

Wyoming Department of Education Required Virtual Education Course Syllabus

BIG HORN COUNTY SCHOOL DISTRICT #1

Program Name	WYCA	Content Area	Science
Course ID	CAEL61610	Grade Level	1
Course Name	Science 1 A	# of Credits	0.5
SCED Code	NoCourseSCED	Curriculum Type	Connections Academy

COURSE DESCRIPTION

Science provides a way for people to actively learn about the world around them. Throughout this course, the student will perform hands-on activities to explore organisms and habitats and examine the composition of Earth. The McGraw-Hill textbook Science: A Closer Look and the science kit are the primary resources for this course. The life science units explore how plants and animals grow and change. The Earth science units analyze Earth's land and resources, as well as how to care for Earth. The student will also explore the scientific method and different careers in science.

In this course, the student will investigate how sunlight affects leaves, design an experiment to discover what plants need to survive, create a model of a mountain, and delve into many more exciting experiments. The lessons in this course are designed to accommodate a variety of learning styles and to provide a variety of opportunities for the entire family to participate in the student's education. Some lessons, or groups of lessons, in each unit are activity-centered, which allows the student to engage the new concepts through exploration and discovery; others are more traditional, requiring the student to read, research, and reflect on the underlying theory.

WYOMING CONTENT AND PERFORMANCE STANDARDS

STANDARD#	BENCHMARK
1-PS4-1	Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.
1-PS4-2	Make observations to construct an evidence-based account that objects in darkness can be seen only when illuminated.
1-PS4-3	Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light.
1-PS4-4	Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.
1-LS1-1	Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.
1-LS1-2	Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.
1-LS3-1	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.
1-ESS1-1	Use observations of the sun, moon, and stars to describe patterns that can be predicted.
1-ESS1-2	Make observations at different times of year to relate the amount of daylight to the time of year.

SCOPE AND SEQUENCE

UNIT OUTLINE	STANDARD#	OUTCOMES
<p>Unit 1: Be a Scientist In this introductory unit, your student will learn about scientists and what they do. He will study the basic steps of the scientific method, and he will learn why it is important for scientists to be careful during experiments.</p>		<ul style="list-style-type: none"> Identify basic science skills Describe the scientific method Explain why science safety is important
<p>Unit 2: Plants are Living things In this unit, your student will learn about plants. She will find out what plants need to live and grow, and she will compare different plants and their parts. Your student will also complete a hands-on activity that requires her to make observations of a plant.</p>	1-LS1-2., 1-LS3-1., 1-LS1-2, 1-LS3-1, 1-PS4-2	<ul style="list-style-type: none"> Identify living and nonliving things Describe plant parts Compare different plants

<p>Unit 3: Plants Grow and Change In this unit, your student will learn how plants grow and change. He will explore flowers, fruits, and seeds, and he will learn how plants are able to survive in different places of the world. Your student will also complete a hands-on activity to explore how sunlight affects a</p>	<p>1-LS1-1., 1-PS4-1, 1-PS4-3, 1-ESS1-2, 1-LS3-1, 1-PS4-2, 1-PS4-4, 1-LS1-1, 1-ESS1-1</p>	<ul style="list-style-type: none"> • Compare flowers, fruits, and seeds • Describe plant life cycles • Identify desert, forest, and arctic environments
<p>Unit 4: All About Animals In this unit, your student will learn about animals. She will explore different kinds of animals, and how they eat, grow, and change throughout their lifetime. Your student will also complete an activity on animal comparison.</p>	<p>1-LS1-2., 1-LS3-1., 1-ESS1-2, 1-LS3-1, 1-PS4-2, 1-ESS1-1</p>	<ul style="list-style-type: none"> • Explain how different animals survive • Describe what animals eat • Identify animal life cycles
<p>Unit 5: Places to Live In this unit, your student will learn about habitats. He will explore land and water habitats, and he will find out how plants and animals live together in different habitats. Your student will also practice his communication skills when learning about desert</p>	<p>1-ESS1-1</p>	<ul style="list-style-type: none"> • Describe land habitats • Describe water habitats • Explain how plants and animals can live in the same habitat
<p>Unit 6: Looking at Earth In this unit, your student will learn about landforms on Earth. She will learn what different landforms look like, and she will explore characteristics of rocks and soil. Your student will also complete a hands-on activity</p>		<ul style="list-style-type: none"> • Identify different landforms • Classify rocks and soil • Explain weathering and erosion
<p>Unit 7: Caring for Earth In this unit, your student will learn about Earth's resources. He will explore what natural resources are, how people use them, and how they can be protected by reducing, reusing, and recycling. Your student will also complete an investigation to find out how much water soil can hold.</p>		<ul style="list-style-type: none"> • Define natural resources • Explain how people use natural resources • Explain the importance of reducing, reusing, and recycling