



Evidence Guide

Mathematics

Grades K-8

v1.5

Gateway 1

Criterion 1.1: 1a, 1b

Criterion 1.2: 1c, 1d, 1e, 1f, 1g

Gateway 2

Criterion 2.1: 2a, 2b, 2c, 2d

Criterion 2.2: 2e, 2f, 2g, 2h, 2i

Gateway 3

Criterion 3.1: 3a, 3b, 3c, 3d, 3e, 3f, 3g, 3h

Criterion 3.2: 3i, 3j, 3k, 3l

Criterion 3.3: 3m, 3n, 3o, 3p, 3q, 3r, 3s, 3t, 3u, 3v

Criterion 3.4: 3w, 3x, 3y, 3z

Gateway 1: Focus & Coherence

Criterion 1.1

Focus

Materials assess grade-level content and give all students extensive work with grade-level problems to meet the full intent of grade-level standards.

What is the purpose of this Criterion?

Criterion 1 considers how well the materials focus on college and career ready standards by assessing students on grade-level content and giving all students extensive work with grade-level problems to meet the full intent of grade-level standards.

Research Connection

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for High School Mathematics](#)
- [Achieve EQUiP Rubric for Lessons & Units](#)

Scoring:

Meets Expectations

- 6 points

Partially Meets Expectations

- 4-5 points

Does Not Meet Expectations

- <4

Gateway 1: Focus & Coherence

Criterion 1.1	Materials assess grade-level content and give all students extensive work with grade-level problems to meet the full intent of grade-level standards.
Indicator 1a	Materials assess the grade-level content and, if applicable, content from earlier grades.

Scoring:	
<p>2 points</p> <ul style="list-style-type: none"> Materials assess grade-level standards or include above-grade assessment items that could be removed or modified without impacting the structure of the materials. Above-grade items are mathematically reasonable. For Grades K-5, no topics are explicitly assessed from (i), (ii), or (iii) below. 	<p>0 points</p> <ul style="list-style-type: none"> Materials include above-grade assessment items that, if removed or modified, would impact the structure of the materials. OR Above-grade items are not mathematically reasonable. OR For Grades K-5, topics are explicitly assessed from (i), (ii), or (iii) below.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with indicator 1b, determines the shift of Focus. In order to maintain Focus, materials assess grade-level standards. Assessments are determined by the publisher and are series-specific. Content from future grades may be introduced, but students should not be held accountable on assessments for future expectations.

Indicator 1a is focused on the assessments embedded in materials for K-8 grade-level standards which define what students should understand and be able to do in their study of mathematics¹.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQulP Rubric for Lessons & Units](#)

Resources:

- [Video: "The Balance Between Skills and Understanding" \(The Hunt Institute\)](#)
- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)

¹ "Common Core State Standards for Mathematics" <http://www.corestandards.org/Math/>
EdReports Evidence Guide Mathematics K-8 v1.5

Indicator 1a Guiding Question:

Do assessments address grade-level standards?

Evidence Collection

Look at all interim, unit, and/or summative assessments. Look at scoring rubrics, if available, to determine acceptable responses for the items. If all questions are on grade level, provide evidence of assessment items that are representative of the materials.

For Grades K-5, do the assessments include items addressing the following topics:

- (i) Probability, including chance, likely outcomes, and/or probability models?
- (ii) Statistical distributions, including center, variation, clumping, outliers, mean, median, mode, range, and/or quartiles; and statistical association or trends, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, and/or correlation?
- (iii) Similarity, transformations, and/or congruence?

Identify above-grade-level assessment items. For each item, answer the following questions:

- What above-grade-level standard does the item align to? Please explain.
- What instructional activities, including span of time, are associated with the assessment item?
- If you remove or modify the above-grade-level item and any associated activities, would this impact the structure of the materials? Please explain.
- Is the above-grade-level item mathematically reasonable? Please explain.

Mathematically Reasonable:

For this indicator, mathematically reasonable consists of two criteria: number of grade-levels above the current one and time of year when the item occurs. For example, assessing standards that are one grade level above the current one could be mathematically reasonable, or assessing above-grade-level standards at the end of the academic year could be mathematically reasonable. To determine if an above-grade-level item is mathematically reasonable, consider the following questions:

- How many grade levels above is the assessment item?
- What time of year do students encounter the assessment item?

Cluster Meeting

Discuss evidence of grade-level assessment items that are representative of the materials.

Discuss all above-grade-level assessment items and any additional information:

- Which assessment items are mathematically reasonable? Please explain.
- Which assessment items, if removed or modified, would impact the structure of the materials? Please explain.

Gateway 1: Focus & Coherence

Criterion 1.1	Materials assess grade-level content and give all students extensive work with grade-level problems to meet the full intent of grade-level standards.
Indicator 1b	Materials give all students extensive work with grade-level problems to meet the full intent of grade-level standards.

Scoring:		
<p>4 points</p> <ul style="list-style-type: none"> Materials present all students with extensive work with grade-level problems. AND Materials present opportunities for all students to meet the full intent of grade-level standards. 	<p>2 points</p> <ul style="list-style-type: none"> Materials do not present all students with extensive work with grade-level problems. OR Materials do not present opportunities for all students to meet the full intent of grade-level standards. 	<p>0 points</p> <ul style="list-style-type: none"> Materials do not present all students with extensive work with grade-level problems. AND Materials do not present opportunities for all students to meet the full intent of grade-level standards.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with indicator 1a, determines the shift of Focus. This indicator examines if the materials provide all students with extensive work with grade-level problems, so that all students engage with the full intent of the grade-level standards.

ALL standards in the CCSSM should be considered throughout evidence collection for Gateway 1 indicators 1b, 1c, 1d, 1e, 1f, and 1g.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQulP Rubric for Lessons & Units](#)

Resources:

- [Video: "The Balance Between Skills and Understanding" \(The Hunt Institute\)](#)
- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)

Indicator 1b Guiding Question:

Do the materials give all students extensive work with grade-level problems to meet the full intent of grade-level standards?

Evidence Collection

Are all grade-level standards present? If not, which ones are not present?

Do the materials engage all students in extensive work with grade-level problems? Identify where and how the materials engage all students in extensive work with grade-level problems. Include evidence of standards where extensive work is not present. To determine if extensive work has been given for a standard, consider the following questions:

- Is the standard from a major cluster or a supporting cluster? (Standards from major clusters might require a different amount of problems than standards from supporting clusters.)
- Have all aspects/parts of a standard been addressed? (Standards with more parts or aspects might require a different amount of problems than standards with fewer parts or aspects.)
- To what aspect(s) of rigor might the standard correspond? (Standards corresponding to one aspect of rigor might require a different amount of problems than standards that correspond to a different aspect of rigor.)

Do all students engage with the full intent of grade-level standards? Identify where and how the materials engage all students with the full intent of grade-level standards. Include evidence of standards where the full intent is not met.

If the materials include activities that have differentiation suggestions, are they engaging all students with **GRADE-LEVEL** problems? Note any differences in the ways in which different populations engage with grade-level problems. Also note if there is guidance for teachers to inform differentiation options.

Does the amount of off-grade-level content (even if it is mathematically reasonable) negatively impact students' work with grade-level content to meet the full intent of the grade-level standards? If yes, include evidence that explains which grade-level standards are affected.

Mathematically Reasonable:

For this indicator, mathematically reasonable refers to the number of grade-levels above or below the current one. For example, content that is one grade level above or below the current grade level could be mathematically reasonable.

Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- Are there any grade-level standards absent from the materials? Evidence must be provided for all grade-level standards absent in the materials.
- Do the materials engage all students in extensive work with grade-level problems? Please explain.
- Do all students engage with the full intent of grade-level standards? Please explain.
- Do the materials include activities that have differentiation suggestions? If so, are they engaging all students with **GRADE-LEVEL** problems?
- Does the amount of off-grade-level content (even if it is mathematically reasonable) negatively impact students' work with grade-level content to meet the full intent of the grade-level standards? If yes, include evidence that explains which grade-level standards are affected.

Gateway 1: Focus & Coherence

Criterion 1.2

Coherence

Each grade's materials are coherent and consistent with the Standards.

What is the purpose of this Criterion?

In Criterion 2, reviewers consider the coherence of the materials by examining:

- how much of the materials address the major clusters of the grade,
- the connections between major and supporting standards within each grade,
- the connections between two or more clusters in a domain, or two or more domains in a grade, and
- the connections between grade-level standards to prior and future-grade-level standards.

Research Connection

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for High School Mathematics](#)
- [Achieve EQUiP Rubric for Lessons & Units](#)

Scoring:

Meets Expectations

- 7-8 points

Partially Meets Expectations

- 5-6 points

Does Not Meet Expectations

- <5 points

Gateway 1: Focus & Coherence

Criterion 1.2	Each grade's materials are coherent and consistent with the Standards.
Indicator 1c	When implemented as designed, the majority of the materials address the major clusters of each grade.

Scoring:	
<p>2 points</p> <ul style="list-style-type: none"> The majority (at least 65%) of the materials, when implemented as designed, address the major clusters of the grade. 	<p>0 points</p> <ul style="list-style-type: none"> The majority (at least 65%) of the materials, when implemented as designed, do not address the major clusters of the grade.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with indicators 1d, 1e, 1f, and 1g, determines the shift of Coherence. This indicator addresses coherence within the grade level by examining if the majority of the materials address the major clusters of the grade, including connections between major and supporting clusters.

Indicator 1c examines how much of the materials addresses standards identified as major work for each grade in the K-8 grade-level standards. This indicator also includes connections between standards identified as supporting work and major work.

This indicator is informed by the other indicators in Coherence and should be reviewed at the end of Gateway 1. ALL standards in the CCSSM should be considered throughout evidence collection for Gateway 1 indicators 1b, 1c, 1d, 1e, 1f, and 1g.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQulP Rubric for Lessons & Units](#)

Resources:

- [Video: "The Balance Between Skills and Understanding" \(The Hunt Institute\)](#)
- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)
- [Focus Component 2: Major Clusters of the Grade](#)

Indicator 1c Guiding Question:

Do at least 65% of the materials, when implemented as designed, address the major clusters of the grade?

Evidence Collection

This indicator is informed by the other indicators in Coherence and should be reviewed at the end of Gateway 1. Connections between supporting work and major work should be included in the calculations for different perspectives.

Collect evidence in the Table provided in the 1c Reviewer Evidence Collection document.

For this indicator, you should consider multiple perspectives when collecting evidence, including:

- Units/chapters (including assessments):
 - List the units/chapters that address the major work of the grade and connections between supporting and major work.
 - Explain the specific standards/clusters being addressed.
 - What percent of units/chapters address the major work of the grade and connections between supporting and major work?
 - State the units/chapters included in the numerator and denominator of your calculation.
- Lessons/Activities (including assessments):
 - List the lessons/activities that address the major work of the grade and connections between supporting and major work.
 - Explain the specific standards/clusters being addressed.
 - What percent of lessons/activities address the major work of the grade and connections between supporting and major work?
 - State the units/chapters included in the numerator and denominator of your calculation.
- Instructional Time (including assessments):
 - Time can be days, hours, or minutes. For materials where a lesson equals a day, please note above, and use minutes as a measure for this perspective.
 - List the amounts of instructional time that address the major work of the grade and connections between supporting and major work.
 - Explain the specific standards/clusters being addressed.
 - What percent of instructional time addresses the major work of the grade and connections between supporting and major work?
 - State the amounts of instructional time included in the numerator and denominator of your calculation.

If it is not possible for a reviewer to capture data for any of these three perspectives, then the reviewer should provide an explanation of why a perspective was not feasible. (For example, a set of materials is not divided into units/chapters, so a calculation from that perspective is not possible.)

If a perspective other than the three already given is a better representation for the materials, then the reviewer should clearly explain why the other perspective is better and include evidence and calculations to accompany the additional perspective.

The total amount of instructional time for this indicator is calibrated to the totals used in Indicator 1g. Calibrating the totals does not mean the totals for 1c and 1g have to be the same.

If the materials include optional chapters/lessons/activities or provide choices for teachers as to what parts of the materials are used, please discuss calculations for 1c with EdReports' staff.

A minimum of 65% should be viewed as a guideline for reviewers. Reviewers should discuss materials on the borderline (e.g., 60%-64%) with EdReports staff.

Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- Review the evidence collected from at least three perspectives. (Chapters/units, lessons, days, minutes, etc.)
- Which perspective is most representative of the materials? Why?
- Do the materials spend a minimum of 65% of instructional time on major work of the grade, including supporting work connected to major work of the grade? Please explain.
- How similar are each reviewer's calculations? If there are differences in calculations between reviewers, those differences should be clearly evident in reviewers evidence collection documents.
- If the materials spiral concepts and skills within each grade level, please explain how you integrated the spiraling within your calculations?
- Evidence that reflects difficulty in calculating percentages for the materials should be discussed with EdReports staff to determine appropriate placement within the grade-level report.

Gateway 1: Focus & Coherence

Criterion 1.2	Each grade's materials are coherent and consistent with the Standards.
Indicator 1d	Supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade.

Scoring:		
2 points <ul style="list-style-type: none"> Connections between supporting and major work enhance focus on major work. 	1 point <ul style="list-style-type: none"> Multiple connections between supporting and major work are entirely absent from the grade-level materials. 	0 points <ul style="list-style-type: none"> Supporting work is treated separately and does not include connections to major work.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with indicators 1c, 1e, 1f, and 1g, determines the shift of Coherence. This indicator addresses connections within the grade level.

