

Lesson Indicators

Math 02

Lesson 01 - Counting

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Recognize 10 can mean "10 ones" or a single entity (1 ten) through physical models and trading games.	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems
01	Read and write 3-digit numerals (e.g., 243 as two hundred forty three, 24 tens and 3 ones, or 2 hundreds and 43 ones, etc.) and construct models to represent each.	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems
01	Use place value concepts to represent, compare and order whole numbers using physical models, numerals and words, with ones, tens and hundreds. For example:	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems

Lesson Indicators

Math 02

Lesson 02 - Fact Families

Code	Description	State ID	Grade Level	Bench Mark	Organizer
10	Demonstrate fluency in addition facts with addends through 9 and corresponding subtractions; e.g., $9 + 9 = 18$, $18 - 9 = 9$.	Y2003.CMA.S01. GPK-02.BK.L02.I10	02	K	Computation and Estimation

Lesson Indicators

Math 02

Lesson 03 - Counting by Tens

Code	Description	State ID	Grade Level	Bench Mark	Organizer
11	Add and subtract multiples of 10.	Y2003.CMA.S01. GPK-02.BL.L02.I11	02	L	Computation and Estimation
13	Estimate the results of whole number addition and subtraction problems using front-end estimation, and judge the reasonableness of the answers.	Y2003.CMA.S01. GPK-02.BM.L02.I13	02	M	Computation and Estimation

Lesson Indicators

Math 02

Lesson 04 - Difference

Code	Description	State ID	Grade Level	Bench Mark	Organizer
06	Model, represent and explain subtraction as comparison, take-away and part-to-whole; e.g., solve missing addend problems by counting up or subtracting, such as "I had six baseball cards, my sister gave me more, and I now have ten. How many did she give me?" can be represented as $6 + ? = 10$ or $10 - 6 = ?$.	Y2003.CMA.S01. GPK-02.BH.L02.I06	02	H	Meaning of Operations

Lesson Indicators

Math 02

Lesson 05 - Even and Odd Numbers

Code	Description	State ID	Grade Level	Bench Mark	Organizer
07	Model, represent and explain multiplication as repeated addition, rectangular arrays and skip counting.	Y2003.CMA.S01. GPK-02.BI.L02.I07	02	I	Meaning of Operations
02	Recognize and classify numbers as even or odd.	Y2003.CMA.S01. GPK-02.BB.L02.I02	02	B	Number and Number Systems

Lesson Indicators

Math 02

Lesson 06 - Fractions

Code	Description	State ID	Grade Level	Bench Mark	Organizer
05	Represent fractions (halves, thirds, fourths, sixths and eighths), using words, numerals and physical models. For example:	Y2003.CMA.S01. GPK-02.BC.L02.I05	02	C	Number and Number Systems
05	Recognize that a fractional part of a rectangle does not have to be shaded with contiguous parts.	Y2003.CMA.S01. GPK-02.BC.L02.I05	02	C	Number and Number Systems
05	Identify and illustrate parts of a whole and parts of sets of objects.	Y2003.CMA.S01. GPK-02.BC.L02.I05	02	C	Number and Number Systems
05	Compare and order physical models of halves, thirds and fourths in relation to 0 and 1.	Y2003.CMA.S01. GPK-02.BC.L02.I05	02	C	Number and Number Systems
05	Recognize that a fractional part can mean different amounts depending on the original quantity.	Y2003.CMA.S01. GPK-02.BC.L02.I05	02	C	Number and Number Systems

Lesson Indicators

Math 02

Lesson 07 - Associative and Commutative Properties

Code	Description	State ID	Grade Level	Bench Mark	Organizer
09	Model and use the commutative property for addition.	Y2003.CMA.S01. GPK-02.BM.L02.I09	02	M	Meaning of Operations

Lesson Indicators

Math 02

Lesson 08 - Divide and Share Equally

Code	Description	State ID	Grade Level	Bench Mark	Organizer
08	Model, represent and explain division as sharing equally and repeated subtraction.	Y2003.CMA.S01. GPK-02.BJ.L02.I08	02	J	Meaning of Operations

Lesson Indicators

Math 02

Lesson 09 - Money

Code	Description	State ID	Grade Level	Bench Mark	Organizer
04	Represent and write the value of money using the	Y2003.CMA.S01. GPK-02.BD.L02.I04	02	D	Number and Number Systems
03	Count money and make change using coins and a dollar bill.	Y2003.CMA.S01. GPK-02.BE.L02.I03	02	E	Number and Number Systems

Lesson Indicators

Math 02

Lesson 10 - Adding Two and Three Digit Numbers

Code	Description	State ID	Grade Level	Bench Mark	Organizer
12	compatible numbers;	Y2003.CMA. S01. GPK- 02.BM.L02.I12	02	M	Computation and Estimation
12	compensatory numbers;	Y2003.CMA. S01. GPK- 02.BM.L02.I12	02	M	Computation and Estimation
12	informal use of commutative and associative properties of addition.	Y2003.CMA. S01. GPK- 02.BM.L02.I12	02	M	Computation and Estimation
12	Demonstrate multiple strategies for adding and subtracting 2- or 3-digit whole numbers, such as:	Y2003.CMA. S01. GPK- 02.BM.L02.I12	02	M	Computation and Estimation

Lesson Indicators

Math 02

Lesson 11 - Regroup to Subtract

Code	Description	State ID	Grade Level	Bench Mark	Organizer
12	Demonstrate multiple strategies for adding and subtracting 2- or 3-digit whole numbers, such as:	Y2003.CMA.S01. GPK-02.BM.L02.I12	02	M	Computation and Estimation
12	informal use of commutative and associative properties of addition.	Y2003.CMA.S01. GPK-02.BM.L02.I12	02	M	Computation and Estimation
12	compensatory numbers;	Y2003.CMA.S01. GPK-02.BM.L02.I12	02	M	Computation and Estimation
12	compatible numbers;	Y2003.CMA.S01. GPK-02.BM.L02.I12	02	M	Computation and Estimation

