

# Wyoming Department of Education Required Virtual Education Course Syllabus

## Sheridan County School District # 1

Program Name	Sheridan County School District #1 Virtual School	Content Area	SC
Course ID	AC03230	Grade Level	K
Course Name	Grade K Science	# of Credits	1
SCED Code	03230	Curriculum Type	Acellus

### COURSE DESCRIPTION

Grade K Science course investigates basic concepts of life, earth, and physical science, as well as physics. On-camera experiments add color, strong visual concepts and variety to the course, as well as deepening students' understanding of the concepts. Course topics include: Plants, Animals, Earth's Resources, Weather, Matter, Movement.

### WYOMING CONTENT AND PERFORMANCE STANDARDS

STANDARD#	BENCHMARK (Standard/Indicator) Use the Standards and Benchmarks as Spreadsheets
K-PS2-1	Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.
K-PS2-2	Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.
K-PS2-3	Make observations to determine the effect of sunlight on Earth's surface.
K-PS2-5	Use observations to describe patterns of what plants and animals (including humans) need to survive.
K-PS2-6	Use and share observations of local weather conditions to describe patterns over time.
K-PS2-7	Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.
K-PS2-8	Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.
K-PS2-9	Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.
K-PS2-10	Communicate solutions that will manage the impact of humans on the land, water, air, and/or other living things in the local environment.
K-PS2-11	Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.
K-2-ETS1-2	Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.
K-2-ETS1-3	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

### SCOPE AND SEQUENCE

UNIT OUTLINE	STANDARD#	OUTCOMES OBJECTIVES/STUDENT CENTERED GOALS
Unit 1	Plants	K-PS2-5 Students discover and observe the five senses, then explore the different parts and needs of plants, as well as how they grow, their diversity, the plants that we eat, and which parts of those plants are edible.

Unit 2	Animals	K-PS2-7; K-PS2-8	Students discover, observe and differentiate the variety we see in the animal kingdom as well as animal behavior, life cycles, and needs. Students are exposed to and analyze the responsibilities of pet owners. Students then observe and are introduced to insects, mammals, reptiles, and birds. Their final virtual lessons, activities, and assessed responses include understanding the mutually beneficial aspects of the relationships between plants and animals and between animals and humans.
Unit 3	Our Planet's Resources	K-PS2-6; K-PS2-7; K-PS2-10; K-PS2-11	Students describe the Planet Earth, including its soil, rock, and resources. Students are introduced to the concepts of recycling water, where it comes from, and its impact on our world.
Unit 4	The Sky is Always Changing	K-PS2-6; K-PS2-7; K-PS2-9; K-PS2-10; K-PS2-11	Students are introduced to weather and its impact on both our world and our behavior. Students observe and analyze Earth's the four seasons, day and night, and shadows.
Unit 5	Let's Learn about Matter	K-PS2-1; K-2-ETS1-2	Students experience an overview of understanding the properties of matter by investigating paper, cloth, metal, wood, clay, and water, their states, and what can be done with them.
Unit 6	Movements	K-PS2-1; K-PS2-2; K-2-ETS1-3	Students are introduced to the concept of Physics, including things that slide and things that roll such as wheels and pulleys. It also introduces force, gravity, sound, and magnets.