Unit:Science-5.1

Content Area: **Science**
Course(s):
Time Period: **Trimester 1**
Length: **Ongoing**
Status: **Published**

Brief Summary of Unit

Students will start to develop inquiry skills. They will explore their environment and problem solve using their five senses.

In this course, students are provided with opportunities to develop skills that pertain to a variety of careers. When completing this course, students can make informed choices and pursue electives that further their study and contribute toward the formation of career interest.

Standards

The standards in this unit reflect a developmental progression across grades/ levels and make interdisciplinary connections across content areas including social sciences, technology, career readiness, cultural awareness and global citizenship.

MA.K-12.1: Make sense of problems and persevere in solving them.

MA.K-12.5: Use appropriate tools strategically.

LA.RST.6-8.3: Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

AL.PK.9.3.3	Predict what will happen next based on prior experience and knowledge and test the prediction for accuracy (e.g., raising the height of the ramp to see if the ball will roll farther than when the ramp was lower).
SCI.PK.5.1	Children develop inquiry skills.
SCI.PK.5.1.1	Display curiosity about science objects, materials, activities, and longer-term investigations in progress (e.g., ask who, what, when, where, why, and how questions during sensory explorations, experimentation, and focused inquiry).
SCI.PK.5.1.2	Observe, question, predict, and investigate materials, objects, and phenomena during classroom activities indoors and outdoors and during any longer-term investigations in progress. Seek answers to questions and test predictions using simple experiments or research media (e.g., cracking a nut to look inside; putting a toy car in water to determine whether it sinks).
SCI.PK.5.1.3	Use basic science terms (e.g., observe, predict, experiment) and topic-related science vocabulary (e.g., words related to living things [fur, fins, feathers, beak, bark, trunk, stem]; weather terms [breezy, mild, cloudy, hurricane, shower, temperature]; vocabulary related to simple machines [wheel, pulley, lever, screw, inclined plane]; words for states of matter

	[solid, liquid]; names of basic tools [hammer, screwdriver, awl, binoculars, stethoscope, magnifier]).
SCI.PK.5.1.4	Communicate with other children and adults to share observations, pursue questions, make predictions, and/or conclusions.
SCI.PK.5.1.5	Represent observations and work through drawing, recording data, and "writing" (e.g., drawing and "writing" on observation clipboards, making rubbings, charting the growth of plants).

Transfer

Essential Questions

- How can I solve problems?
- What can I do when I don't understand something?

Essential Understandings

- They can observe the things around them
- They can try to solve problems on their own

Students Will Know

- Problems can be solved through further exploration and learning
- They use their senses to explore the environment

Students Will Be Skilled At

- Asking questions about things in the environment they don't understand
- Exploring things using all their senses

Evidence/Performance Tasks

This course is designed to promote skill attainment. Student progression and pace through which they proceed through the performance tasks is based on their affinity for and ability to reach skill attainment. The teacher will determine formative and summative skill attainment; alternative assessments will be incorporated for each student based on their strengths and challenges.

- Children will ask questions about things in their environment that they may not understand
- Children will work with teacher and peers to explore possible answers about the way something works

Learning Plan

- Ask children to make observations about their natural environment
- Create charts recordings observations, questions, and predictions
- Provide materials that encourage children in independent exploration (e.g. nature hunt and collect acorns, leaves, pine cones, etc; sand table, water table, measuring tools)
- Teachers will encourage and facilitate children's natural curiosity
- Teachers will support efforts made by students to solve problems

Materials

The materials used in this course allow for integration of a variety of instructional, supplemental, and intervention materials that support student learners at all levels in the school and home environments. In addition to the materials below, the link connects to district approved textbooks and resources utilized in this course: CORE BOOK LIST

- Classroom chart paper for creating observation charts
- Magnifying glasses, collection baskets for nature walks
- Water table, sand table, measuring tools

Suggested Strategies for Modifications

This link includes content specific accommodations and modifications for all populations:

https://docs.google.com/spreadsheets/d/1vp4_sVkiJIcevefjdpDEpUQYy5Jja39vzPvk-fFJrjE/edit

- Allow for extra time and practice
- Incorporate multi-sensory strategies
- Provide 1:1 time and assistance
- Repeat directions and provide multiple examples
- Use visuals