Lesson Indicators

Math 02

Lesson 12 - Time

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	time - hours, half-hours, quarter-hours or minutes and time designations, a.m. or p.m.	Y2003.CMA.S02. GPK-02.BB.L02.I01	02	B	Measurement Units
01	Identify and select appropriate units of measure for:	Y2003.CMA.S02. GPK-02.BB.L02.I01	02	B	Measurement Units
04	Tell time to the nearest minute interval on digital and to the nearest 5 minute interval on analog (dial) timepieces.	Y2003.CMA.S02. GPK-02.BC.L02.I04	02	C	Measurement Units

Lesson Indicators

Math 02

Lesson 13 - Measurement

Code	Description	State ID	Grade Level	Bench Mark	Organizer
05	Estimate and measure the length and weight of common objects, using metric and U.S. customary units, accurate to the nearest unit.	Y2003.CMA. S02. GPK- 02.BD.L02.I05	02	D	Use Measurement Techniques and Tools
02	Establish personal or common referents for units of measure to make estimates and comparisons; e.g., the width of a finger is a centimeter, a large bottle of soda pop is 2 liters, a small paper clip weighs about one gram.	Y2003.CMA. S02. GPK- 02.BC.L02.I02	02	C	Measurement Units
06	Select and use appropriate measurement tools; e.g., a ruler to draw a segment 3 inches long, a measuring cup to place 2 cups of rice in a bowl, a scale to weigh 50 grams of candy.	Y2003.CMA. S02. GPK- 02.BD.L02.I06	02	D	Use Measurement Techniques and Tools
03	Describe and compare the relationships among units of measure, such as centimeters and meters; inches, feet and yards; cups, pints and quarts; ounces and pounds; and hours, half-hours, and quarter-hours; e.g., how many inches in a foot?	Y2003.CMA. S02. GPK- 02.BE.L02.I03	02	E	Measurement Units
07	Make and test predictions about measurements, using different units to measure the same length or volume.	Y2003.CMA. S02. GPK- 02.BE.L02.I07	02	E	Use Measurement Techniques and Tools
01	length - centimeters, meters, inches, feet or yards;	Y2003.CMA. S02. GPK- 02.BB.L02.I01	02	B	Measurement Units

Lesson Indicators

Math 02

Lesson 14 - Measuring Capacity

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	volume (capacity) - liters, cups, pints or quarts;	Y2003.CMA.S02. GPK-02.BB.L02.I01	02	B	Measurement Units
07	Make and test predictions about measurements, using different units to measure the same length or volume.	Y2003.CMA.S02. GPK-02.BE.L02.I07	02	E	Use Measurement Techniques and Tools
03	Describe and compare the relationships among units of measure, such as centimeters and meters; inches, feet and yards; cups, pints and quarts; ounces and pounds; and hours, half-hours, and quarter-hours; e.g., how many inches in a foot?	Y2003.CMA.S02. GPK-02.BE.L02.I03	02	E	Measurement Units
06	Select and use appropriate measurement tools; e.g., a ruler to draw a segment 3 inches long, a measuring cup to place 2 cups of rice in a bowl, a scale to weigh 50 grams of candy.	Y2003.CMA.S02. GPK-02.BD.L02.I06	02	D	Use Measurement Techniques and Tools
02	Establish personal or common referents for units of measure to make estimates and comparisons; e.g., the width of a finger is a centimeter, a large bottle of soda pop is 2 liters, a small paper clip weighs about one gram.	Y2003.CMA.S02. GPK-02.BC.L02.I02	02	C	Measurement Units
12	Demonstrate multiple strategies for adding and subtracting 2- or 3-digit whole numbers, such as:	Y2003.CMA.S01. GPK-02.BM.L02.I12	02	M	Computation and Estimation

Lesson Indicators

Math 02

Lesson 15 - Weight

Code	Description	State ID	Grade Level	Bench Mark	Organizer
02	Establish personal or common referents for units of measure to make estimates and comparisons; e.g., the width of a finger is a centimeter, a large bottle of soda pop is 2 liters, a small paper clip weighs about one gram.	Y2003.CMA.S02. GPK-02.BC.L02.I02	02	C	Measurement Units
05	Estimate and measure the length and weight of common objects, using metric and U.S. customary units, accurate to the nearest unit.	Y2003.CMA.S02. GPK-02.BD.L02.I05	02	D	Use Measurement Techniques and Tools
03	Describe and compare the relationships among units of measure, such as centimeters and meters; inches, feet and yards; cups, pints and quarts; ounces and pounds; and hours, half-hours, and quarter-hours; e.g., how many inches in a foot?	Y2003.CMA.S02. GPK-02.BE.L02.I03	02	E	Measurement Units
06	Select and use appropriate measurement tools; e.g., a ruler to draw a segment 3 inches long, a measuring cup to place 2 cups of rice in a bowl, a scale to weigh 50 grams of candy.	Y2003.CMA.S02. GPK-02.BD.L02.I06	02	D	Use Measurement Techniques and Tools
01	weight - grams, ounces or pounds;	Y2003.CMA.S02. GPK-02.BB.L02.I01	02	B	Measurement Units

Lesson Indicators

Math 02

Lesson 16 - Place Values

Code	Description	State ID	Grade Level	Bench Mark	Organizer
03	Count money and make change using coins and a dollar bill.	Y2003.CMA.S01. GPK-02.BE.L02.I03	02	E	Number and Number Systems
04	Represent and write the value of money using the	Y2003.CMA.S01. GPK-02.BD.L02.I04	02	D	Number and Number Systems
01	Use place value concepts to represent, compare and order whole numbers using physical models, numerals and words, with ones, tens and hundreds. For example:	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems
06	Model, represent and explain subtraction as comparison, take-away and part-to-whole; e.g., solve missing addend problems by counting up or subtracting, such as "I had six baseball cards, my sister gave me more, and I now have ten. How many did she give me?" can be represented as $6 + ? = 10$ or $10 - 6 = ?$.	Y2003.CMA.S01. GPK-02.BH.L02.I06	02	H	Meaning of Operations
12	Demonstrate multiple strategies for adding and subtracting 2- or 3-digit whole numbers, such as:	Y2003.CMA.S01. GPK-02.BM.L02.I12	02	M	Computation and Estimation
08	Model, represent and explain division as sharing equally and repeated subtraction.	Y2003.CMA.S01. GPK-02.BJ.L02.I08	02	J	Meaning of Operations
07	Model, represent and explain multiplication as repeated addition, rectangular arrays and skip counting.	Y2003.CMA.S01. GPK-02.BI.L02.I07	02	I	Meaning of Operations

