**Units of Measurement – Metalwork**
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What are the two main units of measurements used in North America?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Imperial System**

First defined by the British in the 1800's

Lengths: mile, yard, foot, inch​

Canada continues to use the Imperial System when trading with goods with the USA
 **Imperial Measurement Tips:**



**Fill in the answers to the 12 Times Table**

|  |  |  |  |
| --- | --- | --- | --- |
| 12 x 1 = \_\_\_ | 12 x 4 = \_\_\_ | 12 x 7 = \_\_\_ | 12 x 10 = \_\_\_ |
| 12 x 2 = \_\_\_ | 12 x 5 = \_\_\_ | 12 x 8 = \_\_\_ | 12 x 11 = \_\_\_ |
| 12 x 3 = \_\_\_ | 12 x 6 = \_\_\_ | 12 x 9 = \_\_\_ | 12 x 12 = \_\_\_ |


**You must remember to simplify your fractions**

For example:

12 ticks = \_\_\_\_ /16ths of an inch

Divide the numerator and the denominator by 4.

Remember:  Whatever you do to the top number you must do to the bottom number

12 divided by 4 = \_\_\_\_

16 divided by 4 = \_\_\_\_

Simplified fraction - 12/16" = \_\_\_\_\_\_\_\_\_ of an inch (simplified fraction answer) or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (full written word answer).

**Conventions (symbols) how to express inches and feet in your answers**

All are correct but we will use the last convention showing only the symbols of feet and inches

1 foot = 1ft = 1'

1 inch = 1in = 1"

**Convention Samples:**

2 feet and 3 inches will be expressed as follows:

 \_\_’ \_\_"

2 feet 3 and 1/6th of an inch will be expressed as follows

 \_\_’ \_\_ \_\_\_\_" The inch mark goes at the very end of the fraction of an inch

**Metric System**

Most used system of measurement worldwide (ie: Canada, Europe)

Lengths: kilometer, meter, centimeter, millimeter

Canada adopted this system in 1970 to replace the Imperial System

**Let’s practice on the next pages!**

**Imperial Measurement –** Answer with a fraction in inches!
Don’t forget to simplify your fraction ( 2/4” would be 1 /2” ).


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**Measure in length of the rectangle in inches using a REAL ruler**

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**Measure the length of the rectangle in inches using a REAL ruler
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**Convert The following Fractions into a Decimal answer (example ½” = 0.50”)**

|  |  |
| --- | --- |
| **5/16 = \_\_\_\_\_\_\_14/32 = \_\_\_\_\_\_\_3/8 = \_\_\_\_\_\_\_7/8 = \_\_\_\_\_\_\_1 ¾ = \_\_\_\_\_\_\_5 9/16 = \_\_\_\_\_\_\_9 3/16 = \_\_\_\_\_\_\_** | **¼ = \_\_\_\_\_\_\_6 ½ = \_\_\_\_\_\_\_7 3/8 = \_\_\_\_\_\_\_** |

**Answer in METRIC**

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**Measure the length in centimeters using a REAL ruler
Round up your answer to the nearest tenth decimal. (Example = 2.55cm)
 How many cm?**

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