In order to maintain Coherence, materials should connect mathematics within and across grade levels. Materials should indicate how learning progresses from previous learning and toward future learning.

ALL standards in the CCSSM should be considered throughout evidence collection for Gateway 1 indicators 1b, 1c, 1d, 1e, 1f, and 1g.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQulP Rubric for Lessons & Units](#)

Resources:

- [Video: "The Balance Between Skills and Understanding" \(The Hunt Institute\)](#)
- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)
- [Focus Component 2: Major Clusters of the Grade](#)

Indicator 1d Guiding Questions:

Is supporting work connected to the major work of the grade?

Is supporting work addressed independently?

Evidence Collection

For connections between supporting standards/clusters and major standards/clusters, please answer the following questions:

- What connections are made?
- Where are the connections made?
- How are those connections made?

When supporting standards/clusters are not connected to the major standards/clusters of the grade, is the separation mathematically reasonable?

Mathematically Reasonable:

For this indicator, mathematically reasonable refers to the content of the standards. Not all supporting standards address content that should be connected to major work of the grade. For example, in Kindergarten, K.G.5 may not be connected to major work of the grade, and that would be mathematically reasonable.

Are there connections between supporting and major standards/clusters of the grade that are entirely absent from the materials?

Note: A missed connection between supporting and major work standards/clusters is defined as a connection that is entirely absent from the materials. For example:

- In Grade K, if the materials do not connect classifying shapes into categories (K.MD.3) with counting the number of shapes in the categories (K.CC.5) anywhere in the materials, then this would be a missed connection.
- In Grade 7, if the materials do not connect scale drawings (7.G.1) with ratios and proportional relationships (7.RP.A) anywhere in the materials, then this would be a missed connection.

Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- What connections between supporting and major standards/clusters of the grade were identified?
- Where were connections of supporting and major standards/clusters of the grade found?
- How were the connections made in the materials?

Gateway 1: Focus & Coherence

Criterion 1.2	Each grade's materials are coherent and consistent with the Standards.
Indicator 1e	Materials include problems and activities that serve to connect two or more clusters in a domain or two or more domains in a grade.

Scoring:		
2 points <ul style="list-style-type: none"> There are connections from supporting work to supporting work and/or from major work to major work throughout the grade-level materials, when appropriate. 	1 point <ul style="list-style-type: none"> Multiple connections from supporting work to supporting work and/or from major work to major work are entirely absent from the grade-level materials. 	0 points <ul style="list-style-type: none"> There are no connections from supporting work to supporting work and from major work to major work throughout the grade-level materials.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with indicators 1c, 1d, 1f, and 1g, determines the shift of Coherence. This indicator addresses connections within the grade level.

In order to maintain Coherence, materials should connect mathematics within and across grade levels. Materials should indicate how learning progresses from previous learning and toward future learning.

Indicator 1e supports coherence by identifying where materials connect across clusters and/or domains. ALL standards in the CCSSM should be considered throughout evidence collection for Gateway 1 indicators 1b, 1c, 1d, 1e, 1f, and 1g.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQuIP Rubric for Lessons & Units](#)

Resources:

- [Video: "The Balance Between Skills and Understanding" \(The Hunt Institute\)](#)
- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)
- [Focus Component 2: Major Clusters of the Grade](#)

Indicator 1e Guiding Question:

Are there connections between major domains and/or clusters?

Are there connections between supporting domains and/or clusters?

Evidence Collection

Note: Evidence collection should address connections between clusters and/or domains and not individual standards.

For connections between supporting clusters/domains or major clusters/domains, please answer the following questions:

- What connections are made?
- Where are the connections made?
- How are those connections made?

When major to major clusters/domains or supporting to supporting clusters/domains are not connected, is the separation mathematically reasonable?

Mathematically Reasonable:

For this indicator, mathematically reasonable refers to the content of the clusters/domains. Not all clusters/domains address content that should be connected to other clusters/domains. For example, in Grade 1, 1.MD.B may not be connected to other clusters/domains of the grade, and that would be mathematically reasonable.

Are there connections between major to major clusters/domains or supporting to supporting clusters/domains that are entirely absent from the materials?

Note: A missed connection is defined as a connection that is entirely absent from the materials. For example:

- In Grade 3, if the materials do not connect using place value understanding and properties of operations to perform multi-digit arithmetic (3.NBT.A) with understanding properties of multiplication and the relationship between multiplication and division (3.OA.B) anywhere in the materials, then this would be a missed connection.
- In Grade 8, if the materials do not connect understanding and applying the Pythagorean Theorem (8.G.B) with working with radicals and integer exponents (8.EE.A) anywhere in the materials, then this would be a missed connection.

Note: Evidence should not include connections from supporting work to major work. Those connections are addressed in Indicator 1d.

Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- What connections from major clusters/domains to major clusters/domains of the grade were identified, and where are those connections located?
- What connections from supporting clusters/domains to supporting clusters/domains of the grade were identified, and where are those connections located?
- How were the connections made in the materials?

- If connections are entirely absent from the materials, explain/provide an example of what and where that connection might have occurred.

Gateway 1: Focus & Coherence

Criterion 1.2	Each grade's materials are coherent and consistent with the Standards.
Indicator 1f	Content from future grades is identified and related to grade-level work, and materials relate grade-level concepts explicitly to prior knowledge from earlier grades.

Scoring:		
2 points <ul style="list-style-type: none"> Content from future grades is identified and related to grade-level work. AND Materials relate grade-level concepts explicitly to prior knowledge from earlier grades. 	1 point <ul style="list-style-type: none"> Content from future grades is not identified and related to grade-level work. OR Materials do not relate grade-level concepts explicitly to prior knowledge from earlier grades. 	0 points <ul style="list-style-type: none"> Content from future grades is not identified and related to grade-level work. AND Materials do not relate grade-level concepts explicitly to prior knowledge from earlier grades.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with indicators 1c, 1d, 1e, and 1g, determines the shift of Coherence. This indicator examines vertical coherence through identifications of future content related to grade-level work and relations of grade-level concepts explicitly to prior knowledge from earlier grades.

ALL standards in the CCSSM should be considered throughout evidence collection for Gateway 1 indicators 1b, 1c, 1d, 1e, 1f, and 1g.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQulP Rubric for Lessons & Units](#)

Resources:

- [Video: "The Balance Between Skills and Understanding" \(The Hunt Institute\)](#)
- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)

Indicator 1f Guiding Question:

Is content from future grades identified and related to grade-level work?

Do the materials relate grade-level concepts explicitly to prior knowledge from earlier grades?

Evidence Collection

Identify evidence at the chapter/unit level and/or lesson level where grade-level content is related to future learning.

Identify evidence at the chapter/unit level and/or lesson level where prior learning is explicitly related to grade-level content.

Note: The explicit relationship of grade-level concepts to prior knowledge should include the content of the standards. If the materials include a standard code(s) with no explanation on the relationship to grade-level content, that is not sufficient to meet the expectations for this indicator.

Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- Is future learning identified and related to grade-level content? Where? How?
- Is prior learning explicitly identified and related to grade-level learning? Where? How?

Gateway 1: Focus & Coherence

Criterion 1.2	Each grade's materials are coherent and consistent with the Standards.
Indicator 1g	In order to foster coherence between grades, materials can be completed within a regular school year with little to no modification.

Scoring: Narrative Evidence Only

Note: No score is given for this indicator. Only qualitative evidence is provided.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with indicators 1c, 1d, 1e, and 1f, determines the shift of Coherence.

This indicator examines the materials to determine if the amount of time suggested in the materials is appropriate for a school year and if the expectations of the materials are reasonable for both teachers and students to complete in the suggested timeframe. ALL standards in the CCSSM should be considered throughout evidence collection for Gateway 1 indicators 1b, 1c, 1d, 1e, 1f, and 1g.

This is an unscored indicator. The report for this indicator includes qualitative evidence regarding the amount of modification needed, if any, by teachers.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQulP Rubric for Lessons & Units](#)

Resources:

- [Video: "The Balance Between Skills and Understanding" \(The Hunt Institute\)](#)
- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)

Indicator 1g Guiding Question:

Can the materials be completed in a regular school year with little to no modification?

Evidence Collection

Review the table of contents, any pacing guides, scope and sequence, publisher orientation video, and/or implementation documents and guidance provided by the publisher regarding time within the materials.

Documentation should include, but is not limited to:

- How much time is allotted per unit/chapter/module?
- How much time is allotted for lessons/sections/activities?
- How much time is allotted for assessments?
- How much time is allotted for re-teaching or extensions?
- How much time is allotted for optional or supplementary activities?

Please note any discrepancies between publisher guidance provided for different perspectives of the materials. For example, guidance suggested at the lesson level is different from guidance suggested at the chapter level.

Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- How do discrepancies in publisher guidance affect the total time allotted for the materials?
- Based on publisher guidance provided and any discrepancies that may exist, could the materials be completed in a regular school year (approximately 150-180 days of instruction)?
- Do materials present differentiation options that are included in time? (Note: if differentiation options include options for students that are below or above grade level, this needs to be addressed in Indicator 1b.)

Gateway 2: Rigor & Mathematical Practices

Criterion 2.1

Rigor and Balance

Materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations by giving appropriate attention to: developing students' conceptual understanding; procedural skill and fluency; and engaging applications.

What is the purpose of this Criterion?

Criterion 1 considers the ways in which the materials for each grade reflect the balances in the Standards and help students to meet the rigorous expectations by providing students with opportunities to make their own connections to the mathematics to develop conceptual understanding, procedural skill and fluency, and application.

Research Connection

- [Common Core State Standards Mathematics](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)

Scoring:

Meets Expectations

- 7-8 points

Partially Meets Expectations

- 5-6 points

Does Not Meet Expectations

- <5 points

Gateway 2: Rigor & Mathematical Practices

Criterion 2.1	Materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations by giving appropriate attention to: developing students' conceptual understanding; procedural skill and fluency; and engaging applications.
Indicator 2a	Materials develop conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings.

Scoring:		
<p>2 points</p> <ul style="list-style-type: none"> Materials develop conceptual understanding throughout the grade level. <p>AND</p> <ul style="list-style-type: none"> Materials provide opportunities for students to independently demonstrate conceptual understanding throughout the grade level. 	<p>1 point</p> <ul style="list-style-type: none"> Materials do not develop conceptual understanding throughout the grade level. <p>OR</p> <ul style="list-style-type: none"> Materials do not provide opportunities for students to independently demonstrate conceptual understanding throughout the grade level. 	<p>0 points</p> <ul style="list-style-type: none"> Materials do not develop conceptual understanding throughout the grade level. <p>AND</p> <ul style="list-style-type: none"> Materials do not provide opportunities for students to independently demonstrate conceptual understanding throughout the grade level.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with 2b, 2c, and 2d, determines the shift of Rigor. Conceptual understanding of key concepts will allow students to be able to access concepts from a number of perspectives in order to see mathematics as more than a set of algorithmic procedures.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQUiP Rubric for Lessons & Units](#)
- [Achieve Framework to Evaluate Cognitive Complexity in Mathematics Assessments](#)

Resources:

- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)
- Reading: "Principles To Actions", (NCTM) p. 42-48
- [Video: "The Balance Between Skills and Understanding" \(The Hunt Institute\)](#)
- [Video: "Mathematics Fluency: A Balanced Approach" \(The Hunt Institute\)](#)
- [Video: "Building Conceptual Understanding in Mathematics" \(NCTM\)](#)
- [Video: "Conceptual Understanding Excerpt" \(The Hunt Institute\)](#)

Concrete Representational Abstract: Instructional Sequence for Mathematics

Indicator 2a Guiding Questions:

Do the materials develop conceptual understanding?

Do the materials provide opportunities for students to independently demonstrate conceptual understanding throughout the grade level?

Evidence Collection

Conceptual Understanding is a flexible web of connections and relationships within and between ideas, interpretations, and images of mathematical concepts.

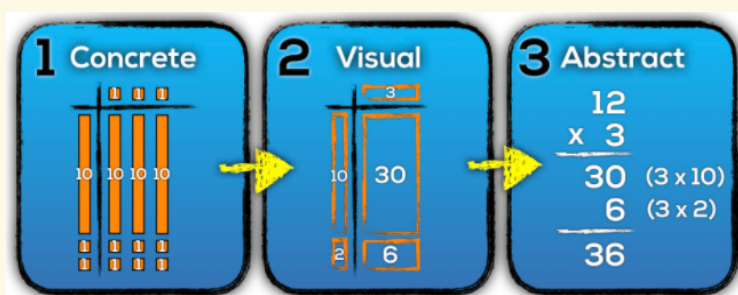
Example: In Grade 4, students use their understanding of place value and properties of operations to perform multi-digit arithmetic.

Note: The use of manipulatives does not necessarily indicate conceptual understanding. Conceptual understanding can be developed without the use of manipulatives.

Do materials feature conceptual problems and discussion questions, including brief conceptual problems with low computational difficulty?

- Example: $11 + 6 = \underline{\quad} + 2$
- Example: Find a number greater than $\frac{3}{5}$ and less than $.75$.
- Example: A fraction divided by a fraction is always/sometimes/never less than the original fraction.

