

Instructional Materials Review and Approval

Supplemental Mathematics K–12 Quality Rubric

Awaiting approval by the State Board of Education

Implementation Quality

| Section | Score |
|---|-------|
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| 3 – Supports for All Learners | |
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Learning Quality

| Section | Score |
|--|-------|
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| 4.1 Depth of Key Concepts | |
| 4.2 Coherence of Key Concepts | |
| 4.3 Coherence and Variety of Practice | |
| 5 – Balance of Conceptual and Procedural Understanding | |
| 5.1 Development of Conceptual Understanding | |
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| 5.3 Balance of Conceptual Understanding and Procedural Fluency | |
| 5.4 Development of Academic Mathematical Language | |
| 5.5 Process Standards Connections | |
| 6 – Productive Struggle | |
| 6.1 Student Self-Efficacy | |
| 6.2 Facilitating Productive Struggle | |

Implementation Quality

1. Intentional Instructional Design

Materials support educators in effective implementation through intentional course, reporting category, and lesson-level design.

1.1 Course-Level Design

| | K-5 | 6-12 |
|------|--|--|
| 1.1a | Materials include a comprehensive mapping framework outlining the TEKS, ELPS, concepts, and knowledge taught in the materials, including mathematical standards across grade bands (vertical alignment) and within the same grade level across mathematical concepts (horizontal alignment). | Materials include a comprehensive mapping framework outlining the TEKS, ELPS, concepts, and knowledge taught in the materials, including mathematical standards across grade bands (vertical alignment) and within the same grade level across mathematical concepts (horizontal alignment). |
| 1.1b | Materials include a suggested implementation guide that provides strategies for effective use in various contexts (e.g., just-in-time support, advanced learning, or as a course). | Materials include a suggested implementation guide that provides strategies for effective use in various contexts (e.g., just-in-time support, advanced learning, or as a course). |
| 1.1c | Materials include comprehensive reporting category overviews that provide the background content knowledge and academic vocabulary necessary to effectively teach the concepts in each lesson. | Materials include comprehensive reporting category overviews that provide the background content knowledge and academic vocabulary necessary to effectively teach the concepts in the lesson. |
| 1.1d | Materials offer a standards and reporting category correlation guide that provides guidance to support alignment with Tier 1 instructional materials and includes recommended entry points based on diagnostic assessment results. | Materials offer a standards and reporting category correlation guide that provides guidance to support alignment with Tier 1 instructional materials and includes recommended entry points based on diagnostic assessment results. |
| 1.1e | Materials include a rationale for the learning sequence and explain how concepts to be learned connect across grade bands (vertical alignment) and within the same grade level across concepts (horizontal alignment). | Materials include a rationale for the learning sequence and explain how concepts to be learned connect across grade bands (vertical alignment) and within the same grade level across concepts (horizontal alignment). |
| 1.1f | Materials include guidance, protocols, or templates for lesson and/or activity internalization. | Materials include guidance, protocols, or templates for lesson and/or activity internalization. |
| 1.1g | Materials include various resources and guidance to support educators, administrators, and instructional coaches in implementing the materials as designed. | Materials include various resources and guidance to support educators, administrators, and instructional coaches in implementing the materials as designed. |

1.2 Lesson-Level Design

| | K-5 | 6-12 |
|-------|--|--|
| 1.2a | Static materials include comprehensive, structured, detailed lesson plans that include learning objectives, questions, tasks or activities, materials lists, and assessment resources required to meet the content and language standards of the lesson. | Static materials include comprehensive, structured, detailed lesson plans that include learning objectives, questions, tasks or activities, materials lists, and assessment resources required to meet the content and language standards of the lesson. |
| 1.2ai | Adaptive materials are responsive and include instructional overviews for educators that list the objectives, questions, tasks, or activities, and assessment component(s) that meet the content and language standards of the lesson or activity. | Adaptive materials are responsive and include instructional overviews for educators that list the objectives, questions, tasks, or activities, and assessment component(s) that meet the content and language standards of the lesson or activity. |
| 1.2b | Materials include a lesson overview outlining the suggested timing for each lesson and lesson component. | Materials include a lesson overview outlining the suggested timing for each lesson and lesson component. |
| 1.2c | Materials include a lesson overview listing the educator and student materials necessary to effectively deliver the lesson and address student misconceptions. | Materials include a lesson overview listing the educator and student materials necessary to effectively deliver the lesson and address student misconceptions. |
| 1.2d | Materials contain support for families in both Spanish and English for each lesson, with suggestions on how to support the progress of their student(s). | Materials contain support for families in both Spanish and English for each lesson, with suggestions on how to support the progress of their student(s). |

2. Progress Monitoring

Materials support educators in effective implementation through frequent, strategic opportunities to monitor and respond to student progress.

