

Primary Program: Bear Necessities

Kindergarten

Vocabulary: Same, different, see, hear, feel, taste, smell, colour, plant, animal

Life Science: Characteristics of Living Things

- Living things have features that can be observed
- Living things (e.g. animals) can be grouped according to their similarities and differences)
- Observe the specific characteristics of living things
- Communicate verbally
- Work with others while exploring and investigating living things
- Show interest in and curiosity about living things

Processes of Science

- Use the senses to make observations
- Describe what they observe
- Share with others information obtained by observing
- Orally communicate observations using learned vocabulary

Grade 1

Vocabulary: animal, plant, food

Life Science: Needs of Living Things

- Accurately group living things according to common characteristics
- Illustrate in detail how animals meet their needs (e.g. ability to adapt to changes in temperature, ways of gathering food) in a given environment
- Observe local animals by their characteristics

Processes of Science

- Communicate verbally
- Describe findings using appropriate4 vocabulary
- Classify organisms
- Identify similarities and differences among organisms
- Group various organism according to given criteria (e.g. common features and structure)

Intermediate Program: Life in the Ocean

Grade 4:

Vocabulary: adaptation, organism, predator, prey, habitat, carnivore, scavenger, herbivore, omnivore

Life Science: Habitats and communities

- Changes in habitat can affect the survival of an individual organism or an entire species
- Infer why particular organisms, animals, and plants are able to share a habitat
- Living things find in particular environments the items and conditions that they need to grow and survive

Grade 6

Vocabulary: species, kingdom, Animalia, invertebrate, vertebrate, classification systems, colouration,

Life Science: Diversity of Life

- Scientists classify organisms into groups according to internal and external features
- Classify organisms using attributes

Primary Program: Dinosaur Clues

Kindergarten

Vocabulary: same, different, see, feel, colour, plant, animal

Life Science: Characteristics of Living things

- Living things have features that can be observed
- Living things (i.e.: animals) can be grouped according to their similarities and differences

Processes of Science

- Use the senses (seeing, feeling) to gather information and make observations
 - Describe what they observe
 - Identify, with guidance, the properties for an object (e.g., colour, shape, texture hardness)
- Share with others information obtained by observing
 - Orally communicate observations using learned vocabulary
 - Work collaboratively with others while sharing (i.e.: listening, encouraging each other, sharing observations)

Grade 1

Vocabulary: animal, plant, needs, food

Life Science: Needs of Living Things

- Needs of living things include food
- Living things use a variety of strategies to meet their needs
- Observe and sort animals by their characteristics
- Communicate verbally

Processes of Science

- Communicate their observations experiences, and thinking in a variety of ways (e.g. verbally). Describe findings using appropriate vocabulary
- Classify organisms
 - Identify similarities and differences among organisms

- Group organisms according to given criteria (e.g. organisms: common features and structure)

Grade 2

Vocabulary: young, adult, appearance, food, predator, prey, environment, characteristics, reptile

Life Science: Needs of Living Things

- Animal's characteristics (e.g., head structure) help them adapt to the conditions in their environment
- Make inferences about an animal's environment from its characteristics
- Use facts and observations to draw conclusions about animal populations

Processes of Science

- Use their senses to interpret observations
 - Observe and make sensory comparisons
 - Provide comprehensive explanations based on observations made or facts learned
 - Draw specific conclusions based on observation

Intermediate Program: Rock On

Grade 7

Vocabulary: volcano, igneous, metamorphic, sedimentary

Earth and Space Science: Earth's Crust

- Rocks are made of minerals that have unique properties
- Minerals are made from pure elements in the Earth
- Minerals can be identified by their colour, luster, hardness, cleavage, crystal structure,
- Rocks are classified by how they are formed within the rock cycle and their mineral content
- Igneous, sedimentary, and metamorphic rocks can be changed from one form to another

Grade 8

Earth and Space Science (Geological Processes)

- Demonstrate how properties can be used to distinguish among minerals
 - Describe the major processes by which rocks are formed and classified
- Instructional Strategies
- Give students various minerals and have them suggest properties that could distinguish these minerals. Have them identify several minerals based on these or other useful properties
 - Display organized rock and mineral collections
 - Provide students with samples of the major rock families

Primary Program: Toadily Awesome

Kindergarten

Vocabulary: same, different, see, hear, feel, colour, animal

Life Science: Characteristics of Living Things

- Living things have features that can be observed
- Living things can be grouped according to their similarities and differences
- Observe the specific characteristics of living things
- Communicate verbally
- Work with others while exploring and investigating living things
- Show interest in and curiosity about living things
- Describe features of local animals
- List a variety of features (e.g. colour and size) of local animals
- Compare common animals
- Describe similar and different features (e.g. size, outer surface such as skin) of common animals
- Sort and classify a variety of animals

Processes of Science

- Use the senses to make observations
- Describe what they observe
- Share with others information obtained by observing
- Orally communicate observations using learned vocabulary

