

LEVELS K-Algebra 1

**EUREKA  
MATH<sup>2</sup>**<sup>TM</sup>

*Eureka Math*<sup>2</sup> <sup>TM</sup>  
**Reviewer Rubric**



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<b>Eureka Math<sup>2</sup>: Alignment at a Glance</b> <b>Criteria of High-Quality, Effective Math Programs</b>		Meets Criteria	
		Yes	No
<b>1. Content and Focus</b>			
A. Curricular materials align with standards and are mathematically accurate.			
i. Sufficient time and resources are allocated to ensure the materials meet the full intent of grade-level standards.			
B. Curricular materials focus on major work of each grade level.			
C. Curricular materials connect supporting and additional work to major work in meaningful ways.			
i. Curricular materials make natural connections between different clusters and domains.			
<b>2. Coherence and Instructional Design</b>			
A. Curricular materials use a logical mathematical progression to build on learning from prior content.			
B. Coherent high-yield models are evident within and across grade levels.			
C. Curricular materials include an intentional sequence for developing academic and mathematical language within and across grade-level courses.			
D. Curricular materials utilize a consistent module and lesson structure, including a variety of well-designed teacher-facilitated experiences.			
E. Students' ideas are valued and seen as resources for learning.			
F. Curricular materials build knowledge of not only key ideas in mathematics but also knowledge of the world.			
G. Curricular materials are research-based.			
<b>3. Balance of Rigor</b>			
A. Curricular materials contain a balance of conceptual understanding, procedural skills, and fluency, as well as application of math knowledge.			
B. Curricular materials support the development of students' conceptual understanding with			
i. simple-to-complex problem sequences			
ii. concrete-pictorial-symbolic progressions and connections			
C. Curricular materials are designed so that students attain the procedural skills and fluency required by grade-level standards.			
D. Curricular materials are designed to include a variety of frequent, authentic application opportunities.			
<b>4. Standards for Mathematical Practice</b>			
A. Curricular materials support the standards' emphasis on mathematical thinking and reasoning.			

B. Curricular materials provide regular opportunities for students to engage in the full meaning of all the Standards for Mathematical Practice.		
C. Curricular materials support teachers in developing their own understanding of the Standards for Mathematical Practice, the role of the practice standards in lessons, and guidance for implementation.		
D. Curricular materials connect content standards and practice standards in authentic ways.		
<b>5. Accessibility, Differentiation, and Engagement</b>		
A. Curricular materials intentionally promote student engagement, student-to-student discourse, and student ownership of learning.		
B. Curricular materials ensure all students can access grade-level mathematics. <ul style="list-style-type: none"> <li>i. Lesson tasks provide multiple entry points into mathematics.</li> <li>ii. Curricular materials provide timely supports to assess and to address students' unfinished learning.</li> </ul>		
C. Curricular materials are designed with principles of Universal Design for Learning by providing multiple means of engagement, representation, and action and expression.		
D. Curricular materials provide scaffolds and instructional supports for multilingual learners.		
E. Curricular materials provide differentiation suggestions for support and challenge.		
F. Curricular materials attend to social and emotional learning (SEL) competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.		
G. Curricular materials are inclusive and reflect diverse cultures, ethnicities, and demographics.		
H. Student facing-materials are visually engaging, accessible, and readable.		
<b>6. Assessment Program</b>		
A. Curricular materials include frequent and varied and comprehensive assessments. <ul style="list-style-type: none"> <li>i. Summative assessments, taken as a whole, include opportunities for students to demonstrate the full intent of grade-level standards.</li> <li>ii. Formative assessments support teachers in determining whether students met the objective(s) of the lessons and topics.</li> <li>iii. Assessment items include a combination of tasks that require students to demonstrate conceptual understanding, procedural skill and fluency, and application.</li> <li>iv. Assessment item types require students to produce a variety of answers and solutions (arguments, explanations, representations, etc).</li> </ul>		
B. Assessment materials provide sufficient guidance for interpreting student performance and guiding instructional decisions.		
<b>7. Teachability and Digital Integration</b>		
A. Curricular materials include embedded and external professional development. <ul style="list-style-type: none"> <li>i. Materials support teacher learning and understanding of mathematical concepts, the progression of learning, and instructional pedagogy.</li> <li>ii. Materials include standards alignment information and explain the role of the standards in the resources.</li> </ul>		
B. Curricular materials include support for implementation. <ul style="list-style-type: none"> <li>i. The materials are visually engaging, easy to use, and well organized for students and teachers.</li> <li>ii. Materials provide information about how to plan and prepare lessons.</li> <li>iii. Materials provide guidance for instructional delivery, including questions to prompt student thinking and expected student outcomes.</li> </ul>		

