

**MANITOBA CONTINUOUS SUBMISSION FOR SCIENCE
GRADE 5**

CURRICULUM CORRELATION FORM

A grade level form is required to be completed for each grade to which the resource applies.

Title: _____

Series Title (if applicable): _____

Format: _____ **Copyright Date:** _____ **ISBN:** _____

Student Resource **Teacher Resource**

Indicate in the boxes (✓) below Cluster (s) to which the resource applies.

Cluster 0 **Cluster 1** **Cluster 2** **Cluster 3** **Cluster 4**

Contains potentially sensitive content? **Yes** **No**

Publisher / Producer / Distributor Information:

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Instructions: In the boxes (✓) the degree of curriculum fit and provide specific unit, chapter, or page references for each Cluster that applies using the following form. *Note: Cluster 0 must also be completed for each resource.*

Rating Scale for Degree of Curriculum Fit

- **Extensive** – The learning resource details content, multiple learning activities, and differentiated teaching strategies that address the required General Learning Outcome(s) and Specified Learning Outcome(s) of the curriculum framework.
- **Moderate** – The learning resource details some content, some learning activities, and some teaching strategies that address the required General Learning Outcome(s) and Specified Learning Outcome(s) of the curriculum framework.
- **Slight** – The learning resource content, learning activities, and teaching strategies address less than the required General Learning Outcome(s) and Specified Learning Outcome(s) of the curriculum framework.
- **None** – The learning resource contains insufficient content, learning activities or teaching strategies to address the required General Learning Outcome(s) and Specified Learning Outcome(s) of the curriculum framework.

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Thematic Cluster Outcomes

Grade 5

Cluster 1 – Maintaining a Healthy Body

Outcome 5-1-01

none slight moderate extensive

Use appropriate vocabulary related to their investigations of human health. Include: nutrients; carbohydrates; proteins; fats; vitamins; minerals; Canada's Food Guide to Healthy Eating; food group; serving size; terms related to the digestive, skeletal, muscular, nervous, integumentary, respiratory, and circulatory systems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-1-02

none slight moderate extensive

Interpret nutritional information found on food labels. <i>Examples: ingredient proportions, identification of potential allergens, information related to energy content and nutrients...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-1-03

none slight moderate extensive

Describe the types of nutrients in foods and their function in maintaining a healthy body. Include: carbohydrates, proteins, fats, vitamins, minerals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-1-04

none slight moderate extensive

Evaluate a daily menu plan and suggest changes to make it align more closely with <i>Canada's Food Guide to Healthy Eating</i> . Include: serving size recommendations according to age for each food group.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-1-05

none slight moderate extensive

Evaluate prepared food products using the design process. <i>Examples: frozen pizza, snack foods, beverages...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-1-06

none slight moderate extensive

Identify the major components of the digestive system, and describe its role in the human body. Include: teeth, mouth, esophagus, stomach, and intestines break down food.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Comments

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Thematic Cluster Outcomes

Grade 5

Cluster 1 – Maintaining a Healthy Body (Continued)

Outcome 5-1-07

none slight moderate extensive

<p>Identify the major components of the skeletal, muscular, and nervous systems, and describe the role of each system in the human body. Include: the skeleton provides protection and support; muscles, tendons, and ligaments enable movement; brain, spinal cord, and nerves receive sensory input, process information, and send out signals.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-1-08

none slight moderate extensive

<p>Identify skin as the major component of the integumentary system, and describe its role in protecting and supporting the human body.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-1-09

none slight moderate extensive

<p>Identify components of the human body's defenses against infections, and describe their role in defending the body against infection. Include: tears, saliva, skin, white blood cells.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-1-10

none slight moderate extensive

<p>Identify the major components of the respiratory and circulatory systems, and describe the role of each system in the human body. Include: the nose, trachea, and lungs take in oxygen and expel carbon dioxide; the heart, blood vessels, and blood transport oxygen, nutrients, and waste products such as carbon dioxide.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-1-11

none slight moderate extensive

<p>Describe how the human body gets rid of waste. Include: kidneys filter blood and dispose of waste as urine; lungs give off waste carbon dioxide; the rectum collects and expels undigested food matter.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-1-12

none slight moderate extensive

<p>Give examples of how systems of the human body work together. <i>Examples: the circulatory system transports nutrients from the digestive system and oxygen from the respiratory system to the muscular system...</i></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Comments

