

## St. James Collegiate Goal Planning For 2021-2022: Numeracy

Step 1 Identify Action Arena	Step 2 Broad Outcome	Step 3 Desired student products and performance	Step 4 Required student knowledge, skills and dispositions	Step 5 Desired teaching products and performances	Step 6 Required teacher knowledge and dispositions	Step 7 Desired team product and performances	Step 8 Required team Knowledge, skills and dispositions
<p>To improve numeracy skills and improve students' ability to communicate their understanding, thinking and reasoning.</p>	<p>Students will deepen their thinking, use critical thinking, logic and be able to see authentic and real-world applications of Mathematics.</p> <p>Students will express their mathematical thinking in multiple ways and discuss the process they use to solve an unfamiliar problem. (Manipulatives, formulas, written, orally, graphically)</p>	<p>Students will have opportunities to expand their thinking at a higher level and see how their learning connects to the real world.</p> <p>By June 2022, all students will improve in their understanding of the connection between symbols and words necessary for being literate in Mathematics.</p> <p>By June 2022, all students will improve by one grade level in computational fluency.</p>	<p>Students will:</p> <p>Demonstrate an increased appreciation for the role making mistakes plays in learning.</p> <p>Communicate with a common vocabulary and understanding across all subject areas.</p> <p>Develop an increased repertoire of strategies to complete independent tasks.</p> <p>Will share and explain ideas, reasoning and representations in pair, small group and whole class discourse.</p> <p>Students will be provided with more opportunities for self-assessment and reflection. Students will be engaged in creating their own problems to solve.</p> <p>Recognize the importance of depth over speed and the mathematical process over the correct answer.</p>	<p>Teachers will:</p> <p>Emphasize: Mathematical skills, critical thinking skills, visible learning strategies and reflection strategies across the content areas.</p> <p>Emphasize the importance of depth over speed and the mathematical process over the correct answer.</p> <p>Work to embed the 5 Practices into their mathematical instruction and planning.</p> <p>Understand the importance and value of selecting rich tasks and anticipating possible student solutions before problems are used with students.</p> <p>To help all students achieve the academic preparation and success in numeracy required for their chosen path towards an immediate career or post-secondary education.</p>	<p>Teachers will:</p> <p>Select tasks that provide multiple entry points.</p> <p>Effectively model the OLM process with most of the instructional time in the “we do” part of the process. Use the <i>‘Try it, Apply it Model’</i> on a regular basis in all subject areas.</p> <p>Understand how to gather and use a body of evidence to evaluate student learning and plan for next steps in instruction and programming.</p> <p>Create opportunities for student self-assessment and reflection.</p> <p>Create learning environments that are interactive, and student centered.</p>	<p>Our Team Will:</p> <p>Continue to implement visible thinking strategies with the <i>try it and apply</i> it model to support our learning.</p> <p>Engage in conversations about shared beliefs about teaching and learning mathematics.</p> <p>Emphasize basic math skills, mental math strategies, writing in math, talking in math – “thinking out loud” and number sense in all math classes.</p> <p>Will work alongside divisional supports (Indigenous Support Teacher) to support and engage students in the mathematics curriculum.</p> <p>Work collaboratively to select common grade level problem solving tasks with real life applications.</p>	<p>Our Team Believes:</p> <p>That numeracy is everyone’s responsibility.</p> <p>Everyone is capable of learning math.</p> <p>That critical thinking is an essential part of Mathematical literacy.</p> <p>It is important for students to see authentic, real world application of Mathematics.</p> <p>That a growth mindset is helpful for both staff and students.</p> <p>Collective teacher efficacy and collaboration is critical in our work to engage students and improve/enrich student mathematical learning.</p> <p>Teaching a diverse student population necessitates understanding individual student needs and academic abilities, which may require adaptations and modifications in programming to ensure student success.</p>