Determine if the materials offer opportunities for students to engage with concrete and semi-concrete representations, as well as verbalization and writing, when developing conceptual understanding. For independent demonstration, student opportunities should not be guided or supported by teacher direction. For example:



Do the materials develop cluster(s) and/or standard(s) that specifically relate to conceptual understanding? (Consider the whole grade level.)

- If yes, provide evidence that explains how the materials develop conceptual understanding including unit, lesson, and lesson part for reference for all examples.
- If no, specifically list any standards and/or clusters that attend to conceptual understanding and are not developed by the materials. Describe how the conceptual understanding is not developed.

Examples of specific standards/clusters include, but are not limited to:

Grade	Standards
Kindergarten	K.CC.4

	K.OA.1, 3, 4 K.NBT
Grade 1	1.OA.B, 6 1.NBT.B 1.NBT.C
Grade 2	2.OA.C 2.NBT.1, 7 2.MD.6
Grade 3	3.OA.1, 2, B 3.NF 3.MD.C
Grade 4	4.NBT.A 4.NBT.5, 6 4.NF
Grade 5	5.NBT.A, 6, 7 5.NF.1, 3, 4, 5 5.MD.C
Grade 6	6.RP.A 6.NS.5, 6, 7 6.EE.3-6
Grade 7	7.NS.1, 2 7.EE.A 7.SP.1, 5
Grade 8	8.EE.B 8.F.A 8.G.A

Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- How do the materials develop conceptual understanding throughout each grade?
- How do the materials provide opportunities for students to independently demonstrate conceptual understanding throughout each grade?
- Do the materials have a consistent lesson structure for developing conceptual understanding and where students independently demonstrate conceptual understanding?
- Based on the student-facing materials, how do students independently demonstrate conceptual understanding?

Gateway 2: Rigor & Mathematical Practices

Criterion 2.1	Materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations by giving appropriate attention to: developing students' conceptual understanding; procedural skill and fluency; and engaging applications.
Indicator 2b	Materials give attention throughout the year to individual standards that set an expectation for procedural skill and fluency.

Scoring:		
<p>2 points</p> <ul style="list-style-type: none"> Materials develop procedural skills and fluency throughout the grade level. AND Materials provide opportunities for students to independently demonstrate procedural skills and fluency throughout the grade level. 	<p>1 point</p> <ul style="list-style-type: none"> Materials do not develop procedural skills and fluency throughout the grade level. OR Materials do not provide opportunities for students to independently demonstrate procedural skills and fluency throughout the grade level. 	<p>0 points</p> <ul style="list-style-type: none"> Materials do not develop procedural skills and fluency throughout the grade level. AND Materials do not provide opportunities for students to independently demonstrate procedural skills and fluency throughout the grade level.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with 2a, 2b, and 2d, determines the shift of Rigor. Students practice skills in order to access more complex concepts and procedures.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQUiP Rubric for Lessons & Units](#)
- [Achieve Framework to Evaluate Cognitive Complexity in Mathematics Assessments](#)

Resources:

- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)
- Reading: "Principles To Actions", (NCTM) p. 42-48
- [Video: "The Balance Between Skills and Understanding" \(The Hunt Institute\)](#)
- [Video: "Mathematics Fluency: A Balanced Approach" \(The Hunt Institute\)](#)
- [Concrete Representational Abstract: Instructional Sequence for Mathematics](#)

Indicator 2b Guiding Questions:

Do the materials develop procedural skill?

Do the materials provide opportunities for students to independently demonstrate procedural skills throughout the grade level?

Evidence Collection

Procedural skill includes knowing how and why an algorithm works.

Fluency includes efficiency, accuracy, flexibility, and appropriate strategy selection.

Procedural skill and fluency may not be addressed in every unit, but should be addressed over the grade, especially with those standards that explicitly call for fluency.

Collect evidence from each unit that shows how the materials develop procedural skill and fluency and where students independently demonstrate procedural skill and fluency.

Identify where there are opportunities for students to progress toward fluency and procedural skill interwoven with students' developing conceptual understanding.

Note whether the materials include a specific section in units/chapters/lessons, etc. that are specifically designed for procedural skill and fluency.

Examples of specific standards/clusters include, but are not limited to:

Grade	Standards
Kindergarten	K.OA.5
Grade 1	1.OA.6
Grade 2	2.OA.2 2.NBT.5
Grade 3	3.OA.7 3.NBT.2
Grade 4	4.NBT.4
Grade 5	5.NBT.5
Grade 6	6.NS.2 6.NS.3 6.EE.1
Grade 7	7.NS.2d 7.EE.4a 7.G.5
Grade 8	8.EE.1 8.EE.7

	8.EE.8b
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Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- How do the materials develop procedural skill and fluency throughout each grade?
- How do the materials provide opportunities for students to independently demonstrate procedural skill and fluency throughout each grade?
- Do the materials have a consistent lesson structure for developing procedural skill and fluency and where students independently demonstrate procedural skill and fluency?
- Based on the student-facing materials, how do students independently demonstrate procedural skill and fluency?

Gateway 2: Rigor & Mathematical Practices

Criterion 2.1	Materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations by giving appropriate attention to: developing students' conceptual understanding; procedural skill and fluency; and engaging applications.
Indicator 2c	Materials are designed so that teachers and students spend sufficient time working with engaging applications of the mathematics.

Scoring:		
<p>2 points</p> <ul style="list-style-type: none"> Materials include multiple routine and non-routine applications of the mathematics throughout the grade level. AND Materials provide opportunities for students to independently demonstrate multiple routine and non-routine applications of the mathematics throughout the grade level. 	<p>1 point</p> <ul style="list-style-type: none"> Materials do not include multiple routine and non-routine applications of the mathematics throughout the grade level. OR Materials do not provide opportunities for students to independently demonstrate multiple routine and non-routine applications of the mathematics throughout the grade level. 	<p>0 points</p> <ul style="list-style-type: none"> Materials do not include multiple routine and non-routine applications of the mathematics throughout the grade level. AND Materials do not provide opportunities for students to independently demonstrate multiple routine and non-routine applications of the mathematics throughout the grade level.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with 2a, 2b, and 2c, determines the shift of Rigor. Materials should include activities with a variety of contexts for both routine and non-routine applications. Students should apply mathematical knowledge in real-world contexts to make meaning of and access the content.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQUiP Rubric for Lessons & Units](#)
- [Achieve Framework to Evaluate Cognitive Complexity in Mathematics Assessments](#)

Resources:

- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)
- Reading: "Principles To Actions", (NCTM) p. 42-48
- [Video: "The Balance Between Skills and Understanding" \(The Hunt Institute\)](#)

- [Video: “Mathematics Fluency: A Balanced Approach” \(The Hunt Institute\)](#)
- [Video: “Building Conceptual Understanding in Mathematics” \(NCTM\)](#)
- [Video: “Conceptual Understanding Excerpt” \(The Hunt Institute\)](#)
- [Concrete Representational Abstract: Instructional Sequence for Mathematics](#)
- [Achieve the Core: Situation Types for Operations in Word Problems](#)

Indicator 2c Guiding Questions:

Do the materials develop students’ ability to utilize mathematical concepts and skills in engaging applications throughout the grade level?

Do the materials provide opportunities for students to independently demonstrate application of mathematical concepts and skills in real-world contexts throughout the grade level?

Evidence Collection

Application problems often, but not always, present a real-world scenario. Students employ a prescribed mathematical strategy or choose their own strategy to find a solution. Example: students apply knowledge about multiplication (Grade 3) to calculate volume (Grade 5).

Collect evidence of problems/activities that align to the standards/clusters for each grade level that address application. Note whether the materials include a specific section in units/chapters/lessons, etc. that is specifically designed for application.

Collect evidence of problems/activities where students independently demonstrate applying mathematics. Evidence should include students solving problems in a variety of contexts, and students should be able to make their own assumptions or simplifications in order to model the contexts mathematically.

Routine applications are prescriptive word problems that provide a situation and a question. They have a real world context, but the problems generally include all necessary (and no extraneous) information. The problems are designed to elicit particular mathematical strategies. The correct answers are usually pre-determined.

Non-Routine applications include unfamiliar/novel contexts. These problems often present a real world scenario, and students employ their choice of mathematical strategies to find a solution. Thus, the problem is open in the middle and closed at the beginning and end. Target answers are known, although the solutions may be allowed to have some variation.

Collect evidence from the materials of multiple routine and non-routine applications of the mathematics throughout the grade level.

Collect evidence of opportunities for students to independently demonstrate multiple routine and non-routine applications of mathematics throughout the grade level.

Examples of specific standards/clusters that address application include, but are not limited to:

Grade	Standards
Kindergarten	K.OA.2 K.G.1

Grade 1	1.OA.A 1.MD.4
Grade 2	2.OA.A 2.MD.5, 8, 10
Grade 3	3.OA.3, 8 3.MD.A, D
Grade 4	4.OA.A 4.NF.3d, 4.NF.4c 4.MD.2
Grade 5	5.NF.2, 6, 7c 5.MD.5b 5.G.2
Grade 6	6.RP.3 6.NS.1 6.EE.7, 9
Grade 7	7.RP.A 7.NS.3 7.EE.3
Grade 8	8.EE.8c 8.F.B 8.G.7

Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- How do the materials include multiple routine and non-routine applications throughout each grade?
- How do the materials provide opportunities for students to independently demonstrate multiple routine and non-routine applications throughout each grade?
- Do the materials have a consistent lesson structure for including multiple routine and non-routine applications?
- Based on the student-facing materials, how do students independently demonstrate multiple routine and non-routine applications?

Gateway 2: Rigor & Mathematical Practices

Criterion 2.1	Materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations by giving appropriate attention to: developing students' conceptual understanding; procedural skill and fluency; and engaging applications.
Indicator 2d	The three aspects of rigor are not always treated together and are not always treated separately. There is a balance of the three aspects of rigor within the grade.

Scoring:		
<p>2 points</p> <ul style="list-style-type: none"> All three aspects of rigor are present independently throughout each grade level. AND Multiple aspects of rigor are engaged simultaneously to develop students' mathematical understanding of a single topic/unit of study throughout each grade level. 	<p>1 point</p> <ul style="list-style-type: none"> All three aspects of rigor are not present independently throughout each grade level. OR Multiple aspects of rigor are not engaged simultaneously to develop students' mathematical understanding of a single topic/unit of study throughout each grade level. 	<p>0 points</p> <ul style="list-style-type: none"> All three aspects of rigor are not present independently throughout each grade level. AND Multiple aspects of rigor are not engaged simultaneously to develop students' mathematical understanding of a single topic/unit of study throughout each grade level.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with 2a, 2b, and 2c, determines the shift of Rigor. Grade-level materials must include a balance of conceptual understanding, procedural skill and fluency, and application, and this balance should be evident in supporting students as they develop mathematical understanding.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQulP Rubric for Lessons & Units](#)
- [Achieve Framework to Evaluate Cognitive Complexity in Mathematics Assessments](#)

Resources:

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- Reading: "Principles To Actions", (NCTM) p. 42-48
- [Video: "The Balance Between Skills and Understanding" \(The Hunt Institute\)](#)
- [Video: "Mathematics Fluency: A Balanced Approach" \(The Hunt Institute\)](#)

- [Video: “Building Conceptual Understanding in Mathematics” \(NCTM\)](#)
- [Video: “Conceptual Understanding Excerpt” \(The Hunt Institute\)](#)
- [Concrete Representational Abstract: Instructional Sequence for Mathematics](#)
- [Achieve the Core: Situation Types for Operations in Word Problems](#)

Indicator 2d Guiding Question:

Do the materials balance the three aspects of rigor?

Evidence Collection

Note: Consider the intent of the program to balance the three aspects of rigor, not the quality of the materials—indicators 2a-c focus on the quality of materials. Evidence should be different than the evidence collected for 2a, 2b, and 2c.

Collect evidence demonstrating how the three aspects of rigor are present independently throughout each grade level.

Collect evidence demonstrating where multiple aspects of rigor are engaged in simultaneously to develop students’ mathematical understanding of a single topic/unit of study throughout each grade level, for example:

- Consider whether materials use conceptual understanding to develop procedural skill and fluency.
- Consider if students use multiple representations (i.e. manipulatives, drawings, expressions, equations, tables, graphs, charts, number lines, etc.) and written/oral explanations to support their work in application problems.

Do the materials emphasize one aspect of rigor over the others in specific units? If so, do the materials work to maintain balance throughout the grade level?

Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- How are the three aspects of rigor present independently throughout each grade level?
- How are multiple aspects of rigor engaged simultaneously to develop students’ mathematical understanding of a single topic/unit of study throughout each grade level?
- Do the materials emphasize one aspect of rigor over the others in specific units? If so, do the materials work to maintain balance throughout the grade level?

Gateway 2: Rigor & Mathematical Practices

Criterion 2.2

Standards for Mathematical Practice

Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice (MPs).

What is the purpose of this Criterion?

The purpose of this criterion is to ensure the Standards for Mathematical Practice are identified and connected to grade-level mathematical content, and the materials present opportunities for students to both learn and independently demonstrate each of the MPs.

Research Connection

- [Common Core State Standards for Mathematics \(CCSSM\)](#)

Scoring:

Note: If the materials do not identify the MPs for teachers, evidence of this will be included in the Practice-Content Connections criterion report. The lack of identification of the MPs will result in the deduction of 1 point in the scoring for indicator 2e only.

