Mathematics

Pilot Priority

Grades Kindergarten – 3
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The Massachusetts Department of Elementary and Secondary Education (ESE), in partnership with WestEd, presents the following collection of assessments appropriate for use as District-Determined Measures (DDMs). These assessments were chosen as examples because they were aligned with critical content, as identified by the Core Course Objectives (CCOs) and/or appropriate Massachusetts Curriculum Framework, and reviewed to ensure overall quality. The following one page summaries cover a wide range of assessments including commercial, non-commercial, traditional, and non-traditional assessments. Districts can use this resource to choose DDMs to implement with or without modifications or as models for locally-developed measures.

**NOTE:** CCOs addressing this Pilot Priority were developed for grades K, 1, and 2. Initial CCO development was focused on high-priority “non-tested” grades and subjects. Because grade 3 is a tested grade in Massachusetts, it was not included among those grades and subjects targeted for CCO development in summer 2013.

**What is included in each one page summary?**

- Assessment name and subject, grade, or course
- Electronic link with additional information about the assessment
- Brief description of the assessment and the content it is intended to assess
- Source: publicly available (non-secure or open source) or must be purchased from a commercial developer
- Approach: assessment can be implemented without modifications (buy), with modifications (borrow), or can serve as model for a locally developed measure (build)
- Design: designed to measure growth or requires modifications
- Type of assessment: traditional end-of-grade or end-of-course test, non-traditional measure such as a performance task or portfolio rubric, screening tool, diagnostic measure, placement exam, classroom assessment, or certification exam
- Type of assessment items: selected response, constructed response, performance task, or portfolio
- Mode of administration: paper/pencil or computer supported
- Scoring method: machine scored or hand scored
Massachusetts District-Determined Measures

*Example Assessments*

Kindergarten
**Mathematics — K**

Assessment
Acuity—CTB/McGraw-Hill

**Description**
Set of assessments, reports, and instructional resources linked to CCSS and intended to be used formatively. Includes performance tasks. Specific information about technical adequacy and content pulled from documents developer created for state of New York. Developer indicated that Massachusetts-specific research is underway to confirm alignment (breadth and depth) of new items to curriculum framework. Findings will be shared with stakeholders in fall 2013. Supports development of fully customized assessments.

**Source**
Commercial Customizable Item Bank

**Approach**
Buying (commercial tool)

**Designed to Measure Growth**
Yes

<table>
<thead>
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<td>Selected Response</td>
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<tr>
<td>Short Constructed Response</td>
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<tr>
<td>Writing Prompt/Essay</td>
<td>Observation Rubric or Checklist</td>
<td>Scored Locally</td>
</tr>
<tr>
<td>Other: Diagnostic Measure</td>
<td></td>
<td>Scored Off-Site</td>
</tr>
</tbody>
</table>
Mathematics — K

Assessment
Adaptive Diagnostic Assessment of Mathematics (ADAM K-7)—Let's Go Learn

Publisher Website/Sample

Description
Adaptive assessment intended to be used formatively. Received high technical quality ratings. A variety of subtests align to the five major National Council of Teachers of Mathematics strands: numbers and operations, algebra, geometry, data analysis, and measurement. Intended to align to CCSS.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay
- Other: Diagnostic Measure

Non-Traditional Assessment
- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work SampleRubric
- Project-Based Rubric
- ObservationRubric or Checklist

Administration/Scoring
- Paper/Pencil
- Computer Supported
- Computer Adaptive
- Machine Scored
- Scored Locally
- Scored Off-Site

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# Mathematics — K

**Assessment**
AIMSweb Mathematics Assessments—Pearson

**Description**
Set of assessments that measure early numeracy (TEN), concepts and applications (M-CAP), computation (M-COMP), and curriculum-based mathematics (M-CBM). Can be used for screening and progress monitoring. Combination of measures would address CCOs for this grade, specifically those related to oral counting, number identification, quantity discrimination, and missing numbers.

<table>
<thead>
<tr>
<th>Source</th>
<th>Approach</th>
<th>Designed to Measure Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Test</td>
<td>Buying (commercial tool)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Traditional Assessment**
- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Other: Diagnostic Measure

**Non-Traditional Assessment**
- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

**Administration/Scoring**
- Paper/Pencil
- Computer Supported
- Machine Scored
- Scored Locally
- Scored Off-Site

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Mathematics — K

Assessment
aMath Adaptive Assessment—Ideal Consulting

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Description
Computer adaptive formative assessment grounded in research on instructionally sensitive assessments. Developers summarized collection of state standards into themes aligned to guidelines from the National Council of Teachers of Mathematics (NCTM) and the National Mathematics Advisory Panel (NMAP). Links to six domains measured by CCSS. Developer completed DDM survey.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay

Non-Traditional Assessment
- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

Administration/ Scoring
- Paper/Pencil
- Computer Supported
- Computer Adaptive
- Machine Scored
- Scored Locally
- Scored Off-Site
Mathematics — K

Assessment
Assessing Math Concepts—Kathy Richardson

Publisher Website/Sample

Description
Suggestion submitted by Carlisle Public School District. Based on Richardson’s Critical Learning Phases and Mathematics Perspectives. Assessments administered in one-on-one interviews. Aligned to content in the first three curriculum framework domains and several CCOs for this grade but does not assess the measurement and data or geometry domains. It may, however, provide indications of where students need additional preparation.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment

☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☑ Selected Response
☑ Short Constructed Response
☐ Writing Prompt/Essay
☑ Other: Diagnostic Measure

Non-Traditional Assessment

☐ Pre/Post or Repeated Measures
☐ Performance Task Rubric
☐ Portfolio or Work Sample Rubric
☐ Project-Based Rubric
☐ Observation Rubric or Checklist

Administration/Scoring

☑ Paper/Pencil
☑ Computer Supported
☒ Computer Adaptive
☑ Machine Scored
☑ Scored Locally
☐ Scored Off-Site

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**Mathematics — K**

**Assessment**

Balanced Assessment for the Mathematics Curriculum, Primary Tasks—Corwin Press

**Publisher Website/Sample**

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**Description**

Innovative assessment tasks developed by Harvard Graduate School of Education and endorsed by the Colorado Professional Learning Community. Tasks were developed prior to 2003, and information about intentional alignment to CCSS (and hence framework) not available at time of review. Documentation indicates, however, that tasks could be modified to address local curricula.

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**Source**

Commercial Test

**Approach**

Building (parts only)

**Designed to Measure Growth**

No

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### Traditional Assessment

- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay
- Other:

### Non-Traditional Assessment

- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

### Administration/Scoring

- Paper/Pencil
- Computer Supported
- Computer Adaptive
- Machine Scored
- Scored Locally
- Scored Off-Site

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Mathematics — K

Assessment
Galileo Benchmark and Formative Assessment System—Assessment Technology Incorporated

Publisher Website/Sample

Description
Customized benchmark assessments developed from secure item bank. State or district can submit standards and ATI builds tests to match. Typically includes 5 items for 8 standards to create 40-item tests. Vertical scale supports interpretations about growth. Claims alignment to CCSS. Piloted in seven districts in Massachusetts in grades 3-10 in ELA and mathematics; alignment work done at that time suggested strong linkage to curriculum frameworks in terms of both depth and breadth.

Source
Commercial Customizable Item Bank

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☒ Selected Response
☒ Short Constructed Response
☐ Writing Prompt/Essay
☒ Other: Interim or Benchmark

Non-Traditional Assessment
☐ Pre/Post or Repeated Measures
☐ Performance Task Rubric
☐ Portfolio or Work Sample Rubric
☐ Project-Based Rubric
☐ Observation Rubric or Checklist

Administration/Scoring
☒ Paper/Pencil
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Mathematics — K

Assessment
GOLD Assessment System—Teaching Strategies

Publisher Website/Sample

Description
Observation checklist developed by researchers at University of North Carolina-Charlotte. Measures development and content learning in social-emotional, physical, language, cognitive, literacy, mathematics, science, and the arts. Recommended by a number of districts, including Medford Public Schools. System addresses four mathematics objectives: number concepts and operations, spatial relationships and shapes, comparisons and measures, and knowledge of patterns. Three of the four objectives are aligned to curriculum framework for this grade.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

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Mathematics — K

Assessment
Group Mathematics Assessment and Diagnostic Evaluation (GMADE)—Pearson

Description
Subtests and items developed to provide a sampling of mathematics tasks reflective of a standards-based test blueprint. Blueprint was generated from year-long research study of state standards, curriculum benchmarks, scope and sequence plans of various commonly used mathematics textbook series, and a review of research on best practice for the teaching and learning of mathematical concepts and skills. Cornerstone of that blueprint was Principles and Standards for School Mathematics as set forth by National Council of Teachers of Mathematics in 2000. Parallel forms support use as pre-post measure. Reporting and administration options. Generally aligned to CCOs.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment