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Thematic Cluster Outcomes

Grade 5

Cluster 1 – Maintaining a Healthy Body *(Continued)*

Outcome 5-1-13

none slight moderate extensive

Identify and describe factors necessary to maintain a healthy body. Include: daily physical activity, a balanced diet, fluid replacement, adequate sleep, appropriate hygiene practices, regular check-ups.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-1-14

none slight moderate extensive

Evaluate information related to body image and health from media sources for science content and bias. <i>Examples: glamorization of smoking in movies, promotion of unrealistic role models in magazines, trivialization of scientific information on television...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-1-15

none slight moderate extensive

Explain how human health may be affected by lifestyle choices and natural- and human-caused environmental factors. Include: smoking and poor air quality may cause respiratory disorders; unhealthy eating and physical inactivity may lead to diabetes or heart disease; prolonged exposure to the Sun can cause skin cancer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Cluster Rating

none slight moderate extensive

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Comments

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Thematic Cluster Outcomes

Grade 5

Cluster 2 – Properties of and Changes in Substances

Outcome 5-2-01

none slight moderate extensive

Use appropriate vocabulary related to their investigations of properties of, and changes in, substances. Include: characteristic, property, substance, matter, volume, state, solid, liquid, gas, reversible, and non-reversible changes, physical change, chemical change, chemical products, raw material.	□	□	□	□	
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Outcome 5-2-02

none slight moderate extensive

Identify characteristics and properties that allow substances to be distinguished from one another. <i>Examples: texture, hardness, flexibility, strength, buoyancy, solubility, colour, mass/weight for the same volume...</i>	□	□	□	□	
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Outcome 5-2-03

none slight moderate extensive

Investigate to determine how characteristics and properties of substances may change when they interact with one other. <i>Examples: baking soda in vinegar produces a gas; adding flour to water produces a sticky paste...</i>	□	□	□	□	
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Outcome 5-2-04

none slight moderate extensive

Recognize that matter is anything that has mass/weight and takes up space.	□	□	□	□	
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Outcome 5-2-05

none slight moderate extensive

Identify properties of the three states of matter. Include: solids have definite volume and hold their shape; liquids have definite volume but take the shape of their container; gases have no definite volume and take the volume and shape of their container.	□	□	□	□	
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Outcome 5-2-06

none slight moderate extensive

Experiment to compare the mass/weight of a substance in its liquid and solid states. <i>Examples: compare the mass of ice cubes with the mass of the liquid that results when they melt...</i>	□	□	□	□	
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Comments

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Thematic Cluster Outcomes

Grade 5

Cluster 2 – Properties of and Changes in Substances (*Continued*)

Outcome 5-2-07

none slight moderate extensive

Demonstrate that the mass/weight of a whole object is equal to the sum of the mass/weight of its parts. <i>Examples: compare the mass/weight of a pencil case and its contents with that of the individual components weighed separately and added together...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-2-08

none slight moderate extensive

Demonstrate that changes of state are reversible through the addition or removal of heat. Include: melting, freezing/solidification, condensation, evaporation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-2-09

none slight moderate extensive

Explore to identify reversible and non-reversible changes that can be made to substances. <i>Examples: reversible - folding paper, mixing baking soda and marbles; non-reversible - cutting paper, mixing baking soda and vinegar...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-2-10

none slight moderate extensive

Recognize that a physical change alters the characteristics of a substance without producing a new substance, and that a chemical change produces a new substance with distinct characteristics and properties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-2-11

none slight moderate extensive

Observe examples of changes in substances, classify them as physical or chemical changes, and justify the designation. <i>Examples: physical - bending a nail, chopping wood, chewing food; chemical - rusting of a nail, burning wood, cooking food...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Comments