Lesson Indicators

Math 02

Lesson 17 - Measuring

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Identify and select appropriate units of measure for:	Y2003.CMA. S02. GPK- 02.BB.L02.I01	02	B	Measurement Units
04	Tell time to the nearest minute interval on digital and to the nearest 5 minute interval on analog (dial) timepieces.	Y2003.CMA. S02. GPK- 02.BC.L02.I04	02	C	Measurement Units
01	weight - grams, ounces or pounds;	Y2003.CMA. S02. GPK- 02.BB.L02.I01	02	B	Measurement Units
01	volume (capacity) - liters, cups, pints or quarts;	Y2003.CMA. S02. GPK- 02.BB.L02.I01	02	B	Measurement Units
01	length - centimeters, meters, inches, feet or yards;	Y2003.CMA. S02. GPK- 02.BB.L02.I01	02	B	Measurement Units
01	time - hours, half-hours, quarter-hours or minutes and time designations, a.m. or p.m.	Y2003.CMA. S02. GPK- 02.BB.L02.I01	02	B	Measurement Units

Lesson Indicators

Math 02

Lesson 19 - Types of Patterns

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Extend simple number patterns (both repeating and growing patterns), and create similar patterns using different objects, such as using physical materials or shapes to represent numerical patterns.	Y2003.CMA.S04. GPK-02.BB.L02.I01	02	B	Use Patterns, Relations and Functions
02	Use patterns to make generalizations and predictions; e.g., determine a missing element in a pattern.	Y2003.CMA.S04. GPK-02.BC.L02.I02	02	C	Use Patterns, Relations and Functions
03	Create new patterns with consistent rules or plans, and describe the rule or general plan of existing patterns.	Y2003.CMA.S04. GPK-02.BC.L02.I03	02	C	Use Patterns, Relations and Functions

Lesson Indicators

Math 02

Lesson 20 - Equivalence

Code	Description	State ID	Grade Level	Bench Mark	Organizer
05	Understand equivalence and extend the concept to situations involving symbols; e.g., $4 + 5 = 9$ and $9 = 4 + 5$, and $4 + 5 = 3 + 6 =$	Y2003.CMA.S04. GPK-02.BE.L02.105	02	E	Use Algebraic Representations
06	Use symbols to represent unknown quantities and identify values for symbols in an expression or equation using addition and subtraction; e.g.,	Y2003.CMA.S04. GPK-02.BF.L02.106	02	F	Use Algebraic Representations

Lesson Indicators

Math 02

Lesson 21 - Qualitative and Quantitative Changes

Code	Description	State ID	Grade Level	Bench Mark	Organizer
07	Describe qualitative and quantitative changes, especially those involving addition and subtraction; e.g., a student growing taller versus a student growing two inches in one year.	Y2003.CMA.S04. GPK-02.BG.L02.I07	02	G	Analyze change
03	Count money and make change using coins and a dollar bill.	Y2003.CMA.S01. GPK-02.BE.L02.I03	02	E	Number and Number Systems

Lesson Indicators

Math 02

Lesson 22 - Representing a Problem Situation

Code	Description	State ID	Grade Level	Bench Mark	Organizer
04	Use objects, pictures, numbers and other symbols to represent a problem situation.	Y2003.CMA. S04. GPK- 02.BD.L02.I04	02	D	Use Algebraic Representations

Lesson Indicators

Math 02

Lesson 23 - Data Analysis

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Pose questions, use observations, interviews and surveys to collect data, and organize data in charts, picture graphs and bar graphs.	Y2003.CMA.S05. GPK-02.BA.L02.I01	02	A	Data Collection
02	Read, interpret and make comparisons and predictions from data represented in charts, line plots, picture graphs and bar graphs.	Y2003.CMA.S05. GPK-02.BC.L02.I02	02	C	Data Collection

Lesson Indicators

Math 02

Lesson 24 - Timelines

Code	Description	State ID	Grade Level	Bench Mark	Organizer
03	Read and construct simple timelines to sequence events.	Y2003.CMA. S05. GPK- 02.BC.L02.I03	02	C	Data Collection

Lesson Indicators

Math 02

Lesson 25 - Data

Code	Description	State ID	Grade Level	Bench Mark	Organizer
05	Identify untrue or inappropriate statements about a given set of data.	Y2003.CMA.S05. GPK-02.BC.L02.I05	02	C	Statistical Methods
04	Write a few sentences to describe and compare categories of data represented in a chart or graph, and make statements about the data as a whole.	Y2003.CMA.S05. GPK-02.BB.L02.I04	02	B	Statistical Methods
06	Recognize that data may vary from one population to another; e.g., favorite TV shows of students and of parents.	Y2003.CMA.S05. GPK-02.BA.L02.I06	02	A	Statistical Methods

Lesson Indicators

Math 02

Lesson 26 - Arrangements

Code	Description	State ID	Grade Level	Bench Mark	Organizer
08	Use physical models and pictures to represent possible arrangements of 2 or 3 objects.	Y2003.CMA. S05. GPK- 02.BD.L02.I08	02	D	Probability

Lesson Indicators

Math 02

Lesson 27 - Data Analysis and Probability

Code	Description	State ID	Grade Level	Bench Mark	Organizer
07	List some of the possible outcomes of a simple experiment, and predict whether given outcomes are more, less or equally likely to occur.	Y2003.CMA.S05. GPK-02.BD.L02.I07	02	D	Probability