☐ Traditional End-of-Grade Assessment

☐ Traditional End-of-Course Assessment

☑ Selected Response

☐ Short Constructed Response

☐ Writing Prompt/Essay

☑ Other: Diagnostic Measure

Non-Traditional Assessment

☐ Pre/Post or Repeated Measures

☐ Performance Task Rubric

☐ Portfolio or Work Sample Rubric

☐ Project-Based Rubric

☐ Observation Rubric or Checklist

Administration/Scoring

☐ Paper/Pencil

☐ Computer Supported

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Massachusetts District-Determined Measures

Example Assessments

Mathematics — K

Assessment
Interim Assessments—Discovery Education

Publisher Website/Sample

Description
Intended to support CCSS-based instruction in ELA and mathematics. Aligned to multiple states' standards. Vertical scale supports interpretations about growth. Received high ratings for technical quality.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment

☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☑ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☑ Other: Diagnostic Measure

Non-Traditional Assessment

☐ Pre/Post or Repeated Measures
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Massachusetts District-Determined Measures
Example Assessments

Mathematics — K

Assessment
Iowa Test of Basic Skills–Riverside

Publisher Website/Sample

Description
Battery assessment for ELA and mathematics. Continuous standard score scale that supports measuring growth. Developed in conjunction with researchers from University of Iowa. Norm-referenced interpretation of results. Findings from study of alignment to CCSS are documented, though documents describing scope and sequence suggest alignment to content no longer part of CCSS-based mathematics curriculum at this grade level.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment

☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☑ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☐ Other:

Non-Traditional Assessment

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☐ Performance Task Rubric
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Administration/Scoring

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Mathematics — K

Assessment
i-Ready Diagnostic Math—Curriculum Associates

Description
Relatively new assessment designed to measure growth using a continuous scale. Claims to be aligned to state standards and CCSS. Reporting at subscale level. Limited information on which to base content alignment at time of review, but districts can contact developer for additional information.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
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## Mathematics — K

### Assessment

Measures of Academic Progress (MAP), Achievement Level Tests (ALT)—Northwest Evaluation Association (NWEA)

**Publisher Website/Sample**

### Description

Adaptive assessment that can be administered up to four times a year. Designed to measure growth. Received high ratings for technical quality. Study of alignment to CCSS was conducted. Comment from Buros Institute reviewer: "...available evidence suggests that MAP tests can be used with confidence by school districts to gauge student learning, relative standing, and growth with respect to educational objectives deemed central to the curricular emphases of those districts."

### Source

Commercial Test

### Approach

- **Designed to Measure Growth**
  - Yes

### Traditional Assessment

- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay
- Other: Diagnostic Measure

### Non-Traditional Assessment

- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
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**Massachusetts District-Determined Measures**

**Example Assessments**

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**Mathematics — K**

**Assessment**

Newton Public Schools Universal Screening Tool—Mathematics

**Publisher Website/Sample**

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**Description**

Early numeracy measure that focuses on composing and decomposing numbers to ten, combining parts without counting, and decomposing numbers to ten without counting. Linked to Kathy Richardson's Assessing Mathematics Concepts series. Assessment activities, scoring guide, and standards assessed. Administered via teacher-conducted interview with student.

**Source**

Open Source Items, Activities, Forms

**Approach**

Borrowing (full measure)

**Designed to Measure Growth**

No

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Mathematics — K

Assessment
North Carolina Formative Assessments

Publisher Website/Sample

Description
Set of assessment tasks, standards to which each performance task is aligned, and scoring rubrics. Tasks for operations and algebraic thinking, counting and cardinality, measurement and data, geometry, and numbers and operations in base ten. Students are asked to solve problems using words, numbers, or pictures. Aligned to CCSS, most CCOs, and curriculum framework, with the exception of the measurement and data domain (based on tasks available for review).

Source
Open Source Items, Activities, Forms

Approach
Borrowing (full measure)

Designed to Measure Growth
No

Traditional Assessment
- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay
- Other: Diagnostic Measure

Non-Traditional Assessment
- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

Administration/Scoring
- Paper/Pencil
- Computer Supported
- Computer Adaptive
- Machine Scored
- Scored Locally
- Scored Off-Site

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### Mathematics — K

**Assessment**
Stanford Achievement Test 10 (SAT 10)—Pearson

**Description**
Designed to measure growth and achievement. Seeks to be aligned to state standards and NAEP. Content is described as aligning to state and national standards, including NAEP. Information about test structure and content indicates many items are contextualized and involve non-routine problem-solving strategies. Received high ratings for technical quality, but districts interested in this option will need additional information from developer to confirm alignment to CCOs.

**Source**
Commercial Test

**Approach**
Buying (commercial tool)

**Designed to Measure Growth**
Yes

#### Traditional Assessment
- [ ] Traditional End-of-Grade Assessment
- [ ] Traditional End-of-Course Assessment
- [X] Selected Response
- [ ] Short Constructed Response
- [ ] Writing Prompt/Essay
- [ ] Other:

#### Non-Traditional Assessment
- [X] Pre/Post or Repeated Measures
- [ ] Performance Task Rubric
- [ ] Portfolio or Work Sample Rubric
- [ ] Project-Based Rubric
- [ ] Observation Rubric or Checklist

#### Administration/Scoring
- [X] Paper/Pencil
- [X] Computer Supported
- [ ] Computer Adaptive
- [X] Machine Scored
- [ ] Scored Locally
- [ ] Scored Off-Site

---

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Massachusetts District-Determined Measures

Example Assessments

Mathematics — K

Assessment
TerraNova 3–CTB/McGraw-Hill

Publisher Website/Sample

Description
Complete battery for grades K–12 in ELA, mathematics, science, and social studies. Standardized grade-level tests of achievement that are vertically aligned. Flexibility in when administered and how scored (remotely or locally). Norm-referenced interpretation of results. Alignment to CCSS could not be verified with available documentation but stated objectives likely address CCOs and curriculum framework for this grade. Content is described as having been developed using state standards, NAEP objectives, and national standards such as National Council of Teachers of Mathematics.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment

- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay
- Other:

Non-Traditional Assessment

- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

Administration/Scoring

- Paper/Pencil
- Computer Supported
- Computer Adaptive
- Machine Scored
- Scored Locally
- Scored Off-Site

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**Mathematics — K**

Assessment

Work Sampling System (WSS)—Pearson

**Publisher Website/Sample**

**Description**

Observation checklist developed by early childhood researcher (Meisels, 2001). Standards-based, curriculum-embedded, intended to document and evaluate what children are learning and have begun to master. Teachers collect information from multiple sources. Includes checklists and guidelines, portfolios, and summary reports. Measures development and content learning in personal/social and physical development and health, language and literacy, social studies, mathematical thinking, scientific thinking, and the arts. Linkage to CCSS not clear, but districts interested in this option can request additional information from developer.

**Source**

Commercial Test

**Approach**

Buying (commercial tool)

**Designed to Measure Growth**

Yes

---

### Traditional Assessment

- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay
- Other: Screening Tool

### Non-Traditional Assessment

- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

### Administration/Scoring

- Paper/Pencil
- Computer Supported
- Computer Adaptive
- Machine Scored
- Scored Locally
- Scored Off-Site

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Grade 1
**Mathematics — 1**

**Assessment**
Acuity—CTB/McGraw-Hill

**Publisher Website/Sample**

**Description**
Set of assessments, reports, and instructional resources linked to CCSS and intended to be used formatively. Includes performance tasks. Specific information about technical adequacy and content pulled from documents developer created for state of New York. Developer indicated that Massachusetts-specific research is underway to confirm alignment (breadth and depth) of new items to curriculum framework. Findings will be shared with stakeholders in fall 2013. Supports development of fully customized assessments.

**Source**
Commercial Customizable Item Bank

**Approach**
Buying (commercial tool)

**Designed to Measure Growth**
Yes

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Mathematics — 1
Assessment
Adaptive Diagnostic Assessment of Mathematics (ADAM K-7)—Let's Go Learn

**Publisher Website/Sample**

**Description**
Adaptive assessment intended to be used formatively. Received high technical quality ratings. A variety of subtests align to the five major National Council of Teachers of Mathematics strands: numbers and operations, algebra, geometry, data analysis, and measurement. Intended to align to CCSS.

