

## SCIENCE

Grade 9 students will be exploring Science through four main units:

### **Reproduction**

- Cell division, mitosis, meiosis, cell cycle
- Sexual and Asexual Reproduction
- Heredity
- Biotechnology

### **Atoms and Elements**

- Historical development of atomic models
- Atomic Structure
- The Periodic Table
- Classification of Elements
- Chemical Changes

### **The Nature of Electricity**

- Models of electricity
- Static Electricity
- Electric Circuits
- Voltage
- Ohms Law
- Electric Power, Generation and Conservation

### **Exploring the Universe**

- Historical perspectives of celestial objects
- Movement of celestial objects
- Space Exploration

Throughout the exploration of these topics, students will learn about scientific method. Students will pursue learning in these areas through hands-on science activities inquiry and design projects, assignments, forming and testing hypotheses, experiments, science literacy, current events in science, class discussions, and cooperative science-team activities Emphasis will be placed on connecting observations and results with big ideas and theories.

Assessment will be based on learning outcomes. Several forms of assessment will give students feedback about their learning and influence the emphasis of future instruction. These will include teacher observations, formal and informal one-on-one conversations, group conversations, checklists, tests and quizzes, assignments, rubrics, self-assessment, reflection and peer assessment. Learning outcome grids will guide student learning and assessment.

Students will be encouraged to be responsible for their learning, to set goals, develop science skills, follow through, and reflect on the outcomes of their efforts. In accordance with the province-wide report card template, student progress reports will include specific reference to three assessment categories: Knowledge and Understanding, Scientific Inquiry Process, and Design and Problem Solving.

Teachers:

Ms. Rose [srose@wsd1.org](mailto:srose@wsd1.org)

Mr. Ponce [doponce@wsd1.org](mailto:doponce@wsd1.org)