

## Math: Recommendations for Success for Grade 9 Students

### HIGH SCHOOL SKILLS

High School mathematics requires a greater deal of self-discipline, focus, and practice. Regardless of the course that students enroll in, they should be prepared to learn at a faster pace than in grade 9 and spend (more) time each evening reviewing the day's lesson. Many students find themselves behind even after missing only one day.

To ensure students are more adequately prepared, students should also work to improve their number and variable operations without a calculator. They may practice topics like:

- .. the "multiplication tables"
- .. Fractions Operations:  $\frac{1}{2} + \frac{2}{3} = \frac{7}{6}$   
 $(\frac{1}{2}) \times (\frac{2}{3}) = \frac{1}{3}$
- .. Variable Operations:  $3x + 2x = 5x$   
 $(3x^2)(2x) = 6x^3$
- .. Opposite Operations:  $2x + 1 = 7 \rightarrow x = 3$   
(solving for variables)

### GRADE 10 COURSE OPTIONS

For students entering Grade 10, the largest group of students typically enter **Mathematics 10C** (Combined). This course is the starting point for both the Mathematics-1 and Mathematics-2 course sequences.

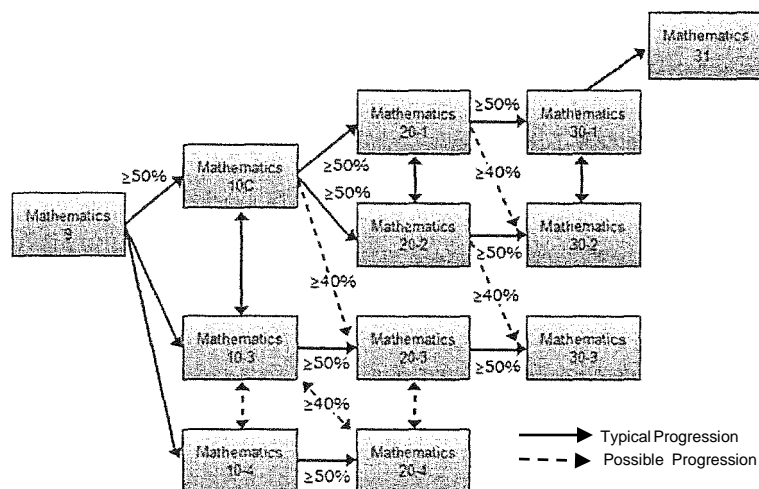
For students that do not pass grade 9 math and/or were in a modified math program, the courses available are **Mathematics 10-3** (for students planning to enter the majority of trades or the workforce immediately after high school) or **Mathematics 10-4** (Knowledge and Employability).

### FULL SEQUENCING (after grade 10)

**Mathematics-1** if students want to study mathematics or sciences at a university, college, or technical institute and go on to a related career such as engineering, mathematics, sciences, some business studies.

**Mathematics-2** if students want to attend a university, college, or technical institute after high school, but do not need calculus skills. I want to take programs like: arts, some engineering technologies, medical technologies, and some apprenticeship programs.

**Mathematics-3** if students are interested in learning the mathematics needed to enter most trades or if I want to enter the workforce after high school.



Please visit the Alberta Education website for more information on High School Math.  
<http://education.alberta.ca/teachers/program/math/parents.aspx>

## **Social Studies**

### **Recommendations for Success for Grade 9 Students**

#### **HIGH SCHOOL SKILLS**

To be successful in high school Social Studies students will need to develop a strong vocabulary and reading comprehension skills. Analytical skills, the ability to synthesize information and understandings from multiple sources and perspectives, and evaluative skills are also keys in being successful. These will be developed through research projects that go into depth on subject matter. Strong writing skills are an important component of high school Social Studies courses. Rather than simple recall and fill-in-the-blank activities, students will think critically about the content they are learning.

