## Octorara Area School District Standards Based Report Card Rubrics <br> 2018-2019 <br> Grade 6 Math

Standards-based grading aligns grading with the PA Core Standards. The report card accurately communicates achievement of learning targets to students, parents, and educators. Our report card provides specific information about the level of proficiency on the learning targets that are taught each trimester.

By the end of the year, students are expected to meet each grade-level standard (M). Students not meeting standards will receive instructional supports to achieve mastery for specific content and skills.

The purpose of these rubrics is to assist students, parents, and teachers in understanding what the specific learning expectations are for students to be considered at grade-level mastery in each skill area. These learning expectations may grow or increase as the school year progresses and more content/skills are introduced.

| SBRC Descriptor | M | SP | LP | NA |
| :--- | :--- | :--- | :--- | :--- |
| Means: | Consistently meets grade level <br> expectations/standards | Demonstrates steady <br> progress toward <br> meeting grade level <br> expectations/standards | Demonstrates limited <br> progress toward meeting <br> grade level <br> expectations/standards | Not assessed at this <br> time |
| The Number System |  | Independently and consistently <br> calculates basic facts <br> efficiently, accurately and <br> flexibly | Inconsistently calculates <br> basic facts efficiently, <br> accurately and flexibly. <br> May be independent <br> with one or more of the <br> four operations, but not <br> all | Dependent upon concrete <br> strategies or tools such as <br> multiplication charts <br> and/or calculator to <br> calculate facts |
| Shows basic fact mastery | Not assessed at this <br> time |  |  |  |
| Applies and extends <br> previous understandings of | Independently and consistently <br> is able to multiply and divide | Is able to multiply <br> fractions, but | Inability to multiply and <br> divide fractions | Not assessed at this <br> time |


| multiplication and division to divide fractions by fractions | fractions | demonstrates inconsistency and.or inability when dividing fractions |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Identifies and chooses appropriate processes to compute fluently with multi-digit numbers | Consistently multiplies multi-digit numbers, decimals and fractions and solves related word problems | Consistently multiplies single digit numbers, decimals and fractions, and solves related word problems | Limited ability to solve problems |  |
| Develops and/or applies number theory concepts to find common factors and multiples | Identifies factors and multiples of numbers. <br> Identifies the GCF and LCM of two or more numbers. | Identifies factors, multiples of individual numbers and identifies the GCF or LCM of two numbers. | Limited ability to apply number concept theories. |  |
| Applies and extends previous understandings of numbers to the system of rational numbers | Consistently compares and orders integers <br> Consistently plots integers on horizontal/vertical lines <br> Understands absolute value | Consistently compares and orders integers <br> Consistently plots integers on horizontal/vertical lines <br> Limited understanding of absolute value | Limited ability tyo compare and order integers <br> Limited ability to plot integers on horizontal/vertical lines <br> Limited understanding of absolute value |  |
| Ratios and Proportional Relationships |  |  |  |  |
| Demonstrates an understanding of ratio concepts and uses ratio reasoning to solve problems | Consistently and independently solves real-world and mathematical problems using ratio and rate reasoning | Demonstrates an understanding of ratios, but is unable to set up proportions. | Demonstrates a limited understanding of ratios and proportions |  |


| Expressions and Equations |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Applies and extends previous understandings of arithmetic to algebraic expressions | Consistently reads, writes and evaluates expressions with operations and exponents | Can read and write an expression <br> Limited ability to evaluate an expression | Limited ability to read, write and evaluate expressions | Not assessed at this time |
| Demonstrates understanding of the process of solving a one-variable equation or inequality and applies to real-world mathematical problems | Solves one-step equations/inequalities that involve the four operations using whole numbers, fractions and decimals. <br> Models and solves related word problems consistently. | Solves one-step equations/inequalities that involves the four operations. <br> Limited ability to model and solve word problems. | Limited ability to solve equations/inequalities. | Not assessed at this time |
| Represents and analyzes quantitative relationships between dependent and independent variables | Consistently represents variables in equations and identifies the dependent/independent variables | Is able to represent variables in equations <br> Inconsistently identifies dependent/independent variables | Limited knowledge of variables | Not assessed at this time |
| Geometry |  |  |  |  |
| Applies appropriate tools to solve real-world and mathematical problems involving area, surface area, and volume. | Calculates perimeter, area, surface area, volume, and circumference accurately, consistently, and independently. | Identifies correct dimensions in a figure but unable to calculate perimeter, area, volume, surface area, or circumference accurately and consistently. | Limited ability to find length, width, perimeter, area, surface area volume, or circumference of figures. |  |
| Graphs points in all four quadrants on the coordinate | Identifies the x and y axes and the origin. | Identifies the x and y axes and the origin. | Unable to identify the parts of the coordinate |  |


| plane to solve real world and mathematical problems. | Consistently plots and identifies points in all four quadrants and solve problems associated with them. | Inconsistently plots and identifies points in Quadrant 1. | plane or to plot or identify any points. |  |
| :---: | :---: | :---: | :---: | :---: |
| Statistics and Probability |  |  |  |  |
| Use a set of numerical data to develop an understanding of and recognize statistical variability. | Collects, organizes, displays, and analyzes data in graphs accurately and consistently (charts, frequency tables, circle graphs, bar graphs, double bar graphs, line plots, stem-and-leaf plots, box and whisker plots and histograms) <br> Accurately calculates the mean, median, mode and range of a data set <br> Upper and lower quartile scores can be found for use in a box and whisker plot | Collects and organizes data in graphs with inconsistent or incomplete results <br> Analyzes and uses data accurately at times <br> Finds two of the following: mean, median, mode and/or range of a data set | Limited ability to collect, display or analyze data <br> Limited ability to calculate one of the following: mean, median, mode or range |  |