C. Curricular materials can be completed within a regular school year, and guidance about the expected timing for lessons and tasks is provided.		
D. Curricular materials provide caregivers with resources to support student academic progress.		
E. A user-friendly online platform provides always-on access to curricular materials and additional resources.		
F. Digital materials and experiences enhance classroom instructional practice, engaging students meaningfully to develop mathematical understanding.		

Criteria of High-Quality, Effective Math Programs	Evidence of Alignment from <i>Eureka Math</i> <sup>2</sup>		
	Yes	No	Criteria Examples and Reviewer Notes
<b>1. Content and Focus</b>			
<p>A. Curricular materials align with standards and are mathematically accurate.</p> <p>i. Sufficient time and resources are allocated to ensure the materials meet the full intent of grade-level standards.</p>			
<p>B. Curricular materials focus on major work of each grade level.</p>			Refer to the module maps, Appendix A.
<p>C. Curricular materials connect supporting and additional work to major work in meaningful ways.</p> <p>i. Curricular materials make natural connections between different clusters and</p>			

domains.			
<b>2. Coherence and Instructional Design</b>			
A. Curricular materials use a logical mathematical progression to build on learning from prior content.			
B. Coherent high-leverage models are evident within and across grade levels.			
C. Curricular materials include an intentional sequence for developing academic and mathematical language within and across grade-level courses.			
D. Curricular materials utilize a consistent module and lesson structure, including a variety of well-designed teacher-facilitated experiences.			
E. Students' ideas are valued and seen as resources for learning.			

<p>F. Curricular materials build knowledge of not only key ideas in mathematics but also knowledge of the world.</p>			
<p>G. Curricular materials are research-based.</p>			<p>See Appendix B: Selection of Eureka Math<sup>2</sup> Research Citations.</p>
<p><b>3. Balance of Rigor</b></p>			
<p>A. Curricular materials contain a balance of conceptual understanding, procedural skills and fluency, as well as application of math knowledge.</p>			
<p>B. Curricular materials support the development of students' conceptual understanding with</p> <ul style="list-style-type: none"> <li>i. simple-to-complex problem sequences</li> <li>ii. concrete-pictorial-symbolic progressions and connections</li> </ul>			



<p>C. Curricular materials are designed so that students attain the procedural skills and fluency required by grade-level standards.</p>			
<p>D. Curricular materials are designed to include a variety of frequent authentic application opportunities.</p>			
<p><b>4. Standards for Mathematical Practice</b></p>			
<p>A. Curricular materials support the standards' emphasis on mathematical thinking and reasoning.</p>			
<p>B. Curricular materials provide regular opportunities for students to engage in the full meaning</p>			

of all the Standards for Mathematical Practice.			
C. Curricular materials support teachers in developing their own understanding of the Standards for Mathematical Practice, the role of the practice standards in lessons, and guidance for implementation.			
D. Curricular materials connect content standards and practice standards in authentic ways.			
<b>5. Accessibility, Differentiation, and Engagement</b>			
A. Curricular materials intentionally promote student engagement, student-to-student discourse, and student ownership of learning.			
B. Curricular materials ensure all students can access grade-level mathematics. i. Lesson tasks provide multiple entry points into mathemati			

<p>cs.</p> <p>ii. Curricular materials provide timely supports to assess and to address students' unfinished learning.</p>			
<p>C. Curricular materials are designed with principles of Universal Design for Learning by providing multiple means of engagement, representation, and action and expression.</p>			
<p>D. Curricular materials provide scaffolds and instructional supports for multilingual learners.</p>			
<p>E. Curricular materials provide differentiation suggestions for support and challenge.</p>			

F. Curricular materials attend to social and emotional learning (SEL) competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.			
G. Curricular materials are inclusive and reflect diverse cultures, ethnicities, and demographics.			
H. Student facing-materials are visually engaging, accessible, and readable.			
<b>6. Assessment Program</b>			
A. Curricular materials include frequent and varied and comprehensive assessments. i. Summative assessments, taken as a whole, include opportunities for			

