



## **Plattsburgh City School District Mathematics Philosophy**

Students attending Plattsburgh City School District will receive a high quality, balanced and developmentally appropriate instructional program that provides ALL students with the opportunities, experiences and resources to be successful. Teachers will use research based teaching strategies, have high expectations, and provide support to all students. This will be accomplished through encouraging the development of critical thinking skills, which we believe to be a crucial component of an effective mathematics program. Additionally our teachers will teach with the understanding that children reach developmental milestones at different times and that some children may not be developmentally ready to learn certain concepts at the same time as their peers. We will teach with the knowledge that this is not a deficit in understanding; it is a difference in pace of development.

Teachers will design lessons and strategies that support the following practices: 1) Make sense of problems and persevere in solving them, 2) Reason abstractly and quantitatively, 3) Construct viable arguments and critique the reasoning of others, 4) Model with mathematics, 5) Use appropriate tools strategically, 6) Attend to precision, 7) Look for and make use of structure, and 8) Look for and express regularity in repeated reasoning.

Students will engage in mathematics through individual and collaborative experiences with a balanced combination of procedural and conceptual understanding to ensure a solid mathematical base in number sense. Our students will be able to justify mathematical concepts in creative and intuitive ways, both verbally and in writing.



## **Mathematics Committee Mission Statement**

- Refine and communicate a PreK-12 scope and sequence of essential skills and domain specific vocabulary to ensure vertical alignment between all levels particularly and especially transition years between buildings.
- Maintain an ongoing intra-district dialogue regarding the math program to ensure proper emphasis on standards and consistency among buildings.
- Provide on-going, math specific professional development for administration and all staff PreK-12 involved in mathematics instruction.
- Conduct reviews of PreK-12 math resources on an on-going basis to ensure alignment to the learning standards.
- Teachers and students will effectively integrate the exploration and use of manipulatives, tools and technologies as essential resources in mathematics practices.
- Assessment will be used to guide instruction, student intervention/placement and program improvement.
- Proactively communicate our purpose within the community by utilizing community resources to enhance our math program.