

Student's Name: _____

Individual Profile of Progress: Grade 3 Number Sense and Operations Strand

Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems.

MARKING PERIOD				PERFORMANCE INDICATORS	COMMENTS
Number Systems					
				3.N.1 Skip count by 25s, 50s, 100s to 1,000	
				3.N.2 Read and write whole numbers to 1,000	
				3.N.3 Compare and order numbers to 1,000	
				3.N.4 Understand the place value structure of the base ten number system: 10 ones = 1 ten 10 tens = 1 hundred 10 hundreds = 1 thousand	
				3.N.5 Use a variety of strategies to compose and decompose three-digit numbers	
				3.N.6 Use and explain the commutative property of addition and multiplication	
				3.N.7 Use 1 as the identity element for multiplication	
				3.N.8 Use the zero property of multiplication	
				3.N.9 Understand and use the associative property of addition	
				3.N.10 Develop an understanding of fractions as part of a whole unit and as parts of a collection	

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				3.N.11 Use manipulatives, visual models, and illustrations to name and represent unit fractions ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, and $\frac{1}{10}$) as part of a whole or a set of objects	
				3.N.12 Understand and recognize the meaning of numerator and denominator in the symbolic form of a fraction	
				3.N.13 Recognize fractional numbers as equal parts of a whole	
				3.N.14 Explore equivalent fractions ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$)*	
				3.N.15 Compare and order unit fractions ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$) and find their approximate locations on a number line*	
Number Theory					
				3.N.16 Identify odd and even number	
				3.N.17 Develop an understanding of the properties of odd/even numbers as a result of addition or subtraction	

Students will understand meanings of operations and procedures, and how they relate to one another.

Operations					
				3.N.18 Use a variety of strategies to add and subtract 3-digit numbers (with and without regrouping)	
				3.N.19 Develop fluency with single-digit multiplication facts (above 5×10 , in context)*	
				3.N.20 Use a variety of strategies to solve multiplication problems with factors up to 12×12 *	
				3.N.21 Use the area model, tables, patterns, arrays, and doubling to provide meaning for multiplication	
				3.N.22 Demonstrate fluency and apply single-digit division facts (above $50/10$, in context)*	
				3.N.23 Use tables, patterns, halving, and manipulatives to provide meaning for division*	

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Grade 3

				3.N.24 Develop strategies for selecting the appropriate computational and operational method in problem solving situations	
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Students will compute accurately and make reasonable estimates.

Estimation					
				3.N.25 Estimate numbers up to 200 Estimate numbers up to 500*	
				3.N.26 Recognize real world situations in which an estimate (rounding) is more appropriate*	
				3.N.27 Check reasonableness of an answer by using estimation	

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Individual Profile of Progress: Grade 3 Algebra Strand

Students will perform algebraic procedures accurately.

MARKING PERIOD				PERFORMANCE INDICATORS	COMMENTS
Equations and Inequalities					
				3.A.1 Use the symbols $<$, $>$, $=$ (with and without the use of a number line) to compare whole numbers. Use the symbols $<$, $>$, $=$ (with and without the use of a number line) to compare unit fractions ($1/2$, $1/3$, $1/4$, $1/5$, $1/6$, and $1/10$)*	

Students will recognize, use, and represent algebraically patterns, relations, and functions.

Patterns, Relations, and Functions					
				3.A.2 Describe and extend numeric (+, -) and geometric patterns	

*Post March for fractions

Grade 3 Geometry Strand

Students will use visualization and spatial reasoning to analyze characteristics and properties of geometric shapes.

Shapes					
				3.G.1 Define and use correct terminology when referring to shapes (circle, triangle, square, rectangle, rhombus, trapezoid, and hexagon)	
				3.G.2 Identify congruent and similar figures*	
				3.G.3 Name, describe, compare, and sort three-dimensional shapes: cube, cylinder, sphere, prism, and cone	
				3.G.4 Identify the faces on a three-dimensional shape as two-dimensional shapes	

Students will apply transformations and symmetry to analyze problem solving situations.

Transformational Geometry					
				3.G.5 Identify and construct lines of symmetry	

*Post March

Student's Name: _____

Individual Profile of Progress: Grade 3 Measurement Strand

Students will determine what can be measured and how, using appropriate methods and formulas.

