DEPARTMENT OF EDUCATION

Assessment Details

Important Testing Dates (2018-2019)

Online testing and data entry:
March 4-May 3

Estimated Test Administration Times for Math MCA (2018-2019)

Grade and Test	Total Test Administration
4 Mathematics MCA	1.5-2 hours

Test Design by Grade Level

A variety of item types will be used on the Mathematics MCA-III, including multiple-choice (MC) items and technology-enhanced (TE) items. Technology-enhanced items may consist of the following types of responses: type-in (student will type numerical answers in a box), graphing (student will plot data to complete various mathematical displays), drag-and-drop (students will formulate, rather than select, a response using drag-and-drop response options) and hot-spot (students will select multiple correct responses or will mark locations on mathematical graphics and displays).

The table indicates the number of operational items appearing on an online adaptive form of the Mathematics MCA-III for grade 4, as well as the range of items within a test form aligned to each strand for grade 4. The second table gives the same information for the paper accommodated Mathematics MCA-IIIs.

Range of Items per Strand for Online Adaptive Mathematics MCA-III Grade 4

Grade	Number of Operational Items	Number & Operation	Algebra	Geometry & Measurement	Data & Analysis & Probability
4	42	16-20	7-8	10-14	6-7

Range of Items per Strand for Paper Accommodated Mathematics MCA-III Grade 4

Grade	Number of Operational Items	Number & Operation	Algebra	Geometry & Measurement	Data & Analysis & Probability
4	50	18-22	8-10	12-15	6-8

Item Type

The table indicates the type and number of items for the online adaptive Mathematics MCA. The second table indicates the type and number of items for the paper accommodated Mathematics MCA.

Type and Number of Items for Online Adaptive Mathematics MCA-III Grade 4

Grade	MC Items (1 point)	Technology-Enhanced Items (1 point)	Total Items/Points
4	32-40	2-10	42

Type and Number of Items for Paper Accommodated Mathematics MCA-III Grade 4

Grade	MC Items (1 point)	Technology-Enhanced Items (1 point)	Total Items/Points
4	50	NA	50

Target Item Counts by Depth and Knowledge Levels

The MCA-III are constructed with minimum target percentages for items at DOK levels 1, 2 and 3. The table shows the target percentages and item counts by DOK levels.

Minimum Item Count Targets by DOK level

Grades	Level 1	Level 2	Level 3
3-8, 11	20%	30%	5%

Item Counts by Standard

The table shows the minimum and maximum numbers of operational items by standard for the online adaptive Mathematics MCA-III grade 4 and the paper accommodated Mathematics MCA-III grade 4.

Online Adaptive MCA-III Grade 4 Minimum and Maximum Item Counts by Standard

Strand	Range of Items per Strand	Standard	Number of Benchmarks per Standard	Range of Items per Standard
1 – Number & Operation	16-20	4.1.1	6	6-8
		4.1.2	7	10-12
2 – Algebra	7-8	4.2.1	1	3-4
		4.2.2	2	3-4
3 – Geometry & Measurement	10-14	4.3.1	2	3-4
		4.3.2	4	4-6
		4.3.3	4	3-4
4 – Data Analysis & Probability	6-7	4.4.1	1	6-7

Paper Accommodated MCA-III Grade 4 Minimum and Maximum Item Counts by Standard

Strand	Range of Items per Strand	Standard	Number of Benchmarks per Standard	Range of Items per Standard
1 – Number & Operation	18-22	4.1.1	6	8-10
		4.1.2	7	10-12
2 – Algebra	8-10	4.2.1	1	4-5
		4.2.2	2	4-5
3 – Geometry & Measurement	12-15	4.3.1	2	4-5
		4.3.2	4	5-7
		4.3.3	4	3-4
4 – Data Analysis & Probability	6-8	4.4.1	1	6-8