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| **Grade 5 Science**  **CURRICULAR COMPETENCIES (DO)**  In science, the curricular competencies introduced in K are expanded in a developmental continuum focused on the doing of science. | | **Big Ideas (UNDERSTAND)** | | | | | | | | | |
| Multicellular organisms have organ systems that enable them to survive and interact within their environment. | Solutions are  homogeneous mixtures. | Machines are devices  that transfer force and energy. | | | Earth materials change as they move through the rock cycle and can be used as natural resources. | | | | |
| **CONTENT (KNOW)** | | | | | | | | | |
| basic structures and functions of body systems (digestive, musculo-skeletal, respiratory, circulatory) | solutions and solubility | properties of simple machines and their force effects | machines:  constructed  found in nature | power the rate at which energy is transformed | local types of earth materials | the rock cycle | the nature of sustainable practices around BC’s living and non-living resources | First Peoples concepts of interconnectedness in the environment | First Peoples knowledge of sustainable practices | |
| *Inquiry Question* | *Inquiry Question* | *Inquiry Question* | | | *Inquiry Question* | | | | | |
| Questioning and predicting | Demonstrate a sustained curiosity about a scientific topic or problem of personal interest. |  |  |  |  |  |  |  |  |  |  | |
| Make observations in familiar or unfamiliar contexts. |  |  |  |  |  |  |  |  |  |  | |
| Identify questions to answer or problems to solve through scientific inquiry. |  |  |  |  |  |  |  |  |  |  | |
| Make predictions about the findings of their inquiry. |  |  |  |  |  |  |  |  |  |  | |
| With support, plan appropriate investigations to answer their questions or solve problems they have identified. |  |  |  |  |  |  |  |  |  |  | |
| Decide which variable should be changed and measured for a fair test. |  |  |  |  |  |  |  |  |  |  | |
| Choose appropriate data to collect to answer their questions. |  |  |  |  |  |  |  |  |  |  | |
| Observe, measure, and record data, using appropriate tools, including digital technologies. |  |  |  |  |  |  |  |  |  |  | |
| Use equipment and materials safely, identifying potential risks. |  |  |  |  |  |  |  |  |  |  | |
| Processing and analyzing data and information | Experience and interpret the local environment. |  |  |  |  |  |  |  |  |  |  | |
| Construct and use a variety of methods, including tables, graphs, and digital technologies, as appropriate, to represent patterns or relationships in data. |  |  |  |  |  |  |  |  |  |  | |
| Identify patterns and connections in data. |  |  |  |  |  |  |  |  |  |  | |
| Compare data with predictions and develop explanations for results. |  |  |  |  |  |  |  |  |  |  | |
| Demonstrate an openness to new ideas and consideration of alternatives. |  |  |  |  |  |  |  |  |  |  | |
| Evaluating | Evaluate whether their investigations were fair tests. |  |  |  |  |  |  |  |  |  |  | |
| Identify possible sources of error. |  |  |  |  |  |  |  |  |  |  | |
| Suggest improvements to their investigation methods. |  |  |  |  |  |  |  |  |  |  | |
| Identify some of the assumptions in secondary sources. |  |  |  |  |  |  |  |  |  |  | |
| Demonstrate an understanding and appreciation of evidence. |  |  |  |  |  |  |  |  |  |  | |
| Identify some of the social, ethical, and environmental implications of the findings from their own and others’ investigations. |  |  |  |  |  |  |  |  |  |  | |
| Applying and innovating | Contribute to care for self, others, and community through personal or collaborative approaches. |  |  |  |  |  |  |  |  |  |  | |
| Co-operatively design projects. |  |  |  |  |  |  |  |  |  |  | |
| Transfer and apply learning to new situations. |  |  |  |  |  |  |  |  |  |  | |
| Generate and introduce new or refined ideas when problem solving. |  |  |  |  |  |  |  |  |  |  | |
| Communicating | Communicate ideas, explanations, and processes in a variety of ways. |  |  |  |  |  |  |  |  |  |  | |
| Express and reflect on personal, shared, or others’ experiences of place. |  |  |  |  |  |  |  |  |  |  | |