

Woodbine J.H.S.

## Course Title: Grade 7 Mathematics

### Course Information and Outline

#### Materials:

The following is a list of materials that you need to bring to each class:

- Pen and pencil
- Eraser
- Math notebook
- Math Power 7 (textbook)
- Binder or duo-tang
- Calculator (for some units)

#### Textbook: Math Power 7

The textbook that you receive at the beginning of the year is on loan and will be collected in June. YOU ARE RESPONSIBLE FOR RETURNING YOUR TEXTBOOK IN THE SAME CONDITION IN WHICH IT WAS GIVEN TO YOU. The replacement value for a lost textbook is \$75. The rebinding fee for damaged books is \$10.

#### Classroom Expectations:

1. Arrive on time and be prepared to work.
2. Complete all assignments on time.
3. Know and abide by the Code of Behaviour (see Student Agenda).
4. If you are having difficulty with the work, seek extra help.
5. If you are absent (due to illness) or know you will be absent (due to a field trip), it is your responsibility to catch up. If you are absent on the day of a test, it is your responsibility to arrange a time with the teacher to write the test on another date. This should be done immediately upon your return to school.

#### Assessment and Evaluation:

Students will be assessed using a variety of tools such as tests, quizzes, performance tasks, presentations, laboratory work, etc. In most cases, a rubric based on 4 levels of achievement will be used to assess mastery of the curriculum expectations.

Level 4	80 – 100%
Level 3 ★	70 – 79%
Level 2	60 – 69%
Level 1	50 – 59%
Level R (remediation required)	Below 50%

★ Level 3 is defined as the **provincial standard**. A student achieving at level 3 should be well prepared for work in the next grade level.

## Course Outline:

Duration	Strands and Overall Expectations	Topics
September	<b>Number Sense &amp; Numeration</b> <ul style="list-style-type: none"> <li>apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers</li> <li>represent perfect squares and square roots, using a variety of tools</li> </ul>	<ul style="list-style-type: none"> <li>operations with whole numbers, decimals, mental math, order of operations, multiples, and factors</li> <li>squares and square roots</li> </ul>
October	<b>Data Management &amp; Probability</b> <ul style="list-style-type: none"> <li>collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs, including relative frequency tables and circle graphs</li> <li>make and evaluate convincing arguments, based on the analysis of data</li> </ul>	<ul style="list-style-type: none"> <li>collecting data, organizing information into tables and graphs, conducting surveys</li> </ul>
November	<b>Measurement</b> <ul style="list-style-type: none"> <li>report on research into real-life applications of area measurements</li> </ul>	<ul style="list-style-type: none"> <li>units of measure, perimeter, and area</li> </ul>
December	<b>Geometry &amp; Spatial Sense</b> <ul style="list-style-type: none"> <li>construct related lines, and classify triangles, quadrilaterals, and prisms</li> <li>develop an understanding of similarity, and distinguish similarity and congruence</li> </ul>	<ul style="list-style-type: none"> <li>two-dimensional geometry</li> </ul>
January	<b>Patterning &amp; Algebra</b> <ul style="list-style-type: none"> <li>represent linear growing patterns (where the terms are whole numbers) using concrete materials, graphs, and algebraic expressions</li> </ul>	<ul style="list-style-type: none"> <li>modelling patterns and expressions</li> </ul>
February	<b>Patterning &amp; Algebra</b> <ul style="list-style-type: none"> <li>model real-life linear relationships graphically and algebraically, and solve simple algebraic equations using a variety of strategies, including inspection and guess and check</li> </ul>	<ul style="list-style-type: none"> <li>writing and solving linear equations</li> </ul>
March	<b>Number Sense &amp; Numeration</b> <ul style="list-style-type: none"> <li>demonstrate an understanding of addition and subtraction of fractions</li> <li>demonstrate an understanding of proportional relationships using percent, ratio, and rate</li> </ul>	<ul style="list-style-type: none"> <li>fractions, decimals, percents, ratios, and rates</li> </ul>
April	<b>Data Management &amp; Probability</b> <ul style="list-style-type: none"> <li>compare experimental probabilities with the theoretical probability of an outcome involving two independent events</li> </ul> <b>Measurement</b> <ul style="list-style-type: none"> <li>determine through investigation using a variety of tools, the surface area of right prisms</li> <li>solve problems that involve the volume of right prisms and that require conversion between metric measures of capacity and volume</li> </ul>	<ul style="list-style-type: none"> <li>probability</li> <li>surface area and volume</li> </ul>
May	<b>Geometry &amp; Spatial Sense</b> <ul style="list-style-type: none"> <li>describe location in the four quadrants of a coordinate system, dilate two-dimensional shapes, and apply transformation to create and analyze designs</li> </ul>	<ul style="list-style-type: none"> <li>transformations and tessellations</li> </ul>
June	<b>Number Sense &amp; Numeration</b> <ul style="list-style-type: none"> <li>represent, compare, order, and demonstrate an understanding of addition and subtraction of integers</li> </ul>	<ul style="list-style-type: none"> <li>integers</li> </ul>