2.1 Instructional Assessments

| | K-5 | 6-12 |
|------|--|--|
| 2.1a | Materials include the definition and intended purpose for the types of instructional assessments included. | Materials include the definition and intended purpose for the types of instructional assessments included. |
| 2.1b | Materials include guidance to ensure consistent and accurate administration of instructional assessments. | Materials include guidance to ensure consistent and accurate administration of instructional assessments. |
| 2.1c | Digital assessments include printable copies and customizable accommodations, (such as text-to-speech, content and language supports, and calculators) that educators can enable or disable to support individual students with individualized education programs (IEPs), 504 plans, language proficiency assessment committees (LPACs), or district-based intervention plans. | Digital assessments include printable copies and customizable accommodations, (such as text-to-speech, content and language supports, and calculators) that educators can enable or disable to support individual students with individualized education programs (IEPs), 504 plans, language proficiency assessment committees (LPACs), or district-based intervention plans. |
| 2.1d | Materials include diagnostic assessments with varying types of tasks and questions, including interactive item types in digital assessment materials where applicable. | Materials include diagnostic assessments with varying types of tasks and questions, including interactive item types in digital assessment materials where applicable. |
| 2.1e | Diagnostic assessments are aligned to the TEKS and reporting categories and include assessment items at varying complexity levels. | Diagnostic assessments are aligned to the TEKS and reporting categories and include assessment items at varying complexity levels. |
| 2.1f | Materials include a variety of formative instructional assessments with varying types of tasks and questions, including interactive item types in digital assessment materials where applicable. | Materials include a variety of formative instructional assessments with varying types of tasks and questions, including interactive item types in digital assessment materials where applicable. |
| 2.1g | Formative assessments are aligned to the TEKS, and lesson or activity objectives and include assessment items at varying complexity levels. | Formative assessments are aligned to the TEKS and lesson or activity objectives and include assessment items at varying complexity levels. |

2.2 Data Analysis and Progress Monitoring

| | K-5 | 6-12 |
|-------|---|---|
| 2.2a | Instructional assessments and scoring information provide guidance for interpreting and responding to student performance, including rationale for each correct and incorrect response. | Instructional assessments and scoring information provide guidance for interpreting and responding to student performance, including rationale for each correct and incorrect response. |
| 2.2b | Materials provide guidance for using included tasks and activities to respond to student performance trends on assessments. | Materials provide guidance for using included tasks and activities to respond to student performance trends on assessments. |
| 2.2c | Materials include tools for students to track their own progress and growth. | Materials include tools for students to track their own progress and growth. |
| 2.2d | Static materials provide prompts and guidance to help educators conduct frequent and timely checks for understanding at key points throughout each lesson or activity. | Static materials provide prompts and guidance to help educators conduct frequent and timely checks for understanding at key points throughout each lesson or activity. |
| 2.2di | Adaptive materials provide frequent and timely checks for understanding at key points throughout each lesson or activity. | Adaptive materials provide frequent and timely checks for understanding at key points throughout each lesson or activity. |

3. Supports for All Learners

Materials support educators in reaching all learners through design focused on engagement, representation, and action/expression for learner variability.

3.1 Differentiation and Scaffolds

| | K-5 | 6-12 |
|------|--|--|
| 3.1a | Materials include educator guidance for explicit activities and lessons scaffolded for students who have not yet reached proficiency in foundational and grade-level mathematical concepts and skills. | Materials include educator guidance for explicit activities and lessons scaffolded for students who have not yet reached proficiency in grade-level mathematical concepts and skills. |
| 3.1b | Materials include educator guidance for language supports, including explicit pre-teaching and explicit embedded supports for developing academic vocabulary and unfamiliar references in text such as figurative language, idioms, and academic language. | Materials include educator guidance for language supports, including explicit pre-teaching and explicit embedded supports for academic vocabulary and unfamiliar references in text. |
| 3.1c | Materials provide enrichment and extension activities for students who have demonstrated proficiency in grade-level or above grade-level content and skills, including the above-grade level TEKS where academically appropriate. | Materials provide enrichment and extension activities for students who have demonstrated proficiency in grade-level or above grade-level content and skills, including the above-grade level TEKS where academically appropriate. |
| 3.1d | Materials include accommodations (such as text-to-speech, content and language supports, and calculators in digital products) that educators can enable or disable to support individual students with individualized education programs (IEPs), 504 plans, language proficiency assessment committees (LPACs), or intervention plans. | Materials include accommodations (such as text-to-speech, content and language supports, and calculators in digital products) that educators can enable or disable to support individual students with individualized education programs (IEPs), 504 plans, language proficiency assessment committees (LPACs), or intervention plans. |
| 3.1e | Materials provide educator guidance in providing options and supports for students to demonstrate learning of mathematical concepts in a variety of ways (e.g. perform, express, represent, etc.) | Materials provide educator guidance in providing options and supports for students to demonstrate learning of mathematical concepts in a variety of ways (e.g. perform, express, represent, etc.) |

