SD 38 K-12 Mathematics & Numeracy
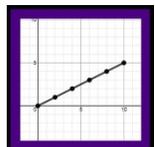
Grades 6&7: Week Four

Big Idea: We use patterns to represent identified regularities and to make generalizations.
Curricular Content: patterns – increasing and decreasing patterns using expressions, tables and graphs, introduction to linear relationships through graphs
Curricular Competencies: develop, demonstrate and apply mathematical understanding through play, inquiry and problem solving, visualize and explore mathematical concepts, represent mathematical ideas in concrete, pictorial, and symbolic forms, engage in problem-solving experiences that are connected to place
Core Competencies focus: Communication, Creative Thinking

Teachers and Families: The following are five problems/tasks to choose from for this week, based on the above curricular areas of focus.

Here is a pattern. What could come next? What would be the 10th step? How do you know? Explain your thinking using pictures, a table or graph. Show the pattern rule as an expression.
Here is a pattern. What could come between these two steps? What else could come between? What would come next? How do you know? Explain your thinking using pictures, a table or graph. Show the pattern rule as an expression.
Here is a graph. What pattern do you notice? What is an expression to represent this pattern? How else could you represent and describe this pattern? (graph from wodb.ca)
Attached are some photographs of land art. What different kinds of patterns can you see? Using found materials outdoors or in your home or using a website or app, create an increasing or decreasing pattern in a circular or spiral form. What is the pattern rule for your pattern? How could you represent your pattern using an expression, table or graph?
Numeracy Task: Look around your home, in your neighbourhood, in a newspaper or website. How are patterns used in design (architecture, fashion, games)? How are patterns used to number or organize things in the world around us? Record and share your findings using pictures, words, symbols, variables, tables or graphs. What is the most common pattern you found?

RICHMOND
SCHOOL DISTRICT NO.38

Outdoor Math Art – What patterns do you see?

created by artist James Brunt

created by students in Oliver, BC

created by students at Grauer Elementary in Richmond, BC