MARKING PERIOD				PERFORMANCE INDICATORS	COMMENTS
Units of Measurement					
				3.M.1 Select tools and units (customary) appropriate for the length measured	
				3.M.2 Use a ruler/yardstick to measure to the nearest standard unit (whole and $\frac{1}{2}$ inches, whole feet, and whole yards)	
				3.M.3 Measure objects, using ounces and pounds	
				3.M.4 Recognize capacity as an attribute that can be measured	
				3.M.5 Compare capacities (i.e., Which contains more? Which contains less?)	
				3.M.6 Measure capacity, using cups, pints, quarts, and gallons	

Students will use units to give meaning to measurements.

Units					
				3.M.7 Count and represent combined coins and dollars, using currency symbols (\$0.00)	
				3.M.8 Relate unit fractions to the face of the clock: Whole = 60 minutes $\frac{1}{2}$ = 30 minutes $\frac{1}{4}$ = 15 minutes	

Students will develop strategies for estimating measurements.

Estimation					
				3.M.9 Tell time to the minute, using digital and analog clocks	
				3.M.10 Select and use standard (customary) and non-standard units to estimate measurements	

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Individual Profile of Progress: Grade 3 Statistics and Probability Strand

Students will collect, organize, display, and analyze data.

MARKING PERIOD				PERFORMANCE INDICATORS	COMMENTS
Collection of Data					
				3.S.1 Formulate questions about themselves and their surroundings*	
				3.S.2 Collect data using observation and surveys, and record appropriately*	
Organization and Display of Data					
				3.S.3 Construct a frequency table to represent a collection of data	
				3.S.4 Identify the parts of pictographs and bar graphs	
				3.S.5 Display data in pictographs and bar graphs	
				3.S.6 State the relationships between pictographs and bar graphs	
Analysis of Data					
				3.S.7 Read and interpret data in bar graphs and pictographs	

Students will make predictions that are based upon data analysis.

Predictions from Data					
				3.S.8 Formulate conclusions and make predictions from graphs	

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Individual Profile of Progress: Grade 3 Problem Solving Strand

Students will build new mathematical knowledge through problem solving.

MARKING PERIOD				PERFORMANCE INDICATORS	COMMENTS
				3.PS.1 Explore, examine, and make observations about a social problem or mathematical situation	
				3.PS.2 Understand that some ways of representing a problem are more helpful than others	
				3.PS.3 Interpret information correctly, identify the problem, and generate possible solutions	

Students will solve problems that arise in mathematics and in other contexts.

				3.PS.4 Act out or model with manipulatives activities involving mathematical content from literature	
				3.PS.5 Formulate problems and solutions from everyday situations	
				3.PS.6 Translate from a picture/diagram to a numeric expression	
				3.PS.7 Represent problem situations in oral, written, concrete, pictorial, and graphical forms	
				3.PS.8 Select an appropriate representation of a problem	

Students will apply and adapt a variety of appropriate strategies to solve problems.

				3.PS.9 Use trial and error to solve problems	
				3.PS.10 Use process of elimination to solve problems	
				3.PS.11 Make pictures/diagrams of problems	

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				3.PS.12 Use physical objects to model problems	
				3.PS.13 Work in collaboration with others to solve problems	
				3.PS.14 Make organized lists to solve numerical problems	
				3.PS.15 Make charts to solve numerical problems	
				3.PS.16 Analyze problems by identifying relationships	
				3.PS.17 Analyze problems by identifying relevant versus irrelevant information	
				3.PS.18 Analyze problems by observing patterns	
				3.PS.19 State a problem in their own words	

Students will monitor and reflect on the process of mathematical problem solving.

				3.PS.20 Determine what information is needed to solve a problem	
				3.PS.21 Discuss with peers to understand a problem situation	
				3.PS.22 Discuss the efficiency of different representations of a problem	
				3.PS.23 Verify results of a problem	
				3.PS.24 Recognize invalid approaches	
				3.PS.25 Determine whether a solution is reasonable in the context of the original problem	

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Individual Profile of Progress: Grade 3 Reasoning and Proof Strand

Students will recognize reasoning and proof as fundamental aspects of mathematics.