3.2 Instructional Methods

| | K-5 | 6-12 |
|------|--|--|
| 3.2a | Materials include direct and explicit prompts and guidance to support building knowledge through multiple means of representation by linking to and activating prior knowledge, concept anchoring, and highlighting patterns, critical features, big ideas, and relationships. | Materials include direct and explicit prompts and guidance to support building knowledge through multiple means of representation by linking to and activating prior knowledge, concept anchoring, and highlighting patterns, critical features, big ideas, and relationships. |
| 3.2b | Static materials include educator guidance and recommendations for effective lesson delivery and facilitation where appropriate (including scaffolding and differentiation approaches) using various instructional approaches. | Static materials include educator guidance and recommendations for effective lesson delivery and facilitation where appropriate (including scaffolding and differentiation approaches) using various instructional approaches. |
| 3.2c | Materials include intervention methods that support multiple types of practice (e.g., guided, independent, or collaborative practice) and include guidance and recommended structures (e.g., whole group, small group, individual) for educators to support effective implementation, ensuring specific Multi-Tiered System of Support (MTSS) Tier 1-3 instructional recommendations are included. | Materials include Intervention methods that support multiple types of practice (e.g., guided, independent, or collaborative practice) and include guidance and recommended structures (e.g., whole group, small group, individual) for educators to support effective implementation, ensuring specific Multi-Tiered System of Support (MTSS) Tier 1-3 instructional recommendations are included. |
| 3.2d | Materials include enrichment and extension methods that support multiple types of engagement (e.g., activities, tasks, projects, real-world scenarios) and include guidance for educators and recommended structures (e.g. collaborative, paired, individual) to support effective implementation. | Materials include enrichment and extension methods that support multiple types of engagement (e.g., activities, tasks, projects, real-world scenarios) and include guidance for educators and recommended structures (e.g. collaborative, paired, individual) to support effective implementation. |
| 3.2e | Materials include prompts and guidance to support the educator in providing timely feedback during lesson delivery. | Materials include prompts and guidance to support the educator in providing timely feedback during lesson delivery. |

3.3 Support for Emergent Bilingual Students

| | K-5 | 6-12 |
|-------------|---|---|
| 3.3a | Materials include educator guidance on providing and incorporating lesson-level linguistic accommodations for various levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language. | Materials include educator guidance on providing and incorporating lesson-level linguistic accommodations for various levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language. |
| 3.3b | Materials include implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs. | Materials include implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs. |
| 3.3c | Materials include embedded guidance to support emergent bilingual students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through oral and written discourse. | Materials include embedded guidance to support emergent bilingual students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through oral and written discourse. |
| 3.3d | If designed for dual language immersion (DLI) programs, materials include resources that outline opportunities to address metalinguistic transfer from English to the partner language. | If designed for dual language immersion (DLI) programs, materials include resources that outline opportunities to address metalinguistic transfer from English to the partner language. |

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Learning Quality

4. Depth and Coherence of Key Concepts

Materials are designed to meet the rigor of the standards while connecting concepts within and across grade levels/courses.

4.1 Depth of Key Concepts

| | K-5 | 6-12 |
|-------------|--|--|
| 4.1a | Practice opportunities over the course of a lesson and/or within reporting categories (including assessments) require students to demonstrate depth of understanding aligned to the TEKS. | Practice opportunities over the course of a lesson and/or within reporting categories (including assessments) require students to demonstrate depth of understanding aligned to the TEKS. |
| 4.1b | Questions and tasks progressively increase in rigor and complexity, developing critical thinking and problem-solving skills, and leading to grade-level proficiency in the mathematics standards. | Questions and tasks progressively increase in rigor and complexity, developing critical thinking and problem-solving skills, and leading to grade-level proficiency in the mathematics standards. |
| 4.1c | Questions and tasks in enrichment and extension materials progressively increase in rigor and complexity, deepening conceptual understanding to support and exceed grade-level proficiency in the mathematics standards. | Questions and tasks in enrichment and extension materials progressively increase in rigor and complexity, deepening conceptual understanding to support and exceed grade-level proficiency in the mathematics standards. |

