Chapter 112. Texas Essential Knowledge and Skills for Science Subchapter A. Elementary

§112.2. Science, Kindergarten, Adopted 2017.

- (9) Organisms and environments. The student knows that plants and animals have basic needs and depend on the living and nonliving things around them for survival. The student is expected to:
 - (A) differentiate between living and nonliving things based upon whether they have basic needs and produce offspring; and
 - (B) examine evidence that living organisms have basic needs such as food, water, and shelter for animals and air, water, nutrients, sunlight, and space for plants.
- (10) Organisms and environments. The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments. The student is expected to:
 - (A) sort plants and animals into groups based on physical characteristics such as color, size, body covering, or leaf shape;
 - (B) identify basic parts of plants and animals;

§112.3. Science, Grade 1, Adopted 2017.

- (9) Organisms and environments. The student knows that the living environment is composed of relationships between organisms and the life cycles that occur. The student is expected to:
 - (A) sort and classify living and nonliving things based upon whether they have basic needs and produce offspring;
 - (B) analyze and record examples of interdependence found in various situations such as terrariums and aquariums or pet and caregiver; and
 - (C) gather evidence of interdependence among living organisms such as energy transfer through food chains or animals using plants for shelter.
- (10) Organisms and environments. The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments. The student is expected to:
 - (A) investigate how the external characteristics of an animal are related to where it lives, how it moves, and what it eats;

§112.4. Science, Grade 2, Adopted 2017.

- (9) Organisms and environments. The student knows that living organisms have basic needs that must be met for them to survive within their environment. The student is expected to:
 - (A) identify the basic needs of plants and animals;
 - (B) identify factors in the environment, including temperature and precipitation, that affect growth and behavior such as migration, hibernation, and dormancy of living things; and
 - (C) compare the ways living organisms depend on each other and on their environments such as through food chains.
- (10) Organisms and environments. The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments. The student is expected to:
 - (A) observe, record, and compare how the physical characteristics and behaviors of animals help them meet their basic needs;

§112.5. Science, Grade 3, Adopted 2017.

(9) Organisms and environments. The student knows and can describe patterns, cycles, systems, and relationships within the environments. The student is expected to:

- (A) observe and describe the physical characteristics of environments and how they support populations and communities of plants and animals within an ecosystem;
- (B) identify and describe the flow of energy in a food chain and predict how changes in a food chain affect the ecosystem such as removal of frogs from a pond or bees from a field; and
- (C) describe environmental changes such as floods and droughts where some organisms thrive and others perish or move to new locations.
- (10) Organisms and environments. The student knows that organisms undergo similar life processes and have structures that help them survive within their environments. The student is expected to:
 - (A) explore how structures and functions of plants and animals allow them to survive in a particular environment

§112.6. Science, Grade 4, Adopted 2017.

- (9) Organisms and environments. The student knows and understands that living organisms within an ecosystem interact with one another and with their environment. The student is expected to:
 - (A) investigate that most producers need sunlight, water, and carbon dioxide to make their own food, while consumers are dependent on other organisms for food; and
- (B) describe the flow of energy through food webs, beginning with the Sun, and predict how changes in the ecosystem affect the food web.
- (10) Organisms and environments. The student knows that organisms undergo similar life processes and have structures and behaviors that help them survive within their environment. The student is expected to:
- (A) explore how structures and functions enable organisms to survive in their environment; **§112.7. Science, Grade 5, Adopted 2017.**
- (9) Organisms and environments. The student knows that there are relationships, systems, and cycles within environments. The student is expected to:
 - (A) observe the way organisms live and survive in their ecosystem by interacting with the living and nonliving components;
 - (B) describe the flow of energy within a food web, including the roles of the Sun, producers, consumers, and decomposers;
- (10) Organisms and environments. The student knows that organisms have structures and behaviors that help them survive within their environments. The student is expected to:
 - (A) compare the structures and functions of different species that help them live and survive in a specific environment such as hooves on prairie animals or webbed feet in aquatic animals