	<p><b>Module 2 Morning:</b> Understanding Instructional Shifts in Mathematics</p> <p><b>Secondary Math Cohort</b></p> <p>June, 2019</p>
	<p><i>Welcome! Sit with your Learning Team! Put on your name tag and put out your name table tent in front of you.</i></p>

●**Duration:** 1 minute

●**Facilitator says:** Welcome back! We look forward to another day of rich learning about mentoring.

## Mentor Training Course Goals

- Build strong relationships with mentees.
- Diagnose and prioritize mentees' strengths and areas for growth.
- Design and implement a coaching support plan.
- Assess and deepen mentor content knowledge and content-specific pedagogy.

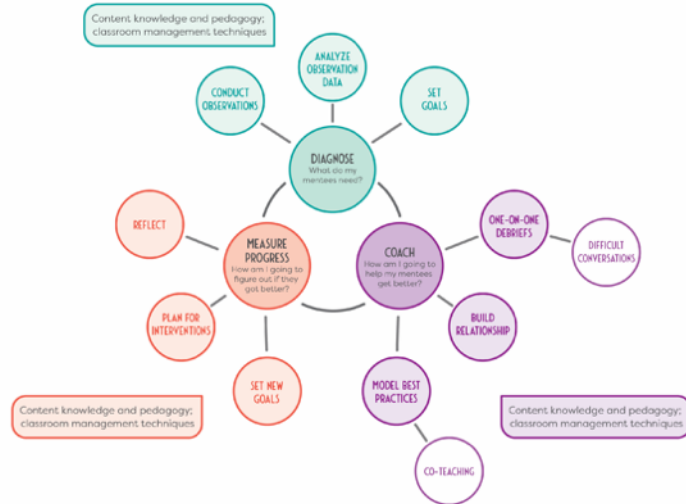


2

**Duration:** 30 seconds

**Facilitator says:** Let's just take a moment to remind ourselves about the overarching goals of the Mentor Training Course. Yesterday we focused building on background knowledge on mentoring and mentoring attributes. We also provided an overview of the mentor cycle, which we will be diving deeper into this afternoon. This morning our content learning will focus on the instructional shifts in mathematics, goals 2 and 4.

# The Mentoring Cycle



3

**Duration:** 30 seconds

**Facilitator says:** Just as a reminder, this is the mentor cycle that we introduced you all to yesterday. This is the cycle that all of our work is grounded in. The cycle is on page 4 of your handout. The mentor cycle illustrates all of the components of your role as a mentor - the concrete actions you will take when working with your mentees. This afternoon we will begin diving deeper into two of the Diagnose components; conduct observations & analyze observation data.

## Module 2 Morning Outcomes

- Describe key shifts in mathematics standards and instruction (rigor, focus, and coherence).
- Identify how to support mentees in using the key shifts to guide decisions about teaching and learning mathematics.

4

**Duration:** 2 minutes

**Facilitator says:**

During this morning's session, we will focus on two content oriented outcomes and in the afternoon we will have two mentoring focused outcomes. In every module, with the exception of yesterday and Module 3 since that will be at the Summit later this month, the mornings of our trainings will focus on deepening our own content knowledge and content-specific pedagogy so that we may better mentor and provide support for our mentees.

The state of Louisiana has invested significantly in the development of Tier 1 curriculum to ensure all educators have access to high quality curriculum and instructional materials. This investment resulted from compelling research on the impact on students when teachers work with high-quality curriculum. We are committed to teachers and students having these materials – particularly our newest teachers and our teachers serving our most vulnerable students. Today's curriculum focus is on the instructional shifts in mathematics, which include coherence, rigor, and focus.

**Facilitator does:** Reminds participants that the outcomes appear on **p. 3**

## Today's Agenda



- Welcome/commitments/outcomes
- Key shifts in mathematics
  - Rigor
  - Focus
  - Coherence
- Lunch
- Conduct observations
- Analyze observation data
- Connection to the assessments

5

**Duration:** 2 minutes

**Facilitator says:** You will see our agenda on **p. 3** of your packet. We will begin with a quick review of our norms and outcomes, then move into our math content for the day which focuses on the three shifts in mathematics. We will break for a 45 minute lunch and when we return we will focus on the first two components of the mentor cycle: conduct observations and analyze observation data. As our day ends, we will examine how the work we do today connects to the assessments.

