

# K - 6 Science Standards Alignment

## Kindergarten:

Life Science, 2.a - Students know how to observe and understand that there are different types of plants and animals.

Earth Science, 3.a - Students know characteristics of mountains, foothills, rivers, streams, oceans, valleys and deserts.

## First Grade:

Life Science, 2.a,b,c,d,e - Students know different plants and animals inhabit different kinds of environments and have unique external features to help them survive. Plants and animals both need water; however, animals need food and plants need light. Animals eat plants or other animals for food. Students will infer what animals eat from the shape of their teeth (sharp teeth: meat eaters, flat teeth: plant eaters). They may also use plants or even other animals for shelter and nesting. Plants use their roots to intake water and nutrients from the soil. The green leaves of plants make food from sunlight.

Earth Science, 3.c - Students know that the sun warms the land, air, and water.

## Second Grade:

Life Science, 2.a,d,e,f - Students know that plants and animals reproduce offspring of their own kind and that the offspring resemble their parents and others of their species. In addition, students know there are variations within some plant and animal groups. Plants and animals can encounter environmental stress such as the following: human interaction/interference, drought, fire, and floods that affect their germination, growth, and development.

Earth Science, 3.a,b,c,e - Students know how to compare the physical properties of different kinds of rocks and know that rocks are composed of different combinations of minerals. Furthermore, smaller rocks come from the erosion and weathering of larger rocks. These smaller rocks are mixed into the soil, along with organic materials, that result in different soil color, texture, capacity to retain water and the ability to support the growth of plants. Rocks, water, plants and soil provide many natural resources (food, fuel, and building materials) that humans use.

## Third Grade:

Life Science, 3.a,b,c,d - Students know plants and animals have structures that serve different functions in growth, survival, and reproduction. Plants and animals have unique structures to help them adapt and survive different environments, such as oceans, deserts, forests, grasslands, and wetlands. Often, there are changes within these environments that can be both harmful and helpful to plants and animals. Because of these changes, some plants and animals survive and reproduce; others die or move to new locations.

## Fourth Grade:

Life Science, 2.a,b,c - Students know plants are the primary source of matter and energy for most food chains. Producers and consumers (herbivores, carnivores, omnivores, and decomposers) are the next component of the food chains. They compete with each other for resources (food, water, shelter) within their ecosystems. The decomposers consist of fungi, insects, and microorganisms. They recycle matter from dead plants and animals.

Life Science, 3.a,b,c - Students know ecosystems can be characterized by their living and nonliving components. Within any ecosystem, some kinds of plants and animals survive well, some struggle to survive, and some cannot survive at all. In addition, plants depend on animals for pollination and seed dispersal, while animals depend on plants for food and shelter.

Earth Science, 4.a, c - Students know how to differentiate igneous, sedimentary, and metamorphic rocks by referring to their properties and methods of formation (the rock cycle.)

Earth Science, 5.c - Students know moving water erodes landforms, reshaping the land by taking it away from some places and depositing it as pebbles, sand, silt, and mud in other places (weathering, transport, and deposition).

## Fifth Grade:

Earth Science, 3.d,e - Students know that the amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water. Students learn the origins of the local water supply through a study of watershed, creeks, rivers, dams, and reservoirs that serve as its source.

## Sixth Grade:

Earth Science, 2.a,b,c - Students know water run-off is the dominant process in shaping the landscape. Rivers and streams are dynamic systems that erode, transport sediment, change course, and flood their banks in natural and recurring patterns. Rivers are dynamic systems that move sediment along. Later the sediment is moved along the coast, by the action of the waves, to establish beaches.