 **South Dakota Grade 4 Mathematics Threshold Descriptors**

|  |
| --- |
| **Grade 4 Priority Cluster: Operations and Algebraic Thinking (Target(s) – A)** |
| Threshold 2 | Threshold 3 | Threshold 4 |
| * Add and subtract to solve one-step problems involving an unknown number
 | * Multiply and divide to solve one-step problems involving equal groups or arrays
 | * Assess the reasonableness of answers using mental computation and estimation strategies, including rounding
 |

|  |
| --- |
| **Grade 4 Priority Cluster: Number and Operations – Base Ten (Target(s) –D, E)** |
| Threshold 2 | Threshold 3 | Threshold 4 |
| * Look for and use repeated reasoning to generalize place value understanding in order to read and write multi-digit whole numbers less than or equal to 100,000 using base-ten numerals and number names.
* Use place value understanding to add and subtract two- and three-digit whole numbers using a standard algorithm
 | * Read and write multi-digit whole numbers less than or equal to 1,000,000 using base-ten numerals, number names, and expanded form.
* Multiply four-digit whole numbers by a one-digit number
 |  |

|  |
| --- |
| **Grade 4 Priority Cluster: Number and Operations – Fractions (Target(s) – F, G, H)** |
| Threshold 2 | Threshold 3 | Threshold 4 |
| * Recognize equivalent fractions using visual models.
* Use visual fraction models to represent a problem.
* Express a fraction with denominator 10 as an equivalent fraction with denominator 100
 | * Generate equivalent fractions using visual models. Identify and generate equivalent forms of a fraction with like denominators.
* Add two fractions with respective denominators 10 and 100
 | * Compare two fractions with different numerators and different denominators using <, >, and =.
* Compare two decimals to the hundredths using <, >, and = or a number line and justify the conclusions by using visual models
 |

|  |
| --- |
| **Grade 4 Supporting Cluster: Operations and Algebraic Thinking (Target(s) –B, C)** |
| Threshold 2 | Threshold 3 | Threshold 4 |
| * Determine whether a given whole number in the range of 1–100 is a multiple of a given one-digit number.
* Generate a shape pattern that follows a given rule
 | * Find factor pairs for whole numbers in the range of 1–100.
* Identify apparent features of a pattern in a problem with scaffolding
 |  |

|  |
| --- |
| **Grade 4 Supporting Cluster: Measurement and Data (Target(s) – I, J, K)** |
| Threshold 2 | Threshold 3 | Threshold 4 |
| * Apply the perimeter formula to rectangles in mathematical problems.
* Use data from a given line plot using fractions 1/2, 1/4, and 1/8 to solve one-step problems.
* Recognize whole-number degrees on a protractor
 | * Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.
* Interpret data from a line plot to solve problems involving addition of fractions with like denominators by using information presented in line plots.
* Construct angles between 0 and 180 degrees in whole-number degrees using a protractor
 | * Apply the perimeter formula to rectangles in real-world problems.
* Solve addition problems to find unknown angles on a diagram in mathematical problems
 |

|  |
| --- |
| **Grade 4 Supporting Cluster: Geometry (Target(s) – L)** |
| Threshold 2 | Threshold 3 | Threshold 4 |
| * Identify points, lines, line segments, and rays
 | * Draw lines of symmetry for two-dimensional figures
 |  |