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### Traditional Assessment
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- [ ] Traditional End-of-Course Assessment
- [x] Selected Response
- [x] Short Constructed Response
- [ ] Writing Prompt/Essay
- [x] Other: Diagnostic Measure

### Non-Traditional Assessment
- [ ] Pre/Post or Repeated Measures
- [ ] Performance Task Rubric
- [ ] Portfolio or Work Sample Rubric
- [ ] Project-Based Rubric
- [ ] Observation Rubric or Checklist

### Administration/Scoring
- [ ] Paper/Pencil
- [x] Computer Supported
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- [x] Machine Scored
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Mathematics — 1

Assessment
AIMSweb Mathematics Assessments—Pearson

Publisher Website/Sample

Description
Set of assessments that measure early numeracy (TEN), concepts and applications (M-CAP), computation (M-COMP), and curriculum-based mathematics (M-CBM). Can be used for screening and progress monitoring. Combination of measures would address CCOs for this grade, specifically those related to oral counting, number identification, quantity discrimination, and missing numbers.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Other: Diagnostic Measure

Non-Traditional Assessment
- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

Administration/Scoring
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## Mathematics — 1

**Assessment**

aMath Adaptive Assessment—Ideal Consulting

**Publisher Website/Sample**

### Description

Computer adaptive formative assessment grounded in research on instructionally sensitive assessments. Developers summarized collection of state standards into themes aligned to guidelines from the National Council of Teachers of Mathematics (NCTM) and the National Mathematics Advisory Panel (NMAP). Links to six domains measured by CCSS. Developer completed DDM survey.

### Source

Commercial Test

### Approach

Buying (commercial tool)

### Designed to Measure Growth

Yes

### Traditional Assessment

- [ ] Traditional End-of-Grade Assessment
- [ ] Traditional End-of-Course Assessment
- [✓] Selected Response
- [ ] Short Constructed Response
- [ ] Writing Prompt/Essay
- [ ] Other:

### Non-Traditional Assessment

- [✓] Pre/Post or Repeated Measures
- [ ] Performance Task Rubric
- [ ] Portfolio or Work Sample Rubric
- [ ] Project-Based Rubric
- [ ] Observation Rubric or Checklist

### Administration/Scoring

- [ ] Paper/Pencil
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- [✓] Computer Adaptive
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**Mathematics — 1**

**Assessment**
Assessing Math Concepts—Kathy Richardson

**Description**
Suggestion submitted by Carlisle Public School District. Based on Richardson’s Critical Learning Phases and Mathematics Perspectives. Assessments administered in one-on-one interviews. Aligned to content in the first three curriculum framework domains and several CCOs for this grade but does not assess the measurement and data or geometry domains. It may, however, provide indications of where students need additional preparation.

**Source**
Commercial Test

**Approach**
Buying (commercial tool)

**Designed to Measure Growth**
Yes

**Traditional Assessment**
- [ ] Traditional End-of-Grade Assessment
- [ ] Traditional End-of-Course Assessment
- [x] Selected Response
- [x] Short Constructed Response
- [ ] Writing Prompt/Essay
- [x] Other: Interim or Benchmark

**Non-Traditional Assessment**
- [ ] Pre/Post or Repeated Measures
- [ ] Performance Task Rubric
- [ ] Portfolio or Work Sample Rubric
- [ ] Project-Based Rubric
- [ ] Observation Rubric or Checklist

**Administration/Scoring**
- [x] Paper/Pencil
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### Mathematics — 1

**Assessment**
Balanced Assessment for the Mathematics Curriculum, Primary Tasks—Corwin Press

**Publisher Website/Sample**

### Description
Innovative assessment tasks developed by Harvard Graduate School of Education and endorsed by the Colorado Professional Learning Community. Tasks were developed prior to 2003, and information about intentional alignment to CCSS (and hence framework) not available at time of review. Documentation indicates, however, that tasks could be modified to address local curricula.

### Source
Commercial Test

### Approach
Building (parts only)

### Designed to Measure Growth
No

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### Mathematics — 1

**Assessment**
Galileo Benchmark and Formative Assessment System—Assessment Technology Incorporated

**Publisher Website/Sample**

**Description**
Customized benchmark assessments developed from secure item bank. State or district can submit standards and ATI builds tests to match. Typically includes 5 items for 8 standards to create 40-item tests. Vertical scale supports interpretations about growth. Claims alignment to CCSS. Piloted in seven districts in Massachusetts in grades 3-10 in ELA and mathematics; alignment work done at that time suggested strong linkage to curriculum frameworks in terms of both depth and breadth.

**Source**
Commercial Customizable Item Bank

**Approach**
Buying (commercial tool)

**Designed to Measure Growth**
Yes

#### Traditional Assessment
- Selected Response
- Short Constructed Response
- Other: Interim or Benchmark

#### Non-Traditional Assessment
- Pre/Post or Repeated Measures
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

#### Administration/Scoring
- Paper/Pencil
- Computer Supported
- Machine Scored
- Scored Locally

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Massachusetts District-Determined Measures

Example Assessments

Mathematics — 1

Assessment
Group Mathematics Assessment and Diagnostic Evaluation (GMADE)—Pearson

Publisher Website/Sample

Description
Subtests and items developed to provide a sampling of mathematics tasks reflective of a standards-based test blueprint. Blueprint was generated from year-long research study of state standards, curriculum benchmarks, scope and sequence plans of various commonly used mathematics textbook series, and a review of research on best practice for the teaching and learning of mathematical concepts and skills. Cornerstone of that blueprint was Principles and Standards for School Mathematics as set forth by National Council of Teachers of Mathematics in 2000. Parallel forms support use as pre-post measure. Reporting and administration options. Generally aligned to CCOs for this grade.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment

☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☐ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☐ Other: Diagnostic Measure

Non-Traditional Assessment

☐ Pre/Post or Repeated Measures
☐ Performance Task Rubric
☐ Portfolio or Work Sample Rubric
☐ Project-Based Rubric
☐ Observation Rubric or Checklist

Administration/Scoring

☑ Paper/Pencil
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Mathematics — 1
Assessment
Interim Assessments—Discovery Education

Description
Intended to support CCSS-based instruction in ELA and mathematics. Aligned to multiple states' standards. Vertical scale supports interpretations about growth. Received high ratings for technical quality.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☒ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☒ Other: Diagnostic Measure

Non-Traditional Assessment
☐ Pre/Post or Repeated Measures
☐ Performance Task Rubric
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Administration/Scoring
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**Mathematics — 1**

**Assessment**
Iowa Test of Basic Skills–Riverside

**Description**
Battery assessment for ELA and mathematics. Continuous standard score scale that supports measuring growth. Developed in conjunction with researchers from University of Iowa. Norm-referenced interpretation of results. Findings from study of alignment to CCSS are documented, though documents describing scope and sequence suggest alignment to content no longer part of CCSS-based mathematics curriculum at this grade level.

**Source**
Commercial Test

**Approach**
Buying (commercial tool)

**Designed to Measure Growth**
Yes

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</tbody>
</table>
### Mathematics — 1

**Assessment**  
i-Ready Diagnostic Math—Curriculum Associates

**Description**  
Relatively new assessment designed to measure growth using a continuous scale. Claims to be aligned to state standards and CCSS. Reporting at subscale level. Limited information on which to base content alignment at time of review, but districts can contact developer for additional information.

**Source**  
Commercial Test

**Approach**  
Buying (commercial tool)

**Designed to Measure Growth**  
Yes

### Traditional Assessment

- [ ] Traditional End-of-Grade Assessment
- [ ] Traditional End-of-Course Assessment
- [ ] Selected Response
- [ ] Short Constructed Response
- [ ] Writing Prompt/Essay
- [x] Other: Diagnostic Measure

### Non-Traditional Assessment

- [ ] Pre/Post or Repeated Measures
- [ ] Performance Task Rubric
- [ ] Portfolio or Work Sample Rubric
- [ ] Project-Based Rubric
- [ ] Observation Rubric or Checklist

### Administration/Scoring

- [ ] Paper/Pencil
- [ ] Computer Supported
- [x] Computer Adaptive
- [ ] Machine Scored
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Mathematics — 1

Assessment

Measures of Academic Progress (MAP), Achievement Level Tests (ALT) – Northwest Evaluation Association (NWEA)

Publisher Website/Sample

Description

Adaptive assessment that can be administered up to four times a year. Designed to measure growth. Received high ratings for technical quality. Study of alignment to CCSS was conducted. Comment from Buros Institute reviewer: "...available evidence suggests that MAP tests can be used with confidence by school districts to gauge student learning, relative standing, and growth with respect to educational objectives deemed central to the curricular emphases of those districts."

