



Hawai'i

Statewide Assessment Program



Hawai'i State Assessment Program Guidance Brief: IEP/504 Teams Considering the Math Manipulatives (MMs) State Test Temporary Accommodations (August 2022)

The Smarter Balanced Consortium granted the Hawai'i State Department of Education (Department) temporary approval to use Math Manipulatives (MMs) as accommodations for statewide testing in SY 2022-2023.

Math Manipulatives are non-embedded accommodations available for use on the Smarter Balanced Math Assessments and the Algebra 1 and 2 End-of-Course (EOC) Exams. The MMs accommodations allow eligible students with IEPs and 504 Plans to represent their understanding of mathematical concepts using visual and tactile concrete materials. Without this accommodation, eligible IEP/504 Plan students would not be able to demonstrate their conceptual understanding and fluency in mathematics.

The rationale for the limited term approval is to allow IEP/504 Plan students access to the construct of measure, support the use of concrete materials to build their conceptual understanding of mathematics, and provide an opportunity for the Department to collect data to support the continued use of MMs as state test accommodations.

Documented Need for the Math Manipulatives (MMs) State Test Accommodations

State test accommodations are intended to remove obstacles to student demonstration of knowledge and skills resulting from student disability without altering the assessed construct (*Standards for Educational and Psychological Testing, 2014*). State test accommodations are not intended to reduce expectations for learning, modify the curriculum, or artificially inflate a student's test score.

The MMs as state test accommodations are available to IEP/504 Plan students who:

1. have a documented visual or cognitive need for the use of MMs in their IEP or 504 Plan; and
2. use MM(s) to solve math tasks during classroom instruction and assessment.

Construct Measured by the State Tests in Mathematics

Statewide assessments measure our students against established standards and grade-level expectations for achievement. In Hawai'i, the Common Core and Next Generation Science Standards are used as the metric. The Smarter Balanced

Mathematics Assessment measures student performance in mathematics based on four “claims” or domains: *Concepts and Procedures*, *Problem Solving*, *Communicating Reasoning*, and *Modeling and Data*. For an understanding of how these claims are used as a basis to generate a grade-level proficiency score for the state test in mathematics, refer to the [Smarter Balanced Mathematics Summative Assessment Blueprints](#) and the [Algebra 1 and Algebra 2 EOC Exam Blueprints](#).

List of Pre-Approved Math Manipulatives (MMs) State Test Accommodations

The list of pre-approved MMs state test accommodations is provided below. School IEP/504 Plan Teams may recommend up to a maximum of **four** MMs from the pre-approved list for a student. If a MM test accommodation recommended by the Team is not on the list, the Test Coordinator may add the unlisted MM(s) in the [SY 2022-2023 Hawai'i State Test Accommodation Verification Request Form](#) (or <https://www.surveymonkey.com/r/ACCOM2022-23>). The Assessment Section will consult with the Exceptional Support Branch and/or the Office of Curriculum and Instructional Design to ensure that requests for the unlisted MMs as accommodations for state testing are appropriate. For more information about requesting state test accommodations, refer to the section on *Requesting Math Manipulatives (MMs) State Test Accommodations* below.

1. Algebra Tiles (recommended for Grade 6 and above)
2. Base Ten Blocks
3. Colored Tiles
4. Geoblocks Set
5. Geoboards and Geobands
6. Multi-Link Cubes, Pop Cubes, or Similar Cubes
7. Multi-Sensory Learning (MSL) Kit
8. One-Inch Blocks
9. Pattern Blocks
10. Transparent Sheets
11. Two-Color Counters

Administration of the Math Manipulatives (MMs) State Test Accommodations

This non-embedded accommodation is available at all grade-levels and may be used on all items found on the Smarter Balanced Math Assessments and the Algebra 1 and 2 EOC exams. Student use of the MMs is not limited to specific problems on the math assessments and the Algebra EOC exams. Students are allowed to use the MM(s) on all items, including items that do not allow the use of a calculator.

The administration of the MMs accommodations must follow the administration guidelines and procedures below, in addition to those outlined in the *Smarter Balanced Summative Test Administration Manual 2022-2023 (TAM)* and/or the *Hawai'i State Science (NGSS) Assessments and End-of-Course Exams Test Administration Manual 2022-2023*. The guidance includes the following:

1. Students are tested separately from other students who are not using MM(s) during state testing.
2. MMs are made available to the student in an organized manner in the student's testing area prior to testing (e.g., in a bag, bin, or tray).
3. **MMs must not have numbers, formulas, or other features that might compromise the math constructs being measured.**
4. Students must select and use the MM(s) independently without prompting or direction.

Please note the use of the MMs accommodations may require the student to be provided additional time for state testing.

Documented Familiarity with the Math Manipulatives (MMs) State Test Accommodations

The student IEP or 504 Plan must identify the MM and document its use in classroom instruction and assessment to be considered for state testing. Further, students should have familiarity with the MM and be able to use it independently as no external assistance is allowed when this accommodation is provided during state testing.

Requesting Math Manipulatives (MMs) State Test Accommodations

The standard process for requesting and verifying state test accommodations applies to MMs accommodations. If the IEP/504 Plan Team recommends the use of MMs accommodations for an eligible student, the test coordinator or other authorized school contact completes and submits the [SY 2022-2023 Hawai'i State Test Accommodation Verification Request Form](#) to the Assessment Section by the deadlines described below.

Student Care Coordinators must be sure to document evidence to support student need for MMs state test accommodations in the student's IEP or 504 record. The specific MM(s) used by the student in classroom instruction and assessment must be identified in their IEP/504 Plan. For more information about documenting evidence in the

[electronic Comprehensive Student Support System \(eCSSS\)](#), refer to the [eCSSS Directions](#).

The [State Test Accommodations Verification Request Form](#) should be submitted one month prior to the opening of the test window. Please note that state test accommodation requests for interim or summative assessments should be submitted no later than 14 days prior to testing.

For more information about other accessibility supports available for interim or summative testing: universal tools, designated supports, and accommodation, refer to the [Hawai'i State Test Accommodation Guides](#), [Crosswalk of Accessibility Features Across State Assessments in Hawai'i \(CAF\)](#), and [Smarter Balanced Assessment Consortium: Usability, Accessibility, and Accommodations Guidelines 2022-2023 \(UAAG\)](#). These resources can be found in the [Accessibility and Accommodations](#) folder on the Resources page of the [alohahsap.org](#) website.

If you have any questions about this guidance brief, please email Elaine Lee at Elaine.Lee@k12.hi.us or call the Assessment Section at (808) 307-3636.