

CRM 6 Organisms & Environments

Pacing

- 66 days
- Feb.25-June5
- Weeks 25-38

DESIRED RESULTS

Making Meaning

The study of life sciences looks at patterns, processes, and relationships of living organisms and their environment. Life scientists use observations, experiments, tests, models, theory and technology to investigate life on planet Earth. The study of life science includes investigating the following:

- Organisms interact with each other and with their environment.
- Organisms have basic needs that are met in their environment, or they will not survive.
- Organisms grow, change, and reproduce as adults.
- Individual organisms have structures and behaviors that help them survive.
- Individual organisms inherit traits from generation to generation.

Transfer: Students will use inquiry and work cooperatively to investigate living organisms to build an understanding of basic needs and how organisms interact with other living organisms and non-living elements in their environment. They will communicate and make connections of how inherited traits aid survival and how organisms change over time.

Enduring Understandings:

- All organisms have basic needs to survive.
- Basic needs can be met through interactions with living and nonliving things.
- Organisms have inherited parts that help them meet their needs.
- Organisms change over time.

Essential Questions:

- How do organisms depend on their environment and their structures to survive?
- What changes do organisms go through in their life cycle?
- Why do organisms resemble their parents?

Essential Vocabulary

- abdomen / abdomen
- adult / adulto
- animal / animal
- antenna / antena
- baby / bebé
- basic need / necesidad básica
- body covering/ cubierta del cuerpo
- breathe / respirar
- child / niño(a)
- drink / beber
- eat / comer
- egg / huevo
- feather / pluma
- flower / flor
- fruit/ fruta
- function of: / función de:
- fur / pelo, pelaje
- grow / crecer, cultivar
- habitat / hábitat
- head / cabeza
- insect / insecto
- ladybug / mariquita

- larva / larva
- leaf / hoja
- leg / pierna
- life cycle / ciclo de vida
- living thing/ seres vivo
- nonliving thing/ objetos inerte
- parent / padre, madre,
- plant / plantar, planta
- pupa / crisálida, pupa
- reproduce / reproducir
- root / raíz
- seed / semilla
- seedling / brote, plántula
- shell / concha, caparazón, cáscara
- shelter / refugio
- skin/ piel
- spot / mancha
- sprout / brotar, germinar
- stem / tallo
- sunlight / luz solar
- tail / cola
- thorax / tórax
- tree / árbol
- wing / ala

Supporting Vocabulary Link

- [Elementary School Supporting Vocabulary](#)

Student Prerequisite Knowledge <i>Students should know:</i>		
<ul style="list-style-type: none"> organisms have different characteristics, and these characteristics help them live in their environment. organisms have life cycles. plants and animals have different needs to stay alive. plants and animals grow and change. adult plants and animals have young. 		
Resources: AISD Module Kit, Model Lesson Portfolio, Gems: Ladybugs Investigations , STEMscopes , eBooks: Envisions Science Leveled Readers, Scott Foresman Text, Science Notebook Resources , BrainPop Jr. , Discovery Education , Differentiation Strategies & Resources		
ELPS: Mandated by Texas Administrative Code (19 TAC §74.4), click on the link for English Language Proficiency Standards (ELPS) to support English Language Learners.		
TEKS Knowledge & Skills	Acquisition	
STAAR: RC = Reporting Category; DC = Dual Coded Skills; Readiness Standard ; Supporting Standard Concepts are addressed in another unit.	Students Will Know	Students Will Be Able To
K.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:		
K.9A: differentiate between living and nonliving things based upon whether they have basic needs and produce offspring.	<ul style="list-style-type: none"> Living things have needs and produce offspring. Non-living things help living things meet their needs, but do not have needs. 	<ul style="list-style-type: none"> Identify the living things and the non-living things in an environment.
K.9B: 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.	<ul style="list-style-type: none"> Organisms have basic needs. Plants need air, water, nutrients, sunlight, and space to live. Animals need food, water, and shelter. 	<ul style="list-style-type: none"> Observe and gather evidence to show that organisms have basic needs. Observe organisms in their natural environment.
<ul style="list-style-type: none"> K.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: 		
K.10A: sort plants and animals into groups based on physical characteristics such as color, size, body covering, or leaf shape.	<ul style="list-style-type: none"> Different plants and animals have external characteristics that help them live in different kinds of places. The size and shape of leaves helps them collect large or smaller amounts of sunlight in their habitat. 	<ul style="list-style-type: none"> View pictures or videos of plants and animals from different habitats to determine similar characteristics. Sort pictures of animals into groups with like characteristics. Sort leaves into groups with like characteristics. Sort pictures of plants from different habitats into groups with like characteristics.
K.10B: identify parts of plants such as roots, stem, and leaves and parts of animals such as head, eyes, and limbs.	<ul style="list-style-type: none"> Plants and animals have parts that can be identified and named. Plants and animals have and use parts to help them live in their habitat. 	<ul style="list-style-type: none"> Draw and label plants and their parts. Draw and label animals and their parts. Use pictures to identify plant and animals parts.
K.10C: identify ways that young plants resemble the parent plant.	<ul style="list-style-type: none"> Young animals (offspring) resemble their parents and each other in many ways. Plants and animals are similar to their parents in color, size, and shape. 	<ul style="list-style-type: none"> Identify pictures and match parent and young plants and animals to their parent. Describe how they could identify the parent.
K.10D: observe changes that are part of a simple life cycle of a plant: seed, seedling, plant, flower, and fruit.	<ul style="list-style-type: none"> Know the stages of a simple plant life cycle. Know changes that occur during the life cycle of a plant. 	<ul style="list-style-type: none"> Observe the life cycle of a plant. Describe changes using pictures and/or diagrams.

