Which courses are the most suitable for the majority of students to be studying in grades 11 and 12?

The most abstract courses for students will be the highly theoretical Pre-Calculus 11 & 12 courses. It leads to University level post-secondary Calculus courses for Sciences, Commerce, and Engineering (where only a small number of students are successful in enrolling). The Mathematics 11 & 12 courses are designed for the majority of high school students.

Is Apprenticeship and Workplace really designed for students thinking of entering the trades at post-secondary?

YES! There were a number of discussions between various groups in the development of the courses. It was clear that one of the pathways needed to focus more on trades and technical math. This led to reduced overlap between pathways. Each pathway is designed to provide students with the mathematical understandings, rigour, and critical-thinking skills that have been identified for specific post-secondary programs.

The courses in Apprenticeship and Workplace Mathematics 10 - 12 contain topics like Measurement, Geometry, Pythagoras Theorem, and Trigonmetry that are directly relevant to studies in trades programs at post-secondary.

Can my child get into University or College without taking Pre-calculus 11 & 12?

YES! There are many different combinations of courses and programs that will allow students to go to college or university. The specific Math courses that are required by colleges or universities depend entirely on the program a student wants to enter.

It is crucial that you check with the college or university guidebook to find out which specific courses are needed for entry and what marks are needed in those courses.

Where can I get more information?

Start your post-secondary career exploration in BC at

http://educationplanner.bc.ca

Start your career planning at

http://www.bced.gov.bc.ca/careers/

Get free math homework help or start your online learning exploration at

http://learnnowbc.ca

SECONDARY

MATH

Important Questions and Answers for Parents and Students

Why am I receiving this?

The Ministry of Education is implementing new pathways and courses in mathematics for students entering grade 10 in September 2010. This brochure is to clarify the changes and assist you and your child when making math course selections.

Which Math Course is best suited for my child?

While there is no "rule" about which math course is right for each student, the decision can be made easier by considering two questions:

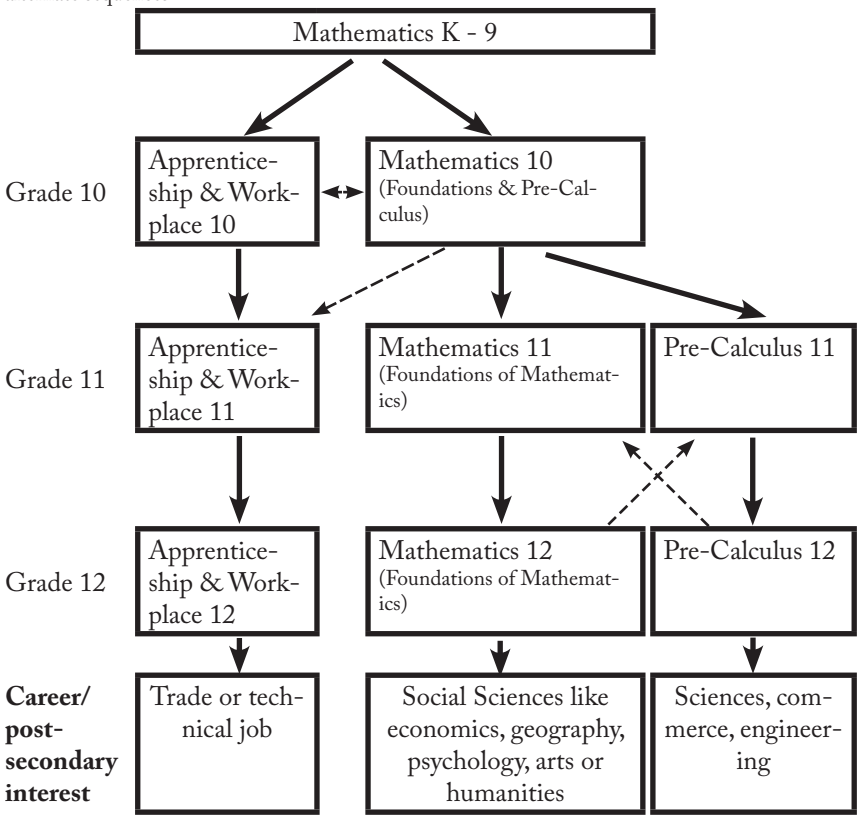
1. What are your child's future education and career plans?
2. What is your child's ability/interest in math?

Your child's education choices after high school depends, in part, on the courses they take in high school. To find out more information about each pathway option, please talk to your child's principal/vice-principal, counsellor and math teacher as well as visiting www.wncp.ca for more curriculum information.

Parents need to remember that grade 10 has ONLY two courses but there are three pathways in grade 11 and 12. Please review the diagram inside this brochure. Students who choose Apprenticeship and Workplace Mathematics 10 cannot easily move to the Mathematics or Pre-Calculus courses easily.

The information in this flyer is meant to serve only as a guide and does not cover information on which courses are required by individual post-secondary institutions.

The solid lines represent the recommended sequences and the dashed lines represent possible alternate sequences



Each pathway is designed to provide students with the mathematical understanding, rigour and critical-thinking skills that have been identified for specific post-secondary programs of study and for direct entry in the work force.

Apprenticeship and Workplace Mathematics (courses at grade 10, 11, & 12)

This pathway is specifically designed to provide students with the mathematical understanding and critical-thinking skills identified for entry into the **majority of trades** at post-secondary and for direct entry into the work force.

Mathematics (Foundations of Mathematics) **courses at grade 10, 11, & 12**

This pathway is designed to provide students with the mathematical understanding and critical-thinking skills identified for post-secondary studies that **DO NOT** require the study of theoretical calculus like Economics, Geography, Psychology, Arts or Humanities.

Pre-Calculus (courses at grade 11 & 12)

This pathway is designed to provide students with the mathematical understanding and critical-thinking skills identified for post-secondary studies that **DO** require the study of theoretical calculus like sciences, commerce, and engineering.

Will post-secondary institutions accept all three of the grade 12 courses as suitable for admission?

The Ministry of Education is meeting and working with post-secondary institutions to ensure understanding of secondary math courses; however, admission requirements are set by individual post-secondary institutions. As a result, parents and guidance counsellors are encouraged to **check with individual post-secondary institutions** to determine the admission requirements for general admission and for specific program admission requirements.

When is the last opportunity to write the Applications of Mathematics 10, Essentials of Mathematics 10 and Principles of Mathematics 10 exams?

Students will have one year to re-write the exams for Applications of Mathematics 10, Essentials of Mathematics 10 or Principles of Mathematics 10. Since these courses end in August 2010, students will be allowed to re-write until August 2011.

Are there still going to be Provincial Exams in the Grade 10 courses?

Yes! The grade 10 pathway courses starting in September 2010 will have a provincial exam that counts for 20% of the student's overall couse mark. This is the same breakdown for exam and school mark as has been the case since grade 10 exams became mandatory.

The exam will include a computation section without the use of calculator as well as a calculator-allowed section. Students will be able to access sample exams from the Ministry of Education website.

What happens if we change our mind about the courses we made before the start of the school year?

Because the three pathways were designed to give students **different** skills, attitudes and knowledge for different career and post-secondary paths, they were NOT designed specifically to allow for lateral movement between pathways. Schools will be recommending students stay in a pathway once a choice has been made.

The math pathways can be thought of like the science courses. While biology, chemistry, and physics are all sciences, they are different courses. Similarly, the new math courses, while all math, are different courses. The pathways contain different courses and were designed in such a way that students could take courses in more than one pathway if desired.

If, after high school, your child changes career paths and realizes that they need a different math course, post-secondary institutions will offer these or equivalent courses for upgrading.