Northpoint Horizons

CAVS (Content Academic Vocabulary System) Math K-2
Correlated to the
California State Mathematic Content Standards

Grade 1

This document provides a correlation to the math directives offered throughout the *CAVS Math* program that meet the California Mathematics Content Standards. The n/a signifies the standards that are not directly met for this grade level.

Math Content Standard	***CAVS* Math Grades K-2 Teacher's Guide Lessons**
Number Sense	
1.0 Students understand and use numbers up to 100:	
1.1 Count, read, and write whole numbers to 100.	Students use the math content words: *number, numeral,* and *digit* while writing numerals with digits, sequencing numbers from 1 to 10, and using numbers to count how many: Lesson 1 –TG p. 1 *How do you count?* Students use the math vocabulary words: *whole number, cardinal number*, and *ordinal number* while using numbers to tell how many, to tell in what position, and by using whole numbers to count from 1 to 10: Lesson 2 – TG p. 7 *What are some kinds of numbers?*
1.2 Compare and order whole numbers to 100 by using the symbols for less than, equal to, or greater than (<, =, >).	Students use a number line when comparing numbers 1 through 10: Lesson 3 – TG p. 13 *How do numbers work together?*
1.3 Represent equivalent forms of the same number through the use of physical models, diagrams, and number expressions (to 20) (e.g., 8 may be	Students find all combinations of 6 and 7 by adding two whole numbers: Lesson 4 – TG p. 19

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represented as 4 + 4, 5 + 3, 2 + 2 + 2 + 2, 10 -2, 11 -3).	*Why do you add numbers?* Students practice subtracting from 20 and write addition facts to go along with each subtraction fact: Lesson 5 – TG p. 25 *Why do you subtract numbers?*
1.4 Count and group object in ones and tens (e.g., three groups of 10 and 4 equals 34, or 30 + 4).	n/a
1.5 Identify and know the value of coins and show different combinations of coins that equal the same value.	Lesson 3 – TG p. 13 *How do numbers work together?*
2.0 Students demonstrate the meaning of addition and subtraction and use these operations to solve problems:	
2.1 Know the addition facts (sums to 20) and the corresponding subtraction facts and commit them to memory.	Students find all combinations of 6 and 7 by adding two whole numbers: Lesson 4 – TG p. 19 *Why do you add numbers?* Students practice subtracting from 20 and write addition facts to go along with each subtraction fact: Lesson 5 – TG p. 25 *Why do you subtract numbers?*
2.2 Use the inverse relationship between addition and subtraction to solve problems.	Students practice subtracting from 20 and write addition facts to go along with each subtraction fact: Lesson 5 – TG p. 25 *Why do you subtract numbers?*
2.3 Identify one more than, one less than, 10 more than, and 10 less than a given number.	Identifying increasing and decreasing numeric patterns: Lesson 7 – TG p. 37 *What makes a pattern?*
2.4 Count by 2s, 5s, and 10s to 100.	Increasing numbers by two: Lesson 7 – TG p. 37 *What makes a pattern?*
2.5 Show the meaning of addition (putting together, increasing) and subtraction (taking away, comparing, finding the difference).	Lesson 4 - TG p. 19 *Why do you add numbers?* Lesson 5 – TG p. 25 *Why do you subtract numbers?*
2.6 Solve addition and subtraction problems with one- and two-digit numbers (e.g., 5 + 58 = __).	n/a

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2.7 Find the sum of three one-digit numbers.	n/a
3.0 Students use estimation strategies in computation and problem solving that involve numbers that use the ones, tens, and hundreds places:	
3.1 Make reasonable estimates when comparing larger or smaller numbers.	Lesson 24 – TG p. 139 *How do we solve problems?*
Algebra and Functions	
1.0 Students use number sentences with operational symbols and expressions to solve problems:	
1.1 Write and solve number sentences from problem situations that express relationships involving addition and subtraction.	Lesson 4 - TG p. 19 *Why do you add numbers?* Lesson 5 – TG p. 25 *Why do you subtract numbers?*
1.2 Understand the meaning of the symbols +, -, =.	Lesson 4 - TG p. 19 *Why do you add numbers?* Lesson 5 – TG p. 25 *Why do you subtract numbers?*
1.3 Create problem situations that might lead to given number sentences involving addition and subtraction.	Radius ™ Math Vocabulary Cards – small group activity: Lesson 4 – TG p. 19 *Why do you add numbers?* Radius ™ Math Vocabulary Cards – small group activity: Lesson 5 – TG p. 25 *Why do you subtract numbers?*
Measurement and Geometry	
1.0 Students use direct comparison and nonstandard units to describe the measurements of objects:	
1.1 Compare the length, weight, and volume of two or more objects by using direct comparison or a nonstandard unit.	Lesson 11 – TG p. 61 *How far? How long?* Lesson 12 – TG p. 67 *How do you tell how far or how long?* Lesson 13 – TG p.73 *How much space does it take up?* Lesson 14 – TG p. 79 *How much does it weigh?*
1.2 Tell time to the nearest half hour and relate time to events (e.g., before/after, shorter/longer).	Students calculate elapsed time and estimate time: Lesson 9 – TG p. 49 *How do you tell time?*

