### Prepare for collaborative lesson planning.

- Overview the unit and or subset of lessons.
- In order for teachers to meaningfully engage in this process, each teacher should arrive having reviewed all components of the lesson and worked through every mathematics problem.

## Step 1: Foundational Study of the Standards

Time estimate: 5 to 10 minutes

**Question:** What is the expectation of the standard(s)?

**Purpose:** Team members will collaboratively analyze the expectation(s) of standard(s) and deepen their understanding of what students should know and be able to do by studying specific Louisiana Student Standards for Mathematics. Examine the Louisiana Guide to Implementing and Acceleration Guidance documents to understand the progression of math learning across prior grades or courses.

Process	Look for	
<ul> <li>Use the appropriate Louisiana Guide to Implementing to determine the targeted standard(s).</li> <li>Analyze the targeted standard(s) for intended component of rigor and intent at the targeted grade level using the Teachers Companion Document 2.0.</li> <li>Reflect on important prerequisite standards.</li> </ul>	<ul> <li>Did the group</li> <li>determine key learning expected from the standard(s)?</li> <li>identify specific strategies called for by the standard(s)?</li> <li>identify expected prerequisite skills or strategies from the previous grade-level or course standard(s)?</li> <li>determine new strategies, skills, or key content being introduced?</li> <li>identify concepts taught for the final time in this grade or course?</li> </ul>	

Notes:





# **Step 2: Collaborative Lesson Planning**

Time estimate: 20 to 30 minutes

**Question:** What instructional decisions must I make to ensure all students can access the content and that the employment of this lesson meets the intent of the standard(s)?

**Purpose:** Team members will connect their understanding of the standard(s) to their high-quality curricular resource so they can make instructional decisions that best meet the intent of the standard(s) and the needs of all students.

Process	Look for	
<ul> <li>As a group, annotate the lesson(s) through the lens of the standard(s).</li> <li>Compare the expectations of the standard(s) discussed with the learning objectives listed in the lesson(s).</li> <li>Prioritize the problems students should engage with according to the expectation(s) of the standard(s). <ul> <li>Think through the correct answers and possible strategies students might use.</li> <li>Identify potential places that may require students to make use of SMP 1, "Make sense of problems and persevere in solving them."</li> <li>Plan just-in-time supports to ensure access to grade-level mathematics for every student based on the prerequisite standard(s) identified in step 1.</li> </ul> </li> <li>Determine class structure for each part of the lesson—whole-class, group work, individual work.</li> <li>Identify opportunities for discourse, engaging students in the Math Practices and formative assessment of student understanding.</li> <li>Determine appropriate extension activities to support students in expanding their understanding.</li> </ul>	<ul> <li>Did the group <ul> <li>determine whether the problems in the lesson provide students opportunities to meet the identified skills and strategies necessary to achieve the intent of the standard(s)?</li> <li>determine instructional strategies and moves needed to make the learning more engaging and meaningful for students?</li> <li>anticipate <ul> <li>potential points in the lesson in which students will need to persevere in problem solving.</li> <li>possible strategies that students might use to solve problems?</li> <li>the meaning of strategy choice in relation to student understanding?</li> <li>potential unfinished learning that will hinder access to grade-level mathematics?</li> </ul> </li> <li>identify how the Standards for Mathematical Practice (SMPs) will manifest in the lesson?</li> <li>plan appropriate extension activities to support students in expanding their understanding?</li> </ul> </li> </ul>	



# Math: PLANNING GUIDE FOR MATH INSTRUCTION

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# Math: PLANNING GUIDE FOR MATH INSTRUCTION

### **Step 3: Unpack Student Understanding**

**Question:** How did students respond to the enacted lesson? Based on the information from formative assessments, what are my next instructional steps?

**Purpose:** Team members will analyze student work to formatively assess the nature and extent of student understanding and to determine the implications for instructional next steps.

#### Reminders for student work analysis

- Focus on the evidence, not on what you *think* the student knows.
- Consider patterns or trends in what students know and can do.
- Approach analysis with an asset-based mindset. (In what areas have students demonstrated success? How can we build on these assets to support future growth?)
- Be aware of personal bias.

#### Sample sources of student work:

- Exit Tickets, Cool Downs
- classwork
- tutoring Exit Tickets

Process	Look for
<ul> <li>Review the intent and expectation of the standard(s).</li> <li>Individually analyze student work samples for evidence of student understanding, and sort these samples into three stacks:         <ul> <li>Stack 1: Not yet.</li> <li>Stack 2: Almost there.</li> <li>Stack 3: Got it!</li> </ul> </li> <li>As a group, share and compare findings reaching consensus for each work sample.</li> <li>Determine         <ul> <li>evidence of patterns and trends in student understanding;</li> <li>implications for future instruction; and</li> <li>a responsive plan that is specific to students' need for individualized support or extension.</li> </ul> </li> </ul>	<ul> <li>Did the group</li> <li>make determinations about student work based on evidence linked to the expectations of the standard?</li> <li>reach consensus on the identified patterns and trends?</li> <li>identify and discuss implications for instruction?</li> <li>plan appropriate support and enrichment opportunities?</li> </ul>



#### Time estimate: 30 to 40 minutes



# Math: PLANNING GUIDE FOR MATH INSTRUCTION

Notes:		



#### **Resources**

#### K-12 Math Planning

#### Accelerate Math

#### Louisiana Guides to Implementing

- Eureka Math Squared Grades K-8 and Algebra I Louisiana Guides to Implementing
- <u>Ready Classroom Grades K-8 Louisiana Guides to Implementing</u>
- Zearn Grades 1-8 and Algebra I Louisiana Guides to Implementing
- Illustrative Mathematics Grades 6-8 Louisiana Guides to Implementing
- Grades K-8, Algebra I, Geometry Louisiana Guide to Implementing Eureka Math
- Grades 6-8, HS Louisiana Guide to Implementing Illustrative Mathematics
- Grades K-8 Louisiana Guide to Implementing JUMP Math
- Algebra I, Geometry Louisiana Guide to Implementing SpringBoard
- Agile Minds, Algebra I, Geometry, Algebra II Louisiana Guides to Implementing
- Carnegie Learning Algebra I, Geometry, and Algebra II Louisiana Guides to Implementing
- Savvas enVision Algebra I, Geometry, and Algebra II Louisiana Guides to Implementing

#### Acceleration Guidance Documents

- <u>Kindergarten</u>
- Grade 1
- Grade 2
- Grade 3
- Grade 4
- Grade 5
- Grade 6
- Grade 7
- Grade 8
- <u>Algebra I</u>
- <u>Geometry</u>
- <u>Algebra II</u>

**Teachers Companion Document 2.0**