - 1.12 <ul style="list-style-type: none"> Living and Nonliving Things - 1.12(A) Interdependence - 1.12(B), 1.12(C) 	Interactions in Environments - 2.12 <ul style="list-style-type: none"> Interdependence - 2.12(A), 2.12(C) Food Chains - 2.12(B) 	Organisms and Environments - 3.12 <ul style="list-style-type: none"> Interdependence - 3.12(A) Food Chains - 3.12(B) Organisms and Environmental Change - 3.12(C), 3.12(D) 	Organisms and Environments - 4.12 <ul style="list-style-type: none"> Food Webs - 4.12(A), 4.12(B) Fossil Evidence of Past Environments - 4.12(C) 	Organisms and Environments - 5.12 <ul style="list-style-type: none"> Biotic and Abiotic Factors - 5.12(A) Food Webs - 5.12(B), 4.12(B), 3.12(B) Fossils - 3.12(D) Human Impact on Ecosystems - 5.12(C)
	Characteristics of Plants and Animals - K.13 <ul style="list-style-type: none"> Plant Structure - K.13(A) Plant Life Cycle - K.13(C) Animal Structure and Function - K.13(B) Inherited Traits - K.13(D) 	Characteristics of Animals - 1.13 <ul style="list-style-type: none"> Animal Structure and Function - 1.13(A) Life Cycles - 1.13(B) Inherited Traits - 1.13(C) 	Characteristics of Plants and Animals - 2.13 <ul style="list-style-type: none"> Structure, Function, and Behavior - 2.13(A), 2.13(B), 2.13(C) Animal Life Cycles - 2.13(D) 	Structure, Function, and Survival - 3.13 <ul style="list-style-type: none"> Structure and Function - 3.13(A) Life Cycles - 3.13(B) 	Structure, Function, and Traits - 4.13 <ul style="list-style-type: none"> Plant Structure and Function - 4.13(A) Physical Traits - 4.13(B) 	Structure, Function, and Survival - 5.13 <ul style="list-style-type: none"> Structure and Function - 5.13(A) Traits and Behaviors - 5.13(B)

	Grade 6	Grade 7	Grade 8
	Process Standards - 6.1-6.5	Process Standards - 7.1-7.5	Process Standards - 8.1-8.5
Matter and energy	<p>Properties of Matter - 6.6</p> <ul style="list-style-type: none"> Physical Properties - 6.6(A), 6.6(B), 6.6(C), 6.6(D) Chemical Changes - 6.6(E) 	<p>Properties of Matter - 7.6</p> <ul style="list-style-type: none"> Elements and Compounds - 7.6(A), 7.6(B) Physical and Chemical Changes - 7.6(C) Solutions - 7.6(D), 7.6(E) 	<p>Properties of Matter - 8.6</p> <ul style="list-style-type: none"> Classification of Matter - 8.6(A), 6.6(C) Physical and Chemical Properties - 8.6(C), 8.6(D), 6.6(D) Atomic Reactivity - 8.6(B) Chemical Formulas, Reactions, and Equations - 8.6(E), 7.6(B), 7.6(C), 6.6(E)
Force, motion, and energy	<p>Force and Motion - 6.7</p> <ul style="list-style-type: none"> Force Interactions - 6.7(A) Balanced and Unbalanced Forces - 6.7(B), 6.7(C) 	<p>Force and Motion - 7.7</p> <ul style="list-style-type: none"> Motion - 7.7(A), 7.7(B), 7.7(C) Balanced and Unbalanced Forces - 7.7(D) 	<p>Force and Motion - 8.7</p> <ul style="list-style-type: none"> Force - 8.7(A), 8.7(B), 6.7(A), 6.7(B) Linear Motion - 7.7(A), 7.7(B), 7.7(C)
	<p>Energy - 6.8</p> <ul style="list-style-type: none"> Potential and Kinetic Energy - 6.8(A) Transfer of Energy - 6.8(B), 6.8(C) 	<p>Thermal Energy - 7.8</p> <ul style="list-style-type: none"> Thermodynamics - 7.8(B) Transfer of Energy - 7.8(A) Temperature and Kinetic Energy - 7.8(C) 	<p>Energy - 8.8</p> <ul style="list-style-type: none"> Characteristics of Waves - 8.8(A) Energy - 8.8(B), 7.8(A), 7.8(C), 6.8(B), 6.8(C)
