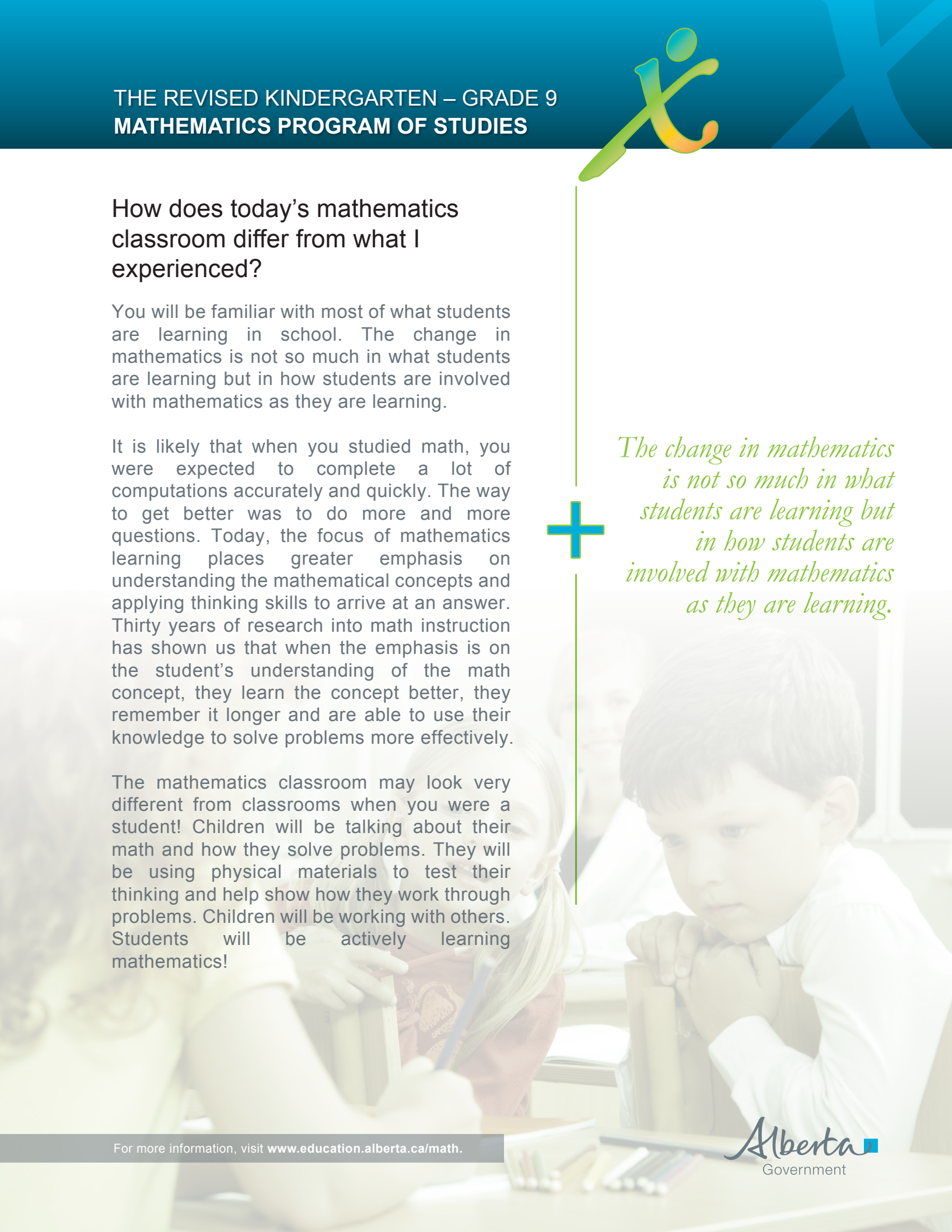
How does today's mathematics classroom differ from what I experienced?

You will be familiar with most of what students are learning in school. The change in mathematics is not so much in what students are learning but in how students are involved with mathematics as they are learning.

It is likely that when you studied math, you were expected to complete a lot of computations accurately and quickly. The way to get better was to do more and more questions. Today, the focus of mathematics learning places greater emphasis on understanding the mathematical concepts and applying thinking skills to arrive at an answer. Thirty years of research into math instruction has shown us that when the emphasis is on the student's understanding of the math concept, they learn the concept better, they remember it longer and are able to use their knowledge to solve problems more effectively.

The mathematics classroom may look very different from classrooms when you were a student! Children will be talking about their math and how they solve problems. They will be using physical materials to test their thinking and help show how they work through problems. Children will be working with others. Students will be actively learning mathematics!

The change in mathematics is not so much in what students are learning but in how students are involved with mathematics as they are learning.



Alberta Government

THE REVISED KINDERGARTEN – GRADE 9
MATHEMATICS PROGRAM OF STUDIES

Yesterday's Classroom	Today's Classroom
Teacher showing students how to solve questions and students copying steps from the board	Students working together on genuine math tasks, receiving guidance from the teacher when needed
Students memorizing procedures to solve routine problems	Students applying mathematical and logical reasoning to solve unique problems
Students working independently on multiple similar questions	Students working together communicating about the mathematics they are using
Mathematics seen as a collection of isolated concepts and procedures	Mathematics as a way of understanding, interpreting and describing our world. Making connections between concepts and real-world applications

How might I support my child in mathematics?

- *Let your child know that all students can be successful in mathematics.*
- *Encourage your child to think of math problems as puzzles or games.*
- *Encourage your child to restate the problem in his or her own words.*
- *Discuss how you use mathematics in your daily life. For example, cooking, shopping, bus schedules, or math at work.*

Adapted with permission from the Alberta Regional Professional Development Consortia.