4.2 Coherence of Key Concepts

| | K-5 | 6-12 |
|-------------|---|---|
| 4.2a | Materials demonstrate coherence across standards/grade bands through a comprehensive mapping framework, organized by reporting category, which include mathematical standards across grade bands (vertical alignment) and within the same grade level across concepts (horizontal alignment). | Materials demonstrate coherence across standards/grade bands through a comprehensive mapping framework, organized by reporting category, which include mathematical standards across grade bands (vertical alignment) and within the same grade level across concepts (horizontal alignment). |
| 4.2b | Materials demonstrate coherence across reporting categories horizontally within grade level across concepts by connecting patterns, big ideas, and relationships between mathematical concepts through logical sequencing. | Materials demonstrate coherence across reporting categories horizontally within grade level across concepts by connecting patterns, big ideas, and relationships between mathematical concepts through logical sequencing. |
| 4.2c | Materials demonstrate coherence across reporting categories vertically across concepts and grade bands, including awareness of prerequisites and future learning implications up to 6th grade by connecting patterns, big ideas, and relationships between mathematical concepts through logical sequencing including guidance on connecting prerequisite grades to current learning. | Materials demonstrate coherence across reporting categories vertically across concepts and grade bands, including connections to 5th grade, by connecting patterns, big ideas, and relationships between mathematical concepts through logical sequencing. |
| 4.2d | Materials demonstrate coherence across lessons and/or activities by connecting students' prior knowledge of concepts and procedures learned in previous grade levels to the mathematical concepts to be learned in the current grade level. | Materials demonstrate coherence across lessons and/or activities by connecting students' prior knowledge of concepts and procedures learned in previous grade levels to the mathematical concepts to be learned in the current grade level. |
| 4.2e | Materials demonstrate coherence across lessons and/or activities by connecting students' knowledge of concepts and procedures learned to the mathematical concepts that will be learned in future grade levels. | Materials demonstrate coherence across lessons and/or activities by connecting students' knowledge of concepts and procedures learned to the mathematical concepts that will be learned in future grade levels. |

4.3 Coherence and Variety of Practice

| | K-5 | 6-12 |
|-------------|---|---|
| 4.3a | Materials provide spaced retrieval opportunities with previously learned skills and mathematical concepts aligned to grade-level standards. | Materials provide spaced retrieval opportunities with previously learned skills and mathematical concepts aligned to grade-level standards. |
| 4.3b | Materials offer interleaved practice opportunities that incorporate vertical and horizontal-aligned mathematical skills and concepts. | Materials offer interleaved practice opportunities that incorporate vertical and horizontal-aligned mathematical skills and concepts. |

5. Balance of Conceptual and Procedural Understanding

Materials are designed to balance conceptual understanding, procedural skill, and fluency.

5.1 Development of Conceptual Understanding

| | K-5 | 6-12 |
|-------------|--|--|
| 5.1a | Questions and tasks provide opportunities for students to interpret, analyze, and evaluate a variety of models and representations for mathematical concepts and situations. | Questions and tasks provide opportunities for students to interpret, analyze, and evaluate a variety of complex, real-world situations for mathematical concepts. |
| 5.1b | Questions and tasks provide opportunities for students to create a variety of models, such as concrete models and pictorial representations, to represent mathematical situations. | Questions and tasks provide opportunities for students to create, interpret, analyze, and evaluate a variety of models representing mathematical situations where appropriate. |
| 5.1c | Questions and tasks provide opportunities for students to develop and apply mathematical conceptual understanding to new problem situations and contexts. | Questions and tasks provide opportunities for students to apply conceptual understanding of mathematics to new problem situations and contexts. |

5.2 Development of Fluency

| | K-5 | 6-12 |
|-------------|---|---|
| 5.2a | Materials provide activities and tasks that are designed to build student fluency and automaticity necessary to complete grade-level mathematical tasks. | Materials provide activities and tasks that are designed to build student automaticity and fluency in pre-requisite skills and processes to complete grade-level mathematical tasks. |
| 5.2b | Materials provide activities, tasks, or projects that are designed to build student automaticity and fluency necessary to complete extended learning and/or above grade-level mathematical tasks. | Materials provide activities, tasks, or projects that are designed to build student automaticity and fluency necessary to complete extended learning and/or above grade-level mathematical tasks. |
| 5.2c | Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within lessons and reporting categories. | Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within lessons and reporting categories. |
| 5.2d | Materials provide opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy within the lesson and throughout the learning sequence of the materials. | Materials provide opportunities for students to evaluate mathematical procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson and throughout the learning sequence of the materials. |
| 5.2e | Materials contain guidance to support students in selecting increasingly efficient approaches to solve mathematics problems. | Materials contain guidance to support students in selecting the most efficient approaches when solving mathematics problems. |