Earth and space	<p>Sun, Earth, and Moon - 6.9</p> <ul style="list-style-type: none"> Seasons - 6.9(A) Tides - 6.9(B) 	<p>The Solar System - 7.9</p> <ul style="list-style-type: none"> Solar System Components, Properties, and Locations - 7.9(A) Newton's Law of Universal Gravitation - 7.9(B) Characteristics that Support Life in Space - 7.9(C) 	<p>The Universe - 8.9</p> <ul style="list-style-type: none"> Stars - 8.9(A) Galaxies - 8.9(B) Theories of the Origins of the Universe - 8.9(C) Seasons, Tides, and Gravity - 7.9(B), 6.9(A), 6.9(B) Earth's Dynamic Layers - 7.10(A), 7.10(B), 6.10(B)
	<p>Earth - 6.10</p> <ul style="list-style-type: none"> Earth's Spheres - 6.10(A) Earth's Layers - 6.10(B) Rock Cycle - 6.10(C) 	<p>Earth's Changing Surface - 7.10</p> <ul style="list-style-type: none"> Earth's Changing Surface - 7.10(A) Plate Tectonics - 7.10(B) 	<p>Weather - 8.10</p> <ul style="list-style-type: none"> Solar Energy, Hydrosphere, and Atmosphere Interactions - 8.10(A), 8.10(B), 8.10(C)
	<p>Earth's Resources - 6.11</p> <ul style="list-style-type: none"> Resource Management - 6.11(A) 6.11(B) 	<p>Human Impact on the Hydrosphere - 7.11</p> <ul style="list-style-type: none"> Human Dependence and Influence - 7.11(A), 7.11(B) 	<p>Climatic Influences - 8.11</p> <ul style="list-style-type: none"> Climatic Influences - 8.10(A), 8.11(A), 8.11(B) The Carbon Cycle - 8.11(C)
Organisms and environments	<p>Organisms and Environments - 6.12</p> <ul style="list-style-type: none"> Biotic and Abiotic Factors - 6.12(A) Organism Behavior and Relationships - 6.12(B) Hierarchical Organization in Ecosystems - 6.12(C) 	<p>Energy Flow in Ecosystems - 7.12</p> <ul style="list-style-type: none"> Flow of Energy - 7.12(A), 7.12(B) 	<p>Organisms and Environments - 8.12</p> <ul style="list-style-type: none"> Flow of Energy - 8.12(A), 7.12(A) Ecosystem Stability - 8.12(B), 8.12(C), 6.12(A) Earth's Water and Human Activity - 7.11(A), 7.11(B)
	<p>Characteristics and Variations of Organisms - 6.13</p> <ul style="list-style-type: none"> Cell Theory - 6.13(A) Characteristics of Organisms - 6.13(B) Ecosystem Stability - 6.13(C) 	<p>Structure, Function, and Evolution - 7.13</p> <ul style="list-style-type: none"> Human Structure and Function - 7.13(A) Hierarchical Organization - 7.13(B) Genetic Diversity - 7.13(C) Evolutionary Mechanisms - 7.13(D) 	<p>Structure, Function, and Survival - 8.13</p> <ul style="list-style-type: none"> Cell Functions and Body Systems - 8.13(A), 7.13(A), 6.13(A) Inherited Traits - 8.13(B) Variation and Survival - 8.13(C), 7.13(C), 7.13(D)
		<p>Taxonomy - 7.14</p> <ul style="list-style-type: none"> Taxonomic System - 7.14(A), 7.14(B) 	

Biology
Process Standards – B1-B.4
<p style="text-align: center;">Cell Structure and Biochemistry - B.5</p> <ul style="list-style-type: none"> Cellular Complexity - B.5(A), B.5(B), B.5(C) Viruses - B.5(D)
<p style="text-align: center;">Organism Growth and Cell Differentiation - B.6</p> <ul style="list-style-type: none"> Cell Cycle - B.6(A), B.6(C) Cell Differentiation - B.6(B)
<p style="text-align: center;">Mechanisms of Genetics - B.7</p> <ul style="list-style-type: none"> DNA - B.7(A) Gene Expression - B.7(B) Mutations - B.7(C) Molecular Technologies - B.7(D)
<p style="text-align: center;">Heredity and Diversity - B.8</p> <ul style="list-style-type: none"> Genetic Diversity - B.8(A), B.8(B)
<p style="text-align: center;">Evolutionary Theory - B.9</p> <ul style="list-style-type: none"> Evolution - B.9(A), B.9(B)
<p style="text-align: center;">Evolutionary Mechanisms - B.10</p> <ul style="list-style-type: none"> Natural Selection - B.10(A), B.10(B), B.10(C) Nonadaptive Mechanisms - B.10(D)
