

Wyoming Department of Education Required Virtual Education Course Syllabus

BIG HORN COUNTY SCHOOL DISTRICT #1

Program Name	WYCA	Content Area	Science
Course ID	CAEL61611	Grade Level	1
Course Name	Science 1 B	# 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 Earth science units explore the seasons and the solar system. The physical science units investigate changes in matter and energy. The student will also explore the scientific method and different careers in science.

In this course, the student will investigate which liquids flow faster, how water can change from a liquid to a gas, create a weather chart, 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: Weather and Seasons In this unit, your student will learn about weather and seasons. He will identify different weather conditions, and he will describe common weather during winter, spring, summer, and fall. Your student will also complete a hands-on activity to explore different types of weather throughout a week.</p>	1-PS4-1, 1-PS4-3, 1-ESS1-2, 1-PS4-4, 1-LS1-1, 1-ESS1-1	<ul style="list-style-type: none"> Identify weather conditions Explain how clouds form Describe weather conditions during different seasons
<p>Unit 2: The Sky In this unit, your student will learn about Earth and the solar system. She will study the movements of Earth, the moon, and the sun, and she will learn why the sun is important to living things. Your student will also complete an activity in which she will record data about the sun at different times of day.</p>	1-ESS1-1., 1-ESS1-2., 1-PS4-1, 1-PS4-3, 1-ESS1-2, 1-LS1-2, 1-PS4-4, 1-LS1-1	<ul style="list-style-type: none"> Explain why living things need the sun Describe the movement of Earth, the moon, and the sun Explain the movement of the planets
<p>Unit 3: Matter Everywhere In this unit, your student will learn about matter. He will come to understand that all things are made of matter, and he will identify properties of solids, liquids, and gases. Your student will also practice measuring objects using standard and nonstandard units.</p>		<ul style="list-style-type: none"> Describe the properties of matter Identify solids, liquids, and gases Explain why everything is made of matter

<p>Unit 4: Changes in Matter In this unit, your student will learn about changes in matter. She will learn how to make mixtures, and she will explore the processes of freezing, melting, and evaporation. Your student will observe evaporation as it occurs.</p>	<p>1-PS4-1, 1-PS4-3, 1-PS4-4, 1-LS1-1</p>	<ul style="list-style-type: none"> • Explain how mixtures form • Describe how heat changes matter • Define freezing, melting, and evaporation
<p>Unit 5: On the Move In this unit, your student will learn about position and motion. He will identify pushes and pulls as forces, and he will explain why magnets attract magnetic objects. Your student will also investigate how quickly different liquids flow.</p>		<ul style="list-style-type: none"> • Explain position and motion • Identify different forces • Describe the properties of magnets
<p>Unit 6: Energy Everywhere In this unit, your student will learn about energy. She will study energy in different forms, such as heat, sound, and electricity. Your student will also complete an investigation about heat energy.</p>	<p>1-PS4-1., 1-PS4-2., 1-PS4-3., 1-PS4-4.</p>	<ul style="list-style-type: none"> • Describe different sources of heat • Explain what causes sounds • Identify uses of electricity