PAT Review

Units and Concepts

**Unit 1: Patterns and equations**

Can you:

* use information in tables to find a pattern (input/ output machines)
* draw a graph based on information in a table (input is on your x axis, output is on your y- axis)
* solve word problems with information in a table
* write an equation with a letter (which is an unknown)
* understand equality ( balance scales, what you do to one side, you have to do to the other in order for your scale to still be balanced)

**Unit 2: Understanding numbers**

Can you:

* draw and fill in a place value chart with numbers more than 1 000 000 and as small as thousandths
* find all the multiples for any number up to 100 (repeating addition)
* find all the factors of a number up to 100 (factor trees, break it down)
* tell the difference between a prime and composite number (prime only have 2 factors)
* explain what an integer is (positive and negative numbers, when do we use them)
* explain what BEDMAS is and know when to use it. (brackets, exponents, multiplication and division( in there order from left to right), addition and subtraction (in their order from left to right))

**Unit 3: Decimals**

Can you:

* multiply decimals (concretely, pictorially and symbolically)
* divide decimals ( concretely, pictorially and symbolically)
* solve problems with decimals

**Unit 4: Angles and Polygons**

Can you:

* identify the different angles by their measure in degrees (acute, right, obtuse, straight, reflex)
* estimate how big an angle is (use 45, 90 and 180 degrees to help)
* draw and label an angle (with a protractor)
* explain how many degrees are in a triangle, quadrilateral, and circle (180 in a triangle, 360 in a quadrilateral and circle)

**Unit 5: Fractions, Ratios and Percents**

Can you:

* covert a mixed number to an improper fraction or convert an improper fraction to a mixed number ( 2 ½ = 5/2 )
* explain what ratios are (comparing 2 quantities- part to part and part to whole)
* explain what percent is ( part of a whole- talks about hundredths)

**Unit 6: Geometry and Measurement**

Can you:

* explain the difference between a regular and irregular polygon ( regular has same side length and same angle measures
* name and build triangles (acute, right, obtuse, isosceles, scalene and equilateral)
* find the perimeter of a polygon ( P( of a regular polygon)= number of sides x side length, P(of an irregular polygon)= s1+ s2+s3+ s4+…
* calculate the area of a rectangle ( A= l x w)
* calculate the volume of a rectangular prism (V=l x w x d)

**Unit 7: Data Analysis and Probability**

Can you:

* find ways to collect data
* draw graph
* use information on graphs to solve problems
* explain the difference between theoretical and experimental probability (theoretical is what are the chances that it should happen, experimental is what actually did happen)

**Unit 8: Transformations**

Can you:

* explain what the difference is between a translation (slide), rotation (turn) and a reflection (flip)
* perform a translation, rotation or reflection on a 2-D shape
* perform multiple translations, rotations and / or reflections on a 2-D shape
* perform a translation, rotation or reflection on a 2-D shape on a grid
* Please remember that the performance on the PATs does not have any reflection on the grades assigned on report cards.