PSUSD 6th Grade Math 2018-19 Matrix

| Unit 1 | Unit 2 | Unit 3 | Unit 4 | Unit 5 | Unit 6 |
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| From:08/13/2018 <br> To:09/18/2018 <br> Assessment:09/18/2018 <br> Reflection: 09/19/2018 | From:09/19/2018 <br> To:10/30/2018 <br> Assessment:10/30/2018 <br> Reflection: 10/31/2018 | From:10/31/2018 <br> To:12/18/2018 <br> Assessment:12/18/2018 <br> Reflection: 12/19/2018 | $\begin{aligned} & \text { From:01/14/2019 } \\ & \text { To:02/26/2019 } \\ & \text { Assessment:02/26/2019 } \\ & \text { Reflection: 02/27/2019 } \end{aligned}$ | From:02/27/2019 <br> To:04/09/2019 <br> Assessment:04/09/2019 <br> Reflection: 04/10/2019 | From: To: <br> Assessment: Reflection: |
| 1 CC.6.NS. 4 Compute fluently with multi-digit numbers and find common factors and multiples. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express $36+8$ as $4(9+2)$. | CC.6.RP. 1 Understand ratio concepts and use ratio reasoning to solve problems. Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, "The ratio of wings to beaks in the bird house at the zoo was $2: 1$, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes." | CC.6.NS. 5 Apply and extend previous understandings of numbers to the system of rational numbers. Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, debits/credits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation. | CC.6.EE. 4 Apply and extend previous understandings of arithmetic to algebraic expressions. Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions $y+y+y$ and $3 y$ are equivalent because they name the same number regardless of which number y stands for. | CC.6.SP. 1 Develop understanding of statistical variability. Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages. |  |
| 2 CC.6.EE. 1 Apply and extend previous understandings of arithmetic to algebraic expressions. Write and evaluate numerical expressions involving whole-number exponents. | CC.6.RP. 2 Understand ratio concepts and use ratio reasoning to solve problems. Understand the concept of a unit rate $\mathrm{a} / \mathrm{b}$ associated with a ratio a:b with b ? 0 (b not equal to zero), and use rate language in the context of a ratio relationship. For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3 / 4$ cup of flour for each cup of sugar." "We paid \$75 for 15 hamburgers, which is a rate of $\$ 5$ per hamburger." (Expectations for unit rates in this grade are limited to non-complex fractions.) | CC.6.NS.6b Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. | CC.6.EE. 5 Reason about and solve onevariable equations and inequalities. Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true. | CC.6.SP. 2 Develop understanding of statistical variability. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape. |  |
| 3 CC.6.EE.2a Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation "Subtract y from 5 " as $5-y$. | CC.6.RP.3a Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. | CC.6.NS.6c Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane. | CC.6.EE. 6 Reason about and solve onevariable equations and inequalities. Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. | CC.6.SP. 4 Summarize and describe distributions. Display numerical data in plots on a number line, including dot plots, histograms, and box plots. |  |
| 4 CC.6.EE.2c Evaluate expressions at specific values for their variables. | CC.6.RP.3b Solve unit rate problems including those involving unit | CC.6.NS.7a Interpret statements of inequality as statements about the | CC.6.EE. 7 Reason about and solve onevariable equations and | CC.6.SP.5.c Summarize <br> and describe distributions. Summarize |  |


| Include expressions that arise from formulas in real-world problems. Perform arithmetic operations, including those involving wholenumber exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $\mathrm{V}=\mathrm{s}^{\wedge} 3$ and $\mathrm{A}=$ $6 s^{\wedge} 2$ to find the volume and surface area of a cube with sides of length $s=1 / 2$. | pricing and constant speed. For example, If it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed? | relative position of two numbers on a number line diagram. For example, interpret -3 > 7 as a statement that -3 is located to the right of 7 on a number line oriented from left to right. | inequalities. Solve realworld and mathematical problems by writing and solving equations of the form $\mathrm{x}+\mathrm{p}=\mathrm{q}$ and $\mathrm{px}=\mathrm{q}$ for cases in which $p, q$ and $x$ are all nonnegative rational numbers. | numerical data sets in relation to their context, such as by: -- c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data was gathered. |
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| 5 CC.6.EE. 3 Apply and extend previous understandings of arithmetic to algebraic expressions. Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression $3(2+x)$ to produce the equivalent expression $6+3 x$; apply the distributive property to the expression $24 \mathrm{x}+$ 18y to produce the equivalent expression 6 ( $4 \mathrm{x}+3 \mathrm{y}$ ); apply properties of operations to $y+y+y$ to produce the equivalent expression $3 y$. | CC.6.RP.3c Find a percent of a quantity as a rate per 100 (e.g., $30 \%$ of a quantity means 30/100 times the quantity); solve problems involving finding the whole given a part and the percent. | CC.6.NS.7b Write, interpret, and explain statements of order for rational numbers in realworld contexts. For example, write $-3^{\circ} \mathrm{C}>-$ $7^{\circ} \mathrm{C}$ to express the fact that $-3^{\circ} \mathrm{C}$ is warmer than $-7^{\circ} \mathrm{C}$. | CC.6.EE. 8 Reason about and solve onevariable equations and inequalities. Write an inequality of the form $x>$ c or $x<c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x$ $>c$ or $x<c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams. | CC.6.SP.5.d Summarize and describe distributions. Summarize numerical data sets in relation to their context, such as by: -- d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data was gathered. |

