



This scope and sequence has been created to ensure alignment between Hub Learning and in-class programming, and smooth transitions following potential staff/student absence. It is intended to support teachers and teams in engaging in collaborative planning for instruction.

Each reporting period has been divided into two segments, defining four quarters across the school year. Each quarter lists the outcomes to be addressed in that approximate time period. Outcomes within a quarter are identified for concentrated teaching and learning, though it is acknowledged that providing opportunities for students to make connections across topics and engage in explorations that span the school year for scientific phenomena that change over time allow students to deepen their understanding. Although there is a suggested order shown within each quarter, teachers will design teaching and learning according to their context. Please note that this resource identifies only the bolded specific outcomes and must be used in conjunction with the questions and issues identified within the [Program of Studies](#).

First Reporting Period		Second Reporting Period	
4–4 Demonstrate positive attitudes for the study of science and for the application of science in responsible ways.			
Topic A: Waste in Our World 4–1 Investigate the nature of things, demonstrating purposeful action that leads to inferences supported by observations. 4–2 Identify patterns and order in objects and events studied; and record observations, using pictures, words and charts, with guidance in the construction of charts; and make predictions and generalizations, based on observations. 4–5 Recognize that human activity can lead to the production of wastes, and identify alternatives for the responsible use and disposal of materials.	Topic D: Light and Shadows 4–1 Investigate the nature of things, demonstrating purposeful action that leads to inferences supported by observations. 4–2 Identify patterns and order in objects and events studied; and record observations, using pictures, words and charts, with guidance in the construction of charts; and make predictions and generalizations, based on observations. 4–9 Identify sources of light, describe the interaction of light with different materials, and infer the pathway of a light beam.	Topic B: Wheels and Levers 4–1 Investigate the nature of things, demonstrating purposeful action that leads to inferences supported by observations. 4–2 Identify patterns and order in objects and events studied; and record observations, using pictures, words and charts, with guidance in the construction of charts; and make predictions and generalizations, based on observations. 4–6 Demonstrate a practical understanding of wheels, gears and levers by constructing devices in which energy is transferred to produce motion. Topic C: Building Devices and Vehicles that Move 4–3 Investigate a practical problem, and develop a possible solution. 4–7 Construct a mechanical device for a designated purpose, using materials and design suggestions provided. 4–8 Explore and evaluate variations to the design of a mechanical device, demonstrating that control is an important element in the design and construction of that device.	Topic E: Plant Growth and Change 4–1 Investigate the nature of things, demonstrating purposeful action that leads to inferences supported by observations. 4–2 Identify patterns and order in objects and events studied; and record observations, using pictures, words and charts, with guidance in the construction of charts; and make predictions and generalizations, based on observations. 4–10 Demonstrate knowledge and skills for the study, interpretation, propagation and enhancement of plant growth.