

# Wyoming Department of Education Required Virtual Education Course Syllabus

## BIG HORN COUNTY SCHOOL DISTRICT #1

Program Name	WYCA	Content Area	Science
Course ID	CAEL61612	Grade Level	2
Course Name	Science 2 A	# of Credits	0.5
SCED Code	NoCourseSCED	Curriculum Type	Connections Academy

### COURSE DESCRIPTION

*Studying science helps us understand the world around us as well as the world that existed before us. The McGraw-Hill textbook Science: A Closer Look and the science kit are the primary resources for this course. The student will study the major branches of science as he performs hands-on activities. The life science units explore different organisms and their habitats. The Earth science units investigate Earth's resources and physical composition.*

*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 he encounters 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
2-LS2-1	Plan and conduct an investigation to determine if plants need sunlight and water to grow.
2-LS2-2	Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.
2-LS4-1	Make observations of plants and animals to compare the diversity of life in different habitats.
2-ESS1-1	Use information from several sources to provide evidence that Earth events can occur quickly or slowly.
2-ESS2-1	Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.

### SCOPE AND SEQUENCE

UNIT OUTLINE	STANDARD#	OUTCOMES
<p><b>Unit 1: Be a Scientist</b> In this introductory unit, your student will learn about the skills used to study science. He will explore skills used in the scientific method, and he will learn why safety procedures are important when conducting science experiments.</p>		<ul style="list-style-type: none"> <li>Identify basic scientific inquiry skills</li> <li>Practice using the scientific method</li> <li>Explain why "safe science" is important</li> </ul>
<p><b>Unit 2: Plants</b> In this unit, your student will learn about plants. She will explore plant parts and plant life cycles, and she will examine how different plants are alike and different. Your student will also learn how to make scientific observations by observing a flower.</p>	2-LS2-1, 2-LS2-2	<ul style="list-style-type: none"> <li>Explain why plants are living things</li> <li>Identify the different parts of a plant</li> <li>Describe the life cycle of a plant</li> </ul>
<p><b>Unit 3: Animals</b> In this unit, your student will learn about animals. He will study different groups of animals, and he will learn how animals change throughout their lifetime. Your student will also learn about classification by classifying types of animals to show how they are alike.</p>		<ul style="list-style-type: none"> <li>Identify different types of animals</li> <li>Describe the life cycle of an animal</li> <li>Explain why animals use camouflage</li> </ul>

<p><b>Unit 4: Looking at Habitats</b>          In this unit, your student will learn about habitats. She will learn how plants and animals use their habitats, and what happens to food webs when habitats change. Your student will also learn how to put things in order by completing an activity about beaver dams and how they are made. In addition, your student will practice matching leaf prints to specific leaf types.</p>		<ul style="list-style-type: none"> <li>• Describe different plant and animal habitats</li> <li>• Define a food chain and a food web</li> <li>• Explain how and why habitats change</li> </ul>
<p><b>Unit 5: Kinds of Habitats</b>          In this unit, your student will learn about forest, desert, and ocean habitats. He will learn how different plants and animals survive in these habitats. Your student will also complete an activity in which he will study human and animal footprints.</p>	2-LS4-1	<ul style="list-style-type: none"> <li>• Explain how plants and animals live in different forest habitats</li> <li>• Describe deserts and how living things survive there</li> <li>• Explain how plants and animals live in the ocean</li> </ul>
<p><b>Unit 6: Land and Water</b>          In this unit, your student will learn about land and water on Earth. She will study Earth's layers and landforms, and she will identify Earth's water resources and how they are used. Your student will also complete an activity in which she will make a model to study landforms on Earth.</p>	2-ESS1-1, 2-ESS2-1	<ul style="list-style-type: none"> <li>• Describe Earth's layers and its landforms</li> <li>• Identify sources of water on Earth</li> <li>• Explain how wind and water change Earth's surface</li> </ul>
<p><b>Unit 7: Earth's Resources</b>          In this unit, your student will learn about Earth's resources. He will study rocks, minerals, and soil, and he will learn why Earth's resources should be taken care of. Your student will also compare different rocks using a Venn diagram, and he will complete an activity in which he will predict how much water different soils can hold.</p>		<ul style="list-style-type: none"> <li>• Describe rocks and minerals and how they are used</li> <li>• Explain how soil forms and describe what's in soil</li> <li>• Identify ways natural resources are used</li> </ul>