Meets Expectations

- 9-10 points

Partially Meets Expectations

- 6-8 points

Does Not Meet Expectations

- <6 points

Gateway 2: Rigor & Mathematical Practices

Criterion 2.2	Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.
Indicator 2e	Materials support the intentional development of MP1: Make sense of problems and persevere in solving them; and MP2: Reason abstractly and quantitatively, for students, in connection to the grade-level content standards, as expected by the mathematical practice standards.

Scoring:		
<p>2 points</p> <ul style="list-style-type: none"> There is intentional development of MP1 to meet its full intent in connection to grade-level content. AND There is intentional development of MP2 to meet its full intent in connection to grade-level content. 	<p>1 point</p> <ul style="list-style-type: none"> There is intentional development of MP1 to meet its full intent in connection to grade-level content. OR There is intentional development of MP2 to meet its full intent in connection to grade-level content. 	<p>0 points</p> <ul style="list-style-type: none"> There is no intentional development of MP1 to meet its full intent in connection to grade-level content. AND There is no intentional development of MP2 to meet its full intent in connection to grade-level content.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with 2f, 2g, 2h, and 2i, determines the adherence to the Standards for Mathematical Practice. This indicator specifically examines MPs 1 and 2 by examining whether the provided opportunities for student engagement with the MPs are a) connected to the mathematical content of the grade level and b) fully developed across the grade level.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQulP Rubric for Lessons & Units](#)

Resources:

- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)
- [MP1: Make sense of problems and persevere in solving them](#)
- [MP2: Reason abstractly and quantitatively](#)
- [Mathematical Practices Compilation](#)

Indicator 2e Guiding Questions:

Across the grade level, are MP1 and MP2 identified and connected to mathematical content?

Across the grade level, is there intentional development of MP1 and MP2 that reaches the full intent of the MPs?

Evidence Collection

Look through all teacher and student materials to ensure that MP1 and MP2 are occurring throughout the grade level. This includes, but is not limited to: lessons, unit overviews, scope and sequence charts, and/or other instructional guides.

Record any instances where MP1 and MP2 are misleading in the curricular materials (e.g. a lesson is marked as aligned to an MP when only a small part of the lesson addresses the MP).

To check that MP1 and MP2 are connected to grade-level content and are developed to their full intent, look at lessons, assessments, and any examples/descriptions of anticipated student work that require students to:

MP1	MP2
Analyze and make sense of problems: actively engage in solving problems by working to understand the information in the problems and the questions asked.	Consider units involved in a problem and attend to the meaning of quantities.
Use a variety of strategies that make sense to solve the problem.	Represent situations symbolically.
Monitor and evaluate their progress in solving problems.	Explain/discuss what the numbers or symbols in an expression/equation represent.
Determine if their answers make sense.	Understand the relationships between problem scenarios and mathematical representations.
Reflect on and revise their problem solving strategy.	

Look at teacher directions and how teachers are guided to carry out the lessons so that students are engaged in the MPs. In particular, look for places where teachers are expected to:

- pose rich problems (MP1),
- provide time for students to make sense of problems (MP1),
- provide opportunities for students to engage in problem solving (MP1),
- ask clarifying and probing questions (MP1, MP2), and
- ensure students make connections between mathematical representations and scenarios (MP2).

Check to see if any of the materials address only the Standards for Mathematical Practice (meaning they are not connected to grade-level mathematical content). Record any instances where the Standards for Mathematical Practice are not connected to the grade-level mathematics content.

Across the grade level, verify that students use the MPs to their full intent within the materials.

If MPs are only located in a specific part of the teacher manuals (e.g. the teacher-led portion of the lesson), you will need to look at other sections (e.g. independent work, homework, assessments) to ensure that the MPs are intentionally connected to the content. Look where the MPs are identified, but also look at places where they are not identified.

Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- When are the MPs identified and connected to grade-level mathematical content?
- In what ways do the students use the MPs to their full intent across the grade level?
- In what ways, if any, do the supports provided for teachers enable students to engage with the MPs?

Gateway 2: Rigor & Mathematical Practices

Criterion 2.2	Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.
Indicator 2f	Materials support the intentional development of MP3: Construct viable arguments and critique the reasoning of others, for students, in connection to the grade-level content standards, as expected by the mathematical practice standards.

Scoring:		
<p>2 points</p> <ul style="list-style-type: none"> There is intentional development of MP3 to meet its full intent in connection to grade-level content. 	<p>1 point</p> <ul style="list-style-type: none"> There is intentional development of students constructing viable arguments in connection to grade-level content. <p>OR</p> <ul style="list-style-type: none"> There is intentional development of students critiquing the reasoning of others in connection to grade-level content. 	<p>0 points</p> <ul style="list-style-type: none"> There is no intentional development of MP3 to meet its full intent in connection to grade-level content.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with 2e, 2g, 2h, and 2i, determines the adherence to the Standards for Mathematical Practice. This indicator specifically examines MP3 by examining whether the provided opportunities for student engagement with the MP are a) connected to the mathematical content of the grade level and b) fully developed across the grade level.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQUiP Rubric for Lessons & Units](#)

Resources:

- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)
- [MP3: Construct viable arguments and critique the reasoning of others](#)
- [Mathematical Practices Compilation](#)

Indicator 2f Guiding Questions:

Across the grade level, is MP3 identified and connected to mathematical content?

Across the grade level, is there intentional development of MP3 that reaches the full intent of the MP?

Evidence Collection

Look through all teacher and student materials to ensure that MP3 is occurring throughout the grade level. This includes, but is not limited to: lessons, unit overviews, scope and sequence charts, and/or other instructional guides.

Record any instances where MP3 is misleading in the curricular materials (e.g. a lesson is marked as aligned to an MP when only a small part of the lesson addresses the MP).

To check that MP3 is connected to grade-level content and is developed to its full intent, look at lessons, assessments, and any examples/descriptions of anticipated student work that require students to:

Construct Viable Arguments	Critique the Reasoning of Others
Construct mathematical arguments.	Perform error analysis of provided student work/solutions/arguments.
Explain/justify their strategies and thinking orally or in writing using concrete models, drawings, actions, or numbers.	Listen to or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.
Create their own conjectures.	

Look at teacher directions and how teachers are guided to carry out the lessons so that students are engaged in the MPs. In particular, look for places where teachers are expected to:

- provide opportunities for students to engage in discourse to construct and/or critique mathematical arguments,
- ask clarifying and probing questions, and
- help students compare methods and strategies.

Check to see if any of the materials address only the Standard for Mathematical Practice (meaning it is not connected to grade-level mathematical content). Record any instances where the Standard for Mathematical Practice is not connected to the grade-level mathematics content.

Across the grade level, verify that students use the MP to its full intent within the materials.

If the MP is only located in a specific part of the teacher manuals (e.g. the teacher-led portion of the lesson), you will need to look at other sections (e.g. independent work, homework, assessments) to ensure that the MP is intentionally connected to the content. Look where the MP is identified, but also look at places where it is not identified.

Cluster Meeting

During the cluster meeting:

Consider the following question(s) as evidence is synthesized:

- When is MP3 identified and connected to grade-level mathematical content?
- In what ways do the students use MP3 to its full intent across the grade level?
- In what ways, if any, do the supports provided for teachers enable students to engage with MP3?

Gateway 2: Rigor & Mathematical Practices

Criterion 2.2	Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.
Indicator 2g	Materials support the intentional development of MP4: Model with mathematics; and MP5: Use appropriate tools strategically, for students, in connection to the grade-level content standards, as expected by the mathematical practice standards.

Scoring:		
<p>2 points</p> <ul style="list-style-type: none"> There is intentional development of MP4 to meet its full intent in connection to grade-level content. <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> There is intentional development of MP5 to meet its full intent in connection to grade-level content. 	<p>1 point</p> <ul style="list-style-type: none"> There is intentional development of MP4 to meet its full intent in connection to grade-level content. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> There is intentional development of MP5 to meet its full intent in connection to grade-level content. 	<p>0 points</p> <ul style="list-style-type: none"> There is no intentional development of MP4 to meet its full intent in connection to grade-level content. <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> There is no intentional development of MP5 to meet its full intent in connection to grade-level content.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with 2e, 2f, 2h, and 2i, determines the adherence to the Standards for Mathematical Practice. This indicator specifically examines MPs 4 and 5 by examining whether the provided opportunities for student engagement with the MPs are a) connected to the mathematical content of the grade level and b) fully developed across the grade level.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQulP Rubric for Lessons & Units](#)

Resources:

- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)
- [MP4: Model with mathematics](#)
- [MP5: Use appropriate tools strategically](#)
- [Mathematical Practices Compilation](#)
- Reading: Chapter 1 of The GAIMME Report (A link to this report cannot be provided, but it can be downloaded by googling "The GAIMME Report".)

- Reading: “Math Modeling: Getting Started & Getting Solutions” (A link to this handbook cannot be provided, but it can be downloaded by googling “SIAM and Moody's modeling handbook”).

Indicator 2g Guiding Questions:

Across the grade level, are MP4 and MP5 identified and connected to mathematical content?

Across the grade level, is there intentional development of MP4 and MP5 that reaches the full intent of the MPs?

Evidence Collection

Look through all teacher and student materials to ensure that MP4 and MP5 are occurring throughout the grade level. This includes, but is not limited to: lessons, unit overviews, scope and sequence charts, and/or other instructional guides.

Record any instances where MP4 and MP5 are misleading in the curricular materials (e.g. a lesson is marked as aligned to an MP when only a small part of the lesson addresses the MP).

To check that MP4 and MP5 are connected to grade-level content and are developed to their full intent, look at lessons, assessments, and any examples/descriptions of anticipated student work that require students to:

MP4	MP5
Put the problem or situation in their own words and identify important information in the problem or situation.	Choose appropriate tools and/or strategies that will help develop their mathematical knowledge.
Use the math they know to solve problems and everyday situations.	Recognize both the insight to be gained from different tools/strategies and their limitations.
Model the situation with an appropriate representation and use an appropriate strategy (part-part- whole, bar model, place value chart, etc.).	Use technological tools, as appropriate, to explore and deepen their mathematical understanding.
Describe what they do with the model(s) and how it relates to the problem situation.	
Check to see whether an answer makes sense and change the model when necessary.	

Look at teacher directions and how teachers are guided to carry out the lessons so that students are engaged in the MPs. In particular, look for places where teachers are expected to:

- pose problems connected to previous concepts (MP4),
- provide a variety of real world contexts (MP4),
- provide meaningful, real-world, authentic performance tasks (MP4),
- promote discourse and investigation (MP4),
- make a variety of tools available (MP5),
- demonstrate the use of tools effectively, including their benefits and limitations (MP5), and

- encourage the use of multiple tools for communication, calculation, investigation, sense-making, etc. (MP5).

Check to see if any of the materials address only the Standards for Mathematical Practice (meaning they are not connected to grade-level mathematical content). Record any instances where the Standards for Mathematical Practice are not connected to the grade-level mathematics content.

Across the grade level, verify that students use the MPs to their full intent within the materials.

If MPs are only located in a specific part of the teacher manuals (e.g. the teacher-led portion of the lesson), you will need to look at other sections (e.g. independent work, homework, assessments) to ensure that the MPs are intentionally connected to the content. Look where the MPs are identified, but also look at places where they are not identified.

Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- When are the MPs identified and connected to grade-level mathematical content?
- In what ways do the students use the MPs to their full intent across the grade level?
- In what ways, if any, do the supports provided for teachers enable students to engage with the MPs?

Gateway 2: Rigor & Mathematical Practices

Criterion 2.2	Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.
Indicator 2h	Materials support the intentional development of MP6: Attend to precision; and attend to the specialized language of mathematics, for students, in connection to the grade-level content standards, as expected by the mathematical practice standards.

Scoring:		
<p>2 points</p> <ul style="list-style-type: none"> There is intentional development of MP6 to meet its full intent in connection to grade-level content. AND Materials attend to the specialized language of mathematics. 	<p>1 point</p> <ul style="list-style-type: none"> There is intentional development of MP6 to meet its full intent in connection to grade-level content. OR Materials attend to the specialized language of mathematics. 	<p>0 points</p> <ul style="list-style-type: none"> There is no intentional development of MP6 to meet its full intent in connection to grade-level content. AND Materials do not attend to the specialized language of mathematics.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with 2e, 2f, 2g, and 2i, determines the adherence to the Standards for Mathematical Practice. This indicator specifically examines MP6, including the specialized language of mathematics, by examining whether the provided opportunities for student engagement with the MP are a) connected to the mathematical content of the grade level and b) fully developed across the grade level.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQulP Rubric for Lessons & Units](#)

Resources:

- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)
- [MP6: Attend to precision](#)
- [Mathematical Practices Compilation](#)

Indicator 2h Guiding Questions:

Across the grade level, is MP6 identified and connected to mathematical content?

Across the grade level, is there intentional development of MP6 that reaches the full intent of the MP?

Across the grade level, is the specialized language of mathematics intentionally developed?

Evidence Collection

Look through all teacher and student materials to ensure that MP6 and the specialized language of mathematics are occurring throughout the grade level. This includes, but is not limited to: lessons, unit overviews, scope and sequence charts, and/or other instructional guides.

Record any instances where MP6 is misleading in the curricular materials (e.g. a lesson is marked as aligned to an MP when only a small part of the lesson addresses the MP).

