PDE - Common Core Mathematics Standards - Cluster Heading Matrix

## Trifold - Grades 4-5-6

| Domain | Grade 4 | Grade 5 | Grade 6 |
| :---: | :---: | :---: | :---: |
| Counting and Cardinality |  |  |  |
| Operations and Algebraic Thinking | - Use the four operations with whole numbers to solve problems. <br> - Gain familiarity with factors and multiples. <br> - Generate and analyze patterns. | - Write and interpret numerical expressions. <br> - Analyze patterns and relationships. |  |
| Number and Operations in Base Ten | - Generalize place value understanding for multidigit whole numbers. <br> - Use place value understanding and properties of operations to perform multi-digit arithmetic. | - Understand the place value system. <br> - Perform operations with multi-digit whole numbers and with decimals to hundredths. |  |
| Number and OperationsFractions | - Extend understanding of fraction equivalence and ordering. <br> - Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. <br> - Understand decimal notation for fractions, and compare decimal fractions. | - Use equivalent fractions as a strategy to add and subtract fractions. <br> - Apply and extend previous understandings of multiplication and division to multiply and divide fractions. |  |
| Measurement and Data | - Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. <br> - Represent and interpret data. <br> - Geometric measurement: understand concepts of angle and measure angles. | - Convert like measurement units within a given measurement system. <br> - Represent and interpret data. <br> - Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition. |  |
| Ratios and Proportional Relationships |  |  | - Understand ratio concepts and use ratio reasoning to solve problems. |
| The Number System |  |  | - Apply and extend previous understandings of multiplication and division to divide fractions by fractions. <br> - Apply and extend previous understandings of numbers to the system of rational numbers. |
| Expressions and Equations |  |  | - Apply and extend previous understandings of arithmetic to algebraic expressions. <br> - Reason about and solve one-variable equations and inequalities. <br> - Represent and analyze quantitative relationships between dependent and independent variables. |
| Functions |  |  |  |

PDE - Common Core Mathematics Standards - Cluster Heading Matrix
Trifold - Grades 4-5-6

| Geometry | $\bullet$Draw and identify lines and angles, and classify <br> shapes by properties of their lines and angles. | Graph points on the coordinate plane to solve <br> real world and mathematical problems. <br> Classify two-dimensional figures into categories <br> based on their properties. | $\bullet$ <br> Solve real-world and mathematical problems <br> involving area, surface area, and volume. |
| :--- | :--- | :--- | :--- | :--- |
| Statistics and Probability |  |  | Develop understanding of statistical variability. <br> Summarize and describe distribution. |