Lesson Indicators

Math 02

Lesson 28 - Basic Geometry

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Identify, describe, compare and sort three-dimensional objects (i.e., cubes, spheres, prisms, cones, cylinders and pyramids) according to the shape of the faces or the numbers of faces, edges or vertices.	Y2003.CMA.S03. GPK-02.BA.L02.I01	02	A	Characteristics and Properties
01	Identify, describe, compare and sort three-dimensional objects (i.e., cubes, spheres, prisms, cones, cylinders and pyramids) according to the shape of the faces or the numbers of faces, edges or vertices.	Y2003.CMA.S03. GPK-02.BB.L02.I01	02	B	Characteristics and Properties

Lesson Indicators

Math 02

Lesson 29 - Shapes

Code	Description	State ID	Grade Level	Bench Mark	Organizer
02	Predict what new shapes will be formed by combining or cutting apart existing shapes.	Y2003.CMA.S03. GPK-02.BA.L02.I02	02	A	Characteristics and Properties

Lesson Indicators

Math 02

Lesson 30 - 2-D and 3-D Shapes

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Identify, describe, compare and sort three-dimensional objects (i.e., cubes, spheres, prisms, cones, cylinders and pyramids) according to the shape of the faces or the numbers of faces, edges or vertices.	Y2003.CMA.S03. GPK-02.BA.L02.I01	02	A	Characteristics and Properties

Lesson Indicators

Math 02

Lesson 31 - Congruent and Similar Shapes

Code	Description	State ID	Grade Level	Bench Mark	Organizer
04	Identify and determine whether two-dimensional shapes are congruent (same shape and size) or similar (same shape different size) by copying or using superposition (lay one thing on top of another).	Y2003.CMA.S03. GPK-02.BD.L02.I04	02	D	Spatial Relationships

Lesson Indicators

Math 02

Lesson 32 - Symmetry

Code	Description	State ID	Grade Level	Bench Mark	Organizer
05	Create and identify two-dimensional figures with line symmetry; e.g., what letter shapes, logos, polygons are symmetrical?	Y2003.CMA.S03. GPK-02.BG.L02.I05	02	G	Transformations and Symmetry

Lesson Indicators

Math 02

Lesson 33 - 2D Shapes and 3D Objects

Code	Description	State ID	Grade Level	Bench Mark	Organizer
03	Recognize two-dimensional shapes and three-dimensional objects from different positions.	Y2003.CMA.S03. GPK-02.BE.L02.I03	02	E	Characteristics and Properties

Lesson Indicators

Math 02

Lesson 34 - Survey, Tally, Graph

Code	Description	State ID	Grade Level	Bench Mark	Organizer
05	Understand equivalence and extend the concept to situations involving symbols; e.g., $4 + 5 = 9$ and $9 = 4 + 5$, and $4 + 5 = 3 + 6 =$	Y2003.CMA.S04. GPK-02.BE.L02.I05	02	E	Use Algebraic Representations
01	Pose questions, use observations, interviews and surveys to collect data, and organize data in charts, picture graphs and bar graphs.	Y2003.CMA.S05. GPK-02.BB.L02.I01	02	B	Data Collection
01	Pose questions, use observations, interviews and surveys to collect data, and organize data in charts, picture graphs and bar graphs.	Y2003.CMA.S05. GPK-02.BA.L02.I01	02	A	Data Collection
11	Add and subtract multiples of 10.	Y2003.CMA.S01. GPK-02.BL.L02.I11	02	L	Computation and Estimation

Lesson Indicators

Math 02

Lesson 35 - Review

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Use place value concepts to represent, compare and order whole numbers using physical models, numerals and words, with ones, tens and hundreds. For example:	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems
01	Read and write 3-digit numerals (e.g., 243 as two hundred forty three, 24 tens and 3 ones, or 2 hundreds and 43 ones, etc.) and construct models to represent each.	Y2003.CMA.S01. GPK-02.BB.L02.I01	02	B	Number and Number Systems
01	Recognize 10 can mean "10 ones" or a single entity (1 ten) through physical models and trading games.	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems
01	Read and write 3-digit numerals (e.g., 243 as two hundred forty three, 24 tens and 3 ones, or 2 hundreds and 43 ones, etc.) and construct models to represent each.	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems
01	Recognize 10 can mean "10 ones" or a single entity (1 ten) through physical models and trading games.	Y2003.CMA.S01. GPK-02.BB.L02.I01	02	B	Number and Number Systems
05	Create and identify two-dimensional figures with line symmetry; e.g., what letter shapes, logos, polygons are symmetrical?	Y2003.CMA.S03. GPK-02.BG.L02.I05	02	G	Transformations and Symmetry
04	Identify and determine whether two-dimensional shapes are congruent (same shape and size) or similar (same shape different size) by copying or using superposition (lay one thing on top of another).	Y2003.CMA.S03. GPK-02.BD.L02.I04	02	D	Spatial Relationships
01	Use place value concepts to represent, compare and order whole numbers using physical models, numerals and words, with ones, tens and hundreds. For example:	Y2003.CMA.S01. GPK-02.BB.L02.I01	02	B	Number and Number Systems

Lesson Indicators

Math 02 (1-18)

Lesson 01 - Counting

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Use place value concepts to represent, compare and order whole numbers using physical models, numerals and words, with ones, tens and hundreds. For example:	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems
01	Recognize 10 can mean "10 ones" or a single entity (1 ten) through physical models and trading games.	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems
01	Read and write 3-digit numerals (e.g., 243 as two hundred forty three, 24 tens and 3 ones, or 2 hundreds and 43 ones, etc.) and construct models to represent each.	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems

Lesson Indicators

Math 02 (1-18)

Lesson 02 - Fact Families

Code	Description	State ID	Grade Level	Bench Mark	Organizer
10	Demonstrate fluency in addition facts with addends through 9 and corresponding subtractions; e.g., $9 + 9 = 18$, $18 - 9 = 9$.	Y2003.CMA.S01. GPK-02.BK.L02.I10	02	K	Computation and Estimation

