

THIRD GRADE**MATHEMATICS**

Goal 6: Demonstrate and apply a knowledge and sense of numbers, including numeration and operations (addition, subtraction, multiplication, division), patterns, and ratios and proportions.

Learning Standard A	Learning Standard B	Learning Standard C	Learning Standard D
Demonstrate knowledge and use of numbers and their representations in a broad range of theoretical and practical settings.	Investigate, represent and solve problems using number facts, operations (addition, subtraction, multiplication, division) and their properties, algorithms and relationships.	Compute and estimate using mental mathematics, paper-and-pencil methods, calculators and computers.	Solve problems using comparison of quantities, ratios, proportions and percents.
<ul style="list-style-type: none"> • Counting forward and backward by 5's, 10's, 100's, and 1,000's to 10,000 • Recognizing and writing numerals by 5's, 10's, 100's, and 1,000's to 10,000 • Applying place value concept of two through five digit numbers • Showing the relationship between addition and subtraction number models using $<$, $>$, $=$ 	<ul style="list-style-type: none"> • Writing and solving addition and subtraction number stories • Solving for missing addends and subtrahends using two digit regrouping • Solving 2 and 3 digit addition and subtraction with regrouping 	<ul style="list-style-type: none"> • Using calculators • Using multiplication arrays • Using manipulatives to solve division problems of equal sharing with or without remainders 	<ul style="list-style-type: none"> • Identifying and comparing basic fractions using concrete materials

State Goal 7: Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.

Learning Standard A	Learning Standard C
Measure and compare quantities using appropriate units, instruments and methods.	Select and use appropriate technology, instruments and formulas to solve problems, interpret results and communicate findings.
<ul style="list-style-type: none"> • Reading/showing accurate temperature within 5 degrees • Measuring inches to the half unit • Recalling equivalent units of measure (12in.=1ft., 3ft.=1yd.) • Ability to differentiate between centimeters and inches • Using the appropriate measurement (centimeter or inch side of the ruler) 	<ul style="list-style-type: none"> • Measuring perimeter of polygon • Finding area of a rectangle

State Goal 8: Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems and predict results.

Learning Standard A	Learning Standard B	Learning Standard C	Learning Standard D
Describe numerical relationships using variables and patterns.	Interpret and describe numerical relationships using tables, graphs and symbols.	Solve problems using systems of numbers and their properties.	Use algebraic concepts and procedure to represent and solve problems.
<ul style="list-style-type: none"> • Finding a variety of equivalent names for numbers • Identifying missing numbers in sequence • Using calculators to explore patterns • Recognizing and identifying a wide variety of patterns in numbers • Adding and subtracting variables (frames and arrows, What's my rule?) 	<ul style="list-style-type: none"> • Describing the numerical relationships of addition and subtraction variables 	<ul style="list-style-type: none"> • Developing and applying addition and subtraction strategies to solve a variety of problems • Using a number line and number grid 	<ul style="list-style-type: none"> • Solving one-step addition and subtraction equations using addition and subtraction with one variable • Using diagrams to solve addition and subtraction problems (parts and total, compare, change)

State Goal 9: Use geometric methods to analyze, categorize and draw conclusions about points, lines, planes and space.

Learning Standard A
Demonstrate and apply geometric concepts involving points, lines, planes and space.
<ul style="list-style-type: none"> • Naming 3D shapes: sphere, cube, cylinder, pyramid, cone • Naming 2D shapes: oval, hexagon, rhombus (diamond), trapezoid, octagon • Recognize the difference between 2D and 3D shapes

State Goal 10: Collect, organize and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability.

Learning Standard A
Organize, represent, analyze, and make conclusions about existing data.
<ul style="list-style-type: none"> • Collecting data through various methods • Organizing collected data on charts, picture and bar graphs • Interpreting collected data from charts, picture and bar graphs