



# Test Design Document

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Wyoming Alternate Assessment for Students with  
Significant Cognitive Disabilities (Wy-ALT)

August 2014

## Mathematics

**Grade Band 3–5**

**Grade Band 6–8**

**Grade Band 9-11**

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## OVERVIEW

### TEST DESCRIPTION

The Wyoming Mathematics Alternate Assessment for Students with Significant Cognitive Disabilities (Wy-ALT) was developed for grade bands: 3–5, 6–8 and 9–11. Each grade band assessment contains a series of 12 performance tasks. Each operational task ranges from four to six items. The items become increasingly more complex and difficult within a task; the tasks become increasingly more complex as the student moves through the grade band test form.

Students are not required to take every task in the assessment and will start the test at the point that is most appropriate for the student. The task at which the student begins the assessment is determined by a Student Placement Questionnaire completed by the student’s teacher. Specifically, students can enter the operational assessment at one of three different points: Task 1, Task 3 or Task 6. For each starting point, students must complete a minimum number of tasks. The task at which the student exits the assessment is not predetermined. Instructions for selecting a student’s starting and concluding tasks will be provided in the *Directions for Administration Manual*.

Because students can enter the assessment at three different starting points and because they are not required to take every task in the assessment, it is necessary to make sure that each student encounters the breadth of domains encompassed in the Wyoming Mathematics Content and Performance Standards - Extensions by the time he or she reaches the designated stopping point. The domains encompassed in the Common Core State Standards for Mathematics are listed in the table below.

<b>DOMAINS IN WYOMING CONTENT AND PERFORMANCE STANDARDS FOR MATHEMATICS</b>		
<b>Gr. 3–5</b>	<b>Gr. 6–8</b>	<b>Gr. 9–11</b>
Operations and Algebraic Thinking	Ratios and Proportional Relationships (grade 6 & 7)	Algebra
Numbers and Operations: Base Ten	The Number System	Geometry
Numbers and Operations: Fractions	Expressions and Equations	Statistics and Probability
Geometry	Geometry	Number and Quantity
Measurement and Data	Functions (grade 8)	Functions
	Statistics and Probability	Modeling

## COMMUNICATION LEVELS

The tasks and items written for the Wy-ALT are aligned not only to the extended grade-level indicators but also to three communication levels. These levels refer to the level of complexity of the communication method the student uses. Tasks and items written to the pre-symbolic level are intended for students who communicate mainly with gestures and eye gaze. Tasks and items written to the symbolic level are intended for students who speak or have a vocabulary of signs or use pictures to communicate. Tasks and items written to the abstract level are intended for students who speak, read, write, and understand sentences and basic mathematics.

## GENERAL BLUEPRINT AND TEST DESIGN

### GENERAL BLUEPRINT

<b>WY-ALT MATHEMATICS</b>			
<b>Entry/Minimum Stop*</b>	<b>Number of Tasks Scored</b>	<b>Number of Items Scored</b>	<b>Number of Points</b>
1–5	5	20–30	40–60
3–9	7	28–42	56–84
6–12	7	28–42	56–84
Total	12	48–72	96–144

\*The General Blueprint only reflects students who take the minimum number of tasks.

DOMAINS BY TASKS

**WY-ALT MATHEMATICS BLUEPRINT FOR DOMAINS BY TASKS**

**Grade Band 3–5**

<b>Domain</b>	<b>Number of Tasks Scored</b>	<b>Number of Items Scored</b>	<b>Number of Points</b>
Operations and Algebraic Thinking	2 or 3	8–18	16–36
Numbers and Operations: Base Ten	2 or 3	8–18	16–36
Numbers and Operations: Fractions	2 or 3	8–18	16–36
Geometry	2	8–12	16–24
Measurement and Data	2	8–12	16–24

**WY-ALT MATHEMATICS BLUEPRINT FOR DOMAINS BY TASKS**

**Grade Band 6–8**

<b>Domain</b>	<b>Number of Tasks Scored</b>	<b>Number of Items Scored</b>	<b>Number of Points</b>
Geometry	2	8–12	16–24
Ratios and Proportional Relationships	2	8–12	16–24
The Number System	2	8–12	16–24
Expressions and Equations	2	8–12	16–24
Functions	2	8–12	16–24
Statistics and Probability	2	8–12	16–24

**WY-ALT MATHEMATICS BLUEPRINT FOR DOMAINS BY TASKS**

**Grade Band 9–11**

<b>Domain</b>	<b>Number of Tasks Scored</b>	<b>Number of Items Scored</b>	<b>Number of Points</b>
Algebra	3 or 4	12–24	24–48
Geometry	5 or 6	20–36	40–72
Statistics and Probability	3 or 4	12–24	24–48

BREADTH OF COVERAGE

**WY-ALT MATHEMATICS BREADTH OF COVERAGE**

**Grade Band 3–5**

	<b>Start</b>	<b>End</b>	<b>Standard 1 Operations and Algebraic Thinking</b>	<b>Standard 2 Numbers and Operations: Base Ten</b>	<b>Standard 3 Numbers and Operations: Fractions</b>	<b>Standard 4 Geometry</b>	<b>Standard 5 Measurement and Data</b>
Pre-symbolic	Task 1	Task 5	X	X	X	X	X
Concrete	Task 3	Task 9	X	X	X	X	X
Abstract	Task 6	Task 12	X	X	X	X	X

**WY-ALT MATHEMATICS BREADTH OF COVERAGE**

**Grade Band 6–8**

	<b>Start</b>	<b>End</b>	<b>Standard 1 Ratios and Proportional Relationships</b>	<b>Standard 2 The Number System</b>	<b>Standard 3 Expressions and Equations</b>	<b>Standard 4 Geometry</b>	<b>Standard 5 Functions</b>	<b>Standard 6 Statistics and Probability</b>
Pre-symbolic	Task 1	Task 5	*	*	*	*	*	*
Concrete	Task 3	Task 9	X	X	X	X	X	X
Abstract	Task 6	Task 12	X	X	X	X	X	X

*\*There are six standards categories for mathematics in the 6-8 grade band. Therefore, students who start on Task 1 and only complete the minimum number of five tasks will be exposed to only five of the six total standards. If a standards category is not represented in the first five tasks in a given administration, it will be represented in the following administration.*

**WY-ALT MATHEMATICS BREADTH OF COVERAGE**

**GRADE BAND 9–11**

	<b>Start</b>	<b>End</b>	<b>Standard 1 Algebra</b>	<b>Standard 2 Geometry</b>	<b>Standard 3 Statistics and Probability</b>
Pre-symbolic	Task 1	Task 5	X	X	X
Concrete	Task 3	Task 9	X	X	X
Abstract	Task 6	Task 12	X	X	X