Record any instances where the specialized language of mathematics is misleading and/or erroneous in the curricular materials (e.g. the materials use made up words versus mathematical terminology, the use of symbols is incorrect or confusing, etc.).

To check that MP6 is connected to grade-level content and is developed to its full intent, look at lessons, assessments and any examples/descriptions of anticipated student work that require students to:

- communicate using grade-level appropriate vocabulary and conventions,
- formulate clear explanations,
- state the meaning of symbols,
- calculate accurately and efficiently,
- specify units of measure,
- use and label tables, graphs, etc. appropriately, and
- introduce and use definitions accurately.

Look at teacher directions and how teachers are guided to carry out the lessons so that students are engaged in the MPs. In particular, look for places where teachers are expected to:

- ensure students know and use clear definitions,
- model accurate, precise mathematical language (vocabulary and conventions), and
- provide feedback to students on the accurate use of mathematical language.

Ensure that mathematical definitions and terminology are precise and accurate (e.g. “commutative property” versus “flip-flop”; using rate/ratio/fraction/proportion precisely; using accurate geometric terminology, even at young ages). Provide specific examples of vocabulary, symbols, numbers, etc. that are not used accurately and precisely.

Check to see if any of the materials address only the Standard for Mathematical Practice (meaning it is not connected to grade-level mathematical content). Record any instances where the Standard for Mathematical Practice is not connected to the grade-level mathematics content.

Across the grade level, verify that students use the MP to its full intent within the materials.

If the MP is only located in a specific part of the teacher manuals (e.g. the teacher-led portion of the lesson), you will need to look at other sections (e.g. independent work, homework, assessments) to ensure that the MP

is intentionally connected to the content. Look where the MP is identified, but also look at places where it is not identified.

Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- When is MP6 identified and connected to grade-level mathematical content?
- In what ways do the students use MP6 to its full intent across the grade level?
- In what ways is the specialized language of mathematics intentionally developed?
- In what ways, if any, do the supports provided for teachers enable students to engage with MP6?

Gateway 2: Rigor & Mathematical Practices

Criterion 2.2	Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice.
Indicator 2i	Materials support the intentional development of MP7: Look for and make use of structure; and MP8: Look for and express regularity in repeated reasoning, for students, in connection to the grade-level content standards, as expected by the mathematical practice standards.

Scoring:		
2 points <ul style="list-style-type: none"> There is intentional development of MP7 to meet its full intent in connection to grade-level content. AND There is intentional development of MP8 to meet its full intent in connection to grade-level content. 	1 point <ul style="list-style-type: none"> There is intentional development of MP7 to meet its full intent in connection to grade-level content. OR There is intentional development of MP8 to meet its full intent in connection to grade-level content. 	0 points <ul style="list-style-type: none"> There is no intentional development of MP7 to meet its full intent in connection to grade-level content. AND There is no intentional development of MP8 to meet its full intent in connection to grade-level content.

About this indicator:

What is the purpose of this Indicator?

This indicator, along with 2e, 2f, 2g, and 2h, determines the adherence to the Standards for Mathematical Practice. This indicator specifically examines MPs 7 and 8 by examining whether the provided opportunities for student engagement with the MPs are a) connected to the mathematical content of the grade level and b) fully developed across the grade level.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)
- [K-8 Publishers' Criteria for the CCSSM \(Summer 2012\)](#)
- [Student Achievement Partners \(SAP\) Instructional Materials Evaluation Tool for K-8 Mathematics](#)
- [Achieve EQulP Rubric for Lessons & Units](#)

Resources:

- [SAP Coherence Map](#)
- [Institute for Mathematics Education Progressions Documents](#)
- [MP7: Look for and make use of structure](#)
- [MP8: Look for and express regularity in repeated reasoning](#)
- [Mathematical Practices Compilation](#)

Indicator 2i Guiding Questions:

Across the grade level, are MP7 and MP8 identified and connected to mathematical content?

Across the grade level, is there intentional development of MP7 and MP8 that reaches the full intent of the MPs?

Evidence Collection

Look through all teacher and student materials to ensure that MP7 and MP8 are occurring throughout the grade-level. This includes, but is not limited to: lessons, unit overviews, scope and sequence charts, and/or other instructional guides.

Record any instances where MP7 and MP8 are misleading in the curricular materials (e.g. a lesson is marked as aligned to an MP when only a small part of the lesson addresses the MP).

To check that MP7 and MP8 are connected to grade-level content and are developed to their full intent, look at lessons, assessments, and any examples/descriptions of anticipated student work that require students to:

MP7	MP8
Look for patterns or structures to make generalizations and solve problems.	Notice repeated calculations to understand algorithms and make generalizations or create shortcuts.
Look for and explain the structure within mathematical representations.	Create, describe, explain a general formula, process, method, algorithm, model, etc.
Analyze a problem and look for more than one approach.	Evaluate the reasonableness of their answers and thinking.
Look at and decompose “complicated” into “simpler” things.	

Look at teacher directions and how teachers are guided to carry out the lessons so that students are engaged in the MPs. In particular, look for places where teachers are expected to:

- provide tasks/problems with patterns (MP7),
- prompt students to look for and describe structure and/or patterns (MP7),
- provide situations in which students can use a strategy to develop understanding of a concept (MP7, MP8),
- provide a variety of examples that explicitly focus on patterns and repeated reasoning (MP7, MP8), and
- prompt students to make generalizations (MP8).

Check to see if any of the materials address only the Standards for Mathematical Practice (meaning they are not connected to grade-level mathematical content). Record any instances where the Standards for Mathematical Practice are not connected to the grade-level mathematics content.

Across the grade level, verify that students use the MPs to their full intent within the materials.

If MPs are only located in a specific part of the teacher manuals (e.g. the teacher-led portion of the lesson), you will need to look at other sections (e.g. independent work, homework, assessments) to ensure that the MPs are

intentionally connected to the content. Look where the MPs are identified, but also look at places where they are not identified.

Cluster Meeting

Consider the following question(s) as evidence is synthesized:

- When are the MPs identified and connected to grade-level mathematical content?
- In what ways do the students use the MPs to their full intent across the grade level?
- In what ways, if any, do the supports provided for teachers enable students to engage with the MPs?

Gateway 3: Usability

Criterion 3.1

Teacher Supports

The program includes opportunities for teachers to effectively plan and utilize materials with integrity and to further develop their own understanding of the content.

What is the purpose of this Criterion?

This criterion examines how the materials support teachers:

- in delivering the student and ancillary materials, especially as it relates to students' mathematical development.
- in understanding the instructional approaches of the program and research-based strategies.
- in improving their own knowledge of the subject beyond the grade level.
- in understanding the role of the standards in the context of the overall series.
- in planning for effective instruction that includes appropriate materials and how caregivers can support student progress and achievement.

Scoring:

Meets Expectations

- 8-9 points

Partially Meets Expectations

- 5-7 points

Does Not Meet Expectations

- <5 points

Gateway 3: Usability

Criterion 3.1	The program includes opportunities for teachers to effectively plan and utilize materials with integrity and to further develop their own understanding of the content.
Indicator 3a	Materials provide teacher guidance with useful annotations and suggestions for how to enact the student materials and ancillary materials, with specific attention to engaging students in order to guide their mathematical development.

Scoring:		
2 points <ul style="list-style-type: none"> Materials provide comprehensive guidance that will assist teachers in presenting the student and ancillary materials. AND Materials include sufficient and useful annotations and suggestions that are presented within the context of the specific learning objectives. 	1 point <ul style="list-style-type: none"> Materials provide comprehensive guidance that will assist teachers in presenting the student and ancillary materials. OR Materials include sufficient and useful annotations and suggestions that are presented within the context of the specific learning objectives. 	0 points <ul style="list-style-type: none"> Materials do not provide comprehensive guidance that will assist them in presenting the student and ancillary materials. AND Materials do not include sufficient and useful annotations and suggestions that are presented within the context of the specific learning objectives.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the materials to determine whether they contain teacher guidance with sufficient and useful annotations and suggestions for how to enact the student materials and ancillary materials.

Indicator 3a Guiding Question:

Do the materials provide teacher guidance with useful annotations and suggestions for how to enact the student materials and ancillary materials, with specific attention to engaging students in order to guide their mathematical development?

Evidence Collection

Review the materials, both print and digital (if available), across the series.

Look for and record evidence to:

- Describe if and how the materials include overview sections, annotations, narrative information, or other

documents that will assist the teacher in presenting the student material and/or ancillary materials.

- Describe how information and guidance provided by the materials is useful for planning instruction. Look for suggestions about instructional strategies and guidance for presenting the content (specifically how to support students' mathematical development), which could include identifying and addressing student errors and misconceptions. These are often in the planning sections as well as margin notes, but could also be in the front matter philosophy, professional development, or explanations of program components.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- How are the materials structured to provide information that will assist the teacher in presenting the student material or ancillary materials?
- How do the materials provide specific guidance to plan instruction and support students in the content (specifically how to support students' mathematical development)?

Gateway 3: Usability

Criterion 3.1	The program includes opportunities for teachers to effectively plan and utilize materials with integrity and to further develop their own understanding of the content.
Indicator 3b	Materials contain adult-level explanations and examples of the more complex grade-level/course-level concepts and concepts beyond the current course so that teachers can improve their own knowledge of the subject.

Scoring:

2 points	1 point	0 points
<ul style="list-style-type: none"> Materials contain adult-level explanations and examples of the more complex grade/course-level concepts so that teachers can improve their own knowledge of the subject. AND Materials contain adult-level explanations and examples of concepts beyond the current course so that teachers can improve their own knowledge of the subject. 	<ul style="list-style-type: none"> Materials contain adult-level explanations and examples of the more complex grade/course-level concepts so that teachers can improve their own knowledge of the subject. OR Materials contain adult-level explanations and examples of concepts beyond the current course so that teachers can improve their own knowledge of the subject. 	<ul style="list-style-type: none"> Materials do not contain adult-level explanations and examples of the more complex grade/course-level concepts so that teachers can improve their own knowledge of the subject. AND Materials do not contain adult-level explanations and examples of concepts beyond the current course so that teachers can improve their own knowledge of the subject.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the materials to determine whether they deepen teacher understanding of mathematical concepts and the mathematical practices so that teachers can improve their own knowledge of the subject.

Indicator 3b Guiding Question:

Do the materials contain adult-level explanations and examples of the more complex grade/course-level concepts and concepts beyond the current course so that teachers can improve their own knowledge of the subject?

Evidence Collection

Review the materials, both print and digital (if available), across the series.

Look for and record evidence to:

- Describe if and how the materials provide complete adult-level explanations and examples that support the teacher in developing their own understanding of the content and expected student practices.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- Where are supports provided for teachers to develop their own understanding of more advanced, grade-level concepts?
- Where are supports provided for teachers to develop their own understanding of concepts beyond the current course?

Gateway 3: Usability

Criterion 3.1	The program includes opportunities for teachers to effectively plan and utilize materials with integrity and to further develop their own understanding of the content.
Indicator 3c	Materials include standards correlation information that explains the role of the standards in the context of the overall series.

Scoring:		
<p>2 points</p> <ul style="list-style-type: none"> Correlation information is present for the mathematics standards addressed throughout the grade level/series. AND Explanations of the role of the specific grade-level/course-level mathematics are present in the context of the series. 	<p>1 point</p> <ul style="list-style-type: none"> Correlation information is present for the mathematics standards addressed throughout the grade level/series. OR Explanations of the role of the specific grade-level/course-level mathematics are present in the context of the series. 	<p>0 points</p> <ul style="list-style-type: none"> Standards correlations are inaccurate or missing. OR There are few, if any, explanations of the role of the specific grade-level/course-level mathematics in the context of the series.

About this indicator:

What is the purpose of this Indicator?

This indicator examines whether materials provide documentation of how each lesson and unit correlate to the Common Core State Standards for Mathematics and whether materials provide explanations of the role of the standards at each unit/module in the context of the overall series.

Research or Standards connection:

- [Common Core State Standards for Mathematics \(CCSSM\)](#)

Indicator 3c Guiding Question:

Do the materials include standards correlation information that explains the role of the standards in the context of the overall series?

Evidence Collection

Review the print and digital (if available) table of contents, pacing guides, scope and sequence, and other teacher materials.

Look for and record evidence to:

- Describe how teacher materials provide information to allow for coherence across multiple course levels to allow a teacher to make prior connections and teach for connections to future content.

- Describe how individual units, lessons, or activities throughout the series are correlated to the CCSSM.

Note:

- if materials only reference the Standards for Mathematical Content but not Mathematical Practices.
- if standards correlation is inconsistent between levels (l.e. from the overview to a module or a lesson).
- if standards correlation is inaccurate.
- if standards correlation is over-identified.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- Are the standards identified consistently and accurately?
- Do the materials identify how the current work fits into the K-12 progression of learning?

Gateway 3: Usability

Criterion 3.1	The program includes opportunities for teachers to effectively plan and utilize materials with integrity and to further develop their own understanding of the content.
Indicator 3d	Materials provide strategies for informing all stakeholders, including students, parents, or caregivers about the program and suggestions for how they can help support student progress and achievement.

Scoring: Narrative Evidence Only

Note: No score is given for this indicator. Only qualitative evidence is provided.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the series to determine if the materials contain strategies for informing students, parents, or caregivers about the program, and it also examines the series to determine if the materials contain suggestions for how parents or caregivers can help support student progress and achievement.