<p>students to demonstrate the full intent of grade-level standards.</p> <p>ii. Formative assessments support teachers in determining whether students met the objective(s) of the lessons and topics.</p> <p>iii. Assessment items include a combination of tasks that require students to demonstrate conceptual understanding, procedural skill and fluency, and application.</p> <p>iv. Assessment item types require students to produce a variety of answers and solutions (arguments, explanations, representations, etc.)</p>			
<p>B. Assessment materials provide sufficient guidance</p>			

<p>for interpreting student performance and guiding instructional decisions.</p>			
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**7. Teachability and Digital Integration**

<p>A. Curricular materials include embedded and external professional development.</p> <ul style="list-style-type: none"> <li>i. Materials support teacher learning and understanding of mathematical concepts, the progression of learning, and instructional pedagogy.</li> <li>ii. Materials include standards alignment information and explain the role of the standards in the resources.</li> </ul>			
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<p>B. Curricular materials include support for implementation.</p> <ul style="list-style-type: none"> <li>i. The materials are visually engaging, easy to use, and well organized for students and teachers.</li> <li>ii. Materials provide information about how to plan and prepare lessons.</li> <li>iii. Materials provide guidance for instructional delivery, including questions to prompt student thinking and expected student outcomes.</li> </ul>			
<p>C. Curricular materials can be completed within a regular school year and guidance about the amount of time lessons and tasks may take is provided.</p>			

D. Curricular materials provide caregivers with resources to support student academic progress.			
E. A user-friendly online platform provides always-on access to curricular materials and additional resources.			
F. Digital materials and experiences enhance classroom instructional practice, engaging students meaningfully to develop mathematical understanding.			



Appendix A



Year-Long Curriculum Overview: Levels K-5

STORY OF UNITS							
	Level K Part-Part-Total	Level 1 Units of Ten	Level 2 Ten Tens	Level 3 Units of Any Number	Level 4 Fractional Units	Level 5 Fractions Are Numbers	
Trimester 1	Quarter 1	Module 1: Counting and Cardinality 7 Topics   33 Lessons	Module 1: Counting, Comparison, and Addition 4 Topics   25 Lessons	Module 1: Place Value Concepts through Metric Measurement and Data • Place Value, Counting, and Comparing Within 1,000 9 Topics   38 Lessons	Module 1: Multiplication and Division with Units of 2, 3, 4, 5, and 10 5 Topics   23 Lessons	Module 1: Place Value Concepts for Addition and Subtraction 5 Topics   24 Lessons	Module 1: Place Value Concepts for Multiplication and Division with Whole Numbers 4 Topics   20 Lessons
	Quarter 2	Module 2: Two- and Three-Dimensional Shapes 3 Topics   16 Lessons	Module 2: Addition and Subtraction Relationships 5 Topics   23 Lessons	Module 2: Addition and Subtraction Within 200 4 Topics   27 Lessons	Module 2: Place Value Concepts through Metric Measurement 4 Topics   25 Lessons	Module 2: Place Value Concepts for Multiplication and Division 5 Topics   26 Lessons	Module 2: Addition and Subtraction with Fractions 4 Topics   17 Lessons
Trimester 2	Quarter 3	Module 3: Comparison 4 Topics   22 Lessons	Module 3: Properties of Operations to Make Easier Problems 5 Topics   26 Lessons	Module 3: Shapes and Time with Fraction Concepts 4 Topics   19 Lessons	Module 3: Multiplication and Division with Units of 0, 1, 6, 7, 8, and 9 4 Topics   25 Lessons	Module 3: Multiplication and Division of Multi-Digit Numbers 6 Topics   24 Lessons	Module 3: Multiplication and Division with Fractions 4 Topics   22 Lessons
	Quarter 4	Module 4: Composition and Decomposition 3 Topics   18 Lessons	Module 4: Comparison and Composition of Length Measurements 3 Topics   14 Lessons	Module 4: Addition and Subtraction Within 1,000 5 Topics   24 Lessons	Module 4: Multiplication and Area 4 Topics   19 Lessons	Module 4: Foundations for Fraction Operations 6 Topics   34 Lessons	Module 4: Place Value Concepts for Decimal Operations 5 Topics   30 Lessons
Trimester 3	Quarter 1	Module 5: Addition and Subtraction 4 Topics   27 Lessons	Module 5: Place Value Concepts to Compare, Add, and Subtract 5 Topics   25 Lessons	Module 5: Money, Data, and Customary Measurement 3 Topics   16 Lessons	Module 5: Fractions as Numbers 5 Topics   27 Lessons	Module 5: Place Value Concepts for Decimal Fractions 4 Topics   14 Lessons	Module 5: Addition and Multiplication with Area and Volume 4 Topics   28 Lessons
	Quarter 2	Module 6: Place Value Foundations 4 Topics   24 Lessons	Module 6: Attributes of Shapes • Advancing Place Value, Addition, and Subtraction 6 Topics   31 Lessons	Module 6: Multiplication and Division Foundations 4 Topics   18 Lessons	Module 6: Geometry, Measurement, and Data 4 Topics   26 Lessons	Module 6: Angle Measurements and Plane Figures 4 Topics   20 Lessons	Module 6: Foundations to Geometry in the Coordinate Plane 4 Topics   20 Lessons
TOTAL:		25 Topics   140 Lessons	TOTAL: 28 Topics   144 Lessons	TOTAL: 29 Topics   142 Lessons	TOTAL: 26 Topics   145 Lessons	TOTAL: 30 Topics   142 Lessons	TOTAL: 25 Topics   137 Lessons

