**End of Unit Study Guide:**

1. Students should be able to understand patterns when multiplying by powers of 10.
2. 3429 ÷ 103  B) 0.3429 x 10

\*\*Use a Place Value chart to show the answers to the expressions. Explain the relationship between each place on the chart.

1. Students should be able to compare and order values in standard, word, and expanded form: (<, > , =)

A) 34.210 34.201

B) 45 hundredths 45 tenths

C) 673 tenths 6 x 101 + 7 x 100  + 3 x 1/10

D) 45 x 1/10 + 23 1/100 45.23

1. Students should be able to model and explain operations with decimal numbers.

Model to explain the following:

A) 4 x 3.9 B) 4.35 ÷ 5

1. Student should be able to apply rounding, conversion of measurement, and operations with decimal number to problem solving situations.

*George conducted a science investigation in which he observed a vascular plant in colored water over the period of one week. Each day he recorded the mass of the plant. Use his data to answer the following….*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
| 7.124 g | 7.734 g | 8.143 g | 8.543 g | 8.375 g |

1. What day did the plant weigh the most? The least? What is the difference between the largest and smallest weight?
2. Round each weight to the nearest tenth. Use the rounded weights to find the average weight of the plant (add the rounded weights and divide by 5).

C) Write an equation to show how you would convert the Day 5 weight to kilograms.