**Teacher Candidate:** Mike Friesen **SA:** VIC MENICUCCI **FA:** ROB WILLIAMSON

**UNIT:** Woodworking/Metal **GRADE:** 8/9/10/11/12 **DATE:**

**TOPIC:** How to Read Measurements **LESSON:** 2 of 16 **BLOCK/TIME:**

**BIG IDEAS**

* Complex tasks require the acquisition of additional skills.
* Complex tasks may require multiple tools and technologies.

**Prior knowledge:**

As grade 8’s, I will assume no knowledge will be had.

* Ask class “Who knows how to read a tape measure” and if so “Who knows how to read imperial and/or metric”?

**Course Content:**

* Identify measurements as fine as 1/64th inch and 1 millimeter
* Able to convert fractions into lowest forms
* Express importance of Symbols (“ ‘ and mm)
* Show elements of plans and drawings.

**Objectives: SWBAT**

* Identify specific measurements on handouts
* Use a tape measure, scale and/or rule to measure required test materials and future projects

**Motivator:**

Once students have completed the lesson and worksheets, individual project design will follow.

**Supporting Material:**

Lecture notes from board and work sheets.

**Equipment:**

|  |  |
| --- | --- |
| **List of materials needed:** | **List of equipment** |
| * Pencils
* Handouts
* Material to measure
 | * White board w/ markers
* Projector
* Document camera
* Class set of tape measures, rules (both metric and imperial)
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**Preparation:**

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| Day before lab:* Print handouts
* Collect measurement tools and material for lab and lecture

Few minutes before class:* Write lesson on board
* Turn on projector and document camera
* Place handouts, material and measurement tools in front of class
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**In class content:**

|  |  |  |
| --- | --- | --- |
| **Time** | **Lesson Procedure** | **Commentary, questions, notes** |
| 2 mins5 mins20 mins5 mins5 mins10 mins10 mins10 mins10 min2mins3 mins | AttendanceGo over schedule * Start lecture:
* Determine prior knowledge
* The “History” of measurement
* Who knows the 2 units of linear measurement?

- Hand out worksheets and measurement tools.* Describe the difference between tape measures, rules, and rulers.

- Demonstrate examples of imperial measurements from the worksheets on the document camera.(Check for questions and understanding)- Work period – Imperial worksheet -Finish PowerPoint on Metric- Demonstrate examples of metric measurements from the worksheets on the document camera.(Check for questions and understanding)- Work period – Metric work sheetClean upClosure* Exit questions

(Why does the end of the tape measure move? What makes the steel rule different ruler?)* Any final questions from class
* Instruct class to finish worksheets for homework and bring in next day for class marking.
 | - Use white board list- Give students my story of how one king created the imperial system to divide land for peasants * - Ask students to participate and handle tools.
* - Walk around class and assist students needing help
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**Vocabulary:** Tape measure,Rule, Ruler, Imperial, Metric, Inch, Millimeter, Foot and Centimeter

**Evaluation:** Exit slips and worksheets

**NOTES:**