

Primary Grades Instructional Data (10 point option)

Subject: Mathematics

Goal: Number Sense



Database last updated with additional data statements on 10/12/2009

151 - 160	Skills and Concepts to Enhance (73% probability*)	161 - 170	Skills and Concepts to Develop (50% probability*)	171 - 180	Skills and Concepts to Introduce (27% probability*)
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Count

151	Counts on by 1s (≤ 100 ; next number; numerals shown)	161	Counts forwards by 2s (≤ 20 ; next number; numerals shown)	173	Counts forwards by 3s (≤ 20 ; next number; numerals shown)
152	Counts on by 1s (≤ 100 ; next number; manipulatives and numerals shown; number line)	161	Counts on by 2s (≤ 20 ; from an even number)	173	Counts on by 2s (≤ 100 ; from an even number; next number; numerals shown)
153	Counts forwards by 1s (≤ 10 ; next number; numerals shown)	163	Counts forward by 5s (≤ 100 ; next number; numerals shown)	173	Counts on by 2s (≤ 100 ; from an odd number)
154	Counts backwards by 1s (≤ 10 ; next number; numerals shown)	168	Counts on by 2s (≤ 100 ; from an even number)	175	Counts on by 2s (≤ 100 ; from an even number; multiple numbers; numerals shown)
155	Counts forwards by 1s (≤ 5 ; next number; numerals shown)	169	Counts on by 2s (≤ 100 ; from an even number; next number; numerals shown)	177	Counts on by 2s (≤ 100 ; from an odd number; next number; numerals shown)
156	Counts forward by 5s (≤ 100 ; next number)	170	Counts on by 2s (≤ 20 ; from an even number; next number; numerals shown)	178	Counts on by 2s (≤ 20 ; from an odd number; next number; numerals shown)
156	Counts forward by 5s (≤ 100 ; next number; numerals shown)	170	Counts on by 2s (≤ 20 ; from an odd number; next number; numerals shown)	180	Counts on by 2s (≤ 50 ; from an odd number)
158	Counts forward by 2s (≤ 10 ; next number)				
159	Counts forwards by 2s (≤ 10 ; next number; numerals shown)				

Identify, Represent: Whole Numbers, Fractions

153	Recognizes the number word for a numeral (≤ 20)	161	Identifies the value of a dime (manipulatives shown; generic coins, ¢ symbol shown)	171	Represents a given set of objects as a numeral (≤ 20 ; manipulatives and numerals shown; 10-frames)
157	Finds the incorrect representation of $1/2$ of a whole (manipulatives shown)	162	Interprets a number line (≤ 100 ; manipulatives and numerals shown; all numerals shown; number line)	173	Represents a given number word as a numeral (≤ 1000 ; numerals and words shown)
157	Represents a given numeral as a set of objects (≤ 20 ; using manipulatives; real-world objects)	162	Represents a given set of objects as a numeral (≤ 20 ; manipulatives and numerals shown; numerals given; 10-frames)	174	Finds the incorrect representation of $1/4$ of a whole (manipulatives shown)
158	Represents $1/2$ as part of a whole (manipulatives shown)	163	Represents a given set of objects as a	174	Identifies an even number (≤ 100 ; numerals shown)

* At the range mid-point, this is the probability students would correctly answer items measuring these concepts and skills.

151 - 160 Skills and Concepts to Enhance (73% probability*)	161 - 170 Skills and Concepts to Develop (50% probability*)	171 - 180 Skills and Concepts to Introduce (27% probability*)
158 Understands the value of a dime (manipulatives shown; generic coin, real-world objects; ¢ symbol shown)	numeral (≤ 20 ; manipulatives and numerals shown; base-10 blocks)	175 Illustrates an odd number of objects (≤ 5 ; manipulatives shown)
159 Represents a given set of objects as a numeral (≤ 20 ; manipulatives and numerals shown; base-10 blocks)	166 Represents one-half as part of a whole (manipulatives shown)	176 Represents $\frac{1}{3}$ as part of a whole (manipulatives shown)
160 Represents a given set of objects as a numeral (≤ 20 ; manipulatives and numerals shown; numerals given; 10-frames)	167 Represents a given numeral as a number word (≤ 1000 ; numerals and words shown)	176 Represents a given set of objects as a numeral (≤ 20 ; manipulatives and numerals shown; bundles and sticks)
	167 Understands the value of a nickel (manipulatives shown; generic coin, real-world objects; ¢ symbol shown)	177 Represents a given numeral as a set of objects (≤ 100 ; using manipulatives; bundles of tens and ones)
	169 Finds the incorrect representation of a set of objects (≤ 5 ; manipulatives and numerals shown)	179 Represents a given numeral on a number line (≤ 20 ; manipulatives shown; number line)
	169 Represents a given set of objects as a numeral (≤ 1000 ; manipulatives and numerals shown; base-10 blocks)	179 Represents part of a whole as $\frac{2}{3}$ (manipulatives shown)
	170 Identifies the coin name for 10¢ (¢ symbol shown)	
	170 Interprets a number line (≤ 100 ; manipulatives and numerals shown; multiples of 10 shown; number line)	
	170 Represents a given set of objects as a numeral (≤ 100 ; manipulatives and numerals shown; base-10 blocks)	
	170 Represents a given set of objects as a numeral (≤ 20 ; manipulatives and numerals shown; domino tiles)	