Source

Commercial Test

Approach

Buying (commercial tool)

Designed to Measure Growth

Yes

Traditional Assessment

☐ Traditional End-of-Grade Assessment

☐ Traditional End-of-Course Assessment

☑ Selected Response

☑ Short Constructed Response

☐ Writing Prompt/Essay

☑ Other: Diagnostic Measure

Non-Traditional Assessment

☑ Pre/Post or Repeated Measures

☐ Performance Task Rubric

☐ Portfolio or Work Sample Rubric

☐ Project-Based Rubric

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Administration/Scoring

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Massachusetts District-Determined Measures

Example Assessments

Mathematics — 1

Assessment
Newton Public Schools Universal Screening Tool—Mathematics

Publisher Website/Sample

Description
Early numeracy measure that focuses on composing and decomposing numbers to ten, combining parts without counting, and decomposing numbers to ten without counting. Linked to Kathy Richardson’s Assessing Mathematics Concepts series. Assessment activities, scoring guide, and standards assessed. Administered via teacher-conducted interview with student.

Source
Open Source Items, Activities, Forms

Approach
Borrowing (full measure)

Designed to Measure Growth
No

Traditional Assessment

☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
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Non-Traditional Assessment

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Administration/Scoring

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**Mathematics — 1**

**Assessment**
North Carolina Formative Assessments

**Publisher Website/Sample**

**Description**
Set of assessment tasks, standards to which each performance task is aligned, and scoring rubrics. Tasks for operations and algebraic thinking, counting and cardinality, measurement and data, geometry, and numbers and operations in base ten. Students are asked to solve problems using words, numbers, or pictures. Aligned to CCSS, most CCOs, and curriculum framework, with the exception of operations and algebraic thinking.

**Source**
Open Source Items, Activities, Forms

**Approach**
Borrowing (full measure)

**Designed to Measure Growth**
No

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Mathematics — 1

Assessment
Stanford Achievement Test 10 (SAT 10)—Pearson

Publisher Website/Sample

Description
Designed to measure growth and achievement. Seeks to be aligned to state standards and NAEP. Content is described as aligning to state and national standards, including NAEP. Information about test structure and content indicates many items are contextualized and involve non-routine problem-solving strategies. Received high ratings for technical quality, but districts interested in this option will need additional information from developer to confirm alignment to CCOs.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

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Mathematics — 1

Assessment
STAR Math Enterprise—Renaissance Learning

Description
Normative growth reporting using student growth percentiles. Can be used for screening and progress monitoring or to track growth for different intervals. Assessments are periodic, constructed around mathematics strands, and adaptive. Strands assessed include numeration concepts, computations processes, word problems, estimation, data analysis, probability and statistics, geometry, measurement, and algebra. Stated objectives are related to a few CCOs, but extent to which items are aligned to CCSS is not clear. Correlations with several state tests were provided. Endorsed by National Center on Response to Intervention.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☐ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☐ Other: Interim or Benchmark

Non-Traditional Assessment
☐ Pre/Post or Repeated Measures
☐ Performance Task Rubric
☐ Portfolio or Work Sample Rubric
☐ Project-Based Rubric
☐ Observation Rubric or Checklist

Administration/Scoring
☐ Paper/Pencil
☐ Computer Supported
☐ Computer Adaptive
☐ Machine Scored
☐ Scored Locally
☐ Scored Off-Site

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Mathematics — 1

Assessment
TerraNova 3–CTB/McGraw-Hill

Publisher Website/Sample

Description
Complete battery for grades K-12 in ELA, mathematics, science, and social studies. Standardized grade-level tests of achievement that are vertically aligned. Flexibility in when administered and how scored (remotely or locally). Norm-referenced interpretation of results. Alignment to CCSS could not be verified with available documentation but stated objectives likely address CCOs and curriculum framework for this grade. Content is described as having been developed using state standards, NAEP objectives, and national standards such as National Council of Teachers of Mathematics.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay

Non-Traditional Assessment
- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

Administration/Scoring
- Paper/Pencil
- Computer Supported
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### Mathematics — 1

**Assessment**

Work Sampling System (WSS)—Pearson

**Publisher Website/Sample**

---

**Description**

Observation checklist developed by early childhood researcher (Meisels, 2001). Standards-based, curriculum-embedded, intended to document and evaluate what children are learning and have begun to master. Teachers collect information from multiple sources. Includes checklists and guidelines, portfolios, and summary reports. Measures development and content learning in personal/social and physical development and health, language and literacy, social studies, mathematical thinking, scientific thinking, and the arts. Linkage to CCSS not clear, but districts interested in this option can request additional information from developer.

**Source**

Commercial Test

**Approach**

Buying (commercial tool)

**Designed to Measure Growth**

Yes

---

#### Traditional Assessment

- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay
- Other: Screening Tool

#### Non-Traditional Assessment

- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

#### Administration/Scoring

- Paper/Pencil
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Massachusetts District-Determined Measures

Example Assessments

Mathematics — 2

Assessment
Acuity—CTB/McGraw-Hill

Description
Set of assessments, reports, and instructional resources linked to CCSS and intended to be used formatively. Includes performance tasks. Specific information about technical adequacy and content pulled from documents developer created for state of New York. Developer indicated that Massachusetts-specific research is underway to confirm alignment (breadth and depth) of new items to curriculum framework. Findings will be shared with stakeholders in fall 2013. Supports development of fully customized assessments.

Source
Commercial Customizable Item Bank

Approach
Buying (commercial tool)  Yes

Designed to Measure Growth

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Mathematics — 2

Assessment
Adaptive Diagnostic Assessment of Mathematics (ADAM K-7)—Let's Go Learn

Publisher Website/Sample

Description
Adaptive assessment intended to be used formatively. Received high technical quality ratings. A variety of subtests align to the five major National Council of Teachers of Mathematics strands: numbers and operations, algebra, geometry, data analysis, and measurement. Intended to align to CCSS.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

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**Mathematics — 2**

**Assessment**
AIMSweb Mathematics Assessments—Pearson

**Publisher Website/Sample**

**Description**
Set of assessments that measure early numeracy (TEN), concepts and applications (M-CAP), computation (M-COMP), and curriculum-based mathematics (M-CBM). Can be used for screening and progress monitoring. M-CAP shows alignment to grade 2 standards addressing number and operations base ten, place value, and linear measurement and length. The M-COMP for this grade addresses the domains of column addition, basic facts, and complex computation, but has limited relationship to CCOs.

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**Non-Traditional Assessment**
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**Administration/Scoring**
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Mathematics — 2

Assessment

aMath Adaptive Assessment—Ideal Consulting

Description

Computer adaptive formative assessment grounded in research on instructionally sensitive assessments. Developers summarized collection of state standards into themes aligned to guidelines from the National Council of Teachers of Mathematics (NCTM) and the National Mathematics Advisory Panel (NMAP). Links to six domains measured by CCSS. Developer completed DDM survey.

Source

Commercial Test

Approach

Buying (commercial tool)

Designed to Measure Growth

Yes

Traditional Assessment

☐ Traditional End-of-Grade Assessment

☐ Traditional End-of-Course Assessment

☑ Selected Response

☐ Short Constructed Response

☐ Writing Prompt/Essay

☐ Other:

Non-Traditional Assessment

☐ Pre/Post or Repeated Measures

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☐ Portfolio or Work Sample Rubric

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Mathematics — 2

Assessment
Assessing Math Concepts—Kathy Richardson

Publisher Website/Sample

Description
Suggestion submitted by Carlisle Public School District. Based on Richardson’s Critical Learning Phases and Mathematics Perspectives. Assessments administered in one-on-one interviews. Aligned to content in the first three curriculum framework domains and several CCOs for this grade but does not assess the measurement and data or geometry domains. It may, however, provide indications of where students need additional preparation.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
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☐ Traditional End-of-Course Assessment
☐ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☐ Other: Interim or Benchmark

Non-Traditional Assessment
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Mathematics — 2

Assessment
Assessment Center/ipGrowth—CORE K12 Education

Description
Item bank aligned to New York standards in mathematics. Assessment may not be available. Districts interested in exploring this option will need to request additional information from developer.

Source
Commercial Customizable Item Bank

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☑ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☑ Other: Screening Tool

Non-Traditional Assessment
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## Mathematics — 2

**Assessment**
Balanced Assessment for the Mathematics Curriculum, Primary Tasks—Corwin Press

### Description
Innovative assessment tasks developed by Harvard Graduate School of Education and endorsed by the Colorado Professional Learning Community. Tasks were developed prior to 2003, and information about intentional alignment to CCSS (and hence framework) not available at time of review. Documentation indicates, however, that tasks could be modified to address local curricula.