Indicator 3d Guiding Question:

Do the materials provide strategies for informing all stakeholders, including students, parents, or caregivers about the program and suggestions for how they can help support student progress and achievement?

Evidence Collection

Look at both print and digital (if available) student materials and teacher materials, including beginning sections of the entire course, unit, chapter, or lesson that contains overview sections, teacher instruction pages, or ancillary supports for a narrative explanation of the content in each topic, paying attention to key instruction that will inform others that may be assisting the student's progress.

Look for and record evidence to:

- Determine where the materials contain strategies for informing students, parents, or caregivers about the mathematics their student is learning. Look for forms of communication with parents and caregivers, including for families that may speak and read in a language other than English.
- Describe where the materials contain suggestions for how parents or caregivers can help support student progress and achievement. Look for any work that notes a school-to-home connection.
- Note whether any materials for parents (like letters home) have been translated into languages other than English. If so, list the languages.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- Where do the materials contain overview sections, teacher instruction pages, or ancillary supports that

contain strategies for informing students, parents, or caregivers about the mathematics program, including for families that may speak and read a language other than English?

- Where do the materials contain overview sections, teacher instruction pages, or ancillary supports that contain suggestions for how parents or caregivers can help support student progress and achievement?

Gateway 3: Usability

Criterion 3.1	The program includes opportunities for teachers to effectively plan and utilize materials with integrity and to further develop their own understanding of the content.
Indicator 3e	Materials provide explanations of the instructional approaches of the program and identification of the research-based strategies.

Scoring:		
<p>2 points</p> <ul style="list-style-type: none"> Materials explain the instructional approaches of the program. <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> Materials include and reference research-based strategies. 	<p>1 point</p> <ul style="list-style-type: none"> Materials explain the instructional approaches of the program. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> Materials include and reference research-based strategies. 	<p>0 points</p> <ul style="list-style-type: none"> Materials do not explain the instructional approaches of the program. <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> Materials do not include and reference research-based strategies.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the materials to determine whether they explain the instructional approaches of the program and whether they identify research-based strategies that have informed the design of the materials.

<p>Indicator 3e Guiding Question:</p> <p>Do the materials provide explanations of the instructional approaches of the program and identification of the research-based strategies?</p>
<p>Evidence Collection</p> <p>Review the materials across the series.</p> <p>Look for and record evidence to:</p> <ul style="list-style-type: none"> Describe how and where the materials explain the instructional approaches of the program. Describe how and where the materials identify and reference research-based strategies that are used in the design.
<p>Cluster Meeting</p> <p>Discuss and answer the following questions to support consensus scoring conversations:</p> <ul style="list-style-type: none"> Where and how well do the materials explain the instructional approaches of the program?

- Where and how well do the materials identify and reference research-based strategies used in and throughout the program?

Gateway 3: Usability

Criterion 3.1	The program includes opportunities for teachers to effectively plan and utilize materials with integrity and to further develop their own understanding of the content.
Indicator 3f	Materials provide a comprehensive list of supplies needed to support instructional activities.

Scoring:	
1 point <ul style="list-style-type: none"> Materials include a comprehensive list of supplies needed to support the instructional activities. 	0 points <ul style="list-style-type: none"> Materials do not include a comprehensive list of supplies needed to support instructional activities.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the series to determine if the materials contain a comprehensive list of materials needed to support implementation.

Indicator 3f Guiding Question: Do the materials provide a comprehensive list of supplies needed to support instructional activities?
Evidence Collection Review the materials across the series. Look for and record evidence to: <ul style="list-style-type: none"> Determine whether a comprehensive list of required materials is provided.
Cluster Meeting During the cluster meeting: Discuss and answer the following questions to support consensus scoring conversations: <ul style="list-style-type: none"> Does the series provide a comprehensive list of required materials? At what level(s) is the support provided (course, unit/module, lesson, etc.)?

Gateway 3: Usability

Criterion 3.1	The program includes opportunities for teachers to effectively plan and utilize materials with integrity and to further develop their own understanding of the content.
Indicator 3g	<i>*This is not an assessed indicator in Mathematics.</i>

Gateway 3: Usability

Criterion 3.1	The program includes opportunities for teachers to effectively plan and utilize materials with integrity and to further develop their own understanding of the content.
Indicator 3h	<i>*This is not an assessed indicator in Mathematics.</i>

Gateway 3: Usability

Criterion 3.2

Assessment

The program includes a system of assessments identifying how materials provide tools, guidance, and support for teachers to collect, interpret, and act on data about student progress towards the standards.

What is the purpose of this Criterion?

This criterion

- examines how the materials measure individual student progress towards the standards and elements over time.
- examines how the materials provide guidance to monitor and move student learning.
- examines how the materials indicate which standards are assessed and provide accommodations while still assessing the intent of the standards.

Scoring:

Meets Expectations

- 9-10 points

Partially Meets Expectations

- 7-8 points

Does Not Meet Expectations

- <7 points

Gateway 3: Usability

Criterion 3.2	The program includes a system of assessments identifying how materials provide tools, guidance, and support for teachers to collect, interpret, and act on data about student progress towards the standards.
Indicator 3i	Assessment information is included in the materials to indicate which standards are assessed.

Scoring:		
2 points <ul style="list-style-type: none"> Materials consistently identify the standards and practices assessed for formal assessments. 	1 point <ul style="list-style-type: none"> Materials identify the standards and practices assessed for some of the formal assessments. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> Materials consistently identify the standards and practices assessed for formal assessments, but do not include all standards and practices for the grade or course level. 	0 points <ul style="list-style-type: none"> Materials do not identify the standards and practices assessed for the formal assessments. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> Materials identify the standards and practices assessed for some of the formal assessments, but do not include all standards and practices for the grade or course level.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the assessment materials to determine whether they identify the standards being assessed for all formal assessment types. It is important to note that some assessments may be building toward the standards and not intended to measure full depth of the standards; these assessments should identify which aspects of the standards are being assessed and/or being built toward.

Formal assessments are determined by the publisher and could include all types: formative, summative, etc. Reviewers look for a list of standards assessed for the entire assessment and/or associated with each item/task. Reviewers look for evidence of identification only.

Indicator 3i Guiding Question:

Does assessment information included in the materials indicate which standards are assessed?

Evidence Collection

Review assessments and corresponding assessment guidance across the series. *Note: this is not an item analysis.

Look for and record evidence to:

- Describe how and where assessments clearly identify which standards are being assessed. Include the level at which the assessment is given (unit, lesson, etc.) and the level at which standards are identified (assessment, task, item, etc.).
- Describe any instances where standards are listed incorrectly or are not from the appropriate grade level/band.
- In the event that the assessments build toward grade-level or grade-band standards, describe whether the assessment information identifies which aspects of the standards are assessed. Also, describe how and where the materials include information that details how the assessments build toward the standards for the grade level or band.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- Where and how do the materials clearly identify which standards are assessed?
- Do the standards correlations or assessment guidance documents indicate if all standards for the grade level/band are assessed by the end of the grade level/band?
- If assessments are building towards the standards, do the materials identify which aspects of the standards are being assessed and how these contribute to building toward grade-level/grade-band standards?

Gateway 3: Usability

Criterion 3.2	The program includes a system of assessments identifying how materials provide tools, guidance, and support for teachers to collect, interpret, and act on data about student progress towards the standards.
Indicator 3j	Assessment system provides multiple opportunities throughout the grade, course, and/or series to determine students' learning and sufficient guidance to teachers for interpreting student performance and suggestions for follow-up.

Scoring:		
4 points <ul style="list-style-type: none"> Assessment system provides multiple opportunities to determine students' learning and sufficient guidance to teachers for interpreting student performance. <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> Assessment system provides multiple opportunities to determine students' learning and suggestions to teachers for following-up with students. 	2 point <ul style="list-style-type: none"> Assessment system provides multiple opportunities to determine students' learning and sufficient guidance to teachers for interpreting student performance but does not provide suggestions for following-up with students. <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> Assessment system provides multiple opportunities to determine students' learning and suggestions to teachers for following-up with students but does not provide sufficient guidance for interpreting student performance. 	0 points <ul style="list-style-type: none"> Assessment system does not provide multiple opportunities to determine students' learning and sufficient guidance to teachers for interpreting student performance. <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> Assessment system does not provide multiple opportunities to determine students' learning and suggestions to teachers for following-up with students.

About this indicator:

What is the purpose of this Indicator?

This indicator examines assessments and corresponding assessment guidance across the series, including answer keys, rubrics, and other assessment scoring tools (e.g., sample student responses, scoring guidelines, and open-ended feedback), guidance for teachers to interpret student performance, and suggestions for follow-up based on student performance.

Indicator 3j Guiding Question:

Does the assessment system provide multiple opportunities throughout the grade, course, and/or series to determine students' learning and sufficient guidance to teachers for interpreting student performance and suggestions for follow-up?

Evidence Collection

Review assessments and corresponding assessment guidance across the series, including answer keys, rubrics, and other assessment scoring tools.

Look for and record evidence to:

- Describe if and how assessments provide tools for scoring purposes (e.g., sample student responses, rubrics, scoring guidelines, and open-ended feedback).
- Describe whether guidance is provided to teachers to interpret student understanding. Look for task-specific scoring guidance to help determine if a student has met the expectations.
- Describe whether teachers are provided with guidance to respond to student needs elicited by the assessment. Record evidence about follow-up steps/suggestions provided for the teacher.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- How and where do the materials provide tools to score assessment items?
- Is guidance consistently provided to teachers to interpret student understandings?
- Are teachers consistently provided with guidance to respond to student needs elicited by the assessment?

Gateway 3: Usability

Criterion 3.2	The program includes a system of assessments identifying how materials provide tools, guidance, and support for teachers to collect, interpret, and act on data about student progress towards the standards.
Indicator 3k	Assessments include opportunities for students to demonstrate the full intent of grade-level/course-level standards and practices across the series.

Scoring:		
4 points <ul style="list-style-type: none"> Assessments include opportunities for students to demonstrate the full intent of grade-level/course-level standards and practices across the series. 	2 points <ul style="list-style-type: none"> Assessments do not include opportunities for students to demonstrate the full intent of grade-level/course-level standards across the series. OR Assessments do not include opportunities for students to demonstrate the full intent of grade-level/course-level practices across the series. 	0 points <ul style="list-style-type: none"> Assessments do not include opportunities for students to demonstrate the full intent of grade-level/course-level standards and practices across the series.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the assessments within and across the materials to determine whether they include a variety of assessment types that are constructed in a manner that allows for the depth of the grade-level standards and practices to be assessed.

Research or Standards connection:

[CCSSO Criteria for High Quality Assessment: Section C - Align to Standards - Mathematics](#)

Indicator 3k Guiding Question:

Do the assessments include opportunities for students to demonstrate the full intent of grade-level/course-level standards and practices across the series?

Evidence Collection

Review assessments and corresponding assessment guidance across the series.

Look for and record evidence to:

- Describe the different types of modalities (e.g., writing, illustrating, demonstrating, modeling, oral presentations, and performance tasks) used for student assessments.
- Describe the different types of items used for student assessments and how they are used to measure student performance (e.g., performance tasks, discussion questions, constructed response questions, project- or problem-based tasks, portfolios, justified multiple choice).
- Demonstrate that assessments address sufficient complexity.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- Do the assessments include a variety of modalities (e.g., writing, illustrating, demonstrating, modeling, oral presentations, and performance tasks) and how are they used across different assessments, grades/courses, and series?
- Do the assessments include a variety of types (e.g., performance tasks, discussion questions, constructed response questions, project- or problem-based tasks, portfolios, justified multiple choice) and how are they used across different assessments, grades/courses, and series?
- Is there a good balance of complexity in assessment tasks?

Gateway 3: Usability

Criterion 3.2	The program includes a system of assessments identifying how materials provide tools, guidance, and support for teachers to collect, interpret, and act on data about student progress towards the standards.
Indicator 3I	Assessments offer accommodations that allow students to demonstrate their knowledge and skills without changing the content of the assessment.

Scoring: Narrative Evidence Only

Note: No score is given for this indicator. Only qualitative evidence is provided.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the series' assessments and assessment guidance documentation to determine what accommodations are available.

Indicator 3I Guiding Question:

Do the assessments offer accommodations that allow students to demonstrate their knowledge and skills without changing the content of the assessment?

Evidence Collection

Review assessments and corresponding assessment guidance across the series.

Look for and record evidence to:

- Describe where and how accommodations are offered that ensure all students can access the assessment, (e.g. text to speech, increased font size, etc.) without changing the content of the assessment.
- Describe any guidance for teachers on the use of provided accommodations.
- Describe whether any accommodations alter grade-level/course expectations or the content of the assessment for students.
- Describe any guidance provided for teachers to account for varied levels of English language proficiency without changing the content of the assessment, yet still allowing Multilingual Learners (MLLs)² to show grade level mastery regardless of language ability.
- Describe any guidance provided for teachers to allow for students with disabilities to demonstrate their knowledge and skills without changing the content of the assessment.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

² At EdReports, we use the term “multilingual learners” when we refer to students who are developing proficiency in multiple languages including students learning English as an additional language in school. This choice is the organization’s attempt to use more asset-based language.

