



# Mathematics 10 at Work Halifax West High School 2021-2022



Ms. Stewart

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## MATHEMATICS AT WORK

This pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into some college programs and for direct entry into the work force. Topics include financial mathematics, algebra, geometry, measurement, number, and statistics and probability.

### Diversity Statement

Halifax West High School welcomes students from all over the world and it is my intent to create a safe learning environment that is inclusive of all. It is vital that we remain respectful of diversity: gender, sexuality, disability, age, socioeconomic status, religion, ethnicity, race and culture. At times, class materials we use may present world views that differ from our own. Please speak to me should a situation arise where you feel uncomfortable or offended so the issue can be addressed. I am open to discussing concerns and seeking acceptable solutions to address issues. I value all of my students and believe there is strength in our diversity. Please let me know if you prefer a name or use pronouns that are different from what is indicated on Powerschool.

### Materials Required:

Pencil, eraser and ruler, loose-leaf and graph paper, Class binder (containing **only** math

### Textbook:

Math at Work 10, McGraw-Hill Ryerson (digital version available on Google Classroom)

### Topics Covered

#### **Measurement (M) 35%**

- ✓ Imperial and metric measure
- ✓ describing the relationships of the units for length, area, surface area, volume, capacity, mass, and temperature.
- ✓ solve problems that involve SI and imperial area measurements of regular, composite, and irregular 2-D shapes and 3-D objects,

#### **Number (N) 20%**

- ✓ Solve problems that involve unit pricing and currency exchange, using proportional reasoning.
- ✓ Income to calculate gross pay and net pay, including wages, salary,

contracts, commissions, and piecework.

#### **Geometry (G) 45%**

- ✓ Spatial reasoning using problem-solving strategies.
- ✓ Right angle trigonometry including applying similarity, the primary trigonometric ratios, Pythagorean Theorem, and solving problems.
- ✓ Similarity of convex polygons, including regular and irregular
- ✓ Solve problems that involve parallel, perpendicular, and transversal lines, and pairs of angles formed between them.
- ✓ Angles, including acute, right, obtuse, straight, and reflex, by

drawing, replicating and constructing, bisecting, and solving problems.

### **Algebra (A) (integrated throughout)**

- ✓ Solve problems that require the manipulation and application of formulas related to perimeter, area, the Pythagorean Theorem, primary trigonometric ratios, and income.

## **ASSESSMENT**

### **Evaluation**

*When determining a students' final grade:*

- ✓ *No single assessment tool (i.e. presentations, labs, demonstrations, portfolios, debates, written tests/quizzes) will account for more than half of the value of each Gradebook category*
- ✓ *Learning trends over time will be considered, more recent student work and the teacher's professional judgment*

*Students will participate in a final cumulative assessment opportunity that allows them to demonstrate an appropriate range of the learning outcomes and process skills involved in the course. This final assessment, whether a written examination or alternative assessment opportunity, will be worth no more than 30%.*

**Final Assessment:** The final assessment will be based on the entire year and is worth 20% of the final grade. It will be written in June.

**Tests:** Tests are major assessments and will be announced several days in advance. Expect tests to be cumulative throughout the year.

**Quizzes:** Quizzes provide opportunities to assess ongoing progress and give indications as to whether extra help is needed. Quizzes are generally short and will be announced in advance.

**Assignments:** Assignments will be given and graded on a regular basis. They may be in class or take home, individual or group effort, as indicated by your teacher. Submissions will not be accepted after the corrected assignments have been handed back to students. The assignment mark will also include your binder and portfolio.

**Skill Checks:** Skill Checks are short evaluations based on recent work. Students must be sure to keep up with their work on a daily basis and come in for extra help when needed.

- ✓ **Assessment for Learning/Formative Assessment** is the ongoing process of gathering and interpreting evidence about student learning for the purpose of determining where students are in their learning, where they need to go, and how best to get there; instructional strategy that takes place while the student is still learning and served to promote learning
- ✓ **Assessment of Learning/Summative Assessment** is the process of analyzing, reflecting upon, and summarizing assessment information and making a judgment and/or decision based upon the information gathered.
- ✓ Assessment will take many forms, and will include observations, conversations, and products.

- ✓ Assessment Tools include, but are not limited to homework probes, quizzes, in-class assignments, tests, projects, and the final exam.

**Note:** Marks throughout the year will adhere to these proportions:

<b>Informal Assessments</b>	<b>50%</b>
<b>Formal Assessments</b>	<b>50%</b>

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### **Communication Tools**

*Halifax West High School will use a variety of methods to communicate student achievement throughout the school year.*

- ✓ Parents and students are encouraged to monitor progress (as well as lates and absences) using the PowerSchool portal.
- ✓ Assessments may be coded as collected, late, missing, or not included in final grade. There may also be comments listed, such as areas of improvement or dates for negotiated extensions.
- ✓ When assessments start to be categorized in a new strand, these assessments are initially weighed heavily and may cause significant change in a student's overall grade. This weighting will become more balanced as assessments continue to be included in the new strand.
- ✓ While HWHS has a number of scheduled opportunities for communication between home and school (Curriculum Night, Parent-Teacher Interviews, Mid Term Reports, Final Report Cards), parents and students are encouraged to contact the teacher any time during the semester to discuss progress.

### **Accessing Help**

In order to be successful in Math 10 @ Work...

- ✓ Extra-help is available at lunch (or by appointment before and after school)
- ✓ **Attend** regularly and be on time
- ✓ Be an **active learner**
  - *Read about the topic in advance, use a highlighter, ask questions, use multiple resources to fully explore the material, focus your attention on the material and avoid the distractions of texting and socializing*
- ✓ **Study** regularly and attempt all homework independently
- ✓ **Communicate** with your teacher and seek extra help when necessary