

The Seven Mathematical Processes

The curriculum identifies seven key processes students engage in as they learn and use math throughout the grades. These are problem solving, reasoning and proving, reflecting, selecting tools and computational strategies, connecting, representing, and communicating. Your child will use these processes when learning new concepts and procedures, practising skills, and solving problems. Your child will also draw on his/her knowledge and skills from all of the mathematical strands and make connections with real-life situations.

The following are samples of questions that support the development of these math processes.

Problem Solving

What is happening in this problem?
What am I asked to find?
What do I know that I can use to solve this?

Reasoning and Proving

Why does this make sense?
How do I know my solution is right?

Reflecting

How else could I have solved this problem?
What did I learn from doing this work?

Selecting Tools and Computational Strategies

Which tool could I use to measure...?
What strategy could I use to show...?

Connecting

This concept reminds me of...
This problem is similar to...

Representing

What does this diagram tell me?
What equation can I use to show this?

Communicating

How can I explain my strategy?
Here is how I figured this out...

Why not try one of these questions at home with your child to let them show you how the math processes work. Use the supporting questions to help.

Calendar Patterns

Christmas Day takes place on the 25th of December. Christmas Eve is the day before and Boxing Day is the day after. In 2015 Christmas Day was a Friday. What day was Christmas Eve and what day was Boxing Day in 2015?



On which days of the week will Christmas Eve, Christmas Day and Boxing Day take place in the next five years? What did you discover?

12 Days of Christmas

According to the traditional song, on the first day of Christmas (December 25th), my true love sent to me: *A partridge in a pear tree*
On the second day of Christmas (December 26th), my true love sent to me THREE presents:



Two turtle doves and
A partridge in a pear tree
This carries on until the twelfth day of Christmas (Epiphany).
After the twelve days of Christmas are over, how many presents has *my true love sent me* altogether? Could you solve this another way?

For more questions, try out the Advent calendars for a problem a day until Christmas:

<https://goo.gl/WMFZu>

As a parent, there is a lot you can do to help your child learn and love math. Learn about the math that your child is studying in school. Look for math in everyday activities. Offer encouragement and have a positive attitude toward math. Parents can be a great role model, math mentor and coach.