**Dear Kindergarten Science Teacher:**

The goal of the North Carolina Science Standard Course of Study (NC SCoS) is to achieve scientific literacy. The Kindergarten Science Pacing Guide includes **Essential Standards and Clarifying Objectives** from *life, physical and earth sciences*. These standards engage students in developing problem-solving and critical thinking skills that empower them to participate in an increasingly scientific and technological world.

**Kindergarteners Value Science Best When...**

➢ Science is taught *daily* (30 to 45 minutes).

➢ Learning opportunities develop understandings and skills for

problem-solving in real-world scientific and technological concepts.

➢ The collaborative scientific contributions of individuals from all

ethnic origins are recognized and valued.

➢ Math and reading skills are infused into science.

➢ *Inquiry skills* and positive attitudes are modeled by the teacher

and others involved in the education process.

➢ A *variety of presentation modes* are used to accommodate different

learning styles; students are given opportunities to interact and share ideas and collaborate with their peers.

**Kindergarteners Learn Science Best When...**

✓ Involved in first-hand exploration & investigation and inquiry/processing skills are nurtured.

✓ Instruction builds directly on student' conceptual background.

✓ Science content is organized on the basis of broad conceptual themes

common to all science disciplines.

✓ Mathematics and communication skills are an integral part of science

instruction.

✓ Learning environment fosters positive attitudes towards self and

society, as well as science.

**Suggested Instructional Model: (I Do; We Do; You Do)**

▪ **I Do: Engage** --Introduce science concept and connect to student's'

prior knowledge; revealing any misconceptions.

▪ **We Do: Explore** --Provide an opportunity for observations and

questioning prior to teacher's explaining of concepts.

▪ **I Do**: **Explain/Elaborate** -- Provide a clear, concise description of new

concept; include labels & essential vocabulary; integrate video clip.

Demonstrate the concept and/or process using visual models,

technology, and text

▪ **We Do: Evaluate** --Assess Hands-on/Minds-on practice through

guided practice

▪ **You Do: Evaluate—**Determine students' overall understanding of

concepts and their progress made towards learning the science

objectives.



2018-2019 Curriculum & Instruction Support Team

**Halifax County Schools: Science Essential Standards Pacing Guide** **Revised June 30, 2018** Kinderga

At-a-Glance NC Wiki: http://www.livebinders.com/play/play_or_edit/217643

**Forces and Motion Earth Systems, Structures and Processes Understand the positions and motions o**

**organisms observed in the environment.** **Quarters** **Understand change and observable patterns of we**

**that occur from day to day and throughout the year.** **Quarters** K.P.1.1 Compare the relative position of various obje

observed in the classroom and outside using position words such as: in front of, behind, between, on top of, under, above, below

X 2 X X K.E.1.1 Infer that change is something that happens to many things in the environment based on observations made usin

their senses.

1 X X X

K.P.1.2 Give examples of different ways objects and organisms move (to include falling to the ground when dropped)

- Straight
- Zigzag
- Round and round
- Fast and slow
- Back and forth

X 2 X X K.E.1.2 Summarize daily weather conditions noting changes that

occur from day to day and throughout the year. 1 X X X

K.E.1.3 Compare weather patterns that occur from season to season. 1 X X X

**Property of Matter Structures and Functions of Living Organisms Understand how objects are describe**

**their physical properties and how they are used.** **Quarters** **Compare characteristics of animals that m**

**alike**

**and different from other animals and nonliving things.** **Quarters** K.P.2.1 Classify objects by observable physical p

(including size, color, shape, texture, weight and flexibility).

X X 3 X K.L.1.1 Compare different types of the same animal (i.e. different

types of dogs, different types of cats, etc.) to determine individual differences within a particular type of animal.

X X X 4

K.P.2.2 Compare the observable physical properties of

different kinds of materials (clay, wood, cloth, paper, etc) from which objects are made and how they are used.

X X 3 X K.L.1.2 Compare characteristics of living and nonliving things
in terms of their:
– Structure – Growth – Movement – Basic needs – Changes
X X X 4
**Note:** The science and engineering practices listed below are to be integrated in daily lesson activities as often
**Science and Engineering Practices:** 1. Asking questions and defining problems 2. Developing and using mod
Planning and carrying out investigations 4. Analyzing and interpreting data 5. Using mathematics and computat
6. Constructing explanations and designing solutions 7. Engaging in argument from evidence 8. Obtaining, eval
communicating information