



# Handsworth Secondary School

## SCIENCE 8 COURSE OUTLINE & Evaluation Guide

### THE JUNIOR SCIENCE PROGRAM

The science curriculum of British Columbia provides a framework of opportunities for students to become scientifically literate by:

- ✓ Examining basic concepts, principles, laws, and theories through scientific inquiry
- ✓ Actively gaining knowledge, skills, and attitudes that provide the basis for sound and ethical problem solving and decision making
- ✓ Developing an understanding of the place of science in society and history and its relationships to other disciplines
- ✓ Making informed and responsible decisions about themselves, their homes, workplaces, and the global community

### COURSE OUTLINE AND INSTRUCTIONAL OBJECTIVES:

#### *Processes of Science*

- Demonstrate safe procedures
- Perform experiments using the scientific method
- Represent and interpret information in graphic form
- Use models to explain how systems operate
- Demonstrate scientific literacy
- Demonstrate ethical, responsible, cooperative behaviour
- Describe the relationship between scientific principles and technology
- Demonstrate competence in the use of technologies specific to investigative procedures and research

#### *Life Science: Cells and Systems*

- Demonstrate knowledge of the characteristics of living things
- Relate the main features and properties of cells to their functions
- Explain the relationship between cells, tissues, organs, and organ systems
- Explain the functioning of the immune system, and the roles of the primary, secondary, and tertiary defense systems

#### *Physical Science: Optics*

- Demonstrate knowledge of the behaviour of waves
- Explain the properties of visible light
- Compare visible light to other types of electromagnetic radiation
- Explain how human vision works

#### *Physical Science: Fluids and Dynamics*

- Explain the concept of force
- Describe the relationship between solids, liquids, and gases, using the kinetic molecular theory
- Determine the density of various substances
- Explain the relationship between pressure, temperature, area, and force in fluids
- Recognize similarities between natural and constructed fluid systems (e.g., hydraulic, pneumatic)

#### *Earth and Space Science: Water Systems on Earth*

- Explain the significance of salinity and temperature in the world's oceans
- Describe how water and ice shape the landscape
- Describe factors that affect productivity and species distribution in aquatic environments



## STUDENT GUIDELINES:

### Absences:

You are responsible for all material covered and assignments done when you are absent. If possible notify your teacher before you are absent so compensatory arrangements and/or work can be completed before you leave. When you return, ensure you have all class notes before requesting tutoring. Students absent from tests must bring a written note from their parents explaining their absence.

### Deadlines:

All assignments are due at the beginning of the class period indicated. If an assignment is not completed, you will be required to see the teacher after school that day to complete it.

### Missed Tests/Exams:

Missed tests and quizzes may be re-scheduled at the teacher's discretion. Students must consult the teacher immediately upon their return to school with a parent's note.

### Tutorial:

Teacher's timetables are posted in all science rooms. Specific tutorial times can be arranged with individual teachers. Ensure you bring the following to the tutorial meeting:

- 1) Textbook and Workbook
- 2) Complete up to date notes
- 3) Specific questions about the difficulties you are having.

### Homework Requirements:

Homework assignments consist mainly of:

- 1) Readings and questions from the textbook and workbook.
- 2) Completing laboratory reports
- 3) Note making on external readings
- 4) General review and preparation for tests and quizzes
- 5) Review worksheets

### Evaluation:

The criteria for letter grades are listed below.

GRADE	PERCENTAGE (Average of evaluation items)	GRADE POINT AVERAGE (GPA)
A	86-100%	4.0
B	73-85%	3.0
C+	67-72%	2.5
C	60-66%	2.0
C-	50-59%	1.0
I	Below 50%	
F (After I)	Below 50%	

### Approximate Weighting

70% Quizzes and Tests

30% Lab work, Homework, Classroom Notes, Work habits and Classroom Contribution

### Final Grade

80% Term Mark

20% Final Exam