- Where and how do the assessments provide accommodations for students?
- Where and how is guidance provided for teachers to use the accommodations?
- Do accommodations alter grade-level/course expectations for students?
- Are current instructional supports for MLLs maintained through the assessment process?
- Are current instructional supports for Students with Disabilities maintained through the assessment process?

Gateway 3: Usability

Criterion 3.3

Student Supports

The program includes materials designed for each student's regular and active participation in grade-level/grade-band/series content.

What is the purpose of this Criterion?

This criterion examines how the materials:

- leverage diverse cultural and social backgrounds of students.
- provide appropriate support, accommodations, and modifications for special populations that support regular and active participation in mathematics.
- provide multiple access points for students at varying ability levels to make sense of mathematics.
- include multi-modal opportunities for students to share their thinking.
- represent people of various demographic and physical characteristics.
- provide opportunities for teachers to use a variety of grouping strategies.
- are made accessible by providing appropriate supports for different reading levels.

Scoring:

Meets Expectations

- 8 points

Partially Meets Expectations

- 6-7 points (*with no 0s)

Does Not Meet Expectations

- <6 points

Gateway 3: Usability

Criterion 3.3	The program includes materials designed for each student's regular and active participation in grade-level/grade-band/series content.
Indicator 3m	Materials provide strategies and supports for students in special populations to support their regular and active participation in learning grade-level/series mathematics.

Scoring:		
2 points <ul style="list-style-type: none"> Materials regularly provide strategies, supports, and resources for students in special populations to support their regular and active participation in grade-level mathematics. 	1 point <ul style="list-style-type: none"> Materials do not regularly provide strategies, supports, and resources for students in special populations to support their regular and active participation in grade-level mathematics. 	0 points <ul style="list-style-type: none"> There are no strategies, supports, or resources for students in special populations to support their regular and active participation in grade-level mathematics.

About this indicator:

What is the purpose of this Indicator?

This indicator examines whether the materials provide strategies, supports, and resources for students in special populations to support their regular and active participation in grade-level mathematics.

Research or Standards connection:

For this indicator, special populations refers to students that must overcome barriers that may require special consideration and attention to ensure equal opportunity for success and in an educational setting.

Resources:

- [Supporting Special Populations, Office of Elementary and Secondary Education](#)

Indicator 3m Guiding Question:

What opportunities are there for students in special populations to engage with materials to support ongoing participation in grade-level mathematics content?

Evidence Collection

Review teacher and student materials across the series.

Look for and record evidence to:

- Describe where and how the materials provide specific strategies and supports for differentiating instruction to meet the needs of students in special populations.
- Identify whether the materials support students in special populations in regular and active participation in grade-level mathematics and include any instances where differentiation does not present opportunities to engage students in the work of the grade level.
- Describe teacher guidance around using grouping strategies with students in special populations.

Note - There must be more than a statement at the beginning of the chapter or lesson that is generic or states that the same strategy could be used with every lesson.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- How and where do materials provide appropriate differentiated strategies and supports for students in special populations?
- Do materials provide differentiation supports to sufficiently engage students in grade-level/course-level mathematics?
- Do the materials include overarching guidance on strategies and accommodations for special populations? Are these evident in lessons?

Gateway 3: Usability

Criterion 3.3	The program includes materials designed for each student's regular and active participation in grade-level/grade-band/series content.
Indicator 3n	Materials provide extensions and/or opportunities for students to engage with grade-level/course-level mathematics at higher levels of complexity.

Scoring:		
2 points <ul style="list-style-type: none"> Materials provide multiple opportunities for advanced students to investigate the grade-level mathematics at a higher level of complexity. AND No instances of advanced students doing more problems than their classmates. 	1 point <ul style="list-style-type: none"> Materials provide some opportunities for advanced students to investigate the grade-level mathematics at a higher level of complexity. AND There are few instances of advanced students doing more problems than their classmates. 	0 points <ul style="list-style-type: none"> Materials provide few, if any, opportunities for advanced students to investigate the grade-level mathematics at a higher level of complexity. OR There are many instances of advanced students doing more problems than their classmates.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the materials to determine whether the materials provide opportunities for advanced students to engage in grade-level mathematics at a higher level of complexity.

Indicator 3n Guiding Question:

What opportunities are present for students to engage in learning with grade-level mathematics at higher levels of complexity?

Are the opportunities that are present purposeful investigations or extensions?

Do the opportunities extend learning of the grade-level content or topic?

Evidence Collection

Review the student materials across the series.

Look for and record evidence to:

- Describe how and where advanced students have opportunities to work at a higher level of complexity with a standard. Note - this is not students completing additional tasks or more work, but is an extension of their learning.

- Identify strategies and supports for advanced students exploration of grade-level content at a higher level of complexity.
- Describe teacher guidance around using grouping strategies with advanced students.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- Where and how do the materials present opportunities specific to extending students' learning of the grade-level content?
- Where and how do the materials present opportunities to students to engage in grade-level content at a higher level of complexity?
- What opportunities do students have to develop and apply higher-level thinking?
- What strategies and supports are available for students to engage in grade-level content at a higher level of complexity?

Gateway 3: Usability

Criterion 3.3	The program includes materials designed for each student's regular and active participation in grade-level/grade-band/series content.
Indicator 3o	Materials provide varied approaches to learning tasks over time and variety in how students are expected to demonstrate their learning with opportunities for students to monitor their learning.

Scoring: Narrative Evidence Only

Note: No score is given for this indicator. Only qualitative evidence is provided.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the materials for a variety of approaches to learning tasks over the grade level and grade band, a variety of opportunities for students to demonstrate their learning over time, opportunities for students to receive oral and/or written peer or teacher feedback, and opportunities for students to monitor and move their learning.

Indicator 3o Guiding Question:

What approaches to presentation of material are provided?

What approaches are provided for students to demonstrate and monitor their learning?

Do the approaches to presentation and demonstration of learning vary over the course of the year?

Evidence Collection

Review teacher and student materials across the series.

Look for and record evidence to:

- Describe how and where the materials provide multi-modal opportunities for students to question, investigate, sense-make, and problem-solve using a variety of formats and methods.
- Describe how and where students have opportunities to share their thinking, to demonstrate changes in their thinking over time, and to apply their understanding in new contexts.
- Describe how the program leverages the use of a variety of formats and methods over time to deepen student understanding and ability to explain and apply mathematics ideas.
- Describe if and how materials provide for ongoing review, practice, self-reflection, and feedback.
- Describe if and how materials provide multiple strategies, such as oral and/or written feedback, peer or teacher feedback, and self-reflection.
- Describe if and how materials provide a clear path for students to monitor and move their own learning.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- How and where do the materials provide multi-modal opportunities for students to question, investigate, sense-make, and problem-solve using a variety of formats and methods?
- How and where do students have opportunities to share their thinking, to compare their thinking with other students or to new ideas presented in the learning opportunities, to demonstrate changes in their thinking over time, and to apply their understanding in new contexts?
- Where and how often do the materials provide for ongoing review, practice, self-reflection, and feedback?
- Where and how often do the materials provide guidance for multiple feedback strategies, such as oral and/or written feedback?
- Where and how often do the materials provide guidance for multiple strategies for peer or teacher feedback?
- Where and how often do the materials encourage students to monitor their own progress based on feedback and self-reflection?
- Where and how often do the materials provide a clear path for students to monitor and move their own learning?

Gateway 3: Usability

Criterion 3.3	The program includes materials designed for each student's regular and active participation in grade-level/grade-band/series content.
Indicator 3p	Materials provide opportunities for teachers to use a variety of grouping strategies.

Scoring: Narrative Evidence Only

Note: No score is given for this indicator. Only qualitative evidence is provided.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the materials to determine the types and frequency of grouping strategies for teachers to use and to determine if guidance is provided to teachers on how and when to use specific grouping strategies.

Note: Evidence for grouping strategies with: special populations will be in 3m; advanced students in 3n; and MLLs in 3q.

Indicator 3p Guiding Question:

Do the materials provide opportunities for teachers to use a variety of grouping strategies?

Evidence Collection

Review teacher and student materials across the series.

Look for and record evidence to:

- Describe how and where the materials provide grouping strategies for students.
- Describe how and where the materials provide for interaction among students and the types of interactions provided.
- Describe how and where the materials provide guidance for the teacher on grouping students in a variety of grouping formats.

Note: If you identify grouping strategies specifically targeted to differentiated populations, please assign that evidence to the associated indicators (special populations will be in 3m; advanced students in 3n; MLLs in 3q).

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- How and where do materials provide different grouping strategies? How does this differ based on the needs of particular students?
- How and where do materials balance whole group, small group, and individual instruction to provide for interaction among students?

- How and where do the materials provide guidance for the teacher on how and when to use specific grouping strategies?

Gateway 3: Usability

Criterion 3.3	The program includes materials designed for each student's regular and active participation in grade-level/grade-band/series content.
Indicator 3q	Materials provide strategies and supports for students who read, write, and/or speak in a language other than English to regularly participate in learning grade-level mathematics.

Scoring:

2 points	1 point	0 points
<ul style="list-style-type: none"> Materials consistently provide strategies and supports for students who read, write, and/or speak in a language other than English to meet or exceed grade-level standards through regular and active participation in grade-level mathematics. 	<ul style="list-style-type: none"> Materials provide strategies and supports for students who read, write, and/or speak in a language other than English to meet or exceed grade-level standards through active participation in grade-level mathematics, but not consistently. 	<ul style="list-style-type: none"> Materials do not provide strategies and supports for students who read, write, and/or speak in a language other than English to meet or exceed grade-level standards through regular and active participation in grade-level mathematics.

About this indicator:

What is the purpose of this Indicator?

This indicator examines whether the materials provide strategies, supports, and resources for students who read, write, and/or speak in a primary language other than English to support their regular and active participation in grade-level mathematics.

Indicator 3q Guiding Question:

Do the materials provide strategies and supports for students who read, write, and/or speak in a language other than English to regularly participate in learning grade-level mathematics?

Evidence Collection

Review teacher and student materials across the series.

Look for and record evidence to:

- Describe how the materials frame their MLL approach and supports throughout the program for the explicit purpose of ensuring they are able to meet the standards.
- Describe how the materials provide strategies, appropriate support, and accommodations that will support MLLs' regular and active participation. Include opportunities for speaking, listening, reading, and writing to develop practices and knowledge of the subject matter. This may include scaffolding, but should scaffold up towards grade-level work.

- Describe content-specific or lesson-specific strategies or materials provided for supporting all students in engaging in grade-level/grade-band instruction. There must be more than a statement at the beginning of the chapter or lesson that is generic or states that the same strategy could be used with every lesson, and there needs to be specific supports and/or routines that allow students to access grade-level instruction and content.
- Describe teacher guidance to support MLLs and to utilize the strategies, supports, and/or accommodations found. Also, describe how the learning opportunities and assessments help teachers identify and follow-up on whether the student has success in content vs. language acquisition, as well as identify when students may have misconceptions with content vs. language demand, to ensure the two are not conflated.
- Describe how the materials incorporate varied approaches to learning tasks over time and variety in how students are expected to demonstrate their learning of grade-level content with opportunities for students to do so in various ways as their language development progresses.
- Describe teacher guidance around using grouping strategies with MLLs. Is there guidance as to how to use language proficiency in grouping students, i.e., when to group students by home language or by language proficiency, either heterogeneously or homogeneously?

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- Where do materials provide appropriate support, and accommodations for MLLs that will support their regular and active participation in learning mathematics?
- Where is there evidence of specific resources and strategies supporting all students?
- Where are differentiation supports present for MLLs?
- What materials would help teachers provide lessons and concepts to help support these students?
- Are there oral language development activities (speaking and listening) for students that provide pathways, including scaffolds and supports for MLLs to engage with grade-level content and to develop disciplinary practices and knowledge of the subject matter? Speaking and listening activities without specific supports for MLLs would not be sufficient evidence.
- Are there reading and writing activities that engage MLLs in topics and prompts with peers and teacher throughout and as an integral part of the reading and writing process to develop disciplinary practices and knowledge of the subject matter?
- Do the materials for teachers provide guidance for instructional practices that promote student agency and learner autonomy for MLLs?
- Do the materials provide guidance for teachers to anticipate and address potential language demands and opportunities that may interfere with engagement of content? Do they clearly identify where both student successes and challenges may be rooted in misconceptions in content vs. language demands, through learning and assessment?
- Do the materials support teachers in identifying students at various language levels with guidelines for supporting these students in monitoring and moving their language development along the English proficiency progression?
- For MLLs still developing their language skills but exceeding in their ability to engage in grade-level content, do the materials allow for them to develop and deepen their understanding of concepts in their primary language?
- Are there vocabulary development supports specific to MLLs, not just to the content? If the focused-upon words are needed to grapple with the linguistic demand of the lesson, then they are MLL supports. If all students need content vocabulary knowledge to be successful in the lesson, then activities and strategies to learn those content-specific words are not MLL strategies.
- Are supports for MLLs differentiated based on level of language proficiency?
- Have we chosen evidence that is specific to supporting the language development of MLLs?

Gateway 3: Usability

Criterion 3.3	The program includes materials designed for each student's regular and active participation in grade-level/grade-band/series content.
Indicator 3r	Materials provide a balance of images or information about people, representing various demographic and physical characteristics.

Scoring: Narrative Evidence Only

Note: No score is given for this indicator. Only qualitative evidence is provided.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the series to determine if the materials include a balance of images or information about people, representing various demographic and physical characteristics.