#### **GRADE 10 COURSE OPTIONS**

For students entering grade 10, there are four sequences from which to enroll: Social Studies 10-1, Social Studies 10-2, Social Studies 10-4, and Social Studies 10-1 Advanced Placement. Students achieving 65% or higher should enroll in Social Studies 10-1, and for those with a strong interest in Social Studies, honors marks, and a strong work ethic, Social Studies 10-1 Advanced Placement should be considered. For those achieving less than 65%, Social Studies 10-2 or Social Studies 10-4 (Knowledge and Employability) provide the alternative sequence.

#### **FULL SEQUENCING**

*Social Studies -1:* This stream is designed for students seeking entrance to university, notably for faculties such as Arts.

*Social Studies -2:* This stream provides the minimal requirement for an Alberta High School Diploma, and its successful completion is accepted as a pre-requisite for some colleges and trade schools.

## **Science: Recommendations for Success for Grade 9 Students**

### **HIGH SCHOOL SKILLS**

High School science requires a greater deal of self-discipline, focus, and practice. Regardless of the course that students enroll in, they should be prepared to learn at a faster pace than in grade 9. Students need to take ownership of their learning by meeting deadlines and working independently when they miss classes. Many students find themselves behind even after missing only one day. Students need to be able to set priorities and being a student should be priority number one.

Science is as much a process as a set of facts. Students will need to develop skills in data collection and analysis and transfer these skills from one field of science to another. Success in high school science also requires some specific mathematics skills including the ability to manipulate a formula.

### **GRADE 10 COURSE OPTIONS**

For students entering Grade 10, the largest group of students typically enter Science 10. This course is the starting point for Biology, Chemistry, Physics and the General Science course sequences. Success in Science 10 is dependent on having a good work ethic and good math skills.

For students that do not pass grade 9 science and/or were in a modified program, the courses available are Science 14 or Science 10-4 (Knowledge and Employability).

### **FULL SEQUENCING (after grade 10)**

Upon completion of Science 10, students have a choice to continue in general science (Science 20/30) and/or to branch into Biology, Chemistry, or Physics. Chemistry and Physics both require good mathematics skills and should only be taken by students who have these skills. Students who receive a grade between 50% and 60% in Science 10 are recommended to continue into Science 20. Students who complete Biology 20, Chemistry 20, or Physics 20, may enroll in Science 30 if they wish to change streams.

Students who complete Science 14 will continue in Science 24 and students who complete Science 10-4 will continue into Science 20-4.

We wish you the best of luck in grade 10!! 😊

## English Language Arts 10-1

### *Recommendations for Success*

Many students feel the demands of English Language Arts 10-1 exceed those of their respective junior high experience. This is owed to a number of factors. First, more material, of a more complex nature, is examined in a shorter timeframe than in junior high school. To experience success, students must attend regularly and demonstrate sustained, consistent focus. Second, a significant portion of class-time is occupied with teacher-presented lecture and student-driven discussion. The time necessary for the completion of these items is found in students completing much of the assigned readings independently and on their own time. Students who wish to capitalize on the significance of in-class instruction and discussion, thereby maximizing their achievement, will complete any and all assigned readings. Subsequently, it is common for students to dedicate an hour or more each evening to reading and reviewing course materials. Finally, English Language Arts 10-1 is **recommended** only for those students who have earned a minimum of **65%** by the conclusion of the ninth grade. This recommendation is in place to ensure students have an adequate grasp of the course's prerequisites, enabling them to keep pace with the increasingly complex demands of the high school experience.

Success is attainable- provided you are willing to work for it. Follow your progress with PowerSchool. Grades are updated periodically-be aware of your achievement. Furthermore, should you struggle with the demands of English Language Arts 10-1, it is recommended you examine the demands on your time, including part-time jobs and extra-curricular activities, and seek assistance in prioritizing. Lastly, a tutor registry is available in Student Services should you require assistance beyond what is offered in the classroom.

You are the one who is ultimately responsible for your achievement. Act accordingly - act responsibly - and success will be yours.