Lesson Indicators

Math 02 (1-18)

Lesson 03 - Counting by Tens

Code	Description	State ID	Grade Level	Bench Mark	Organizer
11	Add and subtract multiples of 10.	Y2003.CMA.S01. GPK-02.BL.L02.I11	02	L	Computation and Estimation
13	Estimate the results of whole number addition and subtraction problems using front-end estimation, and judge the reasonableness of the answers.	Y2003.CMA.S01. GPK-02.BM.L02.I13	02	M	Computation and Estimation

Lesson Indicators

Math 02 (1-18)

Lesson 04 - Difference

Code	Description	State ID	Grade Level	Bench Mark	Organizer
06	Model, represent and explain subtraction as comparison, take-away and part-to-whole; e.g., solve missing addend problems by counting up or subtracting, such as "I had six baseball cards, my sister gave me more, and I now have ten. How many did she give me?" can be represented as $6 + ? = 10$ or $10 - 6 = ?$.	Y2003.CMA.S01. GPK-02.BH.L02.I06	02	H	Meaning of Operations

Lesson Indicators

Math 02 (1-18)

Lesson 05 - Even and Odd Numbers

Code	Description	State ID	Grade Level	Bench Mark	Organizer
02	Recognize and classify numbers as even or odd.	Y2003.CMA.S01. GPK-02.BB.L02.I02	02	B	Number and Number Systems
07	Model, represent and explain multiplication as repeated addition, rectangular arrays and skip counting.	Y2003.CMA.S01. GPK-02.BI.L02.I07	02	I	Meaning of Operations

Lesson Indicators

Math 02 (1-18)

Lesson 06 - Fractions

Code	Description	State ID	Grade Level	Bench Mark	Organizer
05	Recognize that a fractional part can mean different amounts depending on the original quantity.	Y2003.CMA.S01. GPK-02.BC.L02.I05	02	C	Number and Number Systems
05	Compare and order physical models of halves, thirds and fourths in relation to 0 and 1.	Y2003.CMA.S01. GPK-02.BC.L02.I05	02	C	Number and Number Systems
05	Represent fractions (halves, thirds, fourths, sixths and eighths), using words, numerals and physical models. For example:	Y2003.CMA.S01. GPK-02.BC.L02.I05	02	C	Number and Number Systems
05	Identify and illustrate parts of a whole and parts of sets of objects.	Y2003.CMA.S01. GPK-02.BC.L02.I05	02	C	Number and Number Systems
05	Recognize that a fractional part of a rectangle does not have to be shaded with contiguous parts.	Y2003.CMA.S01. GPK-02.BC.L02.I05	02	C	Number and Number Systems

Lesson Indicators

Math 02 (1-18)

Lesson 07 - Associative and Commutative Properties

Code	Description	State ID	Grade Level	Bench Mark	Organizer
09	Model and use the commutative property for addition.	Y2003.CMA.S01. GPK-02.BM.L02.I09	02	M	Meaning of Operations

Lesson Indicators

Math 02 (1-18)

Lesson 08 - Divide and Share Equally

Code	Description	State ID	Grade Level	Bench Mark	Organizer
08	Model, represent and explain division as sharing equally and repeated subtraction.	Y2003.CMA.S01. GPK-02.BJ.L02.I08	02	J	Meaning of Operations

Lesson Indicators

Math 02 (1-18)

Lesson 09 - Money

Code	Description	State ID	Grade Level	Bench Mark	Organizer
04	Represent and write the value of money using the	Y2003.CMA.S01. GPK-02.BD.L02.I04	02	D	Number and Number Systems
03	Count money and make change using coins and a dollar bill.	Y2003.CMA.S01. GPK-02.BE.L02.I03	02	E	Number and Number Systems

Lesson Indicators

Math 02 (1-18)

Lesson 10 - Adding Two and Three Digit Numbers

Code	Description	State ID	Grade Level	Bench Mark	Organizer
12	compatible numbers;	Y2003.CMA. S01. GPK- 02.BM.L02.I12	02	M	Computation and Estimation
12	compensatory numbers;	Y2003.CMA. S01. GPK- 02.BM.L02.I12	02	M	Computation and Estimation
12	informal use of commutative and associative properties of addition.	Y2003.CMA. S01. GPK- 02.BM.L02.I12	02	M	Computation and Estimation
12	Demonstrate multiple strategies for adding and subtracting 2- or 3-digit whole numbers, such as:	Y2003.CMA. S01. GPK- 02.BM.L02.I12	02	M	Computation and Estimation

Lesson Indicators

Math 02 (1-18)

Lesson 11 - Regroup to Subtract

Code	Description	State ID	Grade Level	Bench Mark	Organizer
12	Demonstrate multiple strategies for adding and subtracting 2- or 3-digit whole numbers, such as:	Y2003.CMA.S01. GPK-02.BM.L02.I12	02	M	Computation and Estimation
12	informal use of commutative and associative properties of addition.	Y2003.CMA.S01. GPK-02.BM.L02.I12	02	M	Computation and Estimation
12	compensatory numbers;	Y2003.CMA.S01. GPK-02.BM.L02.I12	02	M	Computation and Estimation
12	compatible numbers;	Y2003.CMA.S01. GPK-02.BM.L02.I12	02	M	Computation and Estimation

Lesson Indicators

Math 02 (1-18)

Lesson 12 - Time

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	time - hours, half-hours, quarter-hours or minutes and time designations, a.m. or p.m.	Y2003.CMA.S02. GPK-02.BB.L02.I01	02	B	Measurement Units
01	Identify and select appropriate units of measure for:	Y2003.CMA.S02. GPK-02.BB.L02.I01	02	B	Measurement Units
04	Tell time to the nearest minute interval on digital and to the nearest 5 minute interval on analog (dial) timepieces.	Y2003.CMA.S02. GPK-02.BC.L02.I04	02	C	Measurement Units

