VIRTUAL MATHEMATICS PROFESSIONAL LEARNING CATALOG
2020 - 2021

Georgia Department of Education
Mathematics Teaching and Learning

Click Here
Click on a grade level to find the virtual professional learning options offered by the Georgia Department of Education.

Kindergarten 1st Grade 2nd Grade
3rd Grade 4th Grade 5th Grade
6th Grade
7th Grade 8th Grade Coordinate Algebra Algebra I
Analytic Geometry Geometry Advanced Algebra/Algebra II

Click Here for Listing of all Grade Level Mathematics Virtual Specialists 2020-2021
Click Here for GaDOE Mathematics Team Contact Information
Click Here to Join Georgia Mathematics Professional Learning Community
Kindergarten

Session 1: Understanding the 8 SMPs from a Kindergarten lens; Introduction to Effective Mathematics Teaching Practices
Release Date: December 10, 2020
Link to Pre-Recorded PL Session
Watch Now

Session 2: Understanding Shapes and Levels of Geometric Thinking
Date: December 14, 2020 4:00 – 5:00 pm
Link to PL Session Recording
Watch Now

Session 3: Comparing Numbers
Release Date: January 6, 2021
Link to PL Session Recording
Watch Now

Session 4: Investigating Addition and Subtraction & CGI
Date: February 3, 2021 4:00 – 5:00 pm
Link to PL Session Recording
Watch Now

Session 5: Further Investigation of Addition and Subtraction
Date: March 10, 2021 4:00 – 5:00 pm
Link to PL Session Recording
Watch Now

Session 6: Problems Worth Solving
Date: March 25, 2021 4:00 – 5:00 pm
Link to PL Session Recording
Watch Now

Session 7: Assessing Student Learning and Looking Ahead – Unit 1
Date: April 19, 2021 4:00 – 5:00 pm
Link to Register for Live Session
Watch Now

Session 8: Looking Ahead: Planning with Big Ideas – Unit 2
Date: May 3, 2021 4:00 – 5:00 pm
Link to Register for Live Session
Watch Now
1st Grade

Session 1: Counting Collections and Choral Counting
Release Date: December 7, 2020

Session 2: Building Conceptual Understanding of Addition and Subtraction/Fluency within 20
Date: December 10, 2020
3:00-4:00 pm

Session 3: Cognitively Guided Instruction/Word Problem Types
Date: January 11, 2021
3:00-4:00 pm

Session 4: Understanding Measurement—Length and Time
Release Date: February 11, 2021

Session 5: Developing Place Value Understanding
Date: February 25, 2021
3:00-4:00 pm

Session 6: Addition and Subtraction within 100
Date: March 18, 2021
3:00-4:00 pm

Session 7: Understanding Shapes and Fractions
Release Date: April 19, 2021

Session 8: Looking Ahead
Date: May 6, 2021
3:00-4:00 pm
2nd Grade

Session 1:
Understanding the 8 Standards for Mathematical Practice
Release Date: December 7, 2020
Link to Pre-Recorded PL Session
Watch Now

Session 2:
Reasoning and Problem Solving; Unit 3 Measurement
Date: December 15, 2020 5:00-6:00 PM
Link to PL Session Recording
Watch Now

Session 3:
Math Representation; Unit 3 Measurement
Date: January 19, 2021 5:00-6:00 PM
Link to Pre-Recorded PL Session
Watch Now

Session 4:
Purposeful Questions; Numberless Word Problems Unit 4 Base 10 Understanding
Release Date: February 4, 2021
Link to Pre-Recorded PL Session
Watch Now

Session 5:
Procedural Fluency from Comprehension Unit 4 Base 10 Understanding
Release Date: March 16, 2021
Link to Pre-Recorded PL Session
Watch Now

Session 6:
Mathematics Discourse; Unit 5 Shapes
Release Date: April 6, 2021
Link to Pre-Recorded PL Session
Watch Now

Session 7:
Productive struggle; and 3-Act Tasks Unit 6 Developing Multiplication
Release Date: April 27, 2021
Link to Pre-Recorded PL Session
Watch Now

Session 8:
Evidence of Student Thinking; Looking Ahead
Date: May 11, 2021 5:00-6:00 PM
Link to Register for Live Session
LIVE
3rd Grade

