

Grade 2 Science Curriculum

Unit 1: Matter	Unit 2: Role of Water on Earth
<p>PS1.A: Structure and Properties of Matter</p> <ul style="list-style-type: none"> ▪ Different kinds of matter exist and many of them can be either solid or liquid, depending on temperature. Matter can be described and classified by its observable properties. (2-PS1-1) ▪ Different properties are suited to different purposes. (2-PS1-2),(2-PS1-3) ▪ A great variety of objects can be built up from a small set of pieces. (2-PS1-3) <p>PS1.B: Chemical Reactions</p> <ul style="list-style-type: none"> ▪ Heating or cooling a substance may cause changes that can be observed. Sometimes these changes are reversible, and sometimes they are not. (2-PS1-4) 	<p>ESS2.C: The Roles of Water in Earth’s Surface Processes</p> <ul style="list-style-type: none"> ▪ Water is found in the ocean, rivers, lakes, and ponds. Water exists as solid ice and in liquid form. (2-ESS2-3) <p>ESS2.B: Plate Tectonics and Large-Scale System Interactions</p> <ul style="list-style-type: none"> ▪ Maps show where things are located. One can map the shapes and kinds of land and water in any area. (2-ESS2-2)
Unit 3: Wind, Water & Land	Unit 4: Changing of Earth
<p>ESS2.A: Earth Materials and Systems</p> <ul style="list-style-type: none"> ▪ Wind and water can change the shape of the land. (2-ESS2-1) <p>ETS1.C: Optimizing the Design Solution</p> <ul style="list-style-type: none"> ▪ Because there is always more than one possible solution to a problem, it is useful to compare and test designs. (secondary to 2-ESS2-1) 	<p>ESS1.C: The History of Planet Earth</p> <ul style="list-style-type: none"> ▪ Some events happen very quickly; others occur very slowly, over a time period much longer than one can observe. (2-ESS1-1)
Unit 5: Biodiversity & Humans	Unit 6: Plants
<p>LS4.D: Biodiversity and Humans</p> <ul style="list-style-type: none"> ▪ There are many different kinds of living things in any area, and they exist in different places on land and in water. (2-LS4-1) 	<p>LS2.A: Interdependent Relationships in Ecosystems</p> <ul style="list-style-type: none"> ▪ 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) <p>ETS1.B: Developing Possible Solutions</p> <ul style="list-style-type: none"> ▪ Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem’s solutions to other people. (secondary to 2-LS2-2)
Unit 7: Matter	Unit 8: Ecosystem Dynamics
<p>PS1.A: Structure and Properties of Matter</p> <ul style="list-style-type: none"> • Different kinds of matter exist (e.g., wood, metal, water) and many of them can be either solid or liquid, depending on temperature. (K-PS1-a),(K-PS1-b) • Matter can be described and classified by its observable properties (e.g., visual, aural, textural), by its uses, and by whether it occurs naturally or is manufactured. (K-PS1-a),(K-PS1-c) • Different properties are suited to different purposes. (2-PS1-a) • A great variety of objects can be built up from a small set of pieces (e.g., blocks, construction sets). (2-PS1-b) • Objects or samples of a substance can be weighed, and their size can be described and measured. (Boundary: volume is introduced only for liquid measure.) (2-PS1-c) 	<p>LS2.A: Interdependent Relationships in Ecosystems</p> <ul style="list-style-type: none"> ▪ 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. (5-LS2-1)