The study of science is taught through the lens of [Scientific Processes \(TEKS K.1-K.4\)](#); therefore, these TEKS should be taught in conjunction with content throughout the year. Suggestions for TEKS to embed in each unit are provided in the Yearly Itinerary; however, the TEKS that can be addressed within a unit depends greatly on the learning activities in which students are engaged. Therefore, teachers must be deliberate in their choice of learning activities to ensure that all Scientific Processes TEKS are appropriately embedded within the course. In Kindergarten, districts are encouraged to facilitate laboratory and field investigations for at least 80% of instructional time.

ASSESSMENT EVIDENCE

Student Work Products/Assessment Evidence

Performance Tasks	Other Evidence (i.e. unit tests, open ended exams, quiz, essay, student work samples, observations, etc.)
Students investigate the following with hands-on labs and activities: <ul style="list-style-type: none"> • Ladybug observations/lab • Ladybug Symmetry • Ladybug Model • Ladybug Defenses lab • Ladybugs Eat lab • Ladybug habitat lab • Ladybug life cycle activity • Classifying things as living/nonliving • Basic needs labs • Sorting plants and animals into groups • Plant part labs • Plant life cycle observations and stage identification 	Teacher observations and questioning Student Interactive Notebooks and Lab Notes <ul style="list-style-type: none"> • Ladybug lab drawings and words/sentences using stems • Living/nonliving graphic organizer with picture sort • Habitat drawings • Life cycle digital pictures, drawings, and/or labeled graphics • Graphic organizer of basic needs (plants and animals) • Sorting plants and animals pictures • Plant part labeled diagram • Plant life cycle labeled diagram

LESSON PLANNING TOOLS

In the course of lesson planning, it is the expectation that teachers will include whole child considerations when planning such as differentiation, special education, English language learning, dual language, gifted and talented, social emotional learning, physical activity, and wellness.

Model Lesson- [Living and Non-Living](#)

- Living and Non-Living Things
- Suggested Pacing: (10 days)
TEKS: K.9A

Model Lesson- [Basic Needs](#)

- Plants Have Basic Needs
 - Animals Have Basic Needs
- Suggested Pacing (9 days)
TEKS: K.9B

Model Lesson- [Plant Characteristics](#)

- Observing and Describing Plants
 - Observing Plant Parts
- Suggested Pacing: (5 days)
TEKS: K.10A, K.10B

Model Lesson- [Inherited Traits and Life Cycle of Plants](#)

- Plants Look Like Their Parents
 - Plants Grow and Change
- Suggested Pacing: (10 days)
TEKS: K.10C, K.10D

Model Lesson- [Ladybugs](#)

- GEMS, Ladybugs, Lessons 1-5
- Suggested Pacing: (15 days)
TEKS: K.9A, K.10A, K.10B

Model Lesson- [Animal Characteristics](#)

- Observing and Describing Animals
 - Observing Animals Parts
- Suggested Pacing: (10 days)
TEKS: K.10A, K.10B

Model Lesson- [Health Lessons](#)

Suggested Pacing: (7 days)
TEKS: HE.K.8A, HE.K.8B, HEK.8C, HE.K.9A, HE.K.9B