### Session 1: Solving Two-Step Problems
- **Release Date:** December 2020
- **Pre-Recorded PL Session**

### Session 2: Identifying Arithmetic Patterns
- **Release Date:** December 15, 2020
- **Pre-Recorded PL Session**

### Session 3: Represent and Interpret Data: Graphs
- **Release Date:** December 18, 2020
- **Pre-Recorded PL Session**

### Session 4: Building Ideas in Geometry
- **Date:** January 12, 2021 6:00-7:00 pm
- **Pre-Recorded PL Session**

### Session 5: Making Sense of Fractions
- **Date:** February 9, 2021 6:00-7:00 pm
- **Pre-Recorded PL Session**

### Session 6: Working with Time
- **Date:** March 9, 2021 6:00-7:00 pm
- **Pre-Recorded PL Session**

### Session 7: Multiplication and Division
- **Release Date:** April 13, 2021
- **Pre-Recorded PL Session**

### Session 8: Math Fluency
- **Date:** May 3, 2021 6:00-7:00 pm
- **Register for Live Session**
**5th Grade**

**Session 1:** Understanding the Grade Level Content Standards; Unit 1: Developing Conceptual Understanding of Fractions
- Release Date: December 7, 2020
- Link to Pre-Recorded PL Session

**Session 2:** Understanding the Grade Level Content Standards; Unit 4: Multiplying/Dividing Fractions
- Release Date: December 17, 2020
- Link to PL Session Recording

**Session 3:** Understanding the Grade Level Content Standards; Unit 5: 2-D Figures
- Date: January 18, 2021 5:00 – 6:00 pm
- Link to PL Session Recording

**Session 4:** Understanding the Grade Level Content Standards; Unit 6: Volume and Measurement
- Date: February 8, 2021 5:00 – 6:00 pm
- Link to Pre-Recorded PL Session

**Session 5:** Understanding the Grade Level Content Standards; Unit 7: Geometry and the Coordinate Plane
- Release Date: February 22, 2021
- Link to PL Session Recording

**Session 6:** Understanding the Grade Level Content Standards; Unit 1: Order of Operations & Whole Numbers
- Release Date: March 22, 2021 5:00 – 6:00 pm
- Link to Pre-Recorded PL Session

**Session 7:** Understanding the Grade Level Content Standards; Unit 2: Adding & Subtracting with Decimals
- Release Date: April 19, 2021
- Link to Register for Live Session

**Session 8:** Understanding the Grade Level Content Standards; Unit 3: Multiplying & Dividing with Decimals
- Date: May 10, 2021 5:00 – 6:00 pm
- Link to Register for Live Session
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<th>Session 1: Understanding the 8 Standards for Mathematical Practice; Unit 3: Equivalent Expressions</th>
<th>Session 2: Understanding the Grade Level Content Standards; Unit 4 One-Step Equations and Inequalities</th>
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<th>Session 5: Understanding the Grade Level Content Standards; Unit 7 Rational Numbers and Their Opposites</th>
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<th>Session 7: Understanding the Grade Level Content Standards; Unit 1: Division and Number Theory</th>
<th>Session 8: Understanding the Grade Level Content Standards; Unit 2 Ratio and Proportions</th>
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<td>Release Date: December 21, 2021</td>
<td>Release Date: January 4, 2021</td>
<td>Date: January 25, 2021 6:00 – 7:00 pm</td>
<td>Release Date: February 22, 2021</td>
<td>Date: March 15, 2021 6:00 – 7:00 pm</td>
<td>Release Date: April 5, 2021</td>
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7th Grade

Session 1: Strategies and Supports through Effective Mathematics Teaching Practices; Unit 3: Ratios and Proportions
Release Date: December 7, 2020
Link to Pre-Recorded PL Session

Session 2: Strategies and Supports through Effective Mathematics Teaching Practices; Unit 4: Geometry
Date: December 10, 2020
5:00 – 6:00 pm
Link to PL Session Recording

Session 3: Strategies and Supports through Effective Mathematics Teaching Practices; Unit 5: Inferences
Release Date: January 8, 2021
Link to Pre-Recorded PL Session

