Bok Academy North Comprehensive Science 3 (2002100)/ 2020-2021

Comprehensive Science 3 ADVANCED (2002110)

**Nature of Science standards are to be woven throughout all lessons.

5 Question Reviews Daily.**

Students will be actively engaged in the following ways:

- •Quantitative and qualitative observations
- Investigation of thoughtful questions
- Design and conduct experiments and other types of investigations
- · Collect and organize data
- · Make logical predictions and offer reasonable explanations
- Explore possible conclusions
- · Communicate their understanding

CPALMS STUDENT TUTORIALS, RESOURCES,

BREAKDOWN OF STANDARDS

Semester 1

Week 1: Classroom Environment and Culture Building:

Unit 1

Nature of Science SC.8.N.1.1, SC.7.N.1.3, SC.7.N.1.2, SC.7.N.1.5, SC.6.N.2.2,

<u>Lab Safety and Inquiry:</u> SC.8.N.1.1. (2 Weeks and Throughout the Year)

All students must read through lab safety rules and obtain a signed permission slip. Beginning labs start with inquiry, how to keep a proper notebook, and expectations of labs. Intro: Scientific Experiments. Scientific Knowledge.

PROGRESS MONITORING WINDOW

Unit 2 Earth & Space Science

(4 Weeks plus review)

The Objects in Our Solar System SC.8.E.5.7

The Effects of Earth's Moon on Earth SC.8.5.9 Relative Positions of

the Sun, Earth, and Moon SC.8.E.5.9

Properties of Stars SC.8.E.5.5

Understanding Distances in Space SC.8.E.5.3

Unit 3 Earth & Space Science

(4 Weeks plus Review)

Theories of Earth's Evolution SC.7.E.6.4

Theory of Plate Tectonics SC.7.E.6.5, Plate Tectonics SC.7.6.2

Earth's Spheres SC.6.E.7.4

Heat Transfer, Convection, Conduction, Radiation and the Sun's Influence SC.6.E.7.5

Unit 3 Physical Science

(6 weeks plus review)

Density SC.8.P.8.4

The Periodic Table of Elements SC.8.P. 8.6

PROGRESS MONITORING WINDOW

Winter Break

Semester 2

Common Compounds SC.8.P.8.5

Identifying Mixtures SC.8.P.8.4

Comparing Physical and Chemical Changes SC.8.P.9.2

The Law of Conservation of Mass SC.8.P.9.1

Temperature and Changes in Matter

SC.8.P.8.1, SC.8.P.9.2

Acids, Bases, and Salts SC.8.P.8.8

Unit 4 Physical Science

(4 Weeks plus review)

Forms of Energy SC.7.P.10.3,

Energy Transfer and Transformations SC.7.P.11.2

Law of Conservation of Energy SC.6.P.11.1, SC.7.P.11.3

Heat Flow SC.7.P.11.4,

Friction, Gravitational Force SC.6.P.13.1

Balanced/Unbalanced Forces SC.6.P.13.3

Unit 5 Life

(6 Weeks plus review)

Chemical Changes and Balance in Living Systems SC.8.L.18.4 Structural Organization SC.6.L.14.1

Cell Theory SC.6.L.14.2

Structure and Function of Organelles SC.6.L.14.4

Major Systems of the Body SC.6.L.14.5

Theory of Evolution SC.7.L.15.2, SC.7.L.15.1

Hereditary Information SC.7.L.16.1

Relationships Among Organisms SC.7.L.17.2

CPALMS STUDENT TUTORIALS

Mini Lesson Reviews of Life Science

Mini Lesson Reviews of Physical Science

Mini Lesson Reviews of Nature of Science

Mini Lesson Reviews of Earth Science

Datafolios

PROGRESS MONITORING WINDOW