

**Spring 2021 CCRS Summative Assessment  
Alternate Blueprinting Option (ABO) Form  
For Mathematics**

In the effort to reduce overall testing time, DoDEA is implementing the new Alternate Blueprinting Option (ABO) for the College and Career Ready Standards (CCRS) Summative Assessment beginning in spring 2021. The ABO measures the same construct as the Flagship (or long) form of the CCRS Summative Assessment administered in spring 2018 and spring 2019. It reduces testing time while maintaining the ability to proportionally measure the standards and report out student scores on the same scale and proficiency levels.

**I. Mathematics ABO CCRS Summative Assessment Blueprint Overview**

The Mathematics ABO assessments are available in grades 3–8 and high school. The test measures the mathematics skills that are critically important for success in college and in the workplace. On each test, students will solve multi-step math problems that require reasoning and address real-world situations. This requires students to reason mathematically, make sense of quantities and their relationships to solve real-world problems, and show their understanding. The mathematics high-level blueprint shown in Table 2 defines the total number of tasks and/or items for any given grade/course assessment, the item types, and the point values for each.

Similar to the Flagship assessments, the ABO assessments for mathematics involve three primary types of tasks: Type I, Type II, and Type III as defined in Table 1. Each task type is described based on several factors, principally the purpose of the task in generating evidence for certain sub claims.

**Table 1. Mathematics Task Types**

<b>Task Type</b>	<b>Description</b>
<b>I. Tasks assessing concepts, skills and procedures</b>	Balance of conceptual understanding, and application
	Can involve any or all mathematical practice standards
	Machine scorable including innovative, computer-based formats
	Sub-claims A and B
<b>II. Tasks assessing expressing mathematical reasoning</b>	Each task calls for written arguments / justifications, critique of reasoning, or precision in mathematical statements (MP.3, 6).
	Can involve other mathematical practice standards
	May include a mix of machine scored and hand scored responses
	Sub-claim C
<b>III. Tasks assessing modeling/applications</b>	Each task calls for modeling/application in a real-world context or scenario (MP.4)
	Can involve other mathematical practice standards
	May include a mix of machine scored and hand scored responses

Sub-claim D

**Table 2: Mathematics ABO High-Level Blueprints**

Items	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Algebra I	Geometry	Algebra II
<b>Type I</b>									
1 point	24	20	20	18	20	20	16	18	16
2 points	3	5	5	4	5	3	5	6	7
4 points	-	-	-	1	0	1	1	0	0
<b>Type II</b>									
3 points	2	2	2	2	2	2	2	2	2
4 points	1	1	1	1	1	1	1	1	1
<b>Type III</b>									
3 points	2	2	2	2	2	2	1	1	1
6 points	1	1	1	1	1	1	2	2	2
<b>Type I Totals</b>	<b>27</b>	<b>25</b>	<b>25</b>	<b>23</b>	<b>25</b>	<b>24</b>	<b>22</b>	<b>24</b>	<b>23</b>
<b>Type II Totals</b>	<b>3</b>								
<b>Type III Totals</b>	<b>3</b>								

\*The assessment will also include embedded field-test items which will not count towards a student's score.

**Commonalities:** When compared to the Flagship CCRS summative assessment form, the ABO:

- Contains a representative sampling of the standards and evidence statements from the CCRS Summative Assessment Evidence Statement Tables.
- Maintains a proportional coverage of all the College and Career Standards across forms.
- Maintains a similar proportion of items to the CCRS Summative Assessment blueprint across the item types, content domains, and sub-claims.
- Contains an appropriate percentage of content in grade 3-8 forms that aligns exclusively to the major work of the grade.
- For the high school assessments, measures an appropriate percentage of content in each high school form that aligns exclusively to prerequisites for careers and postsecondary studies
- Maintains all five performance levels.

**Differences:**

Across the grades the ABO reduces test length to 67% to 75% of the length of the CCRS summative assessment. ABOs are designed to be administered in three 60-minute units for grades 3–8 and two 90-minute units for high school. Figure 1 shows the mathematics test unit structure for the Flagship assessment and for the ABO assessment.

**Figure 1. Unit Structure for Flagship and ABO Mathematics CCRS Summative Assessments**

	Unit 1	Unit 2	Unit 3	Unit 4
<b>Grades 3–5</b>				
Flagship	Non-calculator (60 min)	Non-calculator (60 min)	Non-calculator (60 min)	Non-calculator (60 min)
ABO	Non-calculator (60 min)	Non-calculator (60 min)	Non-calculator (60 min)	NA
<b>Grade 6</b>				
Flagship	Non-calculator (80 min)	Calculator (80 min)	Calculator (80 min)	NA
ABO	Non-calculator section and Calculator section (60 min)	Calculator (60 min)	Calculator (60 min)	NA
<b>Grade 8</b>				
Flagship	Non-calculator (80 min)	Calculator (80 min)	Calculator (80 min)	NA
ABO	Non-calculator (60 min)	Calculator (60 min)	Calculator (60 min)	NA
<b>High School</b>				
Flagship	Non-calculator section and Calculator section (90 min)	Calculator (90 min)	Calculator (90 min)	NA
ABO	Non-calculator section and Calculator section (90 min)	Calculator (90 min)	NA	NA

Information and resources about the DoDEA CCRS Summative Assessment are available on the DoDEA-CAS website under the Resource tab for CCRS Summative Assessments:

<https://www.dodea.edu/assessments/resources/CCRS.cfm> .