



## How can technology support the learning of mathematics?

The revised Mathematics Kindergarten to Grade 9 Program of Studies develops students' proficiency in mental mathematics and estimation, paper and pencil calculations, and the use of a variety of technologies. Technology enables students to explore and create patterns, examine relationships, test conjectures and solve problems.

In the early grades, emphasis is placed on developing number sense; therefore, calculators should not be used in place of knowing number facts. However, your child will use technology to explore relationships between numbers, patterns and concepts, as well as to interpret data and graphs. Tools such as tablets, interactive whiteboards and computers will be used by students as they develop an understanding of concepts progressing from the concrete, to the pictorial, to the symbolic.

As students develop their numeracy skills, calculators and computers may be used to reduce the time and effort devoted to tedious computations and increase students' time and focus on other aspects of mathematics, such as problem solving and real-life applications. Technology can also provide multiple representations of mathematical ideas and help with the discovery and understanding of concepts. When students use technology in these ways, mathematics becomes more engaging and relevant to their lives.



*Technology enables students to explore and create patterns, examine relationships, test conjectures and solve problems.*



How might I support my child in the appropriate use of technology?

- *Encourage your child to practise his or her mental mathematics skills when playing games that require computation, such as cribbage, or when making purchases at the store.*
- *Whenever possible, verbalize the mental math strategies you use when performing computations in your head so your child understands that a calculator is not necessary until a computation becomes too long and tedious.*
- *Explore the world mathematically; for example:*
  - *Can you graph the statistics provided on the sports page? What insights can you gain from doing this?*
  - *Are there technologies such as computer programs or applications that can be used to simplify family tasks, such as budgeting?*

*Adapted with permission from the Alberta Regional Professional Development Consortia.*