

Northpoint Horizons

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

Grade K

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 the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement):	
1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other.	Lesson 3 – TG p. 13 <i>How do numbers work together?</i>
1.2 Count, recognize, represent, name, and order a number of objects (up to 30).	Students use the math content words: <i>number, numeral, and digit</i> while writing numerals with digits, sequencing numbers from 1 to 10, and using numbers to count how many: Lesson 1 –TG p. 1 <i>How do you count?</i> Students use the math vocabulary words: <i>whole number, cardinal number, and ordinal number</i> 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 <i>What are some kinds of numbers?</i>
1.3 Know that the larger numbers describe sets with more objects in them than the smaller numbers have.	Lesson 3 – TG p. 13 <i>How do numbers work together?</i>
2.0 Students understand and describe simple additions and subtractions:	
2.1 Use concrete objects to determine the answers to	Lesson 4 - TG p. 19

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addition and subtraction problems (for two numbers that are each less than 10).	<i>Why do you add numbers?</i> Lesson 5 – TG p. 25 <i>Why do you subtract numbers?</i>
3.0 Students use estimation strategies in computation and problem solving that involve numbers that use the ones and tens places:	
3.1 Recognize when an estimate is reasonable.	Lesson 9 – TG p. 49 <i>How do you tell time?</i> ("estimate" time) Lesson 12 – TG p. 67 <i>How do you tell how far or how long?</i> ("estimate" standard units) Lesson 15 – TG p. 85 <i>How hot or cold is it?</i> (temperature "estimate") Lesson 24 – TG p. 139 <i>How do we solve problems?</i>
Algebra and Functions	
1.0 Students sort and classify objects:	
1.1 Identify, sort, and classify objects by attribute and identify objects that do not belong to a particular group (e.g., all these balls are green, those are red).	Lesson 6 – TG p. 31 <i>How are objects the same?</i>
Measurement and Geometry	
1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties:	
1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more).	Lesson 11 – TG p. 61 <i>How far? How long?</i> Lesson 12 – TG p. 67 <i>How do you tell how far or how long?</i> Lesson 13 – TG p.73 <i>How much space does it take up?</i> Lesson 14 – TG p. 79 <i>How much does it weigh?</i>
1.2 Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar).	Lesson 9 – TG p. 49 <i>How do you tell time?</i> Lesson 10 – TG p. 55 <i>When is your birthday?</i>

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1.3 Name the days of the week.	Students have the opportunity to view and study a calendar in the "Flip Book" and on "Transparency 10" in: Lesson 10 – TG p. 55 <i>When is your birthday?</i>
1.4 Identify the time (to the nearest hour) of everyday events (e.g., lunch time is 12 o'clock; bedtime is 8 o'clock at night).	Students have the opportunity to make and study a clock in: Lesson 9 – TG p. 49 <i>How do you tell time?</i>
2.0 Students identify common objects in their environment and describe the geometric features:	
2.1 Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone).	Lesson 19 – TG p. 109 <i>What are some common shapes?</i>
2.2 Compare familiar plane and solid objects by common attributes (e.g., position, shape, size, roundness, number of corners).	Lesson 20 – TG p. 115 <i>How can you describe shapes?</i> Lesson 21 – TG p. 121 <i>How can you change shapes?</i>
Statistics, Data Analysis, and Probability	
1.0 Students collect information about objects and events in their environment:	
1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.	Lesson 22 – TG p. 127 <i>How can you show facts?</i>
1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors.	Lesson 7 – TG p. 37 <i>What makes a pattern?</i>
Mathematical Reasoning	
1.0 Students make decisions about how to set up a problem:	
1.1 Determine the approach, materials, and strategies to be used.	During each <i>CAVS</i> Math Lesson, the teacher helps students determine the approach, materials, and strategies to be used to solve problems using the <i>5-E</i> Instructional Approach while highlighting math content academic vocabulary. The <i>5-E</i> Approach: <i>Engage:</i> Concept Posters and Math Vocabulary Cards are used to introduce the math concept and vocabulary as a whole group activity. <i>Explore and Learn:</i> Students use hands-on Activity Placemats with manipulatives as a small group inquiry activity. Students
1.2 Use tools and strategies, such as manipulatives or sketches, to model problems.	

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	<p>complete the Record Sheet – many times, by drawing pictures, and then discuss the activity and compare observations with classmates.</p> <p><i>Explain</i> 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.</p> <p><i>Elaborate</i>: 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™.</p> <p><i>Evaluate</i>: 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).</p>
2.0 Students solve problems in reasonable ways and justify their reasoning:	
2.1 Explain the reasoning used with concrete objects and/ or pictorial representations.	<p>During the Explore and Learn section of each <i>CAVS</i> lesson, students use the 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 their classmates. On the Record Sheets there are opportunities for students to draw pictorial representations under the Now Try This section. There are also opportunities for students to use their own picture representations on the Concept Webs.</p>
2.2 Make precise calculations and check the validity of the results in the context of the problem.	<p>Lesson 24 – TG p. 139 <i>How do we solve problems?</i></p>