MARKING PERIOD				PERFORMANCE INDICATORS	COMMENTS
				3.RP.1 Use representations to support mathematical ideas	
				3.RP.2 Determine whether a mathematical statement is true or false and explain why	

Students will make and investigate mathematical conjectures.

				3.RP.3 Investigate the use of knowledgeable guessing by generalizing mathematical ideas	
				3.RP.4 Make conjectures from a variety of representations	

Students will develop and evaluate mathematical arguments and proofs.

				3.RP.5 Justify general claims or conjectures, using manipulatives, models, and expressions	
				3.RP.6 Develop and explain an argument using oral, written, concrete, pictorial, and/or graphical forms	
				3.RP.7 Discuss, listen, and make comments that support or reject claims made by other students	

Students will select and use various types of reasoning and methods of proof.

				3.RP.8 Justify an argument by trying many cases	
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Individual Profile of Progress: Grade 3 Communication Strand

Students will organize and consolidate their mathematical thinking through communication.

MARKING PERIOD				PERFORMANCE INDICATORS	COMMENTS
				3.CM.1 Understand and explain how to organize their thought process	
				3.CM.2 Verbally explain their rationale for strategy selection	
				3.CM.3 Provide reasoning both in written and verbal form	

Students will communicate their mathematical thinking coherently and clearly to peers, teachers, and others.

				3.CM.4 Organize and accurately label work	
				3.CM.5 Share organized mathematical ideas through the manipulation of objects, drawings, pictures, charts, graphs, tables, diagrams, models, symbols, and expressions in written and verbal form	
				3.CM.6 Answer clarifying questions from others	

Students will analyze and evaluate the mathematical thinking and strategies of others.

				3.CM.7 Listen for understanding of mathematical solutions shared by other students	
				3.CM.8 Consider strategies used and solutions found in relation to their own work	

Students will use the language of mathematics to express mathematical ideas precisely

				3.CM.9 Increase their use of mathematical vocabulary and language when communicating with others	
				3.CM.10 Describe objects, relationships, solutions and rationale using appropriate vocabulary	
				3.CM.11 Decode and comprehend mathematical visuals and symbols to construct meaning	

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Individual Profile of Progress: Grade 3 Connections Strand

Students will recognize and use connections among mathematical ideas.

MARKING PERIOD				PERFORMANCE INDICATORS	COMMENTS
				3.CN.1 Recognize, understand, and make connections in their everyday experiences to mathematical ideas	
				3.CN.2 Compare and contrast mathematical ideas	
				3.CN.3 Connect and apply mathematical information to solve problems	

Students will understand how mathematical ideas interconnect and build on one another to produce a coherent whole.

				3.CN.4 Understand multiple representations and how they are related	
				3.CN.5 Model situations with objects and representations and be able to make observations	

Students will recognize and apply mathematics in contexts outside of mathematics.

				3.CN.6 Recognize the presence of mathematics in their daily lives	
				3.CN.7 Apply mathematics to solve problems that develop outside of mathematics	
				3.CN.8 Recognize and apply mathematics to other disciplines	

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Individual Profile of Progress: Grade 3 Representation Strand

Students will create and use representations to organize, record, and communicate mathematical ideas.

MARKING PERIOD				PERFORMANCE INDICATORS	COMMENTS
				3.R.1 Use verbal and written language, physical models, drawing charts, graphs, tables, symbols, and equations as representations	
				3.R.2 Share mental images of mathematical ideas and understandings	
				3.R.3 Recognize and use external mathematical representations	
				3.R.4 Use standard and nonstandard representations with accuracy and detail	

Students will select, apply, and translate among mathematical representations to solve problems.

				3.R.5 Understand similarities and differences in representations.	
				3.R.6 Connect mathematical representations with problem solving	
				3.R.7 Construct effective representations to solve problems	

Students will use representations to model and interpret physical, social, and mathematical phenomena.

				3.R.8 Use mathematics to show and understand physical phenomena (e.g., estimate and represent the number of apples in a tree)	
				3.R.9 Use mathematics to show and understand social phenomena (e.g., determine the number of buses required for a field trip)	
				3.R.10 Use mathematics to show and understand mathematical phenomena (e.g., use a multiplication grid to solve odd and even number problems)	

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