

Elementary Science

Kindergarten

“... all things denote there is a God; yea, even the earth, and all things that are upon the face of it, yea, and its motion, yea, and also all the planets which move in their regular form do witness that there is a Supreme Creator.”

~Alma 30:44

Course Description

In this course, students will learn about:

- Zoology – invertebrates and vertebrates with a focus on insects, worms, mammals, reptiles, amphibians, fish, and birds.
- Astronomy - an introduction to the sun, moon, stars, and planets.
- Physics – an introduction through experiences with magnets, force and motion, chemistry, and the states of matter.
- Anatomy – a look at the systems of our bodies (skeletal, muscular, circulatory, respiratory, digestion, and nervous) and being good stewards of our bodies.
- Botany – an introduction to plants with a focus on their roots, stem, leaves, flowers, and seeds.

Course Objectives

Students will demonstrate their understanding of the science curriculum through participating in class instruction and completing the following tasks:

- Students will be able to compare and contrast animals, distinguishing between vertebrates and invertebrates.
- Students will be able to classify animals into families by physical attributes.
- Students will be able to describe the basic workings of the solar system, including explaining why the earth is the “just right” place for us to live.
- Students will use the scientific method to explore force and motion, chemistry, and magnets.
- Students will describe the three states of matter.
- Students will describe the purposes of the major body systems.
- Students will describe how to be good stewards of their bodies.
- Students will grow plants and make observations to discover the purpose of roots, stems, leaves, flowers, and seeds.

Course Texts

The following titles are books used within lessons in the curriculum.

Title	Author	ISBN	Annotation
<i>The Skeleton Inside You</i>	Philip Balestrino		A “Let’s Read-and-find-out” book that will be used in our study of anatomy and physiology.
Frog and Toad Together	Arnold Lobel		The story “The Garden” will be used.
God’s World	A Beka Book Science Series for Kindergarten		Parts of this text will be used in various lessons.

Course Assignments

The assignments consist of notebook pages, experiments or activities (referred to as “labs”), and memorizations.

Notebook Pages

Your child’s Notebook is not just an organized compilation of assignments; rather, it is a product of his/her creativity, insights, and progress. It is a permanent record of the researching, reasoning, relating, and recording that causes him/her to become an “active producer” rather than a “passive consumer.” The assignments in Elementary Science are designed to guide students on this journey.

Labs

The lab activities are hands-on explorations of the topic being studied which could be in the form of an experiment, an observation and explanation, or a partner activity.

Memorizations

In this course students will memorize and recite the following scriptures:

Zoology: “And I, God, made the beasts of the earth after their kind, . . . and everything which creepeth upon the earth after his kind; and I, God, saw that all these things were good.” ~ Moses 2:25

Astronomy: “The heavens declare the glory of God; and the firmament showeth his handiworks.” ~ Psalms 19:1

Physics: “Let all things be done decently and in order.” ~ 1 Corinthians 14:40

Anatomy/Physiology: “What? Know ye not that your body is the temple of the Holy Ghost which is in you... and ye are not your own? ~1 Corinthians 6:19

Botany: "... every seed bringeth forth unto its own likeness." ~Alma 32:31

Grading: Point Breakdown

Grading at the Kindergarten level is based upon participation as well as Notebook work, Labs, and memorizations. Grades will be given as follows:

Participation	5 Points	(total of 31 lessons = 155 points)
Notebook Assignment / Lab	5 Points	(total of 31 assignments = 155 points)
Unit Memorizations	10 Points	(total of 5 scriptures = 50 points)

(NOTE: Kindergarten Science meets on Mondays. There are holidays on four Mondays during the school year; we will meet 31 times for Science rather than 35.)

TOTAL 360 Points Possible

If your child misses a science class, an alternative assignment will be provided, and your child will have one week to complete it.

Grading Rubric:

Participation	5	Actively participates, asks questions, is focused.	1	Minimal focus and attentiveness to lesson
Notebook		Work is done neatly, carefully, and shows thought.		Work is done sloppily and lacks neatness or thought.
Lab		Actively participates, asks questions, is focused.		Minimal focus and attentiveness to lesson
Memorizations	10	Scripture is recited with confidence and with no help.	1	Scripture is not memorized at all.

Grading: Scale

- EP = Excellent (100-90%)
- CP = Consistent Progress (89-80%)
- SP = Slow Progress (79-70%)
- LP = Limited Progress (69-60%)

NP = Not Passing (59-0%)

* = With Special Accommodation

Self-Government Grade

O = Outstanding

- Demonstrates exceptional effort and work ethic; and
- Makes significant or frequent contributions to the class; and
- Completes and submits all in-class and homework assignments on time, unless otherwise excused by the instructor; and
- Does not require more than one warning from faculty or administration to improve specifically identified misbehavior.

G = Good

- Demonstrates good effort and work ethic; and
- Makes occasional contributions to the class; and
- Completes and submits most in-class and homework assignments on time; and
- Generally does not require more than two (but occasionally more) warnings from faculty or administration to improve specifically identified misbehavior.

MS = Minimum Standard

- Demonstrates a minimal level of effort and work ethic; and
- Makes very few contributions to the class; and
- Submits most in-class and homework assignments, but not in a complete or timely way; and
- Requires multiple warnings from faculty or administration to improve specifically identified misbehavior.

BM = Below Minimum Standard

- Demonstrates an unacceptable level of effort and work ethic; or
- Does not contribute to the class; or
- Consistently neglects to submit in-class or homework assignments.

Strategies for Success

Each week a “Science News” newsletter is emailed to all parents who have an email address in the school email system. The newsletter includes information about what we are learning in class, assignments your child has, and enrichment opportunities to expand your child’s science learning experience. This information will help you ask your child specific questions about what he/she is learning in Science. To help your child be successful in Science, please take time to read the “Science News” each week.

Instructor Contact Information

Nancy Willis
801-319-5372
nwillis@ahsmaail.com

Instructor Bio

Mrs. Willis has over 25 years of experience teaching kindergarten through fourth grade children. She grew up in Provo where she attended Brigham Young University and graduated with a bachelor's in Elementary Education. After serving an LDS mission and teaching for three years in Utah she and her husband moved to Alaska where she lived for the next 24 years until moving back to Utah in August of 2008. She has taught Kindergarten for two years at American Heritage School and began teaching Elementary Science in the fall of 2010. In Alaska, Mrs. Willis taught for 20 years in public schools. While there, Mrs. Willis also completed a Masters degree in Educational Leadership and spent two years as an Elementary School principal. After retiring, she volunteered with the Alaska PTA, taught piano lessons, and home-schooled her youngest child. She and her husband have eight children and three grand children. In her spare time, Mrs. Willis enjoys spending time with her family, going for walks, playing games, reading, doing family history research, baking, and playing and listening to music, and traveling. During her years in the classroom, Mrs. Willis taught science curriculum to all of her classes as there were no science specialists in elementary public schools. Over the years she has helped her own children raise a variety of pets, including dogs, cats, guinea pigs, hamsters, gerbils, birds, fish, a rabbit, and snakes. She has a love of nature and a deep love and appreciation for its Creator. "I am grateful for the opportunity to share my love of learning and the wonders of God's creations with the children in the K-4 science classes at American Heritage."