Session 4: Strategies and Supports through Effective Mathematics Teaching Practices; Unit 6: Probability
Date: January 14, 2021
5:00 – 6:00 pm
Link to PL Session Recording

Session 5: Strategies and Supports through Effective Mathematics Teaching Practices; Remediation and Culmination Activities
Release Date: February 19, 2021
Link to Pre-Recorded PL Session

Session 6: Strategies and Supports through Effective Mathematics Teaching Practices; Unit 1: Operations with Rational Numbers
Date: March 18, 2021
5:00 – 6:00 pm
Link to PL Session Recording

Session 7: Strategies and Supports through Effective Mathematics Teaching Practices; Unit 2: Expressions and Equations
Release Date: April 2, 2021
Link to Pre-Recorded PL Session

Session 8: Applying Backwards Design to PLC’s - Effective Teams - Planning for student success through healthy PLCs
Date: April 15, 2021
5:00 – 6:00 pm
Link to PL Session Recording
8th Grade

Session 1: Strategies and Supports through Effective Mathematics Teaching Practices; Unit 4: Functions
Release Date: December 7, 2020
Link to Pre-Recorded PL Session

Session 2: Strategies and Supports through Effective Mathematics Teaching Practices; Unit 5: Linear Functions
Release Date: December 11, 2020
Link to Pre-Recorded PL Session

Session 3: Strategies and Supports through Effective Mathematics Teaching Practices; Unit 6: Linear Models and Tables
Date: January 7, 2021 5:00 – 6:00 pm
Link to PL Session Recording

Session 4: Strategies and Supports through Effective Mathematics Teaching Practices; Unit 7: Solving Systems of Equations
Release Date: January 15, 2021
Link to Pre-Recorded PL Session

Session 5: Strategies and Supports through Effective Mathematics Teaching Practices; Unit 1: Transformations, Congruence and Similarity
Date: February 18, 2021 5:00 – 6:00 pm
Link to PL Session Recording

Session 6: Strategies and Supports through Effective Mathematics Teaching Practices; Unit 2: Exponents and Equations
Release Date: March 19, 2021
Link to Pre-Recorded PL Session

Session 7: Strategies and Supports through Effective Mathematics Teaching Practices; Unit 3: Geometric Applications of Exponents
Date: April 1, 2021 5:00 – 6:00 pm
Link to PL Session Recording

Session 8: Applying Backwards Design to PLC’s - Effective Teams - Planning for student success through healthy PLCs
Release Date: April 16, 2021
Link to Pre-Recorded PL Session
HS: Coordinate Algebra

**Session 1:**
Making Connections (Unit 1; SMP 7)
Date: December 17, 2020
3:00 - 4:00 pm
Link to PL Session Recording
Watch Now

**Session 2:**
Contemplate then Calculate (Units 2 and 3; SMP 7)
Date: January 8, 2021
3:00 - 4:00 pm
Link to PL Session Recording
Watch Now

**Session 3:**
Using Tape Diagrams to Solve Word Problems
Release Date: February 2021
Link to PL Session Recording
Watch Now

**Session 4:**
3-Reads (Unit 4: SMP 1)
Release Date: February 22, 2021
Link to PL Session Recording
Watch Now

**Session 5:**
Capturing Quantities (Unit 5; SMP2)
Date: March 4, 2021
3:00 - 4:00 pm
Link to PL Session Recording
Watch Now

**Session 6:**
Sharing Skepticism (Unit 6; SMP 3)
Date: March 23, 2021
3:00 - 4:00 pm
Link to PL Session Recording
Watch Now

**Session 7:**
Decide and Defend (SMP 3)
Date: April 12, 2021
3:00 - 4:00 pm
Link to PL Session Recording
Watch Now

**Session 8:**
Tape Diagrams for More Advanced Math Problems
Release Date: April 26, 2021
Link to Pre-Recorded PL Session
PRE ORDER Session
HS: Algebra I

Session 1:
Unit 3: Write Quadratic Expressions in Equivalent Forms to Solve Problems
Release Date: December 18, 2020
Link to Pre-Recorded PL Session
Watch Now

Session 2:
Unit 3: Analyze Quadratic Functions Using Different Representations
Release Date: December 28, 2020
Link to Pre-Recorded PL Session
Watch Now