### Source
Commercial Test

### Approach
Building (parts only)

### Designed to Measure Growth
No

### Traditional Assessment
- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay
- Other:

### Non-Traditional Assessment
- Pre/Post or Repeated Measures
- Performance Task Rubric
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Massachusetts District-Determined Measures

Example Assessments

Mathematics — 2

Assessment
Delaware Department of Education Common Core State Standards for Mathematics—Grade 2 Assessment

Publisher Website/Sample

Description
CCSS-based sample test questions for operations and algebraic thinking, numbers and operations in base ten, measurement and data, and geometry. Only partially aligned to CCos and framework for this grade but districts interested in building their own customized measures can easily modify to better align to local curricula.

Source
Released Items

Approach
Building (parts only)

Designed to Measure Growth
No

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Mathematics — 2

Assessment
Edmentum Test Packs

Publisher Website/Sample

Description
Battery for mathematics linked to PLATO Learning Environment. Can be customized to state standards. Insufficient information on which to make judgment about content alignment or technical quality; districts interested in exploring this option will need to request additional information from developer.

Source
Commercial Customizable Item Bank

Approach
Buying (commercial tool)

Designed to Measure Growth
No

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
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Mathematics — 2

Assessment
Galileo Benchmark and Formative Assessment System–Assessment Technology Incorporated

Publisher Website/Sample

Description
Customized benchmark assessments developed from secure item bank. State or district can submit standards and ATI builds tests to match. Typically includes 5 items for 8 standards to create 40-item tests. Vertical scale supports interpretations about growth. Claims alignment to CCSS. Piloted in seven districts in Massachusetts in grades 3-10 in ELA and mathematics; alignment work done at that time suggested strong linkage to curriculum frameworks in terms of both depth and breadth.

Source
Commercial Customizable Item Bank

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

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Mathematics — 2

Assessment

Group Mathematics Assessment and Diagnostic Evaluation (GMADE)—Pearson

Publisher Website/Sample

Description

Subtests and items developed to provide a sampling of mathematics tasks reflective of a standards-based test blueprint. Blueprint was generated from year-long research study of state standards, curriculum benchmarks, scope and sequence plans of various commonly used mathematics textbook series, and a review of research on best practice for the teaching and learning of mathematical concepts and skills. Cornerstone of that blueprint was Principles and Standards for School Mathematics as set forth by National Council of Teachers of Mathematics in 2000. Parallel forms support use as pre-post measure. Reporting and administration options. Generally aligned to CCOs for this grade.

Source

Commercial Test

Approach

Buying (commercial tool)

Designed to Measure Growth

Yes

Traditional Assessment

Traditional End-of-Grade Assessment

Selected Response

Other: Diagnostic Measure

Non-Traditional Assessment

Pre/Post or Repeated Measures

Performance Task Rubric

Portfolio or Work Sample Rubric

Project-Based Rubric

Observation Rubric or Checklist

Administration/Scoring

Paper/Pencil

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Computer Supported

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Mathematics — 2

Assessment
INSPECT Formatives–Key Data Systems

Publisher Website/Sample

Description
Item bank developed to align to CCSS. Recommended by Commonwealth district. Developer says item bank can be customized for state standards and can include pre-built formative assessments to measure progress with CCSS.

Source
Commercial Customizable Item Bank

Approach
Buying (commercial tool)

Designed to Measure Growth
No

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☐ Selected Response
☐ Short Constructed Response
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☐ Other: Diagnostic Measure

Non-Traditional Assessment
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### Mathematics — 2

**Assessment**

Interim Assessments—Discovery Education

**Publisher Website/Sample**

#### Description

Intended to support CCSS-based instruction in ELA and mathematics. Aligned to multiple states' standards. Vertical scale supports interpretations about growth. Received high ratings for technical quality.

#### Source

Commercial Test

#### Approach

Buying (commercial tool)

#### Designed to Measure Growth

Yes

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Massachusetts District-Determined Measures

Example Assessments

Mathematics — 2

Assessment
Iowa Test of Basic Skills–Riverside

Publisher Website/Sample

Description
Battery assessment for ELA and mathematics. Continuous standard score scale that supports measuring growth. Developed in conjunction with researchers from University of Iowa. Norm-referenced interpretation of results. Findings from study of alignment to CCSS are documented, though documents describing scope and sequence suggest alignment to content no longer part of CCSS-based mathematics curriculum at this grade level.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment

☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
✓ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☐ Other:

Non-Traditional Assessment

✓ Pre/Post or Repeated Measures
□ Performance Task Rubric
□ Portfolio or Work Sample Rubric
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Administration/Scoring

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Mathematics — 2
Assessment
i-Ready Diagnostic Math—Curriculum Associates

Description
Relatively new assessment designed to measure growth using a continuous scale. Claims to be aligned to state standards and CCSS. Reporting at subscale level. Limited information on which to base content alignment at time of review, but districts can contact developer for additional information.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

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Mathematics — 2

Assessment
Measures of Academic Progress (MAP), Achievement Level Tests (ALT) – Northwest Evaluation Association (NWEA)

Publisher Website/Sample

Description
Adaptive assessment that can be administered up to four times a year. Designed to measure growth. Received high ratings for technical quality. Study of alignment to CCSS was conducted. Comment from Buros Institute reviewer: "...available evidence suggests that MAP tests can be used with confidence by school districts to gauge student learning, relative standing, and growth with respect to educational objectives deemed central to the curricular emphases of those districts."

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

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# Mathematics — 2

**Assessment**
Newton Public Schools Universal Screening Tool—Mathematics

**Description**
Early numeracy measure that focuses on composing and decomposing numbers to ten, combining parts without counting, and decomposing numbers to ten without counting. Linked to Kathy Richardson’s Assessing Mathematics Concepts series. Assessment activities, scoring guide, and standards assessed. Administered via teacher-conducted interview with student.

**Source**
Open Source Items, Activities, Forms

**Approach**
Borrowing (full measure)

**Designed to Measure Growth**
No

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Mathematics — 2
Assessment
North Carolina Formative Assessments

Description
Set of assessment tasks, standards to which each performance task is aligned, and scoring rubrics. Tasks for operations and algebraic thinking, counting and cardinality, measurement and data, geometry, and numbers and operations in base ten. Students are asked to solve problems using words, numbers, or pictures. Aligned to CCSS, most CCOs, and curriculum framework.

Source
Open Source Items, Activities, Forms

Approach
Borrowing (full measure)

Designed to Measure Growth
No

Traditional Assessment
- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay
- Other: Diagnostic Measure

Non-Traditional Assessment
- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

Administration/Scoring
- Paper/Pencil
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist
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Mathematics — 2

Assessment
Performance Series, Math–Scantron

Description
Can be administered in conjunction with Scantron's Achievement Series assessments. Vertical scale supports measurement of growth; student growth percentiles can be calculated. Measures students' computation and problem-solving skills. Domains covered are numbers and operations, algebra, geometry, and data analysis and probability. Documentation suggests alignment to the CCSS and CCOs for this grade.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay
- Other: Diagnostic Measure

Non-Traditional Assessment
- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

Administration/Scoring
- Paper/Pencil
- Computer Supported
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- Scored Locally
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Massachusetts District-Determined Measures

Example Assessments

Mathematics — 2

Assessment

PRO-Core Learning Systems–Computers in Education

Publisher Website/Sample

Description

Diagnostic test intended to align to CCSS. Documents previewed were developed for Ohio but may be customizable to Commonwealth curriculum frameworks. Districts interested in this option can contact developer for more information.

Source

Commercial Customizable Item Bank

Approach

Buying (commercial tool)

Designed to Measure Growth

Yes

Traditional Assessment

☐ Traditional End-of-Grade Assessment

☐ Traditional End-of-Course Assessment

☐ Selected Response

☑ Short Constructed Response

☐ Writing Prompt/Essay

☑ Other: Diagnostic Measure

Non-Traditional Assessment

☑ Pre/Post or Repeated Measures

☐ Performance Task Rubric

☐ Portfolio or Work Sample Rubric

☐ Project-Based Rubric

☐ Observation Rubric or Checklist

Administration/Scoring

☑ Paper/Pencil

☑ Computer Supported

☐ Computer Adaptive

☐ Machine Scored

☐ Scored Locally

☐ Scored Off-Site

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# Mathematics — 2

**Assessment**
Scholastic Math Inventory (SMI)

**Description**
Measures achievement and growth based on Quantile Framework for Mathematics (Metametrics). Flexible administration options and customizable to state standards. Link to CCSS not clear, but documentation does show alignment to state standards for North Carolina, California, Florida, Illinois, and Texas. Good option for those seeking link to Quantile Framework.