Place Value and Base-Ten System

Relative Position and Magnitude

151 Understands the concept of one more than a number (≤ 10 ; numerals shown)	161 Understands the concept of 1 less than a number (≤ 100 ; numbers given)	171 Compares the value of money using the term most ($\leq \$1.00$; money words shown; pennies, nickels, dimes, quarters)
152 Compares numbers using the term less than (≤ 10 ; numerals shown)	162 Compares numbers using the term less than (≤ 100 ; numerals shown)	174 Orders numbers from smallest number to largest number (≤ 10 ; numerals shown)
152 Compares sets of objects using the term same (≤ 5 ; manipulatives shown; real-world objects)	163 Compares sets of objects using the term fewest (≤ 10 ; manipulatives shown; blocks)	174 Understands the concept of 2 less than a number (≤ 10)

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151 - 160 Skills and Concepts to Enhance
(73% probability*)

- 153 Compares numbers using the term greater than (≤ 20 ; numerals shown)
- 154 Compares sets of objects using the term fewer (≤ 10 ; manipulatives shown; real-world objects)
- 154 Compares sets of objects using the term fewer (≤ 5 ; manipulatives shown; circles)
- 154 Understands the concept of less than a number (≤ 20)
- 155 Compares 5 numbers using the term largest (≤ 10)
- 155 Compares numbers using the term greater than (≤ 20 ; using manipulatives; number line)
- 155 Compares numbers using the term smallest (≤ 100 ; numerals shown)
- 155 Compares sets of objects using the term fewest (≤ 10 ; manipulatives shown; real-world objects)
- 156 Compares numbers using the term smallest (≤ 10 ; numerals shown)
- 156 Understands the concept of 1 more than a number (≤ 20 ; numerals shown)
- 157 Compares sets of objects using the term fewest (≤ 5 ; manipulatives shown; real-world objects)
- 157 Compares sets of objects using the term same (≤ 10 ; manipulatives shown; circles)
- 158 Compares numbers using the term greater than (≤ 100 ; numerals shown)
- 158 Compares numbers using the term largest (≤ 100 ; numerals shown)
- 159 Compares numbers using the term less than (≤ 100 ; numerals shown)
- 160 Understands the concept of between using numbers (≤ 10 ; numerals shown; multiple numerals missing)

161 - 170 Skills and Concepts to Develop
(50% probability*)

- 163 Understands the concept of 3 more than a number (≤ 20)
- 163 Understands the concept of a number coming right before another number when counting (≤ 5 ; numerals shown)
- 166 Compares numbers using the term largest (≤ 1000 ; numerals shown)
- 167 Understands the concept of between using numbers (≤ 100 ; numerals shown)
- 167 Understands the concept of two more than a number (≤ 10 ; numerals shown)
- 168 Compares numbers using the term greater than (≤ 20 ; manipulatives shown; number line)
- 169 Compares numbers using the term less than (≤ 10 ; manipulatives shown; number line)
- 170 Compares sets of objects using the term more (≤ 100 ; manipulatives shown; base-10 blocks)
- 170 Understands the concept of 1 less than a number (≤ 5)
- 170 Understands the concept of a number coming right before another number when counting (≤ 20 ; numerals shown)

171 - 180 Skills and Concepts to Introduce
(27% probability*)

- 175 Compares numbers using the term less than (≤ 1000 ; numerals shown)
- 175 Rounds a given number to the nearest ten (≤ 100 ; 2-digit number; numbers given)
- 178 Orders a set of objects from smallest number to largest number (≤ 5 ; manipulatives shown; linking cubes)
- 179 Represents fourth (manipulatives shown; real-world objects; from the right)
- 179 Understands the concept of 1 more than a number (≤ 1000 ; numerals shown)
- 180 Understands the concept of 1 less than a number (≤ 1000 ; numerals shown)

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151 - 160

Skills and Concepts to Enhance
(73% probability*)

161 - 170

Skills and Concepts to Develop
(50% probability*)

171 - 180

Skills and Concepts to Introduce
(27% probability*)

Place Value and Base Ten System

159 Identifies the number of groups of 10 (5; bundles and sticks)

163 Identifies the number of groups of 100 (2; base ten blocks)

164 Identifies the number of groups of 100 (5; base ten blocks)

166 Identifies the number of groups of 10 (2; bundles and sticks)

166 Identifies the number of groups of 100 (≤ 1000 ; manipulatives shown; base-10 blocks)

171 Identifies the number of groups of 10 (≤ 100 ; manipulatives shown; bean sticks and beans)

171 Represents a given set of objects as a place value description and as a numeral (≤ 100 ; manipulatives and words shown; base-10 blocks)

172 Identifies the number of groups of 10 (≤ 100 ; manipulatives shown; 10-frames)

172 Identifies the number of groups of 10 (1; base ten blocks)

173 Identifies the number of groups of 10 (7; base ten blocks)

176 Identifies the number of groups of 10 (≤ 100 ; manipulatives shown; base-10 blocks)

177 Represents a given set of objects as a place value description (≤ 100 ; manipulatives and words shown; base-10 blocks)

180 Identifies the number of groups of 10 (8; 10-frames)

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