**CROCUS PLAINS REGIONAL SECONDARY SCHOOL
COURSE OUTLINE AND ASSESSMENT GUIDE**

Course Name:	GRADE 10 ESSENTIALS MATHEMATICS

Teacher's Name: Mr. S. Baraniuk

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Course Description: Grade 10 Math Essentials

Text/Other Resources: Nelson Publishers, Mathematics for Apprenticeship and Workplace

Units of Study

Unit Title	Learning Outcomes	Assessment Plan	Proposed Time (based on ~ 75 school days)
Analysis of Numbers (5%)	Analyze puzzles and games that involve spatial reasoning, using problem-solving strategies.	*Formative Assessment* Assessment may include: Daily classroom activities *Summative Assessment* None, skills learned to be integrated into other outcomes	Integrated over whole semester
Personal Finance (10%)	Demonstrate an understanding of calculations for gross pay and net pay earned through income sources including: *wages *salary *contracts *commissions *piecework Solve problems that require the manipulation and application of formulas related to income.	*Formative Assessment* Assessment may include: • Textbook Assignments • Mental Math • Quizzes • Math Journals • Conferencing • Group Discussions *Summative Assessment* Unit Tests/Quizzes/Projects	Approx. 10 days

Consumer Decisions (10%)	Solve problems that involve unit pricing and currency exchange, using proportional reasoning.	*Formative Assessment* Assessment may include: • Textbook Assignments • Mental Math • Quizzes • Math Journals • Conferencing • Group Discussions *Summative Assessment* Unit Tests/Quizzes/Projects	Approx. 5 days
Measurement (25%)	Demonstrate an understanding of the Systeme International (SI) by describing the relationships of the units for length, area, volume, capacity, and mass. Demonstrate an understanding of the imperial system by: *describing the relationships of the units for length, area, volume, capacity, and mass* *comparing American and British imperial units for capacity* *applying strategies to convert between imperial units and SI units* Solve and verify problems that involve SI and imperial linear measurements, including decimal and fractional measurements Solve problems that require the manipulation and application of formulas related to converting measurement.	*Formative Assessment* Assessment may include: • Textbook Assignments • Mental Math • Quizzes • Math Journals • Conferencing • Group Discussions *Summative Assessment* Unit Tests/Quizzes/Projects	Approx. 20 days

2-D Geometry (10%)	Solve problems that involve SI and imperial area measurements of regular, composite, and irregular 2-D shapes, including decimal and fractional measurements. Solve problems that require the manipulation and application of formulas related to: *perimeter *area	*Formative Assessment* Assessment may include: • Textbook Assignments • Mental Math • Quizzes • Math Journals • Conferencing • Group Discussions *Summative Assessment* Unit Tests/Quizzes/Projects	Approx. 5 days
Transformations (10%)	Demonstrate an understanding of transformations on a 2-D shape, including: * translations * rotations * reflections * dilations	*Formative Assessment* Assessment may include: • Textbook Assignments • Mental Math • Quizzes • Math Journals • Conferencing • Group Discussions *Summative Assessment* Unit Tests/Quizzes/Projects	Approx. 10 days
Angle Construction (10%)	Demonstrate an understanding of angles, including acute, right, obtuse, straight and reflex, by: *drawing *replicating & constructing *bisecting *solving problems Solve problems that involve parallel, perpendicular, and transversal lines, and pairs of angles formed between them.	*Formative Assessment* Assessment may include: • Textbook Assignments • Mental Math • Quizzes • Math Journals • Conferencing • Group Discussions *Summative Assessment* Unit Tests/Quizzes/Projects	Approx. 10 days
	Solve problems involving		

Trigonometry (20%)	right triangles using Pythagorean theorem. Demonstrate an understanding of primary trigonometric ratios (sine, cosine, tangent) by: *applying similarity to right triangles *generalizing patterns from similar right triangles *solving problems Solve problems that require the manipulation and application of formulas related to: *the Pythagorean theorem *primary trigonometric ratios	*Formative Assessment* Assessment may include: • Textbook Assignments • Mental Math • Quizzes • Math Journals • Conferencing • Group Discussions *Summative Assessment* Unit Tests/Quizzes/Projects	Approx. 15 days

Assessment Guidelines

There are various purposes for assessment:

Assessment *for* learning **(formative assessment)**: where assessment helps teachers gain insight into what students understand in order to plan and guide instruction, and provide helpful feedback to students.

Assessment *of* learning **(summative assessment)**: where assessment informs students, teachers and parents, as well as the broader educational community, of achievement at a certain point in time in order to celebrate success, plan interventions and support continued progress.

Academic Achievement

Grades will be calculated on summative assessment information only.
The final calculation will be a fair reflection of a student's achievement of the learning outcomes.

Term Work... 80%
- Assignments/Projects = 45%
- Unit Tests/Quizzes = 35%

Final Exam………………………………….20%

Learning Behaviours

Assessment and reporting of learning behaviors will be according to the Brandon School Division Learning Behaviors Rubric.