

WYOMING
DEPARTMENT OF EDUCATION



Test Design Document

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

August 2014

Science

Grade 4

Grade 8

Grade Band 9–11

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OVERVIEW

TEST DESCRIPTION

The Wyoming Science Alternate Assessment for Students with Significant Cognitive Disabilities (Wy-ALT) was developed for grades: 4, 8 and 9–11. Each 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 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 standards encompassed in the Wyoming Science Content and Performance Standards – Extensions by the time he or she reaches the designated stopping point. The standards encompassed in the Wyoming Science Standards are listed in the table below.

WYOMING SCIENCE STANDARDS		
Gr. 3–5	Gr. 6–8	Gr. 9–11
Earth and Space Science	Earth and Space Science	Biology
Life Systems	Life Systems	Chemistry
Physical Science	Physical Science	Environmental Science
		Physical Geology
		Physical Science
		Physics

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

WY-ALT SCIENCE

Entry/Minimum Stop*	Number of Tasks Scored	Number of Items Scored	Number of Points
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.

STANDARDS BY TASKS

WY-ALT SCIENCE BLUEPRINT FOR STANDARDS BY TASKS

Grade 4

Standard	Number of Tasks Scored	Number of Items Scored	Number of Points
Earth and Space Science	4	16–24	32–48
Life Systems	4	16–24	32–48
Physical Science	4	16–24	32–48

WY-ALT SCIENCE BLUEPRINT FOR STANDARDS BY TASKS

Grade 8

Standard	Number of Tasks Scored	Number of Items Scored	Number of Points
Earth and Space Science	4	16–24	32–48
Life Systems	4	16–24	32–48
Physical Science	4	16–24	32–48

WY-ALT SCIENCE BLUEPRINT FOR STANDARDS BY TASKS

Grade Band 9–11

Standard	Number of Tasks Scored	Number of Items Scored	Number of Points
Biology	2	8–12	16–24
Chemistry	2	8–12	16–24
Environmental Science	2	8–12	16–24
Physical Geology	2	8–12	16–24
Physical Science	2	8–12	16–24
Physics	2	8–12	16–24

BREADTH OF COVERAGE

WY-ALT SCIENCE BREADTH OF COVERAGE

GRADE 4

	Start	End	Standard 1 Earth and Space Science	Standard 2 Life Systems	Standard 3 Physical Science			
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			

WY-ALT SCIENCE BREADTH OF COVERAGE

GRADE 8

	Start	End	Standard 1 Earth and Space Science	Standard 2 Life Systems	Standard 3 Physical Science			
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			

Wy-ALT SCIENCE BREADTH OF COVERAGE

GRADE BAND 9–11

	Start	End	Standard 1 Biology	Standard 2 Chemistry	Standard 3 Environmental Science	Standard 4 Physical Geology	Standard 5 Physical Science	Standard 6 Physics
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 the Science Grade Band 9-11. Therefore, students who start on Task 1 but only complete the minimum number of five tasks will only be exposed to 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.*