

## PCSD Lesson Planning Template

- Algebra. The branch of mathematics that deals with relationships between numbers, utilizing letters and other symbols to represent specific sets of numbers, or to describe a pattern of relationships between numbers.
- Arithmetic Sequence. A sequence of numbers in which the difference between any two consecutive terms is the same.
- Average Rate of Change. The change in the value of a quantity by the elapsed time. For a function, this is the change in the $y$-value divided by the change in the x -value for two distinct points on the graph.
- Coefficient. A number multiplied by a variable in an algebraic expression.
- Constant Rate of Change. With respect to the variable $x$ of a linear function $y=f(x)$, the constant rate of change is the slope of its graph.
- Continuous. Describes a connected set of numbers, such as an interval.
- Discrete. A set with elements that are disconnected.
- Domain. The set of $x$-coordinates of the set of points on a graph; the set of $x$-coordinates of a given set of ordered pairs. The value that is the input in a function or relation.
- End Behaviors. The appearance of a graph as it is followed farther and farther in either direction.
- Equation. A number sentence that contains an equals symbol.
- Explicit Formula. A formula that allows direct computation of any term for a sequence $a_{1}, a_{2}, a_{3}, \ldots, a_{n}, \ldots$.
- Expression. Any mathematical calculation or formula combining numbers and/or variables using sums, differences, products, quotients including fractions, exponents, roots, logarithms, functions, or other mathematical operations.
- Factor. For any number $x$, the numbers that can be evenly divided into $x$ are called factors of $x$. For example, the number 20 has the factors 1,2 , $4,5,10$, and 20.
- Inequality. Any mathematical sentence that contains the symbols > (greater than), < (less than), $\leq$ (less than or equal to), or $\geq$ (greater than or equal to).
- Interval Notation. A notation representing an interval as a pair of numbers. The numbers are the endpoints of the interval. Parentheses and/or brackets are used to show whether the endpoints are excluded or included.


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- Linear Function. A function with a constant rate of change and a straight line graph.
- Linear Model. A linear function representing real-world phenomena. The model also represents patterns found in graphs and/or data.
- Ordered Pair. A pair of numbers, ( $\mathrm{x}, \mathrm{y}$ ), that indicate the position of a point on a Cartesian plane.
- Parameter. The independent variable or variables in a system of equations with more than one dependent variable.
- Range. The set of all possible outputs of a function.
- Recursive Formula. A formula that requires the computation of all previous terms to find the value of an.
- Slope. The ratio of the vertical and horizontal changes between two points on a surface or a line.
- Substitution. To replace one element of a mathematical equation or expression with another.
- Term. A value in a sequence--the first value in a sequence is the 1 st term, the second value is the 2 nd term, and so on; a term is also any of the monomials that make up a polynomial.
- Variable. A letter or symbol used to represent a number.
- X-intercept. The point where a line meets or crosses the $x$-axis
- Y-intercept. The point where a line meets or crosses the $y$-axis

