

### CPS Benchmark Assessment - Winter 2006 - Grade 6

This table is a resource created to expand students' understanding of the concepts covered by the CPS Benchmark Assessment. Benchmark questions and related concepts are listed in columns 1 and 2. Column 3 displays the state learning goal related to the concept. Column 4 displays the path students follow on <http://countdown.luc.edu> to access movies relevant to the concept covered by the question. Instructional movies can be viewed FREE of charge as many times as a student desires. (NCTM standards are in the left margin of the Countdown homepage → their subcategories are shown underneath → these link to lists of movie titles.)

Question #	Concept	State Learning Goal #	NCTM Standard → Category → Movie Title
1	Decimal equivalent of fraction	6	<ul style="list-style-type: none"> <li>• Number &amp; Operations → Decimals → Look for Patterns Part 1*</li> <li>• Number &amp; Operations → Decimals → Look for Patterns Part 2*</li> </ul>
2	Measurement instruments	7	<ul style="list-style-type: none"> <li>• Measurement → Metric &amp; Customary Units(*)</li> </ul>
3	Nets	9	<ul style="list-style-type: none"> <li>• Geometry → Three-Dimensional Shapes → Polyhedra Nets 1*</li> <li>• Geometry → Three-Dimensional Shapes → Polyhedra Nets 2*</li> <li>• Geometry → Three-Dimensional Shapes → Polyhedra Nets on the Computer Part 1</li> <li>• Geometry → Three-Dimensional Shapes → Polyhedra Nets on the Computer Part 2</li> </ul>
4	Median	10	<ul style="list-style-type: none"> <li>• Data Analysis &amp; Probability → Statistics → Vocabulary Median</li> <li>• Data Analysis &amp; Probability → Statistics → Median</li> <li>• Data Analysis &amp; Probability → Statistics → Median: Part 2</li> </ul>
5	Prime factorization	6	<ul style="list-style-type: none"> <li>• Number &amp; Operations → Number Theory → Prime Factorization*</li> </ul>
6	Perimeter	7	<ul style="list-style-type: none"> <li>• Extended Response → Measurement → Schoolyard Perimeter: Solution*</li> <li>• Extended Response → Measurement → Schoolyard Perimeter: Explanation*</li> <li>• Extended Response → Measurement → Area &amp; Perimeter: Solution</li> <li>• Extended Response → Measurement → Area &amp; Perimeter: Explanation</li> </ul>
7	Square numbers	9	<ul style="list-style-type: none"> <li>• Geometry → Two-Dimensional Shapes → Square Number Pattern*</li> <li>• Algebra → Patterns → Square Number Sequence*</li> <li>• Geometry → Two-Dimensional Shapes → Square Number Table</li> <li>• Geometry → Two-Dimensional Shapes → Square Number Computer Spreadsheet</li> </ul>
8	Circle vocabulary	9	<ul style="list-style-type: none"> <li>• Geometry → Two-Dimensional Shapes → Circle Vocabulary*</li> <li>• Geometry → Two-Dimensional Shapes → Defining a Circle</li> </ul>
9	Probability	10	<ul style="list-style-type: none"> <li>• Data Analysis &amp; Probability → Probability → Probability Formula*</li> <li>• Data Analysis &amp; Probability → Probability → Probability Using the Alphabet*</li> <li>• Data Analysis &amp; Probability → Probability → Probability Using Pictures*</li> </ul>

\* indicates an accompanying downloadable worksheet available <http://COUNTDOWN.LUC.EDU>

**CPS Benchmark Assessment - Winter 2006 - Grade 6**

			<ul style="list-style-type: none"> <li>• Data Analysis &amp; Probability → Probability → Probability Using Gumballs</li> </ul>
10	Algebraic expressions	8	<ul style="list-style-type: none"> <li>• Algebra → Variables → Countdown Challenge: The Language of Algebra*</li> <li>• Algebra → Variables → Translating English to Algebra</li> <li>• Algebra → Variables → Generating Equations: Part 1</li> <li>• Algebra → Variables → Generating Equations: Part 2</li> <li>• Algebra → Variables → Generating Equations: Part 3</li> </ul>
11	Volume	7	<ul style="list-style-type: none"> <li>• Measurement → Solids → Volume &amp; Surface Area*</li> <li>• Measurement → Solids → Volume &amp; Surface Area: Part 1*</li> <li>• Measurement → Solids → Volume &amp; Surface Area: Part 2*</li> <li>• Measurement → Solids → Volume: Part 1</li> <li>• Measurement → Solids → Volume: Part 2</li> </ul>
12	One step word problems	6	<ul style="list-style-type: none"> <li>• Number &amp; Operations → Whole Numbers → Computation Vocabulary</li> <li>• Number &amp; Operations → Whole Numbers → Word Problems &amp; Comparisons</li> </ul>
13	Ordered pairs	8	<ul style="list-style-type: none"> <li>• Algebra → Coordinate Geometry → Intro to the Coordinate Plane*</li> <li>• Algebra → Coordinate Geometry → Reading and the Coordinate Plane</li> <li>• Algebra → Coordinate Geometry → Tic-Tac-Toe: Part 1</li> <li>• Algebra → Coordinate Geometry → Tic-Tac-Toe: Part 2</li> </ul>
14	Fundamental Counting Principle	6	<ul style="list-style-type: none"> <li>• Number &amp; Operations → Number Theory → FCP on the Computer: Graphics 1</li> <li>• Number &amp; Operations → Number Theory → FCP on the Computer: Graphics 2</li> <li>• Number &amp; Operations → Number Theory → FCP: Part 1*</li> <li>• Number &amp; Operations → Number Theory → FCP: Part 2</li> <li>• Number &amp; Operations → Number Theory → Countdown Activity: FCP*</li> <li>• Number &amp; Operations → Number Theory → FCP with Playing Cards</li> <li>• Number &amp; Operations → Number Theory → FCP with Telephone Numbers</li> </ul>
15	Graphs of solutions to inequalities	8	<ul style="list-style-type: none"> <li>• Algebra → Inequalities &amp; Graphing → Inequalities &amp; Graphing(*)</li> </ul>
16	Multi-step word problem	6	<ul style="list-style-type: none"> <li>• Number &amp; Operations → Whole Numbers → Sample Three Step Problem</li> </ul>
17	Scale drawings	7	<ul style="list-style-type: none"> <li>• Measurement → Scale → Scale: Drawing*</li> <li>• Measurement → Scale → Scale: Perspective</li> <li>• Measurement → Scale → Scale: Vocabulary</li> </ul>
18	Multi-step word problem	6	<ul style="list-style-type: none"> <li>• Number &amp; Operations → Whole Numbers → Sample Three Step Problem</li> </ul>
19	Line length	7	<ul style="list-style-type: none"> <li>• Geometry → Lines &amp; Angles → Lines Intro</li> </ul>

