

# MATHEMATICAL HABITS OF MIND

## What are mathematical habits of mind?

Extensive research indicates that for students to develop mathematical habits of mind they must encounter and interact in intentional learning settings. Pedagogical design combined with active participation strategies will enhance student learning, increase achievement, and contribute to the development of well-educated citizens.

Students who have developed mathematical habits of mind exhibit expertise in:

- persevering and using mathematics to solve problems in everyday life
- recognizing that there are multiple ways to solve a problem
- demonstrating respect for diversity in approaches to solving problems
- choosing and using appropriate strategies and tools
- pursuing accuracy in problem solving

As part of the BC Ministry of Education curriculum framework and as part of the Introduction to Mathematics curriculum page, Mathematical Habits of Mind are described as an important consideration (as shared above). The link to that page on the curriculum website is [HERE](#).

## Fostering positive mathematical dispositions

Along with mathematical habits of mind, there are some general dispositions that support the nurturing of numerate learners and citizens.

*How do learners respond to challenging situations?*

*How do they see themselves as learners of mathematics?*

*How might ongoing self-assessment and reflection support learning?*

*How might learners be supported to become independent mathematical thinkers and doers?*

*How do students contribute to and learn from others?*

Some key mathematical dispositions include: perseverance, flexibility in thinking, resilience, trying new ideas and ways of doing things, and connection-making.

As part of Personal and Social Core Competency development, students become self-aware, develop positive attitudes and confidence and are able to set goals for themselves.