Indicator 3r Guiding Question:

Do the materials provide a balance of images or information about people, representing various demographic and physical characteristics?

Evidence Collection

Review the student materials across the series.

Look for and record evidence to:

- Describe if and how the materials provide examples of various demographic and physical characteristics.
- Describe if the images and those represented show students engaging in and able to do the work related to the context of the learning.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- How and where do materials and assessments depict different individuals of different genders, races, ethnicities, and other physical characteristics?
- How and where do materials and assessments balance positive portrayals of demographics or physical characteristics? Do names used in assessments, or images throughout the materials depict different genders, races, ethnicities, and other physical characteristics?
- Do the materials avoid stereotypes or language that might be offensive to a particular group?
- Are depictions of demographics or physical characteristics portrayed positively across the series, or is one demographic represented more positively than others? For example, do assessment items proportionately use male and female names for both correct and incorrect responses, or is one gender predominately used for incorrect responses?

- Do the materials provide representations that show students that they can succeed in the subject, going beyond just showing photos of diverse students not engaged in work related to the context of the learning?

Gateway 3: Usability

Criterion 3.3	The program includes materials designed for each student's regular and active participation in grade-level/grade-band/series content.
Indicator 3s	Materials provide guidance to encourage teachers to draw upon student home language to facilitate learning.

Scoring: Narrative Evidence Only

Note: No score is given for this indicator. Only qualitative evidence is provided.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the materials for teacher guidance on connecting learning opportunities to students through use of student home language.

Indicator 3s Guiding Question:

Do the materials present multilingualism as an asset in reading, and encourage support teachers of MLLs to use their students' home language strategically for learning how to negotiate texts in the target language?

Do the materials include instructions on how to garner information of a students' home language that will aid in learning?

Evidence Collection

Review teacher and student materials across the series.

Look for and record evidence to:

- Describe how the materials provide suggestions and strategies to use the home language to support students in learning mathematics.
- Describe how the materials present multilingualism as an asset in reading and learning mathematics, and how to use students' home language strategically for learning how to negotiate text in the target language.
- Describe how teacher materials include guidance on how to garner information that will aid in learning, including the family's preferred language of communication, schooling experiences in other languages, literacy abilities in other languages, and previous exposure to academic or everyday English. Include whether and how the materials guide teachers to use this information strategically in instruction.

Cluster Meeting

Discuss and answer the following question to support consensus scoring conversations:

- What strategies are present to utilize student home language in context with the materials? Are these strategies generalized or specific to certain content?

- Do materials promote home language and knowledge as an asset to engage students in the content material?
- Do the materials use student home language as an additional support to gain access to the content, or rely on students understanding the content in their home language?
- Do the materials recognize all languages, or rely on known information about some of the prevalent languages (i.e., cognates in Spanish)?

Gateway 3: Usability

Criterion 3.3	The program includes materials designed for each student's regular and active participation in grade-level/grade-band/series content.
Indicator 3t	Materials provide guidance to encourage teachers to draw upon student cultural and social backgrounds to facilitate learning.

Scoring: Narrative Evidence Only

Note: No score is given for this indicator. Only qualitative evidence is provided.

About this indicator:

What is the purpose of this Indicator?

This indicator examines whether materials are designed to elicit and leverage diverse cultural and social backgrounds of students.

Indicator 3t Guiding Question:

Do the materials provide guidance to encourage teachers to draw upon student cultural and social backgrounds to facilitate learning?

Evidence Collection

Review teacher and student materials across the series.

Look for and record evidence to:

- Describe if and how materials make connections to the linguistic, cultural, and conventions used in learning mathematics.
- Describe if and how materials make connections to the linguistic and cultural diversity to facilitate learning.
- Identify if teacher guidance is present on how to engage culturally diverse students in the learning of mathematics.
- Identify equity guidance and opportunities in the materials.
- Identify opportunities for students to feel “acknowledged” such as tasks based on customs of other cultures.
- Identify prompts where students are encouraged to share how they (or their parents) do things at home or use information to create personal problems, etc.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- How well do the materials capitalize on diverse cultural and social backgrounds of students?
- How well do the materials help to promote equity and access (across genders, cultures, or countries of origin)?

- How well are the learning goals, instructional activities, text, and images presented in a context designed to leverage diverse cultural and social backgrounds of students?
- How well are the learning goals, instructional activities, text, or images, likely to be relevant, interesting and/or motivating to students?
- How well do the materials connect to the students' funds of knowledge, culture, or community?

Gateway 3: Usability

Criterion 3.3	The program includes materials designed for each student’s regular and active participation in grade-level/grade-band/series content.
Indicator 3u	Materials provide supports for different reading levels to ensure accessibility for students.

Scoring: Narrative Evidence Only

Note: No score is given for this indicator. Only qualitative evidence is provided.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the materials to determine if supports are present for a range of students at a variety of reading levels to engage with grade-level mathematics.

Indicator 3u Guiding Question:

Do the materials provide supports for different reading levels to ensure accessibility for students?

Evidence Collection

Review teacher and student materials across the series.

Look for and record evidence to:

- Identify strategies to engage students in reading and accessing grade-level mathematics. Note: strategies and supports for engaging students in MP1, Make sense and persevere in solving problems and MP6, Attending to precision in language can also be noted here.
- Identify multiple entry points that present a variety of representations to help struggling readers to access and engage in grade-level mathematics.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- How and where do the materials include specific supports or strategies to support students who read below grade level to engage with grade-level mathematics?
- How and where do the materials scaffold vocabulary or concepts to support readers below grade level?
- How and where do the materials use a variety of representations to engage students with grade-level content?
- Do materials include “just-right” pre-reading activities that offer visuals and other types of supports and scaffolds for building essential and pertinent background knowledge on new or unfamiliar themes/ topics?

Gateway 3: Usability

Criterion 3.3	The program includes materials designed for each student's regular and active participation in grade-level/grade-band/series content.
Indicator 3v	Manipulatives, both virtual and physical, are accurate representations of the mathematical objects they represent and, when appropriate, are connected to written methods.

Scoring:		
2 points <ul style="list-style-type: none"> Manipulatives are accurate representations of mathematical objects and are connected to written methods. 	1 point <ul style="list-style-type: none"> Manipulatives are accurate representations of mathematical objects. OR Manipulatives are connected to written methods. 	0 points <ul style="list-style-type: none"> Manipulatives are not accurate representations of mathematical objects and are not connected to written methods.

About this indicator:

What is the purpose of this Indicator?

This indicator determines how materials include manipulatives to support and represent mathematical objects, and connect to grade-level written methods.

Indicator 3v Guiding Question:

Are manipulatives, both virtual and physical, accurate representations of the mathematical objects they represent and, when appropriate, are connected to written methods?

Evidence Collection

Review teacher and student materials across the series.

Look for and record evidence to:

- Identify the use of physical and/or virtual manipulatives. Examples of manipulatives (physical or virtual) could include: two-color counters, calculator, coins, number cubes, playing cards, string, square tiles, unit cubes, colored chips, algebra tiles, grid paper, index cards, anchor charts, ruler, compass, protractor, geometry software, bar diagrams, fraction strips, number lines, decimal grids, x-y tables, pie charts, etc.
- Identify situations where manipulatives help students develop understanding of a concept.
- Describe if and how manipulatives are used and who is using them. Look for routine use of manipulatives so students understand their purpose and can independently choose to use any tools helpful to them, both for learning and for explaining their understanding.
- Identify alignment with content where manipulatives help develop conceptual understanding, as well as instances where they could be beneficial but are not used.

- Describe if and how students connect, and eventually transition from, the use of manipulatives to written methods.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- How often are manipulatives used to develop understanding of content?
- Do students use manipulatives in a variety of situations so they understand their purpose and can use them effectively? Or do they just "check a box"?
- How are manipulatives used to build toward a written process?

Gateway 3: Usability

Criterion 3.4

Intentional Design

The program includes a visual design that is engaging and references or integrates digital technology, when applicable, with guidance for teachers.

What is the purpose of this Criterion?

This criterion:

- examines how the materials integrate digital technology and interactive tools to support student engagement in mathematics.
- examines how the materials use digital technology to provide collaborative opportunities for teachers and/or students.
- examines how the embedded technology and visual design supports student engagement and learning.

Scoring: Narrative Evidence Only

Note: No score is given for this criterion. Only qualitative evidence is provided.

Gateway 3: Usability

Criterion 3.4	The program includes a visual design that is engaging and references or integrates digital technology, when applicable, with guidance for teachers.
Indicator 3w	Materials integrate technology such as interactive tools, virtual manipulatives/objects, and/or dynamic mathematics software in ways that engage students in the grade-level/series standards, when applicable.

Scoring: Narrative Evidence Only

Note: No score is given for this indicator. Only qualitative evidence is provided.

About this indicator:

What is the purpose of this Indicator?

This indicator examines whether materials integrate interactive tools and/or dynamic software in ways that support student engagement in mathematics and is applicable to materials with digital components only.

Indicator 3w Guiding Question:

Do the materials integrate interactive tools and/or dynamic software in ways that support student engagement in mathematics, when applicable?

Evidence Collection

Review teacher and student materials across the series.

Look for and record evidence to:

- Describe if and how digital technology and interactive tools such as data collection tools, simulations, virtual manipulatives, and/or modeling tools are available to students.
- Describe if and how digital materials support students' engagement in “doing” math.
- Describe if and how digital materials can be customized for local use (i.e., student and/or community interests).
- Identify alignment to the course-level content standards and Mathematical Practices.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- What digital technology and interactive tools are included in the materials?
- How are digital technology and interactive tools, such as data collection tools, simulations, and/or modeling tools made available to students?
- How do included digital tools support student engagement in mathematics?
- How can digital materials be customized for local use (i.e., student and/or community interests)?

Gateway 3: Usability

Criterion 3.4	The program includes a visual design that is engaging and references or integrates digital technology, when applicable, with guidance for teachers.
Indicator 3x	Materials include or reference digital technology that provides opportunities for teachers and/or students to collaborate with each other, when applicable.

Scoring: Narrative Evidence Only

Note: No score is given for this indicator. Only qualitative evidence is provided.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the series to determine if the materials provide opportunities and guidance for teachers and/or students to collaborate with each other and is applicable to materials with digital components only.

Indicator 3x Guiding Question:

Do the materials include or reference digital technology that provides opportunities for teachers and/or students to collaborate with each other, when applicable?

Evidence Collection

Review teacher and student materials across the series.

Look for and record evidence to:

- Describe how and where the materials include or reference digital technology that provides opportunities for teachers and/or students to collaborate with each other.
- Describe which stakeholders the materials support collaboration between: teacher to teacher, teacher to student, or student to student.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- How and where do the materials provide opportunities for online or digital collaboration?
- How and where do the materials provide opportunities for students to collaborate with the teacher and/or with other students?

Gateway 3: Usability

Criterion 3.4	The program includes a visual design that is engaging and references or integrates digital technology, when applicable, with guidance for teachers.
Indicator 3y	The visual design (whether in print or digital) supports students in engaging thoughtfully with the subject, and is neither distracting nor chaotic.

Scoring: Narrative Evidence Only

Note: No score is given for this indicator. Only qualitative evidence is provided.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the visual design to determine if images, graphics, and models support student learning and engagement, without being visually distracting; examines for consistency in layout of the teacher and student materials; examines resources to determine whether they clearly communicate information; and examines resources to determine whether they contain any errors as they relate to usability.

Indicator 3y Guiding Question:

Does the visual design (whether in print or digital) support students in engaging thoughtfully with the subject, and is neither distracting nor chaotic?

Evidence Collection

Review teacher and student materials across the series.

Look for and record evidence to:

- Describe how images, graphics, and models support student learning and engagement without being visually distracting.
- Describe whether teacher and student materials are consistent in layout and structure across lessons/modules/units.
- Describe if and how the images, graphics, and models clearly communicate information or support student understanding of topics, texts, or concepts.
- Identify any errors in the resources related to usability.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- Do all images, graphics, and models support student learning and engagement, without being visually distracting?
- Are the teacher and student materials consistent in layout and structure?
- Are there any directions, questions, or information in the materials or assessments that are ambiguous, unclear, or inaccurate?

- Are the organizational features (Table of Contents, glossary, index, internal references, table headers, captions, etc.) in the materials clear, accurate, and error-free?

Gateway 3: Usability

Criterion 3.4	The program includes a visual design that is engaging and references or integrates digital technology, when applicable, with guidance for teachers.
Indicator 3z	Materials provide teacher guidance for the use of embedded technology to support and enhance student learning, when applicable.

Scoring: Narrative Evidence Only

Note: No score is given for this indicator. Only qualitative evidence is provided.

About this indicator:

What is the purpose of this Indicator?

This indicator examines the materials to determine whether they provide teacher guidance for the use of embedded technology to support and enhance student learning and is applicable to materials with digital components only.

Indicator 3z Guiding Question:

Do the materials provide teacher guidance for the use of embedded technology to support and enhance student learning, when applicable?

Evidence Collection

Review teacher materials across the series.

Look for and record evidence to:

- Describe where and how the materials provide guidance for using embedded technology to support and enhance student learning, where applicable.

Cluster Meeting

Discuss and answer the following questions to support consensus scoring conversations:

- Where and how do teacher materials provide guidance for using embedded technology to support and enhance student learning, where applicable?