Lesson Indicators

Math 02 (1-18)

Lesson 13 - Measurement

Code	Description	State ID	Grade Level	Bench Mark	Organizer
02	Establish personal or common referents for units of measure to make estimates and comparisons; e.g., the width of a finger is a centimeter, a large bottle of soda pop is 2 liters, a small paper clip weighs about one gram.	Y2003.CMA.S02. GPK-02.BC.L02.I02	02	C	Measurement Units
05	Estimate and measure the length and weight of common objects, using metric and U.S. customary units, accurate to the nearest unit.	Y2003.CMA.S02. GPK-02.BD.L02.I05	02	D	Use Measurement Techniques and Tools
06	Select and use appropriate measurement tools; e.g., a ruler to draw a segment 3 inches long, a measuring cup to place 2 cups of rice in a bowl, a scale to weigh 50 grams of candy.	Y2003.CMA.S02. GPK-02.BD.L02.I06	02	D	Use Measurement Techniques and Tools
03	Describe and compare the relationships among units of measure, such as centimeters and meters; inches, feet and yards; cups, pints and quarts; ounces and pounds; and hours, half-hours, and quarter-hours; e.g., how many inches in a foot?	Y2003.CMA.S02. GPK-02.BE.L02.I03	02	E	Measurement Units
07	Make and test predictions about measurements, using different units to measure the same length or volume.	Y2003.CMA.S02. GPK-02.BE.L02.I07	02	E	Use Measurement Techniques and Tools
01	length - centimeters, meters, inches, feet or yards;	Y2003.CMA.S02. GPK-02.BB.L02.I01	02	B	Measurement Units

Lesson Indicators

Math 02 (1-18)

Lesson 14 - Measuring Capacity

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	volume (capacity) - liters, cups, pints or quarts;	Y2003.CMA.S02. GPK-02.BB.L02.I01	02	B	Measurement Units
07	Make and test predictions about measurements, using different units to measure the same length or volume.	Y2003.CMA.S02. GPK-02.BE.L02.I07	02	E	Use Measurement Techniques and Tools
03	Describe and compare the relationships among units of measure, such as centimeters and meters; inches, feet and yards; cups, pints and quarts; ounces and pounds; and hours, half-hours, and quarter-hours; e.g., how many inches in a foot?	Y2003.CMA.S02. GPK-02.BE.L02.I03	02	E	Measurement Units
06	Select and use appropriate measurement tools; e.g., a ruler to draw a segment 3 inches long, a measuring cup to place 2 cups of rice in a bowl, a scale to weigh 50 grams of candy.	Y2003.CMA.S02. GPK-02.BD.L02.I06	02	D	Use Measurement Techniques and Tools
02	Establish personal or common referents for units of measure to make estimates and comparisons; e.g., the width of a finger is a centimeter, a large bottle of soda pop is 2 liters, a small paper clip weighs about one gram.	Y2003.CMA.S02. GPK-02.BC.L02.I02	02	C	Measurement Units
12	Demonstrate multiple strategies for adding and subtracting 2- or 3-digit whole numbers, such as:	Y2003.CMA.S01. GPK-02.BM.L02.I12	02	M	Computation and Estimation

Lesson Indicators

Math 02 (1-18)

Lesson 15 - Weight

Code	Description	State ID	Grade Level	Bench Mark	Organizer
02	Establish personal or common referents for units of measure to make estimates and comparisons; e.g., the width of a finger is a centimeter, a large bottle of soda pop is 2 liters, a small paper clip weighs about one gram.	Y2003.CMA. S02. GPK- 02.BC.L02.I02	02	C	Measurement Units
05	Estimate and measure the length and weight of common objects, using metric and U.S. customary units, accurate to the nearest unit.	Y2003.CMA. S02. GPK- 02.BD.L02.I05	02	D	Use Measurement Techniques and Tools
03	Describe and compare the relationships among units of measure, such as centimeters and meters; inches, feet and yards; cups, pints and quarts; ounces and pounds; and hours, half-hours, and quarter-hours; e.g., how many inches in a foot?	Y2003.CMA. S02. GPK- 02.BE.L02.I03	02	E	Measurement Units
06	Select and use appropriate measurement tools; e.g., a ruler to draw a segment 3 inches long, a measuring cup to place 2 cups of rice in a bowl, a scale to weigh 50 grams of candy.	Y2003.CMA. S02. GPK- 02.BD.L02.I06	02	D	Use Measurement Techniques and Tools
01	weight - grams, ounces or pounds;	Y2003.CMA. S02. GPK- 02.BB.L02.I01	02	B	Measurement Units

Lesson Indicators

Math 02 (1-18)

Lesson 16 - Place Values

Code	Description	State ID	Grade Level	Bench Mark	Organizer
03	Count money and make change using coins and a dollar bill.	Y2003.CMA.S01. GPK-02.BE.L02.I03	02	E	Number and Number Systems
04	Represent and write the value of money using the	Y2003.CMA.S01. GPK-02.BD.L02.I04	02	D	Number and Number Systems
12	Demonstrate multiple strategies for adding and subtracting 2- or 3-digit whole numbers, such as:	Y2003.CMA.S01. GPK-02.BM.L02.I12	02	M	Computation and Estimation
07	Model, represent and explain multiplication as repeated addition, rectangular arrays and skip counting.	Y2003.CMA.S01. GPK-02.BI.L02.I07	02	I	Meaning of Operations
06	Model, represent and explain subtraction as comparison, take-away and part-to-whole; e.g., solve missing addend problems by counting up or subtracting, such as "I had six baseball cards, my sister gave me more, and I now have ten. How many did she give me?" can be represented as $6 + ? = 10$ or $10 - 6 = ?$.	Y2003.CMA.S01. GPK-02.BH.L02.I06	02	H	Meaning of Operations
08	Model, represent and explain division as sharing equally and repeated subtraction.	Y2003.CMA.S01. GPK-02.BJ.L02.I08	02	J	Meaning of Operations
01	Use place value concepts to represent, compare and order whole numbers using physical models, numerals and words, with ones, tens and hundreds. For example:	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems