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Thematic Cluster Outcomes

Grade 5

Cluster 2 – Properties of and Changes in Substances (*Continued*)

Outcome 5-2-12

none slight moderate extensive

Identify potentially harmful chemical products used at home, and describe practice to ensure personal safety. Include: use of products with parental supervision, recognition of safety symbols, procedures to follow in case of an emergency, proper storage of chemical products.	□	□	□	□
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Outcome 5-2-13

none slight moderate extensive

Evaluate household chemical products using the design process. <i>Examples: glass-cleaner, laundry soap, toothpaste...</i>	□	□	□	□
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Outcome 5-2-14

none slight moderate extensive

Research and describe how raw materials are transformed into useful products. <i>Examples: food processing, oil refining, paper milling, plastic moulding, gold smelting...</i>	□	□	□	□
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Cluster Rating

none slight moderate extensive

□	□	□	□	□
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Comments

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Thematic Cluster Outcomes

Grade 5

Cluster 3 – Forces and Simple Machines

Outcome 5-3-01

none slight moderate extensive

Use appropriate vocabulary related to their investigations of forces and simple machines. Include: applied force, balanced and unbalanced forces, fulcrum, load, friction, terms related to types of simple machines.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-3-02

none slight moderate extensive

Describe, using diagrams, the forces acting on an object and the effects of increasing or decreasing them. Include: force arrows representing direction and relative strength of forces acting in the same plane, balanced and unbalanced forces.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-3-03

none slight moderate extensive

Investigate a variety of levers used to accomplish particular tasks in order to compare them qualitatively with respect to fulcrum position, applied force, and load. Include: first class, second class, and third class levers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-3-04

none slight moderate extensive

Identify objects in the school and at home that use wheels and axles, and describe the forces involved. <i>Examples: doorknob, manual pencil sharpener, hinge, bicycle...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-3-05

none slight moderate extensive

Recognize that a gear is a wheel and axle used to turn another wheel and axle.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-3-06

none slight moderate extensive

Identify common devices and systems that incorporate pulleys and/or gears.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-3-07

none slight moderate extensive

Explore to determine how the direction and amount of the applied force and the speed of rotation vary within a two-gear system.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Comments

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Thematic Cluster Outcomes

Grade 5

Cluster 3 – Forces and Simple Machines (Continued)

Outcome 5-3-08

none slight moderate extensive

Compare, quantitatively, the force required to lift a load using a pulley system versus a single fixed pulley, and recognize the relationship between the force required and the distance over which the force is applied. Include: a system of pulleys reduces the force required while increasing the distance over which the force is applied; a single fixed pulley requires a greater force but applies it over a shorter distance..	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
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Outcome 5-3-09

none slight moderate extensive

Identify and make modifications to their own pulley and/or gear systems to improve how they move loads. Include: reducing friction.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
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Outcome 5-3-10

none slight moderate extensive

Identify and describe types of simple machines. Include: levers, wheel and axle, pulley, gear, inclined plane, screw, wedge.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
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Outcome 5-3-11

none slight moderate extensive

Describe the advantage of using simple machines to move or lift a given load. Include: to decrease the force required; to increase the resulting force; to change the direction of the applied force..	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
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Outcome 5-3-12

none slight moderate extensive

Investigate to identify advantages and disadvantages of using different simple machines to accomplish the same task. <i>Examples: using a pulley, inclined plane, or lever to move a piano to the second floor...</i>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
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Outcome 5-3-13

none slight moderate extensive

Compare devices that use variations of simple machines to accomplish similar tasks. <i>Examples: a short- or long-handled pump, a racing or mountain bicycle...</i>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
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Outcome 5-3-14

none slight moderate extensive

Use the design process to construct a prototype containing a system of two or more different simple machines that move in a controlled way to perform a specific function.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
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Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Thematic Cluster Outcomes

