MATHEMATICS 10F (Grade 9 FI)

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Textbook: Liens mathématiques 9 (2010, Chenelière)

Themed Units :

Number	Shape and Space
9.N.1. Demonstrate an understanding of powers with integral bases (excluding base 0) and whole number exponents by • representing repeated multiplication using powers • using patterns to show that a power with an exponent of zero is equal to one • solving problems involving powers 9.N.2. Demonstrate an understanding of operations on powers with integral bases (excluding base 0) and whole number exponents. 9.N.3. Demonstrate an understanding of rational numbers by ▪ comparing and ordering rational numbers ▪ solving problems that involve arithmetic operations on rational numbers 9.N.4. Explain and apply the order of operations, including exponents, with and without technology. 9.N.5. Determine the square root of positive rational numbers that are perfect squares. 9.N.6. Determine the approximate square root of positive rational numbers that are non-perfect squares.	9.SS.1. Solve problems and justify the solution strategy using circle properties including ▪ the perpendicular from the centre of a circle to a chord bisects the chord ▪ the measure of the central angle is equal to twice the measure of the inscribed angle subtended on the same arc ▪ the inscribed angles subtended by the same arc are congruent ▪ a tangent to a circle is perpendicular to the radius at the point of tangency 9.SS.2. Determine the surface area of composite 3-D objects to solve problems. 9.SS.3. Demonstrate an understanding of similarity of polygons. 9.SS.4. Draw and interpret scale diagrams of 2-D shapes. 9.SS.5. Demonstrate an understanding of line and rotation symmetry.
Patterns & Relations 9.PR.1. Generalize a pattern arising from a problem-solving context using linear equations and verify by substitution. 9.PR.2. Graph linear relations, analyze the graph, and interpolate or extrapolate to solve problems. 9.PR.3. Model and solve problems using linear equations of the form • $ax = b$ $ax + b = c$ • $ax = b + cx$ $a(x + b) = c$ • $ax + b = cx + d$ $a(bx + c) = d(ex + f)$ • $\frac{a}{x} = b$, $x \neq 0$ where a, b, c, d, e and f are rational numbers. 9.PR.4. Explain and illustrate strategies to solve single variable linear inequalities with rational number coefficients within a problem-solving context. 9.PR.5. Demonstrate an understanding of polynomials (limited to polynomials of degree less than or equal to 2). 9.PR.6. Model, record, and explain the operations of addition and subtraction of polynomial expressions, concretely, pictorially, and symbolically (limited to polynomials of degree less than or equal to 2). 9.PR. 7. Model, record, and explain the operations of multiplication and division of polynomial expressions (limited to polynomials of degree less than or equal to 2) by monomials, concretely, pictorially, and symbolically.	Statistics and Probability 9.SP.1. Describe the effect of • bias • use of language • ethics • cost • time and timing • privacy • cultural sensitivity on the collection of data. 9.SP.2. Select and defend the choice of using either a population or a sample of a population to answer a question. 9.SP.3. Develop and implement a project plan for the collection, display, and analysis of data by • formulating a question for investigation • choosing a data collection method that includes social considerations • selecting a population or a sample • collecting the data • displaying the collected data in an appropriate manner • drawing conclusions to answer the question 9.SP.4. Demonstrate an understanding of the role of probability in society.

Creating the Grade:

➤ Grades will be based only on the demonstration of an individual student's knowledge and skills of the outcomes for each course:

- Only items marked by the teacher will determine a student's grade
- Grades are based on individual student achievement, not group achievement

➤ When determining a grade, the teacher will decide whether there is sufficient evidence of achievement. If not, the mark can be reported as an "*IN*" (incomplete). Teachers will determine with students and parents/guardians a plan for completion of work.

Establish, communicate, and apply consequences for late and missing work:
Students must understand that there will be consequences for not completing assignments that provide evidence of learning or for submitting those assignments late. If, after establishing and clearly communicating expectations regarding assignments, setting and communicating timelines for assignments, and supporting student learning using the strategies provided above, student work is still late or missing; teachers will apply the following strategies:

➤ confer with the student and, where appropriate, with the student's parent/guardians about the reasons for not completing the assignment, and consider the legitimacy of reasons;
➤ develop an agreement with the student to complete the work;
➤ require the student to complete missing work during lunch by attending the Assessment Completion Centre (ACC).

If, after completing the steps above, the student does not hand in the assessment by the agreed upon deadline, a zero may be used as a mark as the student has not demonstrated any knowledge or skill of the outcome.

The consequence for not completing work is to complete the work. Late marks will not be subtracted from an assignment as it is purely punitive and doesn't measure learning. The assignment will either be completed or given a zero.

The full policy is available on the SCI website under "Student Handbook".

Final Evaluation:

TESTS / QUIZZES: 45%   PROJECTS / PORTFOLIO: 20%
DISCUSSIONS / SPEAKING: 20%   FINAL EXAM: 15%

Indigenous Perspectives:

I am committed to learning about Indigenous perspectives and how to incorporate these perspectives into all classrooms. This may include instruction, resources (primary and secondary), assessment practice, and collaboration models.

Late assignments and consequences:

Students must understand that there will be consequences for not completing assignments that provide evidence of learning or for submitting those assignments late. If, after establishing and clearly communicating expectations regarding assignments, setting and communicating timelines for assignments, and supporting student learning using various strategies, student work is still late or missing, teachers will apply the following:

* confer with students and, where applicable, with the student's parents/guardians about the reasons for not completing the assignment, and consider the legitimacy of reasons;

* develop and agreement with the studdent to complete the work by a specific date, which may require the student to attend one or more lunch-hour sessions in the ACC (Assessment Completion Centre).

If, after completing the steps above, the student does not hand in the assessment by the agreed-upon deadline, a mark of zero (0) may be used as a mark as the student has not demonstrated any knowledge or skill of the outcome.

The consequence for not completing work is to complete the work. Late marks will not be subtracted from an assignment as it is purely punitive and doesn't measure learning. The assignment will either be completed or given a zero (0).

Cheating and academic dishonesty:

Both cheating and academic dishonesty can be defined as "presenting work under your name that was not researched or written by you". In short, it is when a student tries to pass off someone else's work as his/her own.

First infraction: Student will be given a mark of zero (0) and instructed to re-do the assignment; if the assignment is not redone, please refer to the section on late assignments above. Parents and school administration will be informed.

Second infraction: Student will be given a mark of zero (0) and will not be presented with the opportunity to redo that particular assignment. Parents and school administration will be informed.

Third infraction: Student will be given a mark of zero (0), will not be presented with the opportunity to redo the assignment and will be referred to the administration of the school / division for appropriate consquences.