Session 3:
Unit 4: Modeling and Analyzing Exponential Functions
Release Date: January 15, 2021
Link to Pre-Recorded PL Session
Watch Now

Session 4:
Unit 5: Construct and Compare Linear, Quadratic, and Exponential Models and Solve Problems
Release Date: February 5, 2021
Link to Pre-Recorded PL Session
Watch Now

Session 5:
Unit 5: Interpret Expressions for Functions in Terms of the Situation They Model
Release Date: February 26, 2021
Link to Pre-Recorded PL Session
Watch Now

Session 6:
Unit 6: Describing Data
Release Date: March 5, 2021
Link to Pre-Recorded PL Session
Watch Now

Session 7:
Unit 1: Relationships Between Quantities and Expressions
Release Date: April 2, 2021
Link to Pre-Recorded PL Session
Watch Now

Session 8:
Unit 2: Reasoning with Linear Equations
Release Date: April 16, 2021
Link to Pre-Recorded PL Session
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<td><strong>Unit 5: Which Comes First, the Graph or the Equation?</strong></td>
<td><strong>Ambiguous Vocabulary</strong></td>
<td><strong>Risk Taking that Fosters Growth for Teachers and Students</strong></td>
<td><strong>Diving into Desmos – More than a Calculator</strong></td>
<td><strong>Unit 3: Using Metacognitive Notes</strong></td>
<td><strong>Right Triangle Trigonometry</strong></td>
<td><strong>Data Driven Instruction and Recalibration</strong></td>
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<td>Release Date: December 28, 2020</td>
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<td>Date: February 9, 2021 5:00 -6:00 pm</td>
<td>Date: March 11, 2020 5:00 -6:00 pm</td>
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<td>Release Date: May 13, 2021</td>
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**HS: Analytic Geometry**
HS: Geometry

Session 1: Modeling Circumference of a Circle
Date: December 9, 2020 4:00 - 5:00 pm
Link to PL Session Recording
Watch Now

Session 2: Geometric and Algebraic Connections
Date: December 16, 2020 4:00 - 5:00 pm
Link to PL Session Recording
Watch Now

Session 3: Things to Consider as You Start the New Semester
Release Date: January 6, 2021
Link to Pre-Recorded PL Session
Watch Now

Session 4: Transformations in the Coordinate Plane
Date: January 13, 2021 4:00 - 5:00 pm
Link to PL Session Recording
Watch Now

Session 5: Similarity, Congruence, and Proofs
Date: February 10, 2021 4:00 - 5:00 pm
Link to PL Session Recording
Watch Now

Session 6: Right Triangle Trigonometry
Date: March 10, 2021 4:00 - 5:00 pm
Link to PL Session Recording
Watch Now

Session 7: Applications of Probability
Date: April 14, 2021 4:00 - 5:00 pm
Link to PL Session Recording
Watch Now

Session 8: Reflections and Looking Ahead
Release Date: May 12, 2021
Link to Pre-Recorded PL Session
Watch Now
### Session 1: Ambiguous Vocabulary
- **Release Date:** December 2020
- **Link to Pre-Recorded Session:** Watch Now

### Session 2: Whiteboards for the 21st Century
- **Release Date:** December 16, 2020
- **Link to Pre-Recorded Session:** Watch Now

### Session 3: Calculator Choices to Promote Equity
- **Release Date:** December 18, 2020
- **Link to Pre-Recorded Session:** Watch Now

### Session 4: Risk Taking that Fosters Growth for Teachers and Students
- **Date:** January 14, 2021 4:30 – 5:30 pm
- **Link to PL Session Recording:** Watch Now

### Session 5: Diving into Desmos – More than a Calculator
- **Date:** February 9, 2021 5:00 – 6:00 pm
- **Link to PL Session Recording:** Watch Now

### Session 6: Formative Assessments for Hybrid Teaching
- **Date:** March 10, 2021 4:00–5:00 pm
- **Link to PL Session Recording:** Watch Now

### Session 7: Statistics for Life – Empower Students with Numbers
- **Date:** April 15, 2021 4:30–5:30 pm
- **Link to PL Session Recording:** Watch Now

### Session 8: Looking Ahead – Planning for New Beginnings
- **Release Date:** April 30, 2021
- **Link to PL Session Recording:** Watch Now