



## **Essentials Mathematics 20**

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### **Course description**

Essentials 20 is the first course in the Essentials Mathematics Curriculum in Manitoba. This course follows the guideline set by the Ministry of Education by reinforcing communication, connection, mental math, problem reasoning, technology, and visualization. Together we will improve our math language and develop new skills to solve problems that could relate to us. The Essential Mathematics course is for students wanting to learn mathematics for their personal and work-related use after high school such as a Post-Secondary Degree which doesn't involve sciences or for some of the trade apprenticeship programs.



### **Course Expectations**

Students should:

- Be prepared for class and have all their learning supplies (calculator, pencil, paper, notes)
- Be respectful of others comments and belongings
- Be responsible for their own learning (not on your cell phone or distracting others)
- Be prepared to make mistakes and ask for help

### **Digital Citizenship**

*SVSD AP 203 Digital Citizenship and AP 230 Cell Phone Use*

"The Swan Valley School Division is committed to providing an engaging and safe learning environment where the potentially harmful impacts of online platforms and cell phone use is minimized. To support this positive environment, the following personal device or cell phone guidelines will be in place."

"Grade 9 to 12 students: banned from cell phone use during class time on campus and off campus but are permitted to responsible use of cell phones during break times and lunch."

"Student with medical or diverse learning needs may qualify for exceptions to the Administrative Procedure, however a Student Specific Plan will need to be created to accompany such an exception." If this applies to you and you have not completed this plan, please see me, so we can make arrangements for it to be done.

"Teachers may direct Grade 9 to 12 students...to use cell phones for educational purposes."

"The SVSD is not responsible for loss/theft/damages incurred to personal ICT devices including physical or data damage."

The term “cell phone” includes tablets, e-readers, smart phones, MP3 players, smart watches, electronic toys or any other personal technology devices.

### **Classroom Implementation of ICT**

- All devices will be handed into the bucket or placed on the teacher’s desk. If any staff member requests you to hand in your device, you are required to do so according to the SVRSS School Code of Conduct
- At times, technology will be used in the classroom to enhance learning in which laptops will be provided to each student.
- If a student is leaving class to go to the washroom or other tasks, the device will remain in the classroom.
- Parents/Guardian should be aware that their child will not be able to respond to message/calls received during class time.

### **Assessment**

#### ***Formative***

This type of assessment gives the student opportunity to make mistakes and learn from those mistakes. Some kinds of formative assessment that I will be using are practice questions with solutions, interviewing, and observation.

#### ***Summative***

This type of assessment will give students ownership of how well they are doing in the course. Although students should know how well they are doing in the course by their formative assessment these assessments will be used for your mark. Some types of this assessment will be Rich Performance Tasks (Homework, Assignments, and Projects), Tests, and Final Exam.

### **Evaluation Plan**

1. Rich Performance Tasks	15%
2. Tests	65%
3. Final Exam	20%



**Topics:**

Unit Pricing and Currency Exchange - use proportions to calculate unit pricing and currency exchange

Earning an Income - calculate gross pay and net pay

Length, Area and Volume - calculate surface area, volume, and perimeter

Mass, Temperature and Volume - convert mass, length, volume, and temperature between and within imperial and metric systems

Angles and Parallel Lines - explore angle relationships using various methods, including technology, solve problems involving parallel line properties

Transformations - translate, rotate, dilate and reflect objects on a Cartesian co-ordinate plane

Trigonometry of Right Triangles and Similarity of Figures - use right triangle trigonometry, the Pythagorean Theorem and similar triangles to solve problems

**Important Notes**

- Students will be given the opportunity to re-do one (1) summative assessment over the course of the semester. Additional re-do opportunities only exist at the discretion of the teacher.

Missing Tests:

- Any student missing an important summative assessment like a test may be required to be assessed with an alternate and possibly more challenging assessment once a zero and missing is placed in PowerSchool. (Rationale: student has created an advantage by having more time to prepare and/or discuss assessment items). Missing an assessment with parental permission, illness, field trip, court appearance, etc. may still warrant an alternate assessment as per the instructor.

- Final Examination:

If a student's final exam mark is higher than their term mark, the final exam weighting will be considered at 100%. That is, if a student scores higher on the final exam than their term mark, the final exam score becomes their final course grade. This will NOT be considered in reverse (i.e. the final exam will hold a minimum respective weight as per the course outline).

**Course Structure**

	<b>Unit</b>	<b>Outcomes</b>	<b>Assessment</b>
<b>Sept 6 to Sept 27</b>	Unit Pricing and Currency Exchange	C1	Practice Questions (F) Test(S) Homework/Assignment (S)
<b>Oct 1 to Oct 24</b>	Earning Income	P1, P2	Practice Questions (F) Test(S) Homework/Assignment (S)
<b>Oct 28 to Nov 14</b>	Length, Area and Volume	M1, M2, M3, M4, G1, G2	Practice Questions (F) Test(S) Homework/Assignment (S)
<b>Nov 18 to Dec 2</b>	Angles and Parallel Lines	Ac1, Ac2	Practice Questions (F) Test(S) Homework/Assignment (S)
<b>Dec 3 to Dec 13</b>	Trigonometry	Tg1, Tg2, Tg3	Practice Questions (F) Test(S) Homework/Assignment (S)
<b>Dec 16 to Jan 9</b>	Similarity of Figures	TF1	Practice Questions (F) Test(S) Homework/Assignment (S)
<b>Jan 10 to Jan 17</b>	Mass, Temperature and Volume	M1, M2, M3, M4	Practice Questions (F) Test(S) Homework/Assignment (S)
<b>Jan 20 to Feb 1</b>	Puzzles/Review/Exam	A1	Practice Questions (F) Exam (S)