

# Grade 8: Mathematics

## Unit 2 - Decisions, Decisions

**Start:** January- February

**Duration:** 8 weeks

### LEARNING EXPERIENCES:

- Review of algebraic concepts
- Representing linear relationships in different ways
- Graphing linear relationships using a variety of methods
- Understanding the relationship between parallel and perpendicular lines
- Reading and interpreting graphs
- Solve problems using linear models

### KEY CONCEPT:

**Relationships**

### RELATED CONCEPTS:

**Change, Models**

### STATEMENT OF INQUIRY

Representing patterns of **change** as **relationships** can help determine the impact of human decision-making on the environment.

### INQUIRY QUESTIONS:

#### Factual:

What is a pattern?  
What is slope?

#### Conceptual:

How can you represent changing relationships?  
What makes a good representation?

#### Debatable:

How does human decision-making affect the environment?  
Do we always face consequences for our decisions?

### OBJECTIVES AND ASSESSMENT CRITERIA:

#### A: Knowing and Understanding

Students will:

- i. select appropriate mathematics when solving problems in both familiar and unfamiliar situations.
- ii. apply the selected mathematics successfully when solving problems.
- iii. solve problems correctly in a variety of contexts.

#### C: Communicating

Students will:

- i. use appropriate mathematical language (notation, symbols and terminology) in both oral and written statements.
- ii. use appropriate forms of mathematical representation to present information.
- iii. communicate coherent mathematical lines of reasoning.
- iv. organize information using a logical structure.

#### D: Applying mathematics in real-life contexts

Students will:

- i. identify relevant elements of authentic real-life situations.
- ii. select appropriate mathematical strategies when solving authentic real-life situations.
- iii. apply the selected mathematical strategies successfully to reach a solution.
- iv. explain the degree of accuracy.
- v. describe whether a solution makes sense in the context of the authentic real-life situation.

#### ATLs

**Research, Thinking**

### RESOURCES:

MS Teams /Laptops/ MyiMaths/Quizizz/Khan Academy/Managebac/Geogebra

**SUMMATIVE ASSESSMENT:** Criteria A, C and D