Curriculum Newsletter for Grades 7 and 8 Science

Mr. Bennett

Dear Parents,

This term, your children will get an introduction into basic chemistry. Below is a chart that briefly outlines the main curriculum expectations that they will be taught and how we will assess them. For each major project, students will be given a specific outline along with a rubric.
If you have any questions, please do not hesitate to contact us.

Unit 3: Heat

Curriculum Expectation:	Teaching Strategy:	Assessment:
! Assess the costs and benefits of technologies that reduce heat loss or heat-related impacts on the environment	! Small group discussions to access prior knowledge ! individual research on heat technologies ! whole group lessons	! Create a device that will keep an ice cube cold for the greatest amount of time possible
! Investigate ways in which heat changes substances and describe how heat is transferred	! Investigative laboratories to learn about heat transfer ! Whole class demonstrations of radiation, conduction and convection	! Comment on findings from labs and activities ! Quizzes and tests ! Notebooks and written responses to questions
! Demonstrate an understanding of heat as a form of energy that is associated with the movement of particles and is essential to many processes within the earth`s systems	! Use heat to change the movement of particles in different substances ! class discussions of how heat drives systems on Earth	! Students will explain why water rises in a tube when it is heated and falls when cooled. ! explanation of how particle theory helps to explain changes due to heat ! quizzes and test

Unit 4: Interactions in the Environment

Curriculum Expectation:	Teaching Strategy:	Assessment:
! Assess the impact of human activities and technologies on the environment and evaluate ways of controlling these impacts	! Small group discussions to access prior knowledge ! individual research on current technologies used to reduce our impacts on the Speed River	! Students will research how the city reduces pollution reaching the Speed River
! Investigate interactions within the environment and identify factors that affect the balance between different components of an ecosystem	! Small group discussions about the water cycle, the Carbon cycle and how different processes change these cycles ! Whole class demonstration of the water cycle !	! Students will report on their measurements and observations from labs ! In class assignments ! Individual report on producers, consumers and decomposers in a local ecosystem
! Demonstrate an understanding of the interactions between and among biotic and abiotic elements in the environment	! Investigate the biotic and abiotic elements in the Speed River ecosystem ! Learn about the water cycle and how it works for Guelph's aquifer	! Students will take water quality measurements in the Speed River ! Students will collect, identify and release organisms from the Speed River