## Grade 7 Math

## Course Code: $0080 \quad$ Credit Value: none <br> Miss Doran sdoran@trsd.ca

Prerequisites: none, although successful completion of K-6 math courses are strongly encouraged.

## Required Materials and Recommended Resources:

Required: binder, pencils, eraser, lined paper, basic scientific calculator (students will NOT be allowed to use their device as a calculator)
Textbook (provided): MathLinks 7 (McAskill et. At.; McGraw-Hill Ryerson, 2007)
Other resources to be used as supplementary material

## Course Description and Purpose

Grade 7 is designed to give students the skills required to move forward into Grade 8 math. The content of this course encourages the development of abstract mathematical thought processes needed for higher level math.

## Goals of Course

The main goals of mathematics education are to prepare students to

- communicate and reason mathematically
- use mathematics confidently, accurately, and efficiently to solve problems
- appreciate and value mathematics
- make connections between mathematical knowledge and skills and their applications
- commit themselves to lifelong learning
- become mathematically literate citizens, using mathematics to contribute to society and to think critically about the world


## Summary of Four Main Topics

Number Sense: develop number sense
Patterns and Relations: use patterns to describe the world and solve problems
Shape and Space: use direct or indirect measurements to solve problems
Statistics and Probability: collect, display, and analyze data to solve problems

## Special Programming

| Spiral Planning | $\underline{\text { mRLC }}$ |
| :--- | :--- |
| Grade 7 math will follow a spiral <br> curriculum. A spiral curriculum <br> allows for units of study to be <br> spread out throughout the school <br> year, rather than ending once a <br> chapter has been completed. This <br> will provide students with <br> opportunities to review taught <br> content, and also improve their <br> academic standing within that <br> curricular area. | (mRLC). The purpose of being part of this team is to improve and track student <br> understanding and ability of mathematic knowledge in various grades. The <br> mRLC has developed a pacing guide with the essential outcomes taught <br> between September and the end of January, and the other outcomes are <br> covered later in the year. To help track student understanding of the material, <br> there are 4 quizzes that students are asked to write. All four quizzes are based <br> on the essential outcomes, and are meant to give students and the teacher a <br> better understanding of what needs more review. In June, students are asked <br> to write a Baseline Assessment, where the results are recorded by the division. <br> All parents/guardians have the option to allow their students to opt out of this <br> baseline assessment. This baseline and the quizzes will not count toward <br> student grades. |


| Schedule | Topics covered |
| :---: | :---: |
| September |  |
| - Review of Grade 6 Concepts |  |
| - Chapter 4: Fractions, Decimals \& Percents | Connect Fractions, Decimals, and Percents; Fractions, Decimals, and Percents; Applications of Percents |
| - Chapter 6: Introduction to Fraction Operations | Divisibility Rules; Add Fractions with Like Denominators; Subtract Fractions with Like Denominators |
| October |  |
| - Chapter 6 completion |  |
| - Chapter 7: Adding and Subtracting Fractions | Common Denominators; Add and Subtract Fractions with Unlike Denominators; Add Mixed Numbers; Subtract Mixed Numbers |
| November |  |
| - Chapter 9: Adding and Subtracting Integers | Explore Integer Addition; Add Integers; Explore Integer Subtraction; Subtract Integers; Apply Integer Operations |
| - Chapter 10: Patterns and Expressions | Describe Patterns; Variables and Expressions; Evaluate Expressions; Graph Linear Relations |
| December |  |
| - Chapter 10 Completion |  |
| - Chapter 11: Solving Equations | Expressions and Equations; Solving One-Step Equations with Adding or Subtracting; Solving One-Step Equations with Multiplying or Dividing; Solving Two-Step Equations |
| January |  |
| - Complete Chapter 11 |  |
| - Chapter 1: Coordinates | The Cartesian Plane; Create Designs |
| - Chapter 8: Circles | Construct Circles; Circumference of a Circle; Area of a Circle; Interpret Circle Graphs; Create Circle Graphs |
| February |  |
| - Complete Chapter 8 |  |
| - Chapter 3: Geometry and Measurement | Area of a Parallelogram; Area of a Triangle |
| - $1^{\text {st }}$ mRLC Quiz |  |
| March |  |
| - Chapter 2: Operations on Decimals | Add and Subtract Decimal Numbers; Multiply Decimal Numbers; Divide Decimal Numbers; Order of Operations and Decimal Numbers |
| - $2^{\text {nd }} \mathrm{mRLC}$ Quiz |  |
| April |  |
| - Chapter 5: Probability | Probability; Organize Outcomes; Probabilities of Simple Independent Events; Applications of Independent Events; Conduct Probability Experiments |
| - Chapter 3: Geometry and Measurement | Parallel and Perpendicular Line Segments; Draw Perpendicular Bisectors; Draw Angle Bisectors |
| - $3^{\text {rd }} \mathrm{mRLC}$ Quiz |  |
| May |  |
| - Chapter 1: Coordinates and Design | Transformations; Horizontal and Vertical Distances |
| - Chapter 12: Working with Data | Median and Mode; Mean; Range and Outliers; Effects of Outliers; Choose the Best Measure of Central Tendency |
| - $4^{\text {th }} \mathrm{mRLC}$ Quiz |  |
| June |  |

- Review and Baseline Assessment


## Assessment

## Student Evaluation

Formative Assessments:

- "Warm-up" assignments
- "Show you know" questions
- Spiral curriculum work
- mRLC Check-Ins, Quizzes \& Baseline

Assessment
Summative Assessments:

- Chapter Assignments
- Chapter Tests


## Breakdown of Marks

Coursework (tests \& assignments): 100\%
Coursework will be marked using a key based on the final answer and work shown.

## Guidelines

## Homework Policy

Homework will be assigned if/when:

- Students are not able to complete their assignments during class.
- Students are absent.

Incomplete Work

- Following the deadline of any assignment, the student's mark will be recorded as a zero. Upon completion of the assignment, it will be graded and recorded. At reporting periods, a final deadline will be given for the evaluations to take effect on the report card for that reporting period.


## Extra Help

- If students need extra help, your teacher is available at lunch hour. Appointments can also be made for the morning or afterschool.


## Plagiarism

"Students must understand that the tests/exams they complete and the assignments they submit as evidence of learning must be their own work and that cheating and plagiarism will not be tolerated..." (Provincial Assessment Policy, K-12)
"Academic dishonesty could result in one or all of the following: contacting the parents, documentation of the incident in the student's file, report this behavior on the report card, enforce loss of privileges for the student, disciplinary measures, redo the work and deduct marks for academic dishonesty.... If a student is found to be engaging in academic dishonesty, the principal will follow the school and division policy which may result in further consequences as deemed appropriate by the principal." (TRSD Instructional policy manual)

## Classroom Expectations

- Attendance and Absence
- Students are expected to attend class regularly.
- Students who arrive in class 5 minutes after the bell or later will be marked as LATE
- Students who arrive with 15 minutes or less left in class will be marked as absent
- Students who are absent for class are responsible for gathering missed work and asking questions. Notes for missed work will be available upon request
- All members of the classroom community are expected to be polite and respectful to all staff, students, and property in the classroom.
- Use of Personal Devices
- Devices and accessories must be turned off and put out of sight during teacher instruction.
- If students cannot comply with the technology expectations, their device will be placed in a safe location until the end of class.
- If necessary, the student will be asked to leave their device in their locker or in the office.
- Inclement Weather: students may be assigned work if the buses do not run or the school is closed.