Grade 5

Cluster 3 – Forces and Simple Machines *(Continued)*

Cluster Rating

none slight moderate extensive

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Comments

Cluster 4 - Weather

Outcome 5-4-01

none slight moderate extensive

Use appropriate vocabulary related to their investigations of weather. Include: weather; properties; volume; pressure; air masses; fronts; weather instrument; severe weather; forecast; accuracy; water cycle; climate; terms related to public weather reports, and cloud formations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-4-02

none slight moderate extensive

Describe how weather conditions may affect the activities of humans and other animals. <i>Examples: heavy rainfall may cause roads to wash out; stormy conditions may prevent a space shuttle launching; in excessive heat, cattle may produce less milk...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-4-03

none slight moderate extensive

Describe properties of air. Include: has mass/weight and volume; expands to fill a space; expands and rises when heated; contracts and sinks when cooled; exerts pressure; moves from areas of high pressure to areas of low pressure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Comments

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Thematic Cluster Outcomes

Grade 5

Cluster 4 – Weather (Continued)

Outcome 5-4-04

none slight moderate extensive

Recognize that warm and cold air masses are important components of weather, and describe what happens when these air masses meet along a front. Include: in a cold front the cold air mass slides under a warm air mass, pushing the warm air upwards; in a warm front the warm moist air slides up over a cold air mass.	□	□	□	□	
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Outcome 5-4-05

none slight moderate extensive

Use the design process to construct a weather instrument. <i>Examples: an instrument that measures wind direction, wind speed, rainfall...</i>	□	□	□	□	
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Outcome 5-4-06

none slight moderate extensive

Observe and measure local weather conditions over a period of time, using student-constructed or standard instruments, and record and analyze these data.	□	□	□	□	
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Outcome 5-4-07

none slight moderate extensive

Identify and describe components of public weather reports from a variety of sources. Include: temperature; relative humidity; wind speed and direction; wind chill; barometric pressure; humidex; cloud cover; ultraviolet index; warm and cold fronts; amount, types, and probability of precipitation.	□	□	□	□	
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Outcome 5-4-08

none slight moderate extensive

Describe the key features of a variety of weather phenomena. <i>Examples: wind speed and precipitation of blizzards...</i>	□	□	□	□	
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Outcome 5-4-09

none slight moderate extensive

Provide examples of severe weather forecasts, and describe preparations for ensuring personal safety during severe weather and related natural disasters. <i>Examples: tornado, thunderstorm, blizzard, extreme wind chill, flood, forest fire...</i>	□	□	□	□	
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Comments

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Thematic Cluster Outcomes

Grade 5

Cluster 4 – Weather (*Continued*)

Outcome 5-4-10

none slight moderate extensive

Investigate various ways of predicting the weather, and evaluate their usefulness. <i>Examples: weather-related sayings, traditional knowledge, folk knowledge, observations of the natural environment...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-4-11

none slight moderate extensive

Contrast the accuracy of short- and long-term weather forecasts, and discuss possible reasons for the discrepancies. Include: long-term forecasts may not be accurate as weather is a complex natural phenomenon that science is not yet able to predict accurately.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-4-12

none slight moderate extensive

Describe examples of technological advances that have enabled humans to deepen their scientific understanding of weather and improve the accuracy of weather predictions. <i>Examples: satellites collect data that scientists analyze to increase understanding of global weather patterns; computerized models predict weather...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-4-13

none slight moderate extensive

Explain how the transfer of energy from the Sun affects weather conditions. Include: the Sun's energy evaporates water and warms the Earth's land, water, and air on a daily basis.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-4-14

none slight moderate extensive

Explain how clouds form, and relate cloud formation and precipitation to the water cycle.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-4-15

none slight moderate extensive

Identify and describe common cloud formations. Include: cumulus, cirrus, stratus.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Comments

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Thematic Cluster Outcomes

Grade 5

Cluster 4 – Weather (*Continued*)

