

Welcome to Workplace Math 10!

Throughout this course, you will explore four Big Ideas, Content and Curricular Competencies as set by the BC Curriculum [<https://curriculum.gov.bc.ca/curriculum/mathematics/10/workplace-mathematics>]. The four Big Ideas are:

- **Proportional reasoning** is used to make sense of **multiplicative** relationships.
- 3D objects can be examined mathematically by **measuring** directly and indirectly length, surface area, and volume.
- **Flexibility** with number builds meaning, understanding, and confidence.
- **Representing and analyzing data** allows us to notice and wonder about relationships.

Course Overview

Practice Assignments: Each unit is broken down into lessons and each lesson has a practice assignment accompanying it which includes an answer key and video solutions. You are required to complete and mark at least three quarters of each practice assignment (show your work). These assignments will be graded on completeness.

Send-In Assignments: The send-in assignments are a way for you to demonstrate what you have learned throughout the unit. No answer key is provided. They will be marked by your teacher and are worth 45% of your final grade. However, if you wish to complete corrections you may do so to improve your grade (grade will be calculated based on higher mark). Note: you may hand in each send-in assignment only once for corrections, and the corrections must be done on your own.

Tests: At the end of each unit there is a test, which is to be written in the classroom under supervision. You may bring in a cheat sheet on a single sided 8.5" by 11" piece of paper. You may have no help on your test. If you wish to improve your grade on a test, you may do corrections. If you do the corrections on your own you will receive up to an additional 10% on that test.

How To Be Successful

1. Take good, organized notes for your own reference as you learn new concepts.
2. Make sure that you understand and can do the problems presented in lessons.
3. Complete practice assignments after each lesson and compare your answers to the answer key.
4. Correct your mistakes!
5. Write a Unit test only after your send-in assignment has been marked, returned and corrected. That way you can use your send-in assignment as a review.
6. One-on-One Help is available! If you need assistance, please don't hesitate to contact me via email or phone to ask a question or to set up a one-on-one appointment. We can do this in person or we can meet online using Zoom. Remember, I am your teacher and I'm here to help.

Resources

- Content Connections online lessons: <https://apps.contentconnections.ca/ccltiprocess/>

Substantive Activity (Experimental Probability)

In order to be officially activated in this course you must first complete a substantive activity. For this activity you will complete the send-in assignment for unit 1: “Experimental Probability”. In this unit, you will conduct probability experiments using games; use simulations to solve problems; make connections to theoretical probability; and compare theoretical probability with experimental probability. The substantive activity covers a number of curriculum outcomes such as:

Big Ideas

- **Flexibility** with number builds meaning, understanding, and confidence (eg. How does using a measuring tool increase fluency and flexibility with decimals and fractions?)
- **Representing and analyzing data** allows us to notice and wonder about relationships (eg. How can simulations help us make inferences?)

Content

- Experimental Probability

Curricular Competencies

- Develop **thinking strategies** to solve puzzles and play games
- Explore, **analyze**, and apply mathematical ideas using **reason, technology, and other tools**
- **Model** with mathematics in **situational contexts**
- Apply **flexible and strategic approaches** to **solve problems**
- **Explain and justify** mathematical ideas and **decisions** in **many ways**
- **Reflect** on mathematical thinking
- **Connect mathematical concepts** with each other, other areas, and personal interests

Course evaluation:

Final Grade Course Calculator

| | |
|--------------------------|----------|
| Practice Assignments 10% | X 0.10 = |
|--------------------------|----------|

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|--|----------|
| Send-in Assignments (including Substantive Activity 6.43%) 45% | X 0.45 = |
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| Tests 45% | X 0.45 = |
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| Final Grade | <input type="text"/> |
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Course Organization

The course content is divided into 7 Units as shown below with suggested times. Note that once the substantive activity is complete, the time allotted for the remainder of the course is 16 weeks.

| Unit | Suggested time (1 week = 5 hours) | Assessments | Weight | Mark |
|-----------------------------|--------------------------------------|---|--------|------|
| 1. Experimental Probability | 12.5 hours (2.5 weeks) | Practice Assignments 1,2,3,4 | 1.43% | |
| | | Send-in Assignment (Substantive Activity) | 6.43% | |
| | | Test | 6.43% | |
| 2. Graphs | 12.5 hours (2.5 weeks) | Practice Assignments 1,2,3,4 | 1.43% | |
| | | Send-in Assignment | 6.43% | |
| | | Test | 6.43% | |
| 3. Measurement Conversions | 12.5 hours (2.5 weeks) | Practice Assignments 1,2,3,4,5 | 1.43% | |
| | | Send-in Assignment | 6.43% | |
| | | Test | 6.43% | |
| 4. Trigonometry | 15 hours (3 weeks) | Practice Assignments 1,2,3,4,5 | 1.43% | |
| | | Send-in Assignment | 6.43% | |
| | | Test (or project) | 6.5% | |
| 5. Surface Area and Volume | 15 hours (3 weeks) | Practice Assignments 1,2,3,4,5,6,7 | 1.43% | |
| | | Send-in Assignment | 6.43% | |
| | | Test | 6.43% | |
| 6. Central Tendency | 12.5 hours (2.5 weeks) | Practice Assignments 1,2,3 | 1.43% | |
| | | Send-in Assignment | 6.43% | |
| | | Test | 6.43% | |
| 7. Financial Literacy | 12.5 hours (2.5 weeks) | Practice Assignments 1,2,3 | 1.43% | |
| | | Send-in Assignment | 6.43% | |
| | | Test | 6.43% | |
| | | Final Grade | 100% | |