

# **GRADE 6 MATH – COURSE OUTLINE 2017-2018**

## **Ms. Carpenter, Mrs. Angus**

### **MATH STRANDS:**

The learning outcomes in the program of studies are organized into four strands across the grades K–9.

#### **NUMBER**

- Develop number sense

#### **PATTERNS AND RELATIONS**

##### Patterns

- Use patterns to describe the world and to solve problems.

##### Variables and Equations

- Represent algebraic expressions in multiple ways.

#### **SHAPE AND SPACE**

##### Measurement

- Use direct and indirect measurement to solve problems.

##### 3-D Objects and 2-D Shapes

- Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.

##### Transformations

- Describe and analyze position and motion of objects and shapes.

#### **STATISTICS AND PROBABILITY**

##### Data Analysis

- Collect, display and analyze data to solve problems.

##### Chance and Uncertainty

- Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.

### **UNITS OF STUDY AND TIMELINE:**

- 1 – Understanding Number** (approximately 8 weeks)
  - 2 – Transformations** (approximately 4 weeks)
  - 3 – Decimals** (approximately 4 weeks)
  - 4 – Angles & Polygons** (approximately 4 weeks)
  - 5 – Fractions, Ratios, and Percents** (approximately 4 weeks)
  - 6 – Geometry & Measurement** (approximately 4 weeks)
  - 7 – Patterns** (approximately 4 weeks)
  - 8 – Data Analysis & Probability** (approximately 4 weeks)
- Review** (approximately 2 weeks)

**COURSE RESOURCES:**

- Math Makes Sense – Grade 6 Math textbook (access to textbook pages on Google Classroom)
- SMS website – unit lessons, extra practice sheets, organizers, online textbook pages, videos
- Manipulatives, playing cards/dice
- Smartboard, computers

**COURSE COMPONENTS:**

- Mental Math Skills – activities to reinforce addition, subtraction, multiplication and division
- Problem Solving Skills – math problems that are completed with a focus on inquiry
- Classroom Assignments – textbook work, sheet work and activities
- Quizzes – quizzes are given throughout each unit to ensure that outcomes are understood
- Tests – a test is given at the end of each unit to ensure that outcomes are understood

**COURSE MATERIALS:**

- pencils, erasers, pen (any color(s)), pencil crayons
- ruler, protractor, calculator
- deck of cards
- 1 notebook, 3 red duotangs (mental math, handouts, tests/quizzes)

**COURSE EXPECTATIONS:**

Students are expected to arrive to class with materials, on time and ready to work each class. All work should be dated, completed neatly and secured in a labeled duotang (see above) or notebook. All assignments and homework should be completed on time. If an issue arises regarding homework completion, students or parents should contact me as soon as possible. Students who are having difficulty with a concept should take advantage of extra lunchtime help.

**EVALUATION:**

Assessment is an ongoing process. Both formative (usually not graded - observations, discussions, feedback) and summative (usually graded - unit tests, quizzes, final projects) assessments are used to analyze student performance. Report card marks are calculated based on the following:

<b>Daily work, assignments &amp; quizzes</b>	<b>80%</b>
<b>Unit tests</b>	<b>20%</b>

<b>Academic Achievement Reporting Key</b>	
<b>LEVEL OF UNDERSTANDING</b>	<b>ACADEMIC ACHIEVEMENT</b>
<b>Mastering (MAS)</b>	Can apply the learning to complex tasks independently.
<b>Advancing (ADV)</b>	Can apply the learning to increasingly difficult tasks with prompts.
<b>Progressing (PRG)</b>	Can apply the learning to moderate tasks with support.
<b>Emerging (EMG)</b>	Can apply the learning to basic tasks with guidance.
<b>Beginning (BEG)</b>	Can apply the learning to simple tasks with direction.
<b>Limited (LIM)</b>	Cannot yet apply the learning to simple tasks. Extensive support required.
<b>IE</b>	<b>Insufficient evidence to accurately assess progress.</b>
<b>NA</b>	<b>Not applicable this term.</b>
<b>IPP</b>	<b>Please see your child's Individual Program Plan.</b>
<b>ELL</b>	<b>Please see your child's English Language Learner Assessment.</b>