Outcome 5-4-16

none slight moderate extensive

Differentiate between weather and climate. <i>Examples: weather includes the atmospheric conditions existing at a particular time and place; climate describes the long-term weather trend of a particular region...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-4-17

none slight moderate extensive

Identify factors that influence weather and climate in Manitoba and across Canada, and describe their impacts. <i>Examples: jet stream, proximity to water, elevation, Chinook...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-4-18

none slight moderate extensive

Recognize that climates around the world are ever changing, and identify possible explanations. <i>Examples: volcanic eruptions, ozone depletion, greenhouse effect, El Nino, deforestation...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Cluster Rating

none slight moderate extensive

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Comments

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Skills and Attitudes Outcomes

Grade 5

Cluster 0

Outcome 5-0-1a

none slight moderate extensive

Formulate, with guidance, specific questions that lead to investigations. Include: rephrase questions to a testable form, focus research questions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-0-1b

none slight moderate extensive

Identify various methods for finding the answer to a specific question and, with guidance, select one to implement. <i>Examples: generating experimental data, accessing information from a variety of sources...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-0-1c

none slight moderate extensive

Identify practical problems to solve. <i>Examples: How can I determine the mass of air? Which prepared pizza should I buy?...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-0-1d

none slight moderate extensive

Identify various methods to solve a practical problem and select and justify one to implement. <i>Examples: constructing and testing a prototype, evaluating consumer products, accessing information from a variety of sources...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-0-2a

none slight moderate extensive

Access information using a variety of sources. <i>Examples: libraries, magazines, community resource people, outdoor experiences, videos, CD-ROMS, Internet...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-0-2b

none slight moderate extensive

Review information to determine its usefulness using pre-determined criteria.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-0-2c

none slight moderate extensive

Record information in own words and reference sources appropriately.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Comments

Prescribed Learning Outcomes	Degree of Curriculum Fit	Unit, Chapter or Page References
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Skills and Attitudes Outcomes

Grade 5

Cluster 0 (Continued)

<i>Outcome 5-0-3a</i>	none	slight	moderate	extensive	
Formulate, with guidance, a prediction/hypothesis that identifies a cause and effect relationship.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-3b</i>	none	slight	moderate	extensive	
Identify variables that have an impact on their experiments, and, with guidance, variables to hold constant to ensure a fair test.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-3c</i>	none	slight	moderate	extensive	
Create a written plan to answer a specific question. Include: apparatus, materials, safety considerations, and steps to follow.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-3d</i>	none	slight	moderate	extensive	
Develop criteria to evaluate a prototype or consumer product. Include: function, aesthetics, efficient use of materials, cost, reliability.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-3e</i>	none	slight	moderate	extensive	
Create a written plan to solve a problem. Include: materials, safety considerations, labelled diagrams of top and side views, steps to follow.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-4a</i>	none	slight	moderate	extensive	
Carry out, with guidance, procedures that comprise a fair test. Include: controlling variables, repeating measurements to increase accuracy and reliability.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-4b</i>	none	slight	moderate	extensive	
Construct a prototype.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-4c</i>	none	slight	moderate	extensive	
Work cooperatively with group members to carry out a plan, and troubleshoot problems as they arise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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Skills and Attitudes Outcomes

Grade 5

Cluster 0 (Continued)

