Wyoming Department of Education Required Virtual Education Course Syllabus

Campbell County School District # 1

Program Name	Campbell County Virtual School	Content Area	SC
Course ID	SC2V	Grade Level	2
Course Name	Science 2	# of Credits	
SCED Code		Curriculum Type	K12 Inc

COURSE DESCRIPTION

SCIENCE 2
Students perform experiments to develop skills of observation and analysis and learn how scientists understand our world. They demonstrate how pulleys lift heavy objects, make a temporary magnet and test its strength, and analyze the parts of a flower. Students will explore topics such as the metric system (liters and kilograms), force (motion and simple machines, physicist Isaac Newton), magnetism (magnetic poles and fields, how a compass works), sound (how sounds are made, inventor Alexander Graham Bell), the human body (cells, the digestive system), and geology (layers of the earth, kinds of rocks, weathering).

WYOMING CONTENT AND PERFORMANCE STANDARDS

STANDARD#	BENCHMARK (Standard/Indicator) Use the Standards and Benchmarks as Spreadsheets
SC4.1.2	Life Cycles of Organisms: Students sequence life cycles of living things, and recognize that plants and animals resemble their
SC4.1.4	Properties of Earth Materials: Students investigate water, air, rocks, and soils to compare basic properties of earth materials.
SC4.1.9	Physical Phenomena:Students investigate physical phenomena commonly encountered in daily life, including light, heat,
SC4.1.10	Position and Motion of Objects: Students demonstrate that pushing and pulling can change the position and motion of objects.
SC4.2.2	Students use the inquiry process to conduct simple scientific investigations.
SC4.2.3	Students identify and use appropriate scientific equipment.
SC4.2.4	Students properly use safety equipment and recognize hazards and safety symbols while practicing standard safety procedures.
SC4.3.1	Students recognize the nature and history of science. • Discuss how scientific ideas change over time.

SCOPE AND SEQUENCE

UNIT OUTLINE	STANDARD#	OUTCOMES OBJECTIVES/STUDENT CENTERED GOALS
Metrics and Measurements	SC4.1.4 SC4.2.2 SC4.2.3 SC4.2.4	Unit 1: Metrics and Measurements Summary Learn the tools and methods for measuring length, mass, weight, temperature, and volume in standard metric units. Discover the difference between mass and weight. Find out the boiling and freezing points of water. Finally, become a scientist and use the scientific process to conduct investigations.
Forces and Motion	SC4.1.10 SC4.3.1	Unit 2: Forces and Motion Summary Find out how the forces of gravity and friction affect everything in our universe: Gravity causes all things to fall at the same rate. Friction works opposite motion direction. Heavy objects require more force to move than light objects.
Simple Machines		Unit 3: Simple Machines Summary Find out how machines make work easier. Learn about six types of simple machines--wheels and axles, pulleys, levers, inclined planes, wedges, and screws. Discover how they apply a smaller force over a greater distance than could be done by hand.
Magnetism	SC4.1.9	Unit 4: Magnetism Summary Explore the invisible force of magnetism. Show that similar poles repel and opposite poles attract. Examine the magnetic fields and strengths of different magnets. Construct a temporary magnet and show that the north-seeking pole of a magnet turns toward the Earth's magnetic north pole.

Sounds Around Us	SC4.1.9 SC4.3.1	Unit 5: Sounds Around Us Summary Sound waves and vibrations are all around us. Find out how our ears hear natural and man-made sounds, how our vocal cords produce sounds, and how sounds take on the characteristics of pitch and volume. Discover how Alexander Graham Bell studied the mechanics of sound and changed the world with his inventions.
The Human Body	SC4.3.1	Unit 6: The Human Body Summary Take a journey through that fascinating machine--the human body. Discover that cells make up all living things, and identify the parts of a cell. Track the processes of digestion and excretion, and identify proper nutrient requirements on a food pyramid.
Rock Hounds	SC4.3.1	Unit 7: Rock Hounds Summary Take a trip inside the Earth, discover the processes that create rocks, and solve the mystery of fossils. Explore some of the methods geologists use to classify rocks and minerals, and then become a geologist yourself, gathering and inspecting your own rock samples. Finally, meet the famous Florence Bascom, the "first woman" of geology.
Weathering, Erosion, and Soil		Unit 8: Weathering, Erosion, and Soil Summary Soil is all around us--in our gardens and even in the dirt stains on our knees! But what is soil? Find out what soil is made of and how it forms. Examine different types of soils and determine which is best for growing bean plants. Then, experiment to see how rocks wear down, how soils erode, and how we can prevent erosion.
Circle of Life, Plants	SC4.1.2	Unit 9: Circle of Life, Plants Summary Examine the different stages in the life cycle of a plant. Germinate beans to find out how light and gravity affect plant growth. Dissect a flower and identify its parts. Learn about the process of pollination, fruit and seed production, and seed dispersal.
Circle of Life, Animals	SC4.1.2	Unit 10: Circle of Life, Animals Summary Find out how the life cycles of plants and animals compare. Identify the stages in the life cycles of insects, amphibians, fish, birds, reptiles, and mammals (including humans). Discover how butterflies, mealworms, and frogs go through a fascinating transformation called metamorphosis.