**CPS Benchmark Assessment - Winter 2006 - Grade 6**

			<ul style="list-style-type: none"> <li>• Geometry → Lines &amp; Angles → Classifying Lines</li> <li>• Geometry → Lines &amp; Angles → Lines on a Coordinate Grid</li> <li>• Geometry → Lines &amp; Angles → Lines on a Map</li> </ul>
20	Subtracting fractions from 1	6	<ul style="list-style-type: none"> <li>• Number &amp; Operations → Fractions → Subtracting Fractions from One*</li> </ul>
21	Reading graphs	10	<ul style="list-style-type: none"> <li>• Data Analysis &amp; Probability → Graphs → Using Literature: "Tiger Math"*</li> <li>• Data Analysis &amp; Probability → Graphs → Graph Basics</li> </ul>
22	Algebraic expressions	8	<ul style="list-style-type: none"> <li>• Algebra → Variables → Countdown Challenge: The Language of Algebra*</li> <li>• Algebra → Variables → Translating English to Algebra</li> <li>• Algebra → Variables → Generating Equations: Part 1</li> <li>• Algebra → Variables → Generating Equations: Part 2</li> <li>• Algebra → Variables → Generating Equations: Part 3</li> </ul>
23	Circle vocabulary	9	<ul style="list-style-type: none"> <li>• Geometry → Two-Dimensional Shapes → Circle Vocabulary*</li> <li>• Geometry → Two-Dimensional Shapes → Defining a Circle</li> </ul>
24	Ratio	6	<ul style="list-style-type: none"> <li>• Number &amp; Operations → Ratio → Writing Ratios: Intro*</li> <li>• Number &amp; Operations → Ratio → Writing Ratios</li> </ul>
25	Comparing areas	7	<ul style="list-style-type: none"> <li>• Measurement → Games &amp; Puzzles → Comparing Areas</li> </ul>
26	Ratios	6	<ul style="list-style-type: none"> <li>• Number &amp; Operations → Ratio → Writing Ratios: Intro*</li> <li>• Number &amp; Operations → Ratio → Writing Ratios</li> <li>• Number &amp; Operations → Ratio → Solving Ratio Problem</li> </ul>
27	Algebraic expressions	8	<ul style="list-style-type: none"> <li>• Algebra → Variables → Countdown Challenge: The Language of Algebra*</li> <li>• Algebra → Variables → Translating English to Algebra</li> <li>• Algebra → Variables → Generating Equations: Part 1</li> <li>• Algebra → Variables → Generating Equations: Part 2</li> <li>• Algebra → Variables → Generating Equations: Part 3</li> </ul>
28	Time	7	<ul style="list-style-type: none"> <li>• Measurement → Time → Age in Minutes on the Computer</li> </ul>
29	Circle Graphs	10	<ul style="list-style-type: none"> <li>• Data Analysis &amp; Probability → Graphs → Reading Circle Graphs</li> <li>• Data Analysis &amp; Probability → Graphs → Naming Angles on a Circle Graph</li> <li>• Data Analysis &amp; Probability → Graphs → Calculating Angles for a Circle Graph</li> <li>• Data Analysis &amp; Probability → Graphs → Creating a Circle Graph</li> </ul>
30	Multi-step word problem	6	<ul style="list-style-type: none"> <li>• Number &amp; Operations → Whole Numbers → Sample Three Step Problem</li> </ul>
31	Similar polygons	9	<ul style="list-style-type: none"> <li>• Geometry → Congruence &amp; Similarity → Similar Figures: Concept Development</li> </ul>

**CPS Benchmark Assessment - Winter 2006 - Grade 6**

			<ul style="list-style-type: none"><li>• Geometry → Congruence &amp; Similarity → Similar Figures: Vocabulary</li><li>• Data Analysis &amp; Probability → Graphs → Pictogram, Bar &amp; Line*</li><li>• Data Analysis &amp; Probability → Graphs → Reading Circle Graphs*</li></ul>
32	Comparing graphs	10	