<i>Outcome 5-0-4d</i>	none	slight	moderate	extensive	
Assume various roles and share responsibilities as group members.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-4e</i>	none	slight	moderate	extensive	
Use tools and materials in a manner that ensures personal safety and the safety of others. Include: keeping an uncluttered workspace, putting equipment away after its use, handling glassware with care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-5a</i>	none	slight	moderate	extensive	
Make observations that are relevant to a specific question.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-5b</i>	none	slight	moderate	extensive	
Test a prototype or consumer product with respect to pre-determined criteria.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-5c</i>	none	slight	moderate	extensive	
Select and use tools and instruments to observe, measure, and construct. Include: balance, thermometer, spring scale, weather instruments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-5d</i>	none	slight	moderate	extensive	
Evaluate the appropriateness of units and measuring tools in practical contexts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-5e</i>	none	slight	moderate	extensive	
Estimate and measure mass/weight, length, volume, and temperature using SI and other standard units.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-5f</i>	none	slight	moderate	extensive	
Record and organize observations in a variety of ways. <i>Examples: point-form notes, sentences, labelled diagrams, charts, ordered lists of data, frequency diagrams, spreadsheets...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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<i>Outcome 5-0-6a</i>	none	slight	moderate	extensive	
Construct graphs to display data, and interpret and evaluate these and other graphs. <i>Examples: bar graphs, frequency tallies, line plots, broken line graphs...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-6c</i>	none	slight	moderate	extensive	
Identify and suggest explanations for patterns and discrepancies in data.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-6d</i>	none	slight	moderate	extensive	
Identify and make improvements to a prototype and explain the rationale for the changes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-6e</i>	none	slight	moderate	extensive	
Evaluate the strengths and weaknesses of a consumer product based on pre-determined criteria.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-6f</i>	none	slight	moderate	extensive	
Evaluate the methods used to answer a question or solve a problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-7a</i>	none	slight	moderate	extensive	
Draw, with guidance, a conclusion that explains investigation results. Include: explaining patterns in data, supporting or rejecting a prediction/hypothesis.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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Cluster 0 (Continued)

<i>Outcome 5-0-7b</i>	none	slight	moderate	extensive	
Base conclusions on evidence rather than preconceived ideas or hunches.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-7c</i>	none	slight	moderate	extensive	
Identify, with guidance, a new prediction/hypothesis based on results of investigations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-7d</i>	none	slight	moderate	extensive	
Propose and justify a solution to the initial problem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-7e</i>	none	slight	moderate	extensive	
Identify new practical problems to solve.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-7f</i>	none	slight	moderate	extensive	
Use prior knowledge and experiences selectively to make sense of new information in a variety of contexts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-7g</i>	none	slight	moderate	extensive	
Communicate methods, results, conclusions, and new knowledge in a variety of ways. <i>Examples: oral, written, multi-media presentations...</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-7h</i>	none	slight	moderate	extensive	
Identify, with guidance, potential applications of investigation results.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-8a</i>	none	slight	moderate	extensive	
Recognize that science is a way of answering questions about the world and that there are questions that science cannot answer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-8b</i>	none	slight	moderate	extensive	
Identify examples of scientific knowledge that have developed as a result of the gradual accumulation of evidence.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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Grade 5

Cluster 0 (Continued)

<i>Outcome 5-0-8c</i>	none	slight	moderate	extensive	
Recognize that technology is a way of solving problems in response to human needs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-8d</i>	none	slight	moderate	extensive	
Provide examples of technologies from the past and describe how they have evolved over time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-8e</i>	none	slight	moderate	extensive	
Describe hobbies and careers related to science and technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-8f</i>	none	slight	moderate	extensive	
Recognize that science is organized into specialized disciplines.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-8g</i>	none	slight	moderate	extensive	
Describe positive and negative effects of scientific and technological endeavours. Include: effects on themselves, society, the environment, and the economy..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-9a</i>	none	slight	moderate	extensive	
Appreciate that women and men of diverse cultural backgrounds can contribute equally to science.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-9b</i>	none	slight	moderate	extensive	
Show interest in the activities of individuals working in scientific and technological fields.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-9c</i>	none	slight	moderate	extensive	
Demonstrate confidence in their ability to carry out investigations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<i>Outcome 5-0-9d</i>	none	slight	moderate	extensive	
Appreciate the importance of creativity, accuracy, honesty, and perseverance as scientific and technological habits of mind.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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Grade 5

Cluster 0 (Continued)

Outcome 5-0-9e

none slight moderate extensive

Be sensitive to and develop a sense of responsibility for the welfare of other humans, other living things, and the environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Outcome 5-0-9f

none slight moderate extensive

Frequently and thoughtfully evaluate the potential consequences of their actions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Cluster Rating

none slight moderate extensive

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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