Grade 1

Vocabulary: animal, needs, food, water

Life Science: Needs of Living Things

- Accurately group living things according to common characteristics
- Needs of living things included food and water
- Illustrate in detail how animals meet their needs (e.g. types of homes and habitats, ability to adapt to changes in temperature) in a given environment
- Observe and sort local animals by their characteristics
- Communicate verbally

Processes of Science

- Communicate their observations and thinking in a variety of ways (e.g. verbally)
 - Describe findings using appropriate vocabulary
- Classify organisms
 - Identify similarities and differences among organisms
 - Group various organisms according to given criteria (common features and structure)

Intermediate Program: Dino DNA

Grade 4

Processes and Skills of Science

- Use data from investigations to recognize patterns and relationships and reach conclusions

Grade 5

Processes and Skills of Science

- Identify variables that can be changed in an experiment

Earth and Space Science

- Analyze how BC's living and non-living resources are used

Grade 6

Life Science

- Analyze how different organisms adapt to their environments

Grade 7

Life Science

- Assess survival needs and interactions between organisms and the environment

Primary Program: Go Buggy

Kindergarten

Vocabulary: same different, see, feel, colour

Life Science: Characteristics of Living Things

- Observe the specific characteristics of living things
- Communicate verbally
- Work with others while exploring and investigating living things
- Show interest and curiosity about living things
- Demonstrate respect for living things

Processes of Science

- Use the senses to make observations
 - Describe what they observe
 - Identify the properties of an object
- Share with others information obtained by observing

Grade 2

Vocabulary: young, adult, life cycle, behaviour, appearance, food, characteristics, insect

Life Science: Animal Growth and Changes

- Different kinds of animals have different life cycles
- Animal's characteristics (e.g. skin covering) help them adapt to the conditions in their environment

Intermediate Program: It's Electric

Grade 6

Vocabulary: atom, electron, static electricity and current electricity, electrical current, closed and open circuit, conductor, insulator, battery, magnetism, voltage, geothermal, nuclear, tidal, solar, wind power, biomass power, coal, gas, fossil fuels, hydro, hydro-electric dams, electrocution, bulb, positive, negative, electrical energy

Physical Science: Electricity

- Static electricity is the result of the accumulation of excess charge on an object
- An electron is a negatively charged particle
- Unlike electric charges attract, and like charges repel
- Electric current is the movement of electrons through a conductor
- Conductors permit a flow of electric current, while insulators block the flow of electric current
- Chemicals can be used to transfer electrical energy (e.g. dry cell batteries)
- Electrical energy can be transferred to produce heat, light, motion, and chemical activity
- Different sources of energy can be transferred to produce electrical energy (e.g., wind, water, solar, tidal etc.)
- Manipulate, construct, and test electrical circuits that use batteries

Primary Program: Attracted to Magnets

Grade 1

Vocabulary: push/pull, magnet

Physical Science

- Magnetic forces can pull or push some objects
- Objects can exert forces on other objects

Processes of Science

- Communicate their observations and thinking in a variety of ways (e.g. verbally)

Intermediate Program: Reassembling Dinner

Grade 4

Vocabulary: food chain, food web, producer, consumer, predator, and prey.

Life Science: Habitats and Communities

- Living things interact with each other in many ways and may depend on each other for food and shelter
- Food chains play an important role in population changes

Grade 6

Vocabulary: birds, species, kingdom, Animalia, Vertebrate, mammals, reptiles, amphibians, fish, classification systems, camouflage, behavior, mimicry, coloration.

Life Science: Diversity of Life

- Analyze how different organisms adapt to their environment

Grade 7

Vocabulary: food chain, food web, producer, consumer, predator, and prey.

Life Science: Ecosystems

- Living things interact with each other and their physical environment
- Producers of food such as plants are related to consumers (e.g. animals) and decomposers (e.g., bacteria and fungi) in webs of interdependence called food chains and food webs
- Food webs are individual food chains that are linked

Primary Program: Amazing Amphibians & Radical Reptiles

Grade 2

Vocabulary: young, adult, life cycle, behaviour, appearance, food, predator, prey, environment, characteristics, reptile, amphibian

Life Science: Animal Growth and Changes

- Animal's characteristics (e.g., skin covering) help them adapt to the conditions in their environment
- Make inferences about an animal's environment from its characteristics
- Different kinds of animals have different life cycles
- Observe the life cycles of a variety of animals

Intermediate Program: Gearing Up

Grade 5

Vocabulary: simple machine, lever, wedge, pulley, ramp, screw, inclined plane, wheel, axle, effort force, force, fulcrum, mass (weight), load, friction, work, compound machine, unbalanced forces, balanced forces, equilibrium

Physical Science: Forces and Simple Machines

- Simple machines change the effect of how much effort force is applied to the machine to do something useful
- Simple machines includes lever, wedge, inclined plane, screw, roller, axle, wheel and pulley
- Simple machines don't change the load (mass), they change the amount of effort used to move the same mass
- Compound machines are combinations of simple machines
- Design and construct simple machines with a useful function