

Primary Grades Instructional Data (10 point option)

Subject: Mathematics

Goal: Algebra



Database last updated with additional data statements on 2/15/2008

141 - 150 Skills and Concepts to Enhance
(73% probability*)

151 - 160 Skills and Concepts to Develop
(50% probability*)

161 - 170 Skills and Concepts to Introduce
(27% probability*)

Application of Algebraic Concepts

162 Determines the missing subtrahend (2-digit minuend, 1-digit subtrahend; minuend = 10; equation shown)

164 Determines the missing subtrahend (1-digit minuend, 1-digit subtrahend; minuend = 5; equation shown)

168 Determines the missing addend (1-digit addends; sum \leq 5; equation shown)

170 Determines the missing addend (1-digit addends; sum \leq 10; equation shown)

Attributes, Patterns, and Functions

141 Extends a pattern (repeating; AB; next three objects; manipulatives shown; geometric shapes)

142 Extends a pattern (repeating; AB; next object; manipulatives shown; geometric shapes)

144 Illustrates the repeating portion of a pattern (AB; manipulatives shown; letters shown)

146 Infers a rule for a pattern (repeating; ABC; manipulatives shown; geometric shapes)

149 Extends a pattern (repeating; AABC; next four objects; using real-world objects)

149 Extends a pattern (repeating; AABC; next object; manipulatives shown; geometric shapes)

151 Extends a pattern (repeating; AB; next two objects; numerals shown)

155 Illustrates the repeating portion of a pattern (AAB; manipulatives shown; geometric shapes)

159 Extends a pattern (repeating; AAB; real-world object; next three objects)

159 Extends a pattern (repeating; AB; next two objects; manipulatives shown; geometric shapes)

159 Extends a pattern (repeating; ABB; next three numbers; letters shown)

160 Illustrates the repeating portion of a pattern (ABCC; numerals shown)

160 Interprets a pattern (repeating; same rule, different letters; AAAB; using letters)

161 Interprets a pattern (repeating; same rule, different objects; AAB; manipulatives shown; geometric shapes)

162 Extends a pattern (repeating; ABC; next three numbers; numerals shown)

162 Illustrates a pattern using a given rule (repeating; AAB; manipulatives shown; real-world objects)

162 Illustrates the repeating portion of a pattern (AAAB; manipulatives shown; geometric shapes)

162 Illustrates the repeating portion of a pattern (ABC; manipulatives shown; geometric shapes)

165 Interprets a pattern (repeating; same rule, different objects; AAB; manipulatives shown; real-world objects)

168 Extends a pattern (repeating; ABCD; next object; manipulatives shown; geometric shapes)

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

141 - 150 Skills and Concepts to Enhance
(73% probability*)

151 - 160 Skills and Concepts to Develop
(50% probability*)

161 - 170 Skills and Concepts to Introduce
(27% probability*)

169 Extends a pattern (repeating; AB; next six objects; manipulatives shown; geometric shapes)

Understanding Algebraic Concepts

145 Determines equality using addition (using manipulatives; real-world objects)

157 Infers an operation symbol for an equation (addition; 1-digit addends; sum ≤ 10)

162 Represents the word combine as a symbol (symbols shown)

157 Infers an operation symbol for an equation (addition; 2-digit addends; sum ≤ 100)

167 Determines equality using subtraction (manipulatives shown; blocks and balance)

169 Determines equality using addition (manipulatives shown; blocks and balance)

169 Represents an addition fact using the commutative property (1-digit addends; expression shown)

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