

**MCCREARY SCHOOL
COURSE OUTLINE**

Math 10F

GRADE 9

Code: 0080/English

One Credit Course

Teacher: Michal Nogaj

Prerequisites: Grade 8 Math

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 on formal tests or exams)

Textbook: MathLinks 9 (McAskill et. At.; McGraw-Hill Ryerson, 2008)

Other resources to be used as supplementary material

Course Description and Goals

Math 10F is designed to give students the basic skills required to move forward into any of the three streams of math they will find in higher grades: Pre-Calculus, Applied, and Essentials. Students will continue to build on their mental math skills as well as calculator skills. Number sense, space and shape, statistics and probability, and patterns and relations will be focused on.

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: mRLC

Turtle River School Division is part of the Manitoba Rural Learning Consortium (mRLC). The purpose of being part of this team is to improve and track student understanding and ability of mathematic knowledge in various grades. The mRLC has developed a pacing guide with the essential outcomes taught from February to April, and the other outcomes are covered later in the semester. To help track student understanding of the material, there are 4 quizzes that students are asked to write. All four quizzes are based on the essential outcomes, and are meant to give students and the teacher a better understanding of what needs more review. In June, students are asked to write a Baseline Assessment, where the results are recorded by the division. *All parents/guardians have the option to allow their students to opt out of this baseline assessment.* This baseline and the quizzes will not count toward student grades.

Schedule	Topics covered
February	
<ul style="list-style-type: none"> Review of Grade 8 Concepts 	
<ul style="list-style-type: none"> Chapter 2: Rational Numbers 	Comparing and Ordering Rational Numbers; Problem Solving with Rational Numbers in Decimal Form; Problem Solving with Rational Numbers in Fraction Form; Determining Square Roots of Rational Numbers
<ul style="list-style-type: none"> Chapter 3: Powers and Exponents 	Using Exponents to Describe Numbers; Exponent Laws; Order of Operations; Using Exponents to Solve Problems
<ul style="list-style-type: none"> Chapter 5: Introduction to Polynomials 	The Language of Mathematics; Equivalent Expressions; Adding and Subtracting Polynomials
March	
<ul style="list-style-type: none"> Chapter 7: Multiplying and Dividing Polynomials 	Multiplying and Dividing Monomials; Multiplying Polynomials by Monomials; Dividing Polynomials by Monomials
<ul style="list-style-type: none"> Chapter 8: Solving Linear Equations 	Solving One-Step Equations; Solving Two-Step Equations; Solving Equations with Brackets; Solving Equations with Variables on Both Sides of the Equation
<ul style="list-style-type: none"> Chapter 6: Linear Relations 	Representing Patterns; Interpreting Graphs; Graphing Linear Relations
April	
<ul style="list-style-type: none"> Chapter 9: Linear Inequalities 	Representing Inequalities; Solving Single-Step Inequalities; Solving Multi-Step Inequalities
<ul style="list-style-type: none"> Chapter 4: Scale Factors and Similarity 	Enlargements and Reductions; Scale Diagrams; Similar Triangles; Similar Polygons
<ul style="list-style-type: none"> Chapter 1: Symmetry and Surface Area 	Line symmetry; Rotation Symmetry and Transformations; Surface Area
May	
<ul style="list-style-type: none"> Chapter 10: Circle Geometry 	Exploring Angles in a Circle; Exploring Chord Properties; Tangents to a Circle
<ul style="list-style-type: none"> Chapter 11: Data Analysis 	Factors Affecting Data Collection; Collecting Data; Probability in Society; Developing and Implementing a Project Plan
June	
<ul style="list-style-type: none"> Review Formative Quizzes Baseline Assessment Final Exam 	

Assessment

Student Evaluation

Formative Assessments:

- "Warm-up" assignments
- mRLC Quizzes
- Extra Practice
- Baseline Assessment

Summative Assessments:

- Chapter Assignments
- Chapter Tests
- Final Exam

Breakdown of Marks

Coursework (tests & assignments): 70%

Final Exam: 30%

Coursework and exam will be marked using a key based on final answers and work shown.

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 on Microsoft Teams or in paper format

- 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 (including but not limited to cell phones, headphones, ear buds, tablets, and smart watches) must be turned off and put out of sight during teacher instruction. Devices are NOT to be used as calculators. All students are required to have a basic scientific calculator to use during class, on tests, and on the exam.
- If students cannot comply with the technology expectations, their device will be placed in a safe location until the end of class.

- **Snow Days / No Bus Days**

- Due to the amount of material required to be completed during the course, students may be expected to complete homework as assigned in case of inclement weather or days where no buses run
- Students will be expected to check Teams to see any updates regarding possible homework assignments

- **Final Exam**

- All students are expected to write the final exam on the scheduled day
- Failure to attend the final exam will result in a 0 (zero) unless there are exceptional circumstances, which may include bereavement or medical emergencies. If no notice is given for non-attendance on an exam day and no valid reason is provided within a reasonable time frame, you may not be allowed to write the exam.
- Students are not to have devices on their person while writing the exam. Any use of these devices during an exam will result in a mark of 0 (zero)

Student Signature: _____

Date: _____

Parent/Guardian Signature: _____

Date: _____