

Children learn mathematics to help them make better sense of the world around them, and to develop skills necessary in their lives. Being able to use mathematical knowledge to determine answers is important.

Becoming confident and competent with mathematics, however, is more about *doing* than about *knowing*, and more about communicating one's thinking than about stating the final answer. Mathematics education should therefore place a priority on the educational processes shown to help students develop these skills.

This is important to keep in mind when discussing how to teach and learn basic facts. In this pamphlet, we have addressed some common questions that students, parents, and teachers have asked about basic facts in math education.

How might I support my child at home to master the basic number facts?

Ask your child if they can describe how they determined an answer or if they can think of another way to find an answer.

Play games and solve puzzles where basic facts are part of the game play or the score keeping. (examples: Cribbage, Kakuro).

Ask numerical questions about daily life (examples: cooking, sports, money).

See the website below for many more ideas and resources.

For further details
& supporting links:

www.bcamt.ca/facts

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**British Columbia Association
of Mathematics Teachers**
~ a Provincial Specialist Association of the
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Mastering Basic Number Facts

*Answers to some
frequently asked
questions...*



It is critical that students know their basic facts well—and teaching them effectively requires much more than flash cards and timed tests.
~ John Van de Walle et al.

Is knowing basic facts important for students to be successful in mathematics?

Students need to be fluent with basic addition and multiplication facts. However, fluency includes much more than recalling the facts. To become fluent, successful students learn when and how to use the facts.

Good number sense leads to knowledge of basic facts, but memorizing basic facts does not necessarily lead to number sense.

Strategies that focus on understanding are useful because they help to develop number sense; they give learners a solid foundation from which to explore more complex mathematics.

Do students need to memorize basic facts?

Recall of facts is important and expected; however, recall of basic facts developed from memorization alone does not help to develop the number sense that is required to solve problems.

To have true mastery and robust recall of basic facts, students need to have efficient strategies. If facts learned through memorization are forgotten, students may have no strategies to compute a result because memorization itself doesn't lead to number sense.

Although rote memorization can lead to recall for some students, for many students it leads to anxiety and/or a dislike of mathematics. This is especially true when recall of basic facts is timed.

Number Sense is the flexible use and understanding of numbers and quantities.
~ Jo Boaler

Why does my child have to learn more than one way? This seems confusing and overwhelming.

“Learning more than one way” should not mean memorizing more than one way, nor should it be confusing and overwhelming. Rather, students need time to explore, connect, and understand different strategies to make sense of mathematical concepts.

Exploring multiple strategies helps students to develop mathematical thinking, communication skills, confidence, and an appreciation for mathematics.

Familiarity with a variety of strategies is essential when a particular strategy does not make sense.

Developing flexible strategies helps connect better to future learning of mathematical concepts.

“I know that 4×6 is 24 because I doubled 6 to get 12, then doubled 12 to get 24.”