



COURSE OUTLINE

SUBJECT: Workplace 10

BIG IDEAS:

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.

CURRICULAR COMPETENCIES:

Students are expected to do the following:

Reasoning and modelling

- Develop **thinking strategies** to solve puzzles and play games
- Explore, **analyze**, and apply mathematical ideas using **reason, technology, and other tools**
- **Estimate reasonably** and demonstrate **fluent, flexible, and strategic thinking** about number
- **Model** with mathematics in **situational contexts**
- **Think creatively** and with **curiosity and wonder** when exploring problems

Understanding and solving

- Develop, demonstrate, and apply conceptual understanding of mathematical ideas through play, story, **inquiry**, and problem solving
- **Visualize** to explore and illustrate mathematical concepts and relationships
- Apply **flexible and strategic approaches to solve problems**
- Solve problems with **persistence and a positive disposition**
- Engage in problem-solving experiences **connected** with place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures

Communicating and representing

- **Explain and justify** mathematical ideas and **decisions in many ways**
- **Represent** mathematical ideas in concrete, pictorial, and symbolic forms
- Use mathematical vocabulary and language to contribute to **discussions** in the classroom
- Take risks when offering ideas in classroom **discourse**

Connecting and reflecting

- **Reflect** on mathematical thinking
- **Connect mathematical concepts** with each other, other areas, and personal interests

- Use **mistakes** as **opportunities to advance learning**
- **Incorporate** First Peoples worldviews, perspectives, **knowledge**, and **practices** to make connections with mathematical concepts

CONTENT:

Students are expected to know the following:

- create, interpret, and critique **graphs**
- **primary trigonometric ratios**
- metric and imperial measurement and **conversions**
- **surface area and volume**
- **central tendency**
- **experimental probability**
- **financial literacy:** gross and net pay

RESOURCE MATERIALS:

Math Works 10
 Locally developed supplemental packages
 Scientific Calculator Required

POLICIES AND PROCEDURES:

- 1) **PREPARATION FOR CLASS**
 It is the student's responsibility to arrive for each class **on time** with their notebook, pencils, calculator, and textbook. Students must keep a homework record sheet in their notebook, as well as recording this information in their agenda books. Parents are encouraged to monitor their child's progress by examining the evaluation sheet or agenda book.
- 2) **ABSENCES**
 Missing classes for any reason will have an impact on learning, assessment, and evaluation. Students absent from class, whether excused or unexcused, are solely responsible for obtaining and completing any missed assignments, work, or homework. **Your teacher is not required to make special arrangements for unexcused absences.**
 - a) Students absent for illness, medical appointments, and other emergencies **must** contact their teacher **on the day they return to school** to submit overdue assignments, schedule missed tests or quizzes, and to receive missed work.
 - b) Students absent for school related activities (ex. Field trips, work experience, sports trips, etc.), **must** inform their teacher of this absence **well in advance** of the activity, in order to receive specific instructions on work that will be missed and the rescheduling of missed tests and quizzes.
 - c) Students absent for any other reason, including family vacations, are considered **unexcused**. Any work, tests, or quizzes missed for these absences may result in receiving a **zero** for that activity.