Math 10F

Course Code: 0080   Credit Value: 1.0 credits
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Prerequisites: none, although successful completion of K-8 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 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 between September and the end of January, and the other outcomes are covered later in the year. 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
September	
• Review of Grade 8 Concepts	
• 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
October	
• Chapter 2 completion	
• Chapter 3: Powers and Exponents	Using Exponents to Describe Numbers; Exponent Laws; Order of Operations; Using Exponents to Solve Problems
November	
• Chapter 3 completion	
• Chapter 5: Introduction to Polynomials	The Language of Mathematics; Equivalent Expressions; Adding and Subtracting Polynomials
December	
• Chapter 7: Multiplying and Dividing Polynomials	Multiplying and Dividing Monomials; Multiplying Polynomials by Monomials; Dividing Polynomials by Monomials
January	
• 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
• Chapter 6: Linear Relations	Representing Patterns; Interpreting Graphs; Graphing Linear Relations
February	
• Complete Chapter 6	
• Chapter 9: Linear Inequalities	Representing Inequalities; Solving Single-Step Inequalities; Solving Multi-Step Inequalities
• 1st mRLC Quiz	
March	
• Chapter 9 Completion	
• 2nd mRLC Quiz	
April	
• Chapter 4: Scale Factors and Similarity	Enlargements and Reductions; Scale Diagrams; Similar Triangles; Similar Polygons
• Chapter 1: Symmetry and Surface Area	Line symmetry; Rotation Symmetry and Transformations; Surface Area
• 3rd mRLC Quiz	
May	
• Chapter 10: Circle Geometry	Exploring Angles in a Circle; Exploring Chord Properties; Tangents to a Circle
• Chapter 11: Data Analysis	Factors Affecting Data Collection; Collecting Data; Probability in Society; Developing and Implementing a Project Plan
• 4th mRLC Quiz	
June	
• Review	
• Baseline Assessment	
• Final Exam (Divisional Exam)	

Assessment

Student Evaluation

Formative Assessments:
- o "Warm-up" assignments
- o "Show you know" questions
- o Spiral curriculum work
- o mRLC Quizzes
- o Extra Practice
- o Baseline Assessment

Summative Assessments:
- o Chapter Assignments
- o Chapter Tests
- o Final Exam

Breakdown of Marks

Coursework (tests & assignments): 70%
Final Divisional Exam: 30%

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

Guidelines

Homework Policy

Homework will only 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.

Rewrites
- Students may be able to rewrite a test or assignment if they have shown sufficient work to prepare for the rewrite. A rewrite will only happen if it is agreed upon by the teacher and student, and if necessary, the parent and/or administration.

Plagiarism
- If a student plagiarizes work, they will receive a mark of zero until the assignment can be redone under supervision
- Any plagiarism will result in a serious conversation with the student, the classroom teachers, the parents/guardians, and possibly administration. For more than one offense, administration will be involved.

Extra Help
- If students need extra help, your teachers are available at lunch hour. Appointments can also be made for the morning or afterschool.

Classroom Expectations

- Attendance and Absence
  - o Students are expected to attend class regularly.
  - o Students who arrive in class 5 minutes after the bell or later will be marked as LATE
  - o Students who arrive with 15 minutes or less left in class will be marked as absent
  - o 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**
  - o Devices and accessories must be turned off and put out of sight during teacher instruction.

- o   Students may listen to music during independent work time, with teacher permission.   If there is any other reason that a student must use their device, permission must always be given prior to its use. Parents/guardians are welcome to contact the office as needed.
- o   If students cannot comply with the technology expectations, their device will be placed in a safe location until the end of class.

Student Signature: _____   Date: _____

Parent/Guardian Signature: _____   Date: _____