

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 success criteria.

If you have any questions, please do not hesitate to contact us.

Unit 1: Pure Substances and Mixtures

Curriculum Expectation:	Teaching Strategy:	Assessment:
<ul style="list-style-type: none">! Evaluate the social and environmental impacts of the use and disposal of pure substances and mixtures;	<ul style="list-style-type: none">! Small group discussions to access prior knowledge! individual research on current technologies used to dispose of materials! whole group lessons	<ul style="list-style-type: none">! Students will research the materials that go into making a binder and the impacts that has.
<ul style="list-style-type: none">! Investigate the properties and applications of pure substances and mixtures	<ul style="list-style-type: none">! Labs to look at different solvents and what can dissolve in them! Experiments to learn about how to affect rate of dissolving! Whole class demonstrations of distillation, filtration and super-saturation	<ul style="list-style-type: none">! Students will report on their measurements and observations from labs! In class assignments! Notebooks and written responses to questions
<ul style="list-style-type: none">! Demonstrate an understanding of the properties of pure substances and mixtures and describe these characteristics using the particle theory	<ul style="list-style-type: none">! Investigative laboratories to learn about solutes, solvents and different types of mixtures! Animations, demonstrations, discussions and labs to look at particle theory and how it works	<ul style="list-style-type: none">! Students will discuss their findings from labs and use the particle theory to explain everyday events.! Quizzes and tests

Unit 2: Heat

Curriculum Expectation:	Teaching Strategy:	Assessment:
<ul style="list-style-type: none"> ! Assess the costs and benefits of technologies that reduce heat loss or heat-related impacts on the environment 	<ul style="list-style-type: none"> ! Small group discussions to access prior knowledge ! individual research on heat technologies ! whole group lessons 	<ul style="list-style-type: none"> ! Create a device that will keep an ice cube cold for the greatest amount of time possible
<ul style="list-style-type: none"> ! Investigate ways in which heat changes substances and describe how heat is transferred 	<ul style="list-style-type: none"> ! Investigative laboratories to learn about heat transfer ! Whole class demonstrations of radiation, conduction and convection 	<ul style="list-style-type: none"> ! Comment on findings from labs and activities ! Quizzes and tests ! Notebooks and written responses to questions
<ul style="list-style-type: none"> ! 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 	<ul style="list-style-type: none"> ! Use heat to change the movement of particles in different substances ! class discussions of how heat drives systems on Earth 	<ul style="list-style-type: none"> ! 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