**Source**
Commercial Test

**Approach**
Buying (commercial tool)

**Designed to Measure Growth**
Yes

### Traditional Assessment

- ☑ Traditional End-of-Grade Assessment
- ☑ Traditional End-of-Course Assessment
- ☑ Selected Response
- ☐ Short Constructed Response
- ☐ Writing Prompt/Essay
- ☑ Other: Diagnostic Measure

### Non-Traditional Assessment

- ☑ Pre/Post or Repeated Measures
- ☐ Performance Task Rubric
- ☐ Portfolio or Work Sample Rubric
- ☐ Project-Based Rubric
- ☐ Observation Rubric or Checklist

### Administration/Scoring

- ☐ Paper/Pencil
- ☐ Computer Supported
- ☑ Computer Adaptive
- ☑ Machine Scored
- ☐ Scored Locally
- ☐ Scored Off-Site

---

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Mathematics — 2

Assessment
Stanford Achievement Test 10 (SAT 10)–Pearson

Description
Designed to measure growth and achievement. Seeks to be aligned to state standards and NAEP. Content is described as aligning to state and national standards, including NAEP. Information about test structure and content indicates many items are contextualized and involve non-routine problem-solving strategies. Received high ratings for technical quality, but districts interested in this option will need additional information from developer to confirm alignment to CCOs.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☐ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☐ Other:

Non-Traditional Assessment
☐ Pre/Post or Repeated Measures
☐ Performance Task Rubric
☐ Portfolio or Work Sample Rubric
☐ Project-Based Rubric
☐ Observation Rubric or Checklist

Administration/Scoring
☐ Paper/Pencil
☐ Computer Supported
☐ Computer Adaptive
☐ Machine Scored
☐ Scored Locally
☐ Scored Off-Site
## Mathematics — 2

**Assessment**

STAR Math Enterprise—Renaissance Learning

**Publisher Website/Sample**

### Description

Normative growth reporting using student growth percentiles. Can be used for screening and progress monitoring or to track growth for different intervals. Assessments are periodic, constructed around mathematics strands, and adaptive. Strands assessed include numeration concepts, computations processes, word problems, estimation, data analysis, probability and statistics, geometry, measurement, and algebra. Stated objectives are related to a few CCOs, but extent to which items are aligned to CCSS is not clear. Correlations with several state tests were provided. Endorsed by National Center on Response to Intervention.

### Source

Commercial Test

### Approach

Buying (commercial tool)

### Designed to Measure Growth

Yes

### Traditional Assessment

- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay
- Other: Interim or Benchmark

### Non-Traditional Assessment

- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

### Administration/Scoring

- Paper/Pencil
- Computer Supported
- Computer Adaptive
- Machine Scored
- Scored Locally
- Scored Off-Site

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Massachusetts District-Determined Measures

Example Assessments

Mathematics — 2

Assessment
TerraNova 3—CTB/McGraw-Hill

Publisher Website/Sample

Description
Complete battery for grades K-12 in ELA, mathematics, science, and social studies. Standardized grade-level tests of achievement that are vertically aligned. Flexibility in when administered and how scored (remotely or locally). Norm-referenced interpretation of results. Alignment to CCSS could not be verified with available documentation but stated objectives likely address CCOs and curriculum framework for this grade. Content is described as having been developed using state standards, NAEP objectives, and national standards such as National Council of Teachers of Mathematics.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment

☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☑ Selected Response
☑ Short Constructed Response
☐ Writing Prompt/Essay
☐ Other:

Non-Traditional Assessment

☑ Pre/Post or Repeated Measures
☐ Performance Task Rubric
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☐ Observation Rubric or Checklist

Administration/Scoring

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### Mathematics — 2

**Assessment**

Work Sampling System (WSS)—Pearson

**Publisher Website/Sample**

---

**Description**

Observation checklist developed by early childhood researcher (Meisels, 2001). Standards-based, curriculum-embedded, intended to document and evaluate what children are learning and have begun to master. Teachers collect information from multiple sources. Includes checklists and guidelines, portfolios, and summary reports. Measures development and content learning in personal/social and physical development and health, language and literacy, social studies, mathematical thinking, scientific thinking, and the arts. Linkage to CCSS not clear, but districts interested in this option can request additional information from developer.

---

**Source**

Commercial Test

**Approach**

Buying (commercial tool)

**Designed to Measure Growth**

Yes

---

**Traditional Assessment**

- [ ] Traditional End-of-Grade Assessment
- [ ] Traditional End-of-Course Assessment
- [ ] Selected Response
- [ ] Short Constructed Response
- [ ] Writing Prompt/Essay
- [X] Other: Screening Tool

**Non-Traditional Assessment**

- [ ] Pre/Post or Repeated Measures
- [X] Performance Task Rubric
- [ ] Portfolio or Work Sample Rubric
- [ ] Project-Based Rubric
- [ ] Observation Rubric or Checklist

**Administration/Scoring**

- [ ] Paper/Pencil
- [ ] Computer Supported
- [ ] Computer Adaptive
- [ ] Machine Scored
- [X] Scored Locally
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Grade 3

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Massachusetts District-Determined Measures

Example Assessments

Mathematics — 3
Assessment
Acuity—CTB/McGraw-Hill

Publisher Website/Sample

Description
Set of assessments, reports, and instructional resources linked to CCSS and intended to be used formatively. Includes performance tasks. Specific information about technical adequacy and content pulled from documents developer created for state of New York. Developer indicated that Massachusetts-specific research is underway to confirm alignment (breadth and depth) of new items to curriculum framework. Findings will be shared with stakeholders in fall 2013. Supports development of fully customized assessments.

Source
Commercial Customizable Item Bank

Approach
Buying (commercial tool)  Yes

Designed to Measure Growth

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☐ Selected Response
☑ Short Constructed Response
☐ Writing Prompt/Essay
☑ Other: Diagnostic Measure

Non-Traditional Assessment
☑ Pre/Post or Repeated Measures
☐ Performance Task Rubric
☐ Portfolio or Work Sample Rubric
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### Mathematics — 3

**Assessment**
Adaptive Diagnostic Assessment of Mathematics (ADAM K-7)–Let's Go Learn

**Publisher Website/Sample**

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**Description**
Adaptive assessment intended to be used formatively. Received high technical quality ratings. A variety of subtests align to the five major National Council of Teachers of Mathematics strands: numbers and operations, algebra, geometry, data analysis, and measurement. Intended to align to CCSS.

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- [✓] Short Constructed Response
- [ ] Writing Prompt/Essay
- [✓] Other: Diagnostic Measure

**Non-Traditional Assessment**
- [ ] Pre/Post or Repeated Measures
- [ ] Performance Task Rubric
- [ ] Portfolio or Work Sample Rubric
- [ ] Project-Based Rubric
- [ ] Observation Rubric or Checklist

**Administration/Scoring**
- [ ] Paper/Pencil
- [✓] Computer Supported
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Mathematics — 3
Assessment
AIMSweb Mathematics Assessments—Pearson

Publisher Website/Sample

Description
Set of assessments that measure concepts and applications (M-CAP), computation (M-COMP), and curriculum-based mathematics (M-CBM). Can be used for screening and progress monitoring. Developer states that these assessments are compatible with any set of standards, including CCSS.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
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Non-Traditional Assessment
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Mathematics — 3
Assessment
aMath Adaptive Assessment–Ideal Consulting

Description
Computer adaptive formative assessment grounded in research on instructionally sensitive assessments. Developers summarized collection of state standards into themes aligned to guidelines from the National Council of Teachers of Mathematics (NCTM) and the National Mathematics Advisory Panel (NMAP). Links to six domains measured by CCSS. Developer completed DDM survey.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment

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Non-Traditional Assessment

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### Mathematics — 3

**Assessment**
Assessing Math Concepts—Kathy Richardson

**Publisher Website/Sample**

---

**Description**
Suggestion submitted by Carlisle Public School District. Based on Richardson’s Critical Learning Phases and Mathematics Perspectives. Assessments administered in one-on-one interviews. Aligned to content in the first three curriculum framework domains but does not assess measurement and data or geometry domains. It may, however, provide indications of where students need additional preparation.

---

**Source**
Commercial Test

**Approach**
Buying (commercial tool)

**Designed to Measure Growth**
Yes

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Massachusetts District-Determined Measures

Example Assessments

Mathematics — 3

Assessment
Assessment Center/ipGrowth—CORE K12 Education

Publisher Website/Sample

Description
Item bank aligned to New York standards in mathematics. Assessment may not be available. Districts interested in exploring this option will need to request additional information from developer.

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</table>
Mathematics — 3

Assessment
Balanced Assessment for the Mathematics Curriculum, Primary Tasks—Corwin Press

Publisher Website/Sample

Description
Innovative assessment tasks developed by Harvard Graduate School of Education and endorsed by the Colorado Professional Learning Community. Tasks were developed prior to 2003, and information about intentional alignment to CCSS (and hence framework) not available at time of review. Documentation indicates, however, that tasks could be modified to address local curricula.

