

Pre-Algebra and Grade 8 Math Learning Targets 2015-2016 REGIONAL SCHOOL UNIT #22

RSU #22 is committed to the optimal learning of all students. As RSU #22 continues to move towards meeting 2018 graduation expectations, we have elected to look at proficiency learning targets K-12. Rather than only the high school being responsible to report student proficiency, we have created some initial targets at each grade level. We know that some children may be able to meet standards beyond the targets listed at the grade level. We also know that some students will need more time to meet the expectations.

Standards to be scored:

Number and Quantity: Number Systems

- Understands the similarities and differences among the angles and lines of shapes. Understands how to compose a geometric shape with given conditions
- Is skilled at multiplying and dividing integers (this is about using the rules of signs correctly)
- Is skilled at adding, subtracting, multiplying and dividing rational numbers
- Understands the relationship between rational and irrational numbers

Number Sense: Fractions, Decimals and Percents

- Is skilled at multiplication and division of decimals to hundredths place
- Is skilled at finding the percent of a quantity
- Is skilled at using proportional relationships to solve problems

Geometry: Attributes and Properties

- Understands the different attributes of triangles
- Understands the similarities and differences among the angles and lines of shapes
- Understands how to compose a geometric shape with given conditions

Geometry: Measurement

- Is skilled at measuring angles using a protractor Is skilled at drawing angles using a protractor
- Is skilled at finding the area of triangles, parallelograms, trapezoids, and other polygons
- Is skilled at finding area and circumference of circles

Statistics and Probability: Data Analysis

- Understands data can be represented and interpreted using a line graph (timeplot)

- Is skilled at summarizing numerical data sets by using quantitative measures including median, mean, inter-quartile range

Algebra: Foundational

- Understands how to generate a sequence given a rule
- Understand basic order of operations for addition, subtraction, multiplication, division
- Understand how to use parentheses, brackets, or braces to evaluate numerical expressions

Algebra: Interpreting Functions

- Understands that a function is a rule that assigns to each input (domain) exactly one output (range)
- Understand the concepts behind rate of change, average rate of change, and initial value for a linear function with regards to the given situation it models