Lesson Indicators

Math 02 (1-18)

Lesson 17 - Measuring

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Identify and select appropriate units of measure for:	Y2003.CMA. S02. GPK- 02.BB.L02.I01	02	B	Measurement Units
04	Tell time to the nearest minute interval on digital and to the nearest 5 minute interval on analog (dial) timepieces.	Y2003.CMA. S02. GPK- 02.BC.L02.I04	02	C	Measurement Units
01	weight - grams, ounces or pounds;	Y2003.CMA. S02. GPK- 02.BB.L02.I01	02	B	Measurement Units
01	volume (capacity) - liters, cups, pints or quarts;	Y2003.CMA. S02. GPK- 02.BB.L02.I01	02	B	Measurement Units
01	time - hours, half-hours, quarter-hours or minutes and time designations, a.m. or p.m.	Y2003.CMA. S02. GPK- 02.BB.L02.I01	02	B	Measurement Units
01	length - centimeters, meters, inches, feet or yards;	Y2003.CMA. S02. GPK- 02.BB.L02.I01	02	B	Measurement Units

Lesson Indicators

Math 02 (19-36)

Lesson 19 - Types of Patterns

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Extend simple number patterns (both repeating and growing patterns), and create similar patterns using different objects, such as using physical materials or shapes to represent numerical patterns.	Y2003.CMA.S04. GPK-02.BB.L02.I01	02	B	Use Patterns, Relations and Functions
03	Create new patterns with consistent rules or plans, and describe the rule or general plan of existing patterns.	Y2003.CMA.S04. GPK-02.BC.L02.I03	02	C	Use Patterns, Relations and Functions
02	Use patterns to make generalizations and predictions; e.g., determine a missing element in a pattern.	Y2003.CMA.S04. GPK-02.BC.L02.I02	02	C	Use Patterns, Relations and Functions

Lesson Indicators

Math 02 (19-36)

Lesson 20 - Equivalence

Code	Description	State ID	Grade Level	Bench Mark	Organizer
05	Understand equivalence and extend the concept to situations involving symbols; e.g., $4 + 5 = 9$ and $9 = 4 + 5$, and $4 + 5 = 3 + 6 =$	Y2003.CMA.S04. GPK-02.BE.L02.105	02	E	Use Algebraic Representations
06	Use symbols to represent unknown quantities and identify values for symbols in an expression or equation using addition and subtraction; e.g.,	Y2003.CMA.S04. GPK-02.BF.L02.106	02	F	Use Algebraic Representations

Lesson Indicators

Math 02 (19-36)

Lesson 21 - Qualitative and Quantitative Changes

Code	Description	State ID	Grade Level	Bench Mark	Organizer
07	Describe qualitative and quantitative changes, especially those involving addition and subtraction; e.g., a student growing taller versus a student growing two inches in one year.	Y2003.CMA.S04. GPK-02.BG.L02.I07	02	G	Analyze change
03	Count money and make change using coins and a dollar bill.	Y2003.CMA.S01. GPK-02.BE.L02.I03	02	E	Number and Number Systems

Lesson Indicators

Math 02 (19-36)

Lesson 22 - Representing a Problem Situation

Code	Description	State ID	Grade Level	Bench Mark	Organizer
04	Use objects, pictures, numbers and other symbols to represent a problem situation.	Y2003.CMA. S04. GPK- 02.BD.L02.I04	02	D	Use Algebraic Representations

Lesson Indicators

Math 02 (19-36)

Lesson 23 - Data Analysis

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Pose questions, use observations, interviews and surveys to collect data, and organize data in charts, picture graphs and bar graphs.	Y2003.CMA.S05. GPK-02.BA.L02.I01	02	A	Data Collection
02	Read, interpret and make comparisons and predictions from data represented in charts, line plots, picture graphs and bar graphs.	Y2003.CMA.S05. GPK-02.BC.L02.I02	02	C	Data Collection

Lesson Indicators

Math 02 (19-36)

Lesson 24 - Timelines

Code	Description	State ID	Grade Level	Bench Mark	Organizer
03	Read and construct simple timelines to sequence events.	Y2003.CMA. S05. GPK- 02.BC.L02.I03	02	C	Data Collection

Lesson Indicators

Math 02 (19-36)

Lesson 25 - Data

Code	Description	State ID	Grade Level	Bench Mark	Organizer
05	Identify untrue or inappropriate statements about a given set of data.	Y2003.CMA.S05. GPK-02.BC.L02.I05	02	C	Statistical Methods
04	Write a few sentences to describe and compare categories of data represented in a chart or graph, and make statements about the data as a whole.	Y2003.CMA.S05. GPK-02.BB.L02.I04	02	B	Statistical Methods
06	Recognize that data may vary from one population to another; e.g., favorite TV shows of students and of parents.	Y2003.CMA.S05. GPK-02.BA.L02.I06	02	A	Statistical Methods

Lesson Indicators

Math 02 (19-36)

Lesson 26 - Arrangements

Code	Description	State ID	Grade Level	Bench Mark	Organizer
08	Use physical models and pictures to represent possible arrangements of 2 or 3 objects.	Y2003.CMA. S05. GPK- 02.BD.L02.I08	02	D	Probability

Lesson Indicators

Math 02 (19-36)

Lesson 27 - Data Analysis and Probability

Code	Description	State ID	Grade Level	Bench Mark	Organizer
07	List some of the possible outcomes of a simple experiment, and predict whether given outcomes are more, less or equally likely to occur.	Y2003.CMA.S05. GPK-02.BD.L02.I07	02	D	Probability

Lesson Indicators

Math 02 (19-36)