5.3 Balance of Conceptual Understanding and Procedural Fluency

| | K-5 | 6-12 |
|-------------|--|---|
| 5.3a | Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed. | Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed. |
| 5.3b | Questions, tasks, and/or activities provide opportunities for the use of concrete models, manipulatives, and pictorial representations. | Questions, tasks, and/or activities provide opportunities for the use of models and representations where academically appropriate. |
| 5.3c | Materials include supports for students in creating, analyzing, and explaining the connection between concrete and representational models and abstract (symbolic/numeric/algorithmic) mathematical concepts where academically appropriate. | Materials include supports for students in creating, analyzing, and explaining the connection between representational models and abstract (symbolic/numeric/algorithmic) mathematical concepts where academically appropriate. |

5.4 Development of Academic Mathematical Language

| | K-5 | 6-12 |
|-------------|---|---|
| 5.4a | Materials provide opportunities for students to develop their academic mathematical language using visuals, manipulatives, or other language development strategies. | Materials provide opportunities for students to develop their academic mathematical language using visuals, manipulatives, or other language development strategies. |
| 5.4b | Materials include embedded guidance for the educator addressing scaffolding, supporting, and extending student development and use of academic mathematical vocabulary in context when communicating with both educators and peers. | Materials include embedded guidance for the educator addressing scaffolding, supporting, and extending student development and use of academic mathematical vocabulary in context when communicating with both educators and peers. |
| 5.4c | Materials include embedded guidance to support student application of appropriate mathematical language, including academic vocabulary, in discourse. | Materials include embedded guidance to support student application of appropriate mathematical language, including academic vocabulary, in discourse. |
| 5.4d | Materials provide embedded guidance to facilitate or support mathematical conversations among students which provide opportunities for them to hear, refine, and use math language with peers. | Materials provide embedded guidance to facilitate or support mathematical conversations among students which provide opportunities for them to hear, refine, and use math language with peers. |
| 5.4e | Materials provide embedded guidance to anticipate a variety of student answers including exemplar responses to questions and tasks, including guidance to support and/or redirect inaccurate student responses. | Materials provide embedded guidance to anticipate a variety of student answers including exemplar responses to questions and tasks, including guidance to support and/or redirect inaccurate student responses. |

5.5 Process Standards Connections

| | K-5 | 6-12 |
|-------------|--|--|
| 5.5a | Process standards are integrated appropriately into the materials. | Process standards are integrated appropriately into the materials. |
| 5.5b | Materials include an explicit description of how process standards are incorporated and connected throughout the learning sequence of the materials. | Materials include an explicit description of how process standards are incorporated and connected throughout the learning sequence of the materials. |
| 5.5c | Materials include an explicit description of how process standards are incorporated and connected throughout the reporting categories. | Materials include an explicit description of how process standards are incorporated and connected throughout the reporting categories. |
| 5.5d | Materials include an explicit overview of the process standards incorporated into each lesson. | Materials include an explicit overview of the process standards incorporated into each lesson. |

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6. Productive Struggle

Materials support students in applying disciplinary practices to productive problem-solving, including explaining and revising their thinking.

6.1 Student Self-Efficacy

| | K-5 | 6-12 |
|-------------|--|--|
| 6.1a | Materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics. | Materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics. |
| 6.1b | Materials support students in understanding, explaining, and justifying that there can be multiple ways to solve mathematics problems and complete tasks. | Materials support students in understanding, explaining, and justifying that there can be multiple ways to solve mathematics problems and complete tasks. |
| 6.1c | Materials provide various opportunities for students to make sense of mathematics through doing, writing about, and discussing math with peers and/or educators. | Materials provide various opportunities for students to make sense of mathematics through doing, writing about, and discussing math with peers and/or educators. |

6.2 Facilitating Productive Struggle

| | K-5 | 6-12 |
|-------------|---|---|
| 6.2a | Materials support educators in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications. | Materials support educators in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, justifications, and multiple points of entry. |
| 6.2b | The materials offer explicit facilitation prompts, probing questions, and guidance to assist educators in providing explanatory feedback based on correct and incorrect student responses and anticipated misconceptions. | The materials offer explicit facilitation prompts, probing questions, and guidance to assist educators in providing explanatory feedback based on correct and incorrect student responses and anticipated misconceptions. |