## 4th Grade Math Checklist

Operations and Algebraic Thinking
4.OA.A.1: I can understand that multiplication equations can be seen as comparisons of groups (e.g., $24=4 \times 6$ can be thought of as 4 groups of 6 or 6 groups of 4).

- 4.OA.A.2: I can multiply or divide to solve word problems by using drawings or writing equations and solving for a missing number.
- 4.OA.A.3: I can use what I know about addition, subtraction, multiplication and division to solve multi-step word problems involving whole numbers.
4.OA.A.3: I can represent word problems by using equations with a letter standing for the unknown number.
- 4.OA.A.3: I can determine how reasonable my answers to word problems are by using estimation, mental math and rounding.
- 4.OA.B.4: I can find all factor pairs for a whole number from 1 to 100 .
- 4.OA.B.4: I can recognize a whole number as a multiple of each of its factors.
- 4.OA.B.4: I can determine whether a whole number from 1 to 100 is a multiple of a given one-digit number.
] 4.OA.B.4: I can determine whether a given whole number up to 100 is a prime or composite number.
] 4.OA.C.5: I can create a number or shape pattern that follows a given rule.
- 4.OA.C.5: I can notice and point out different features of a pattern once it is created by a rule.


## Number and Operations in Base Ten

4.NBT.A.1: I can recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.

- 4.NBT.A.2: I can read and write larger whole numbers using numerals, words and in expanded form.
4.NBT.A.2: I can compare two larger numbers by using what I know about the values in each place. symbols to show the comparison.
- 4.NBT.A.2: I can compare two larger numbers and use the symbols >, = and < to show the comparison.
- 4.NBT.A.3: I can round larger whole numbers to any place.
- 4.NBT.B.4: I can add and subtract larger numbers
- 4.NBT.B.5: I can multiply a whole number up to four digits by a one-digit whole number.
- 4.NBT.B.5: I can multiply two two-digit numbers.
4.NBT.B.5: I can illustrate and explain how to multiply larger numbers by using equations, arrays or models.
4.NBT.B.6: I can find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors.
[ 4.NBT.B.6: I can illustrate and explain how to divide larger numbers by using equations, arrays or models.


## Number and Operations- Fractions

- 4.NF.A.1: I can explain (and show models for) why multiplying a numerator and a denominator by the same number does not change the value of a fraction.
- 4.NF.A.1: I can recognize and generate equivalent fractions based on my knowledge of numerators and denominators.
- 4.NF.A.2: I can compare two fractions with different numerators and different denominators by creating common denominators or numerators or by comparing them to a benchmark fraction like one-half.
- 4.NF.A.2: I can recognize that comparisons of fractions are valid only when the two fractions refer to the same whole.
- 4.NF.A.2: I can compare fractions using the symbols >, = and <, and justify the comparison by using models.
- 4.NF.B.3: I can understand a fraction $a / b$, with $a>1$, as a sum of fractions $1 / b$.
$\square$ 4.NF.B.3.A: I can understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
- 4.NF.B.3.B: I can decompose a fraction into a sum of fractions with the same denominator in more than one way and justify my work using models.
4.NF.B.3.C: I can add and subtract mixed numbers with like denominators.
4.NF.B.3.D: I can solve word problems involving addition and subtraction of fractions that refer to the same whole and that have like denominators.
- 4.NF.B.4: I can apply my understanding of multiplication to multiply a fraction by a whole number.
- 4.NF.B.4.A: I can understand a fraction $\mathrm{a} / \mathrm{b}$ as a multiple of $1 / \mathrm{b}$ (e.g., I know that $5 / 4$ is the product of $5 \times(1 / 4))$.
4.NF.B.4.B: I can understand a multiple of $\mathrm{a} / \mathrm{b}$ as a multiple of $1 / \mathrm{b}$ and use that knowledge to multiply a fraction by a whole number (e.g., $n \times(a / b)=(n \times a) / b)$.
- 4.NF.B.4.C: I can solve word problems involving multiplication of a fraction by a whole number.
4.NF.C.5: I can show a fraction with a denominator of 10 as an equivalent fraction with a denominator of 100 in order to add the two fractions.
$\square$ 4.NF.C.6: I can use decimals to show fractions with denominators of 10 and 100.
4.NF.C.7: I can compare two decimals to hundredths by reasoning about their size and realizing that the comparison is only true if the two decimals refer to the same whole.
$\square$ 4.NF.C.7: I can compare decimals using the symbols $>$, = and <, and justify the comparison by using models.


## Measurement and Data

- 4.MD.A.1: I can show that I know the relative size of measurement units within one system of units (including km, m, cm; kg, g; lb, oz; l, ml; hr, min, sec).
4.MD.A.1: I can show the measurements in a larger unit in terms of smaller units and record these in a table.
- 4.MD.A.2: I can use the four operations (+, - $x, /$ ) to solve word problems involving measurement.
4.MD.A.2: I can solve measurement problems involving simple fractions and decimals.
$\square$ 4.MD.A.2: I can solve problems that ask me to express measurements given in a larger unit in terms of a smaller unit.
- 4.MD.A.2: I can show measurement quantities using diagrams that involve a measurement scale (e.g., a number line).
- 4.MD.A.3: I can use what I know about area and perimeter to solve real world problems involving rectangles.
4.MD.B.4: I can make a line plot to show a data set of measurements involving fractions.
4.MD.B.4: I can solve problems involving addition and subtraction of fractions by using information shown in line plots.
- 4.MD.C.5: I can recognize angles as geometric shapes where two rays share a common endpoint.
- 4.MD.C.5: I can understand concepts of angle measurement.
- 4.MD.C.5.A: I can understand that angles are measured with reference to a 360 -degree circle, with its center at the common endpoint of the rays.
[ 4.MD.C.5.B. I can understand that an angle that turns through n one-degree angles is said to have an angle measurement of $n$ degrees.
- 4.MD.C.6: I can use a protractor to measure and sketch angles in whole-number degrees.
- 4.MD.C.7: I can solve real-world and mathematical addition and subtraction problems to find unknown angles.


## Geometry

- 4.G.A.1: I can identify and draw points, lines, line segments, rays, angles and perpendicular \& parallel lines.
[ 4.G.A.2: I can classify two-dimensional shapes based on what I know about their geometrical attributes.
- 4.G.A.2: I can recognize and identify right triangles.
4.G.A.3: I can recognize, identify and draw lines of symmetry.

