Foundations of Math 10 LG 16

METRIC AND IMPERIAL MEASUREMENTS

INTRODUCTION:

Imperial measurement is still the standard system used in many trades like construction and auto repair. Most studies in science have converted to metric measurements; however, there are still some areas in physics and chemistry that require conversion from one system to the other. This Guide is all about creating a comfortable system for you to make measurements or conversions.

LEARNING GUIDE EXPECTATIONS:

On the completion of this learning guide you will be able to:

1) Develop a method for measuring, estimating and converting **metric (SI) measurements.**
2) Create a system for measuring, estimating and converting **imperial measurements.**
3) Convert between metric (SI) and imperial measurements.

EVALUATION:

You are ready to progress to the next learning guide when you can demonstrate your understanding of the above expectations. Please refer to your Mathematics 10 Marks Record Sheet to determine the assessment.

RESOURCES NEEDED:

Math Links 10 Text

Geometry Set including a ruler, compass and protractor

LEARNING ACTIVITIES:

Expectation #1: Develop a method for measuring, estimating and converting **metric (SI) measurements.**

1. Watch and take notes on instructional video on Referents.
2. Watch and take notes on instructional video on Choosing Appropriate Units.
3. In the Math Links 10 text, read pages 8-10.
4. Work through Examples 1, 2 & 3 on pages 11-14.
5. Read Key Ideas on page 14.

6. In your math journal, include a referent for millimetre, centimetre, metre, and kilometre.

7. Now complete #1, 3, 4, 5, 7, 9, 11-13, 15, 16, 17, 19 & 20 on pages 15-21.

8. For extra practice, click here. For the answers to the extra practice, click here.

Expectation #2: Create a system for measuring, estimating and converting **imperial measurements.**

1. Watch and take notes on instructional video on Imperial Measurements.

2. Read pages 22-24.

3. Work through Examples 1, 2 & 3 on pages 24-29.

4. In your journal, include a referent for inch, foot, yard, and mile.

5. Now complete #2, 4, 5, 7-11, 13, 14, 15, 17 &18 on pages 30-35.

6. For extra practice, click here. For the answers to the extra practice, click here.

Expectation #3: Convert between metric (SI) and imperial measurements.

1. Watch and take notes on instructional video on Converting Units.

2. In the Math Links 10 text, read Link the Ideas on page 37 and then work through Examples 1, 2 & 3 on pages 38-41.

3. Read Key Ideas on page 42.

4. In your journal, show how you would convert 18cm to inches.

5. Now complete #1-4, 6a,b, 8, 9, 11-13, 15 &18 on pages 42-47.

6. For extra practice, click here. For the answers to the extra practice, click here.

REVIEW AND CHALLENGE

1. In the Math Links 10 text, complete Chapter Review #1-13 on pages 48-50.
2. In the Math Links 10 text, complete Practice Test #1-9 on pages 51-53.
3. In the Math Links 10 text, complete Unit Connections #1-5 on pages 140-141.

PRACTICE QUIZZES

Practice quiz #1
Practice quiz #2
Practice quiz #3
Practice quiz #4
Practice quiz #5