Trimester and quarter indicators are provided as a guide for pacing. A few optional lessons in each grade level are included in the total number of lessons. About thirty additional days are allotted at each level for assessment and responsive teaching.

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**Year-Long Curriculum Overview: Level 6–Algebra I**

		STORY OF RATIOS			STORY OF FUNCTIONS
		Level 6 Ratios and Rates	Level 7 Ratios and Proportionality	Level 8 Ratios and Linearity	Algebra I Modeling with Functions
Trimester 1	Quarter 1	Module 1: Ratios, Rates, and Percents 5 Topics   26 Lessons	Module 1: Ratios and Proportional Relationships 3 Topics   20 Lessons	Module 1: Scientific Notation, Exponents, and Irrational Numbers 5 Topics   24 Lessons	Module 1: Expressions, Equations, and Inequalities in One Variable 4 Topics   23 Lessons
	Quarter 2	Module 2: Operations with Fractions and Multi-Digit Numbers 6 Topics   24 Lessons	Module 2: Operations with Rational Numbers 5 Topics   26 Lessons	Module 2: Rigid Motions and Congruent Figures 4 Topics   22 Lessons	Module 2: Equations and Inequalities in Two Variables 4 Topics   24 Lessons
Trimester 2		Module 3: Rational Numbers 4 Topics   17 Lessons	Module 3: Expressions, Equations, and Inequalities 4 Topics   23 Lessons	Module 3: Dilations and Similar Figures 4 Topics   17 Lessons	Module 3: Functions and Their Representations 4 Topics   23 Lessons
	Quarter 3	Module 4: Expressions and One-Step Equations 5 Topics   25 Lessons	Module 4: Geometry 5 Topics   26 Lessons	Module 4: Linear Equations in One and Two Variables 6 Topics   27 Lessons	Module 4: Quadratic Functions 4 Topics   27 Lessons
Trimester 3	Module 5: Area, Surface Area, and Volume 4 Topics   19 Lessons	Module 5: Percent and Applications of Percent 5 Topics   24 Lessons	Module 5: Systems of Linear Equations 3 Topics   14 Lessons	Module 5: Linear and Exponential Functions 4 Topics   24 Lessons	
	Quarter 4	Module 6: Statistics 4 Topics   22 Lessons	Module 6: Probability and Populations 4 Topics   19 Lessons	Module 6: Functions and Bivariate Statistics 5 Topics   25 Lessons	Module 6: Modeling with Functions 2 Topics   7 Lessons
		<b>TOTAL: 28 Topics   133 Lessons</b>	<b>TOTAL: 26 Topics   138 Lessons</b>	<b>TOTAL: 27 Topics   129 Lessons</b>	<b>TOTAL: 22 Topics   128 Lessons</b>

Trimester and quarter indicators are provided as a guide for pacing. A few optional lessons in each grade level/course are included in the total number of lessons. About thirty additional days are allotted at each level for assessment and responsive teaching.

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## Appendix B: Selection of *Eureka Math*<sup>2</sup> Research Citations

- Berlinghoff, W. P. and F. Q. Gouvêa. *Math through the Ages: A Gentle History for Teachers and Others*. Farmington, ME: Oxton House Publishers, 2002.
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