Source
Commercial Test

Approach
Building (parts only)

Designed to Measure Growth
No

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☐ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☐ Other:

Non-Traditional Assessment
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# Mathematics — 3

**Assessment**

Edmentum Test Packs

**Description**

Battery for mathematics linked to PLATO Learning Environment. Can be customized to state standards. Insufficient information on which to make judgment about content alignment or technical quality; districts interested in exploring this option will need to request additional information from developer.

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## Traditional Assessment

- [ ] Traditional End-of-Grade Assessment
- [ ] Traditional End-of-Course Assessment
- [✓] Selected Response
- [ ] Short Constructed Response
- [ ] Writing Prompt/Essay
- [✓] Other: Diagnostic Measure

## Non-Traditional Assessment

- [ ] Pre/Post or Repeated Measures
- [ ] Performance Task Rubric
- [ ] Portfolio or Work Sample Rubric
- [ ] Project-Based Rubric
- [ ] Observation Rubric or Checklist

## Administration/Scoring

- [ ] Paper/Pencil
- [✓] Computer Supported
- [ ] Computer Adaptive
- [✓] Machine Scored
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Mathematics — 3

Assessment

Galileo Benchmark and Formative Assessment System—Assessment Technology Incorporated

Publisher Website/Sample

Description

Customized benchmark assessments developed from secure item bank. State or district can submit standards and ATI builds tests to match. Typically includes 5 items for 8 standards to create 40-item tests. Vertical scale supports interpretations about growth. Claims alignment to CCSS. Piloted in seven districts in Massachusetts in grades 3-10 in ELA and mathematics; alignment work done at that time suggested strong linkage to curriculum frameworks in terms of both depth and breadth.

Source

Commercial Customizable Item Bank

Approach

Buying (commercial tool)  Yes

Designed to Measure Growth

Yes

Traditional Assessment

☑ Selected Response
☑ Short Constructed Response
☑ Other: Interim or Benchmark

Non-Traditional Assessment

☑ Pre/Post or Repeated Measures

Administration/Scoring

☑ Paper/Pencil
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Mathematics — 3

Assessment
Grade 3 Mathematics Assessment—Partnership for the Assessment of Readiness for College and Careers (PARCC)

Description
Released items for end-of-grade assessments for grades 3-8, but also provides useful ideas for districts seeking to build customized measures for this mathematics content at any grade. Items are representative of what will be appearing on the PARCC assessments. Designed to reflect shifts in focus, coherence, and rigor triggered by the transition to CCSS. Includes multi-step problems, conceptual questions, applications, and substantial procedures. Verified alignment to the PARCC Model Content Frameworks, which are CCSS-based.

Source
Open Source Items, Activities, Forms

Approach
Building (parts only)

Designed to Measure Growth
No

Traditional Assessment

☑ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☐ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☑ Other: Assessment Consortium Measure

Non-Traditional Assessment

☐ Pre/Post or Repeated Measures
☐ Performance Task Rubric
☐ Portfolio or Work Sample Rubric
☐ Project-Based Rubric
☐ Observation Rubric or Checklist

Administration/Scoring

☐ Paper/Pencil
☐ Computer Supported
☐ Computer Adaptive
☐ Machine Scored
☑ Scored Locally
☐ Scored Off-Site

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Mathematics — 3

Assessment

Group Mathematics Assessment and Diagnostic Evaluation (GMADE)—Pearson

Publisher Website/Sample

Description

Subtests and items developed to provide a sampling of mathematics tasks reflective of a standards-based test blueprint. Blueprint was generated from year-long research study of state standards, curriculum benchmarks, scope and sequence plans of various commonly used mathematics textbook series, and a review of research on best practice for the teaching and learning of mathematical concepts and skills. Cornerstone of that blueprint was Principles and Standards for School Mathematics as set forth by National Council of Teachers of Mathematics in 2000. Parallel forms support use as pre-post measure. Reporting and administration options. Districts interested in this measure will need additional information from developer to confirm alignment to CCSS.

Source

Commercial Test

Approach

Buying (commercial tool)

Designed to Measure Growth

Yes

Traditional Assessment

☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☑ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☑ Other: Diagnostic Measure

Non-Traditional Assessment

☐ Pre/Post or Repeated Measures
☐ Performance Task Rubric
☐ Portfolio or Work Sample Rubric
☐ Project-Based Rubric
☐ Observation Rubric or Checklist

Administration/Scoring

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Massachusetts District-Determined Measures

Example Assessments

### Mathematics — 3

**Assessment**
INSPECT Formatives–Key Data Systems

**Publisher Website/Sample**

**Description**
Item bank developed to align to CCSS. Recommended by Commonwealth district. Developer says item bank can be customized for state standards and can include pre-built formative assessments to measure progress with CCSS.

<table>
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<tr>
<th>Source</th>
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<th>Designed to Measure Growth</th>
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</thead>
<tbody>
<tr>
<td>Commercial Customizable Item Bank</td>
<td>Buying (commercial tool)</td>
<td>No</td>
</tr>
</tbody>
</table>

**Traditional Assessment**
- ☐ Traditional End-of-Grade Assessment
- ☐ Traditional End-of-Course Assessment
- ☑ Selected Response
- ☐ Short Constructed Response
- ☐ Writing Prompt/Essay
- ☑ Other: Diagnostic Measure

**Non-Traditional Assessment**
- ☐ Pre/Post or Repeated Measures
- ☐ Performance Task Rubric
- ☐ Portfolio or Work Sample Rubric
- ☐ Project-Based Rubric
- ☐ Observation Rubric or Checklist

**Administration/Scoring**
- ☑ Paper/Pencil
- ☑ Computer Supported
- ☐ Computer Adaptive
- ☑ Machine Scored
- ☐ Scored Locally
- ☐ Scored Off-Site

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### Mathematics — 3

**Assessment**

Interim Assessments—Discovery Education

**Publisher Website/Sample**

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**Description**

Intended to support CCSS-based instruction in ELA and mathematics. Aligned to multiple states' standards. Vertical scale supports interpretations about growth. Received high ratings for technical quality. Endorsed by National Center on Response to Intervention for grades 3-10.

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**Source**

Commercial Test

**Approach**

Buying (commercial tool)

**Designed to Measure Growth**

Yes

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#### Traditional Assessment

- [ ] Traditional End-of-Grade Assessment
- [ ] Traditional End-of-Course Assessment
- [x] Selected Response
- [ ] Short Constructed Response
- [ ] Writing Prompt/Essay
- [x] Other: Diagnostic Measure

#### Non-Traditional Assessment

- [ ] Pre/Post or Repeated Measures
- [ ] Performance Task Rubric
- [ ] Portfolio or Work Sample Rubric
- [ ] Project-Based Rubric
- [ ] Observation Rubric or Checklist

#### Administration/Scoring

- [ ] Paper/Pencil
- [x] Computer Supported
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## Mathematics — 3

### Assessment
Iowa Test of Educational Development, Form E—Riverside

### Description
Full battery for ELA, mathematics, science, and social studies. Continuous standard score scale that supports measuring growth. Developed in conjunction with researchers at the University of Iowa. Assesses number sense and operations, algebraic patterns and connections, data analysis, geometry, and measurement. Findings from study of alignment to CCSS are documented.

### Source
Commercial Test

### Approach
Buying (commercial tool)

### Designed to Measure Growth
Yes

### Traditional Assessment
- [ ] Traditional End-of-Grade Assessment
- [ ] Traditional End-of-Course Assessment
- [x] Selected Response
- [ ] Short Constructed Response
- [ ] Writing Prompt/Essay
- [ ] Other:

### Non-Traditional Assessment
- [x] Pre/Post or Repeated Measures
- [ ] Performance Task Rubric
- [ ] Portfolio or Work Sample Rubric
- [ ] Project-Based Rubric
- [ ] Observation Rubric or Checklist

### Administration/Scoring
- [x] Paper/Pencil
- [ ] Computer Supported
- [ ] Computer Adaptive
- [x] Machine Scored
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Publisher Website/Sample
Mathematics — 3

Assessment
i-Ready Diagnostic Math—Curriculum Associates

Publisher Website/Sample

Description
Relatively new assessment designed to measure growth using a continuous scale. Claims to be aligned to state standards and CCSS. Reporting at subscale level. Limited information on which to base content alignment at time of review, but districts can contact developer for additional information.