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2.0 Students identify common geometric figures, classify them by common attributes, and describe their relative position or their location in space:	
2.1 Identify, describe, and compare triangles, rectangles, squares, and circles, including the faces of three-dimensional objects.	Lesson 19 – TG p. 109 *What are some common shapes?*
2.2 Classify familiar plane and solid objects by common attributes, such as color, position, shape, size, roundness, or number of corners, and explain which attributes are being used for classification.	Lesson 20 – TG p. 115 *How can you describe shapes?* Lesson 21 – TG p. 121 *How can you change shapes?*
2.3 Give and follow directions about location.	Lesson 16 – TG p. 91 *Where are you?* Lesson 17 – TG p. 97 *Where are you now?* Lesson 18 – TG p. 103 *Which way do you go?*
2.4 Arrange and describe objects in space by proximity, position, and direction (e.g., near, far, below, above, up, down, behind, in front of, next to, left or right of).	Lesson 16 – TG p. 91 *Where are you?* Lesson 17 – TG p. 97 *Where are you now?* Lesson 18 – TG p. 103 *Which way do you go*
Statistics, Data Analysis, and Probability	
1.0 Students organize, represent, and compare data by category on simple graphs and charts:	
1.1 Sort objects and data by common attributes and describe the categories.	Lesson 6 – TG p. 31 *How are objects the same?*
1.2 Represent and compare data (e.g., largest, smallest, most often, least often) by using pictures, bar graphs, tally charts, and picture graphs.	Lesson 22 – TG p. 127 *How can you show facts?*
2.0 Students sort objects and create and describe patterns by numbers, shapes, sizes, rhythms, or colors:	
2.1 Describe, extend, and explain ways to get to a next element in simple repeating patterns (e.g., rhythmic, numeric, color, and shape).	Lesson 7 – TG p. 37 *What makes a pattern?*
Mathematical Reasoning	
1.0 Students make decisions about how to set up a problem:	

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1.1 Determine the approach, materials, and strategies to be used.	During each *CAVS* Math Lesson, the teacher helps students determine the approach, materials, and strategies to be used to solve problems using the *5-E* Instructional Approach while highlighting math content academic vocabulary. The *5-E* Approach: *Engage*: Concept Posters and Math Vocabulary Cards are used to introduce the math concept and vocabulary as a whole group activity. *Explore* and Learn: Students use hands-on Activity Placemats with manipulatives as a small group inquiry activity. Students complete the Record Sheet – many times, by drawing pictures, and then discuss the activity and compare observations with classmates. *Explain* Concepts and Vocabulary: The teacher leads a discussion and models the use of academic vocabulary words through the Flip Book. Oral Language activities are provided as extensions and for differentiated instruction. *Elaborate*: Students apply newly learned concepts when working with a partner to complete the Concept Webs. As a small group activity, students practice listening to, reading, writing, and speaking each academic vocabulary word with the Radius Audio System™. *Evaluate*: Teachers review the lesson's academic vocabulary words through Interactive Transparencies (whole group activity) and assess each lesson through the Lesson Review sheets (individual activity).
1.2 Use tools, such as manipulatives or sketches, to model problems.	
2.0 Students solve problems and justify their reasoning:	
2.1 Explain the reasoning used and justify the procedures selected.	Lesson 23 – TG p. 133 *What do you think will happen?* Lesson 24 – TG p. 139 *How do we solve problems?*
2.2 Make precise calculations and check the validity of the results from the context of the problem.	
3.0 Students note connections between one problem and another.	
Students have opportunities to make connections between one problem and another in the *CAVS* Math program. After the teacher and students read the Flip Book lesson, where the math concept(s) and vocabulary are explained, students are then asked to solve problems/answer questions about the concept(s) introduced under the "Make Connections" section of the	

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lesson.	