

# Grade 7: Mathematics

## Unit 1 - Number Sense

**Start:** August- November

**Duration:** 12 weeks

### LEARNING EXPERIENCES:

- Place value and expanded notation of very large numbers
- Rounding and Estimation/ Approximation
- Prime numbers and prime factors
- Greatest/ highest common factor, lowest common multiple
- Fractions, decimals, percentages

- Index notation
- Factors
- Multiples
- Order of operations
- Integers
- Exponents, Square/ cube numbers, roots

### KEY CONCEPT:

**Form**

### RELATED CONCEPTS:

**Representation, Equivalence**

### STATEMENT OF INQUIRY

Critical thinking and math literacy is developed when connections between multiple **representations**, **equivalence** and **form** can be discovered by examining patterns.

### INQUIRY QUESTIONS:

#### Factual:

How do we perform operations with decimals and fractions?

#### Conceptual:

How can understanding numbers in different forms improve processes and accuracy?  
How does the way we represent something affect its usefulness?

#### Debatable:

Do we need numbers in different forms?

### 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.

#### B: Investigating Patterns

##### Students will...

- i. apply mathematical problem-solving techniques to recognize patterns.
- ii. describe patterns as relationships or general rules consistent with findings
- iii. verify whether the pattern works for other examples.

#### 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.

#### ATLs

**Thinking, Communication, Self-Management**

### RESOURCES:

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

### SUMMATIVE ASSESSMENT:

Criteria A, B and C