Program: Energy Revealed

Grade 4 – Ontario Math Curriculum Connections



| Activity Name | Organizing Idea | Learning Outcome |
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| Activity: Knowing Energy: Stair Climb | B. Number: B2. Operations | B2.1 - use the properties of operations, and the relationships between addition, subtraction, multiplication, and division, to solve problems involving whole numbers, including those requiring more than one operation, and check calculations |
| Activity: Knowing Energy: Tea at Home | B. Number: B2. Operations | B2.1 - use the properties of operations, and the relationships between addition, subtraction, multiplication, and division, to solve problems involving whole numbers, including those requiring more than one operation, and check calculations |
| Activity: Knowing Energy: Race to a kWh | B. Number: B2. Operations | B2.1 - use the properties of operations, and the relationships between addition, subtraction, multiplication, and division, to solve problems involving whole numbers, including those requiring more than one operation, and check calculations |
| Activity: Knowing Energy: How Intense is Your Electricity Usage? | B. Number: B2. Operations | B2.1 - use the properties of operations, and the relationships between addition, subtraction, multiplication, and division, to solve problems involving whole numbers, including those requiring more than one operation, and check calculations |
| Activity: Knowing Energy: The Electricity Grid | N/A | |
| Activity: Knowing Energy: Renewables | N/A | |
| Activity: Knowing Energy: The Big Picture | N/A | |
| Activity: All About the Baseline | Grade 7-12 | |
| Activity: Can You Observe How You Conserve? | N/A | |
| Activity: Energy Hogs | Relationships | C1.1 - identify and describe repeating and growing patterns, including patterns found in real-life contexts |
| | | C1.2 - create and translate repeating and growing patterns using various representations, including tables of values and graphs |
| | | C1.3 - determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in repeating and growing patterns |

| | | C1.1 - identify and describe repeating and growing patterns, including patterns found in real-life contexts |
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| Activity: Extra Energy Investigation | C. Algebra: C1. Patterns and Relationships | C1.2 - create and translate repeating and growing patterns using various representations, including tables of values and graphs |
| | | C1.3 - determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in repeating and growing patterns |
| Activity: How Smart is Your Smart Board? | Grade 7-12 | |
| | | C1.1 - identify and describe repeating and growing patterns, including patterns found in real-life contexts |
| Activity: Imagination Station | C. Algebra: C1. Patterns and Relationships | C1.2 - create and translate repeating and growing patterns using various representations, including tables of values and graphs |
| Activity: Small Appliance Energy Reliance | D. Data: D1. Data Literacy | C1.3 - determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in repeating and growing patterns |
| | | D1.2 - collect data from different primary and secondary sources to answer questions of interest that involve comparing two or more sets of data, and organize the data in frequency tables and stem-and-leaf plots |
| | | D1.3 - select from among a variety of graphs, including multiple-bar graphs, the type of graph best suited to represent various sets of data; display the data in the graphs with proper sources, titles, and labels, and appropriate scales; and justify their choice of graphs |
| | | D1.6 - analyse different sets of data presented in various ways, including in stem-and-leaf plots and multiple-bar graphs, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions |
| Activity: Start Me Up! | N/A | |
| | | D1.2 - collect data from different primary and secondary sources to answer questions of interest that involve comparing two or more sets of data, and organize the data in frequency tables and stem-and-leaf plots |
| Activity: Take a Look | D. Data: D1. Data Literacy | D1.3 - select from among a variety of graphs, including multiple-bar graphs, the type of graph best suited to represent various sets of data; display the data in the graphs with proper sources, titles, and labels, and appropriate scales; and justify their choice of graphs |
| | | D1.6 - analyse different sets of data presented in various ways, including in stem-and-leaf plots and multiple-bar graphs, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions |
| Activity: Total Energy vs Total Cost | Grade 7-12 | |
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| Activity: Understanding Energy Efficiency in Your School | Grade 7-12 | |
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| Activity: Community Walk | N/A | |
| Activity: School Energy Audit | Grade 7-12 | |
| Activity: Energy Efficient Lighting | N/A | |
| Activity: Find the Phantom Load | D. Data: D1. Data Literacy | D1.2 - collect data from different primary and secondary sources to answer questions of interest that involve comparing two or more sets of data, and organize the data in frequency tables and stem-and-leaf plots |
| | | D1.3 - select from among a variety of graphs, including multiple-bar graphs, the type of graph best suited to represent various sets of data; display the data in the graphs with proper sources, titles, and labels, and appropriate scales; and justify their choice of graphs |
| | | D1.6 - analyse different sets of data presented in various ways, including in stem-and-leaf plots and multiple-bar graphs, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions |
| Activity: Home Energy Audit | N/A | |
| Activity: Watchers and Seekers | I Algebra: (I Patterns and I | C1.1 - identify and describe repeating and growing patterns, including patterns found in real-life contexts |
| | | C1.2 - create and translate repeating and growing patterns using various representations, including tables of values and graphs |
| | | C1.3 - determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in repeating and growing patterns |
| Activity: Back to the Future | N/A | |
| Activity: Changing Our Ways | N/A | |
| Activity: Exploring Our Energy Ethics | N/A | |
| Activity: Once Upon a Bike | N/A | |
| Activity: Puzzling Over Energy Issues | N/A | |
| Activity: Ride, Roll and Stroll | N/A | |
| Activity: Speak for the Trees | Grade 7-12 | |
| Activity: Taking the Lead | N/A | |
| Activity: Walk a Mile | N/A | |