Source
Commercial Test

Approach
Buying (commercial tool)

Yes

Designed to Measure Growth

Traditional Assessment

☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☒ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☒ Other: Diagnostic Measure

Non-Traditional Assessment

☐ Pre/Post or Repeated Measures
☐ Performance Task Rubric
☐ Portfolio or Work Sample Rubric
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**Mathematics — 3**

**Assessment**

Measures of Academic Progress (MAP), Achievement Level Tests (ALT)—Northwest Evaluation Association (NWEA)

**Description**

Adaptive assessment that can be administered up to four times a year. Designed to measure growth. Received high ratings for technical quality. Study of alignment to CCSS was conducted. Comment from Buros Institute reviewer: "...available evidence suggests that MAP tests can be used with confidence by school districts to gauge student learning, relative standing, and growth with respect to educational objectives deemed central to the curricular emphases of those districts."

**Source**

Commercial Test

**Approach**

Buying (commercial tool)

**Designed to Measure Growth**

Yes

**Traditional Assessment**

☑️ Selected Response

☑️ Short Constructed Response

☐ Traditional End-of-Grade Assessment

☐ Traditional End-of-Course Assessment

☐ Writing Prompt/Essay

☐ Other: Diagnostic Measure

**Non-Traditional Assessment**

☑️ Pre/Post or Repeated Measures

☐ Performance Task Rubric

☐ Portfolio or Work Sample Rubric

☐ Project-Based Rubric

☐ Observation Rubric or Checklist

**Administration/Scoring**

☐ Paper/Pencil

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☑️ Computer Adaptive

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Mathematics — 3

Assessment
North Carolina Formative Assessments

Publisher Website/Sample

Description
Set of assessment tasks, standards to which each performance task is aligned, and scoring rubrics. Tasks for operations and algebraic thinking, counting and cardinality, measurement and data, geometry, and numbers and operations in base ten. Students are asked to solve problems using words, numbers, or pictures. Aligned to CCSS and curriculum framework.

Source
Open Source Items, Activities, Forms

Approach
Borrowing (full measure)

Designed to Measure Growth
No

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☐ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☑ Other: Diagnostic Measure

Non-Traditional Assessment
☐ Pre/Post or Repeated Measures
☐ Performance Task Rubric
☐ Portfolio or Work Sample Rubric
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Massachusetts District-Determined Measures

Example Assessments

Mathematics — 3

Assessment
Performance Series, Math—Scantron

Description
Can be administered in conjunction with Scantron's Achievement Series assessments. Vertical scale supports measurement of growth; student growth percentiles can be calculated. Measures students' computation and problem-solving skills. Domains covered are numbers and operations, algebra, geometry, and data analysis and probability. Documentation suggests alignment to the CCSS for this grade. Endorsed by National Center on Response to Intervention for grades 3-10.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment

- Traditional End-of-Grade Assessment

- Traditional End-of-Course Assessment

- Selected Response

- Short Constructed Response

- Writing Prompt/Essay

- Other: Diagnostic Measure

Non-Traditional Assessment

- Pre/Post or Repeated Measures

- Performance Task Rubric

- Portfolio or Work Sample Rubric

- Project-Based Rubric

- Observation Rubric or Checklist

Administration/Scoring

- Paper/Pencil

- Computer Supported

- Computer Adaptive

- Machine Scored

- Scored Locally

- Scored Off-Site

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Mathematics — 3

Assessment
PRO-Core Learning Systems–Computers in Education

Description
Diagnostic test intended to align to CCSS. Documents previewed were developed for Ohio but may be customizable to Commonwealth curriculum frameworks. Districts interested in this option can contact developer for more information.

Source
Commercial Customizable Item Bank

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☐ Selected Response
☑ Short Constructed Response
☐ Writing Prompt/Essay
☐ Other: Diagnostic Measure

Non-Traditional Assessment
☑ Pre/Post or Repeated Measures
☐ Performance Task Rubric
☐ Portfolio or Work Sample Rubric
☐ Project-Based Rubric
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Administration/Scoring
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Massachusetts District-Determined Measures

Example Assessments

Mathematics — 3

Assessment
Riverside Interim Assessments

Description
Three parallel pre-built forms per grade to support use as repeated measure. Linked to Iowa Assessments and designed to assess CCSS. Scores for achievement, proficiency, and growth. Vertical scale supports longitudinal monitoring of progress. Blueprint suggests it is a strong match to the curriculum framework in terms of breadth of content assessed, though less so in terms of depth (cognitive complexity).

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☐ Selected Response
☐ Short Constructed Response
☐ Writing Prompt/Essay
☐ Other: Interim or Benchmark

Non-Traditional Assessment
☐ Pre/Post or Repeated Measures
☐ Performance Task Rubric
☐ Portfolio or Work Sample Rubric
☐ Project-Based Rubric
☐ Observation Rubric or Checklist

Administration/Scoring
☐ Paper/Pencil
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Publisher Website/Sample

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Mathematics — 3

Assessment
Scholastic Math Inventory (SMI)

Description
Measures achievement and growth based on Quantile Framework for Mathematics (Metametrics). Flexible administration options and customizable to state standards. Link to CCSS not clear, but documentation does show alignment to state standards for North Carolina, California, Florida, Illinois, and Texas. Good option for those seeking link to Quantile Framework.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
- Traditional End-of-Grade Assessment
- Traditional End-of-Course Assessment
- Selected Response
- Short Constructed Response
- Writing Prompt/Essay
- Other: Diagnostic Measure

Non-Traditional Assessment
- Pre/Post or Repeated Measures
- Performance Task Rubric
- Portfolio or Work Sample Rubric
- Project-Based Rubric
- Observation Rubric or Checklist

Administration/Scoring
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### Mathematics — 3

**Assessment**
Stanford Achievement Test 10 (SAT 10)–Pearson

**Publisher Website/Sample**

**Description**
Designed to measure growth and achievement. Seeks to be aligned to state standards and NAEP. Content is described as aligning to state and national standards, including NAEP. Information about test structure and content indicates many items are contextualized and involve non-routine problem-solving strategies. Received high ratings for technical quality, but districts interested in this option may want additional information from developer to confirm alignment to curriculum framework.

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**Traditional Assessment**
- [ ] Traditional End-of-Grade Assessment
- [ ] Traditional End-of-Course Assessment
- [x] Selected Response
- [ ] Short Constructed Response
- [ ] Writing Prompt/Essay
- [ ] Other:

**Non-Traditional Assessment**
- [x] Pre/Post or Repeated Measures
- [ ] Performance Task Rubric
- [ ] Portfolio or Work Sample Rubric
- [ ] Project-Based Rubric
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**Administration/Scoring**
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### Mathematics — 3

Assessment

STAR Math Enterprise–Renaissance Learning

**Publisher Website/Sample**

#### Description

Normative growth reporting using student growth percentiles. Can be used for screening and progress monitoring or to track growth for different intervals. Assessments are periodic, constructed around mathematics strands, and adaptive. Strands assessed include numeration concepts, computations processes, word problems, estimation, data analysis, probability and statistics, geometry, measurement, and algebra. Extent to which items are aligned to CCSS is not clear. Correlations with several state tests were provided. Endorsed by National Center on Response to Intervention.

#### Source

Commercial Test

#### Approach

Buying (commercial tool)

#### Designed to Measure Growth

Yes

#### Traditional Assessment

- [ ] Traditional End-of-Grade Assessment
- [ ] Traditional End-of-Course Assessment
- [x] Selected Response
- [ ] Short Constructed Response
- [ ] Writing Prompt/Essay
- [x] Other: Interim or Benchmark

#### Non-Traditional Assessment

- [x] Pre/Post or Repeated Measures
- [ ] Performance Task Rubric
- [ ] Portfolio or Work Sample Rubric
- [ ] Project-Based Rubric
- [ ] Observation Rubric or Checklist

#### Administration/Scoring

- [ ] Paper/Pencil
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Mathematics — 3
Assessment
TerraNova 3–CTB/McGraw-Hill

Publisher Website/Sample

Description
Complete battery for grades K-12 in ELA, mathematics, science, and social studies. Standardized grade-level tests of achievement that are vertically aligned. Flexibility in when administered and how scored (remotely or locally). Norm-referenced interpretation of results. Alignment to CCSS could not be verified with available documentation. Content is described as having been developed using state standards, NAEP objectives, and national standards such as National Council of Teachers of Mathematics.

Source
Commercial Test

Approach
Buying (commercial tool)

Designed to Measure Growth
Yes

Traditional Assessment
☐ Traditional End-of-Grade Assessment
☐ Traditional End-of-Course Assessment
☑ Selected Response
☑ Short Constructed Response
☐ Writing Prompt/Essay
☐ Other:

Non-Traditional Assessment
☑ Pre/Post or Repeated Measures
☐ Performance Task Rubric
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Administration/Scoring
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