Newfoundland Curriculum Outcomes That Align with SucSeed

Grade 4

Grade 4 Mathematics

- 4N2.4 Order a given set of numbers in ascending or descending order, and explain the order by making references to place value.
- 4N3.2 Estimate sums and differences, using different strategies.
- 4N3.4 Determine the sum of two numbers using a personal strategy.
- 4N3.5 Solve problems that involve addition and subtraction of more than two numbers.
- 4N3.6 Determine the difference of two numbers using a personal strategy
    - For example, compare the masses between a carrot and a fruit or leaf! Can be used with addition and subtraction.
- 4N4.1 Determine the answer to a given question involving the multiplication of a number by 1, and explain the answer. - Teach by showing a single fruit or vegetable, then explaining what would x1 of these be, what is present!
- 4N4.3 Determine the answer to a given question involving the division of a number by 1, and explain the answer.
- 4N5.1 Provide examples for applying mental mathematics strategies:
    - doubling
    - repeated doubling
    - halving
    - doubling or halving and adding or subtracting one more group
    - relating division to multiplication
- 4N6.1 Use concrete materials, such as base ten blocks or their pictorial representations,(harvest, leaves, or old stems) to represent multiplication; and record the process symbolically.
- 4N6.5 Estimate a product, using a personal strategy.
- 4N8.4 Represent a given fraction, using concrete materials.
- 4N9.1 Write the decimal for a given concrete or pictorial representation of part of a set, part of a region or part of a unit of measure.
- 4N10.5 Express, orally and in written form, the decimal equivalent for a given fraction. - 1/4th of a carrot.
- 4PR5.2 Express a given pictorial or concrete representation of an equation in symbolic form
- 4SS3.1 Describe area as the measure of surface recorded in square units.
- 4SS3.4 Provide a referent for a square centimeter, and explain the choice.
- 4SS3.5 Estimate the area of a given 2-D shape, using personal references.
- 4SS3.6 Determine the area of a regular 2-D shape, and explain the strategy.

- 4SS6.2 Determine whether or not a given 2-D shape is symmetrical by using an image reflector or by folding and superimposing.
- 4SS6.3 Complete a symmetrical 2-D shape, given half the shape and its line symmetry.
- 4SS6.5 Provide examples of symmetrical shapes found in the environment, and identify the line(s) of symmetry.
- 4SS6.6 Sort a given set of 2-D shapes as those that have no lines of symmetry, one line of symmetry, or more than one line of symmetry
- 4SP2.1 Identify an interval and correspondence for displaying a given set of data in a graph, and justify the choice
- 4SP2.3 Answer a given question using a given graph in which data (SucSeed Garden Data) is displayed using many-to-one correspondence
- 4SP2.4 Create and label (with axes and title) a bar graph to display a given set of data, using many-to-one correspondence, and justify the choice of interval used.

Grade 4 Science

- GCO1
    - 25.0 Demonstrate that specific terminology is used in science and technology contexts
    - 30.0 Demonstra processes for investigating scientific questions and solving technological problems
    - 31.0 Compare the results of their investigations to those of others and recognize that results may vary
    - 32.0 Describe examples, in the home and at school, of tools, techniques, and materials that may be used to respond to their needs
    - 34.0 Describe examples of modern technologies that did not exist in the past
    - 36.0 Consider the positive and negative effects of familiar technologies
    - 37.0 Contemplate their own and their family's impact on natural resources
    - 38.0 Describe how personal actions help conserve natural resources and care for living things and their habitats
    - 41.0 Explore how science and technology have been used to solve problems in the home and at school
    - 43.0 Describe instances where scientific ideas and discoveries have led to new inventions and applications
    - 49.0 Describe examples of tools and techniques that extend our senses and enhance our ability to gather data and information about the world
    - 65.0 Identify examples of scientific knowledge that have developed from a variety of sources

- GCO2
    - 1.0 propose questions to investigate and practical problems to solve
    - 2.0 rephrase questions in a testable form
    - 3.0 state a prediction and a hypothesis
    - 4.0 identify various methods for finding answers to questions and solutions to problems, and select one that is appropriate
    - 5.0 devise procedures to carry out a fair test and to solve a practical problem
    - 6.0 identify appropriate tools, instruments, and materials to complete investigations
    - 7.0 carry out procedures to explore a given problem and to ensure a fair test, controlling major variables
    - 8.0 select and use tools
    - 9.0 follow procedures
    - 10.0 select and use tools for measuring
    - 11.0 make observations and collect information that is relevant to the question or problem
    - 12.0 record observations
    - 13.0 identify and use a variety of sources and technologies to gather relevant information
    - 14.0 construct and use devices for a specific purpose
    - 15.0 classify according to several attributes and create a chart or diagram that shows the method of classifying
    - 16.0 compile and display data
    - 17.0 identify and suggest explanations for patterns and discrepancies in data
    - 18.0 draw a conclusion that answers an initial question
    - 19.0 suggest improvements to a design or constructed object
    - 20.0 evaluate personally constructed devices
    - 21.0 identify new questions or problems that arise from what was learned
    - 22.0 communicate questions, ideas, and intentions, and listen to others while conducting investigations
    - 23.0 communicate procedures and results
    - 24.0 work with group members to evaluate processes used in solving a problem
- GC03
    - 42.0 Describe how soil is formed from rocks
    - 45.0 Identify objects by the sounds they make
    - 47.0 Compare how vibrations travel differently through a variety of solids and liquids and through air
    - 55.0 Identify natural and artificial sources of light in the environment
    - 56.0 Demonstrate that light travels in all directions from a source
    - 58.0 Investigate how a beam of light interacts with a variety of objects

- 60.0 Explore how a variety of media may change the direction of light
- 61.0 Demonstrate that white light may be separated into colours
- 63.0 Identify a variety of local and regional habitats and their associated populations of plants and animals
- 66.0 Compare the structural adaptations of plants that enable them to thrive in different kinds of places
- 69.0 Predict how reduction or removal of a plant or animal population affects the rest of the community
- 70.0 Relate habitat loss to the endangerment or extinction of plants and animals