Lesson 28 - Basic Geometry

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Identify, describe, compare and sort three-dimensional objects (i.e., cubes, spheres, prisms, cones, cylinders and pyramids) according to the shape of the faces or the numbers of faces, edges or vertices.	Y2003.CMA.S03. GPK-02.BB.L02.I01	02	B	Characteristics and Properties
01	Identify, describe, compare and sort three-dimensional objects (i.e., cubes, spheres, prisms, cones, cylinders and pyramids) according to the shape of the faces or the numbers of faces, edges or vertices.	Y2003.CMA.S03. GPK-02.BA.L02.I01	02	A	Characteristics and Properties

Lesson Indicators

Math 02 (19-36)

Lesson 29 - Shapes

Code	Description	State ID	Grade Level	Bench Mark	Organizer
02	Predict what new shapes will be formed by combining or cutting apart existing shapes.	Y2003.CMA. S03. GPK- 02.BA.L02.I02	02	A	Characteristics and Properties

Lesson Indicators

Math 02 (19-36)

Lesson 30 - 2-D and 3-D Shapes

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Identify, describe, compare and sort three-dimensional objects (i.e., cubes, spheres, prisms, cones, cylinders and pyramids) according to the shape of the faces or the numbers of faces, edges or vertices.	Y2003.CMA.S03. GPK-02.BA.L02.I01	02	A	Characteristics and Properties

Lesson Indicators

Math 02 (19-36)

Lesson 31 - Congruent and Similar Shapes

Code	Description	State ID	Grade Level	Bench Mark	Organizer
04	Identify and determine whether two-dimensional shapes are congruent (same shape and size) or similar (same shape different size) by copying or using superposition (lay one thing on top of another).	Y2003.CMA.S03. GPK-02.BD.L02.I04	02	D	Spatial Relationships

Lesson Indicators

Math 02 (19-36)

Lesson 32 - Symmetry

Code	Description	State ID	Grade Level	Bench Mark	Organizer
05	Create and identify two-dimensional figures with line symmetry; e.g., what letter shapes, logos, polygons are symmetrical?	Y2003.CMA.S03. GPK-02.BG.L02.I05	02	G	Transformations and Symmetry

Lesson Indicators

Math 02 (19-36)

Lesson 33 - 2D Shapes and 3D Objects

Code	Description	State ID	Grade Level	Bench Mark	Organizer
03	Recognize two-dimensional shapes and three-dimensional objects from different positions.	Y2003.CMA. S03. GPK- 02.BE.L02.I03	02	E	Characteristics and Properties

Lesson Indicators

Math 02 (19-36)

Lesson 34 - Survey, Tally, Graph

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Pose questions, use observations, interviews and surveys to collect data, and organize data in charts, picture graphs and bar graphs.	Y2003.CMA.S05. GPK-02.BA.L02.I01	02	A	Data Collection
05	Understand equivalence and extend the concept to situations involving symbols; e.g., $4 + 5 = 9$ and $9 = 4 + 5$, and $4 + 5 = 3 + 6 =$	Y2003.CMA.S04. GPK-02.BE.L02.I05	02	E	Use Algebraic Representations
01	Pose questions, use observations, interviews and surveys to collect data, and organize data in charts, picture graphs and bar graphs.	Y2003.CMA.S05. GPK-02.BB.L02.I01	02	B	Data Collection
11	Add and subtract multiples of 10.	Y2003.CMA.S01. GPK-02.BL.L02.I11	02	L	Computation and Estimation

Lesson Indicators

Math 02 (19-36)

Lesson 35 - Review

Code	Description	State ID	Grade Level	Bench Mark	Organizer
01	Recognize 10 can mean "10 ones" or a single entity (1 ten) through physical models and trading games.	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems
01	Read and write 3-digit numerals (e.g., 243 as two hundred forty three, 24 tens and 3 ones, or 2 hundreds and 43 ones, etc.) and construct models to represent each.	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems
01	Recognize 10 can mean "10 ones" or a single entity (1 ten) through physical models and trading games.	Y2003.CMA.S01. GPK-02.BB.L02.I01	02	B	Number and Number Systems
01	Read and write 3-digit numerals (e.g., 243 as two hundred forty three, 24 tens and 3 ones, or 2 hundreds and 43 ones, etc.) and construct models to represent each.	Y2003.CMA.S01. GPK-02.BB.L02.I01	02	B	Number and Number Systems
05	Create and identify two-dimensional figures with line symmetry; e.g., what letter shapes, logos, polygons are symmetrical?	Y2003.CMA.S03. GPK-02.BG.L02.I05	02	G	Transformations and Symmetry
04	Identify and determine whether two-dimensional shapes are congruent (same shape and size) or similar (same shape different size) by copying or using superposition (lay one thing on top of another).	Y2003.CMA.S03. GPK-02.BD.L02.I04	02	D	Spatial Relationships
01	Use place value concepts to represent, compare and order whole numbers using physical models, numerals and words, with ones, tens and hundreds. For example:	Y2003.CMA.S01. GPK-02.BB.L02.I01	02	B	Number and Number Systems
01	Use place value concepts to represent, compare and order whole numbers using physical models, numerals and words, with ones, tens and hundreds. For example:	Y2003.CMA.S01. GPK-02.BA.L02.I01	02	A	Number and Number Systems

Lesson Indicators

VLA Demo Lessons

Lesson 03 - Counting by Tens

Code	Description	State ID	Grade Level	Bench Mark	Organizer
11	Add and subtract multiples of 10.	Y2003.CMA.S01. GPK-02.BL.L02.I11	02	L	Computation and Estimation
13	Estimate the results of whole number addition and subtraction problems using front-end estimation, and judge the reasonableness of the answers.	Y2003.CMA.S01. GPK-02.BM.L02.I13	02	M	Computation and Estimation

Lesson Indicators

VLA Demo Lessons

Lesson 09 - Money

Code	Description	State ID	Grade Level	Bench Mark	Organizer
03	Count money and make change using coins and a dollar bill.	Y2003.CMA.S01. GPK-02.BE.L02.I03	02	E	Number and Number Systems
04	Represent and write the value of money using the	Y2003.CMA.S01. GPK-02.BD.L02.I04	02	D	Number and Number Systems