<p style="text-align: center;">Energy Conversions in Organisms - B.11</p> <ul style="list-style-type: none"> Cellular Respiration - B.11(A), B.11(B) Photosynthesis - B.11(A)
<p style="text-align: center;">Interactions Among Biological Systems - B.12</p> <ul style="list-style-type: none"> Animal Structure and Function - B.12(A) Plant Structure and Function - B.12(B)
<p style="text-align: center;">Interdependence and Ecosystem Stability - B.13</p> <ul style="list-style-type: none"> Ecosystem Stability - B.13(A), B.13(B), B.13(C), B.13(D)

Chemistry
Process Standards - C1.-C.4
<p style="text-align: center;">The Periodic Table - C.5</p> <ul style="list-style-type: none"> Periodic Properties - C.5(A), C.5(B) Periodic Trends - C.5(C)
<p style="text-align: center;">Atomic Theory - C.6</p> <ul style="list-style-type: none"> Atomic Theory - C.6(A) Atomic Structure - C.6(B), C.6(D), C.6(E) Atomic Properties - C.6(C)
<p style="text-align: center;">Chemical Bonds - C.7</p> <ul style="list-style-type: none"> Intramolecular Bonds - C.7(A) C.7(C) Intramolecular Forces - C.7(D) Chemical Nomenclature - C.7(B)
<p style="text-align: center;">The Mole - C.8</p> <ul style="list-style-type: none"> Mole Concept - C.8(A), C.8(B), C.8(C), C.8(D)
<p style="text-align: center;">Chemical Equations - C.9</p> <ul style="list-style-type: none"> Stoichiometry - C.9(C), C.9(D) Mass Conservation and Reactions - C.9(A), C.9(B)
<p style="text-align: center;">Principles of Gases - C.10</p> <ul style="list-style-type: none"> Principles of Gases - C.10(A), C.10(B), C.10(C)
<p style="text-align: center;">Solutions - C.11</p> <ul style="list-style-type: none"> Solutions - C.11(A), C.11(B) Solubility - C.11(C), C.11(D) Molar Concentration - C.11(E), C.11(F)
<p style="text-align: center;">Acids and Bases - C.12</p> <ul style="list-style-type: none"> Chemical Nomenclature - C.12(A) Chemical Properties – C.12(B), C.12(C), C.12(E) Chemical Changes - C.12(D)
<p style="text-align: center;">Thermochemistry - C.13</p> <ul style="list-style-type: none"> Thermodynamics - C.13(A) Heat Calculations - C.13(B), C.13(C), C.13(D)
<p style="text-align: center;">Nuclear Chemistry - C.14</p> <ul style="list-style-type: none"> Nuclear Reactions - C.14(A), C.14(B), C.14(C)

Physics
Process Standards - P1.-P4
<p style="text-align: center;">Mechanics - P.5</p> <ul style="list-style-type: none"> Analyzing Motion - P.5(A), P.5(B), P.5(C), P.5(D) Force Interactions - P.5(E), P.5(F) P.5(G) Newton’s Law of Universal Gravitation - P.5(H)
<p style="text-align: center;">The Nature of Forces - P.6</p> <ul style="list-style-type: none"> Electric and Magnetic Forces - P.6(A), P.6(B) Conservation of Charge - P.6(C) Electric Circuits - P.6(D), P.6(E)
<p style="text-align: center;">Law of Conservation of Energy and Momentum - P.7</p> <ul style="list-style-type: none"> Work and Power - P.7(A) Mechanical, Potential, and Kinetic Energy - P.7(B) Conservation of Energy - P.7(C) Momentum - P.7(D), P.7(E)
<p style="text-align: center;">Characteristics and Behavior of Waves - P.8</p> <ul style="list-style-type: none"> Behavior of Waves - P.8(A), P.8(D) Characteristics of Waves - P.8(C) Transverse and Longitudinal Waves - P.8(B) Electromagnetic Spectrum - P.8(E), P.8(F), Image Formation - P.8(G)
<p style="text-align: center;">Quantum Phenomena - P.9</p> <ul style="list-style-type: none"> Nature of Light- P.9(A), P.9(C) Malus’s Law - P.9(B) Quantum Phenomena - P.9(D)