## Mutual Commitments



**M**ake the learning meaningful

**E**ngage mentally and physically

**N**otice opportunities to support the learning of others

**T**ake responsibility for your own learning

**O**wn the outcomes

**R**espect the learning environment of self and others

6

**Duration:** 5 minutes

**Facilitator says:** Let's take a moment to reflect on how well you personally and as a team held to the mutual commitments in yesterday's session. Scan through the list and identify one you were successful in observing. Then as a team identify a commitment that was a bright spot for the team as a whole.

**Facilitator does:** Give teams a minute and then ask for a few responses about team bright spots.

**Facilitator says:** Now let's look at a commitment that was challenging for your team. As a team talk about specific actions you can take to evidence a stronger commitment in the identified area.

**Facilitator does:** Give teams a minute and then ask a few teams to report out.

## This, That, Neither, Both

- Do you enjoy watching TV at home or going to the movies?
- Do you prefer sleeping in or early rising?
- Do you like hot or cold weather?
- Jimmy Kimmel or Jimmy Fallon?
- Do you prefer toilet paper over or under the roll?
- Do you enjoy playing sports or watching sports?
- Teaching math or teaching reading/writing?
- Feeling like, “I can do this” or feeling overwhelmed?

7

**Duration:** 10 minutes

**Facilitator says:** We are going to do a fun inclusion activity called “This, That, Neither, Both”. Imagine a long strip of tape or yarn down the center of the room. We will pose a question with two possible answers such as, Do you like dogs or cats? You will think about your answer (one, both or neither) and then everyone moves to show their preference. Standing on one side of the line to show what you prefer, on the line if you like both options equally, or staying in your spot if you like neither. Ready to play? Here we go!

**Facilitator does:** **Animate** each question one at a time, allowing participants to move to various places in the room to indicate their answers and facilitating fun and informal conversations about their answers. You may offer some time for them to briefly chat with someone who made the same choice - or just take a few seconds to notice where everyone ended up and suggest times to talk about shared interests later.

**NOTE:** The questions on this slide animate in one at a time.

# Setting the Foundation for Implementing Mathematics Curriculum

## Rigor of the LSSM

Grades 6-9

8

**Duration:** 30 seconds

**Facilitator says:** This morning will be the first of three math focused content sessions. This first one will focus on mathematics standards, the shifts, and how to implement the shifts. This content relates directly to the fourth goal focused on strengthening your content knowledge and content-specific pedagogy Mentors use this expertise to develop mentee's teaching practice. In addition, this content relates directly to one of the required assessments you will need to complete, which we will look at more closely later today.



Ultimately, college and career readiness demands students know more than just content, but demonstrate that they know how to learn and build upon that content to solve problems. They must develop versatile communication skills, work collaboratively and work competitively in a school or work environment.

(Office of the State Superintendent, n.d.)

9

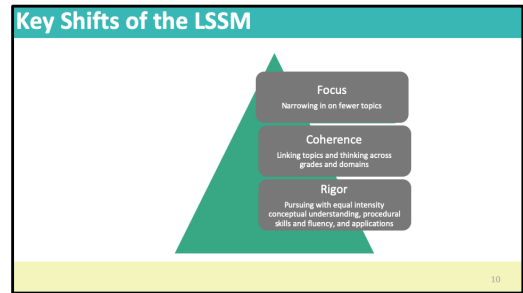
**Duration:** 2 minutes

**Critical idea:** The quote highlights that students' attainment of the Louisiana State Standards for Mathematics (LSSM) is critical to becoming college and career ready. Students must develop strong problem-solving and communication skills in addition to understanding the content.

**Facilitator says:** Take a moment to read the quotation on the slide. As you read, make note of any words or phrases that resonate with you (OR ask a participant to read the quote for the room).

**Facilitator does:** After participants have read the quote, ask 2 or 3 participants to share a phrase within the quote that stands out.

**Facilitator says:** It is necessary to acknowledge that students' attainment of the LSSM is critical to becoming college and career ready. The quote highlights the point that we must teach students more than just the content, but they must have frequent opportunities to develop a diverse set of collaborative and problem-solving skills. As we continue through this session and future sessions this year, we will build on your understanding of how this will look in the classroom and the implications it will have on teaching and learning.



**Duration:** 15 minutes

**Critical Idea:** The key shifts are what make the LSSM different from previous standards. These key shifts should guide decisions about teaching and learning.

**Facilitator says:** The LSSM require shifts in educators' thinking for curriculum, instruction, and assessment to be aligned. The shifts are called out specifically in three areas. We will engage in a text protocol to clarify each of the three key shifts. Turn to **p. 6** in your handout.

**Facilitator does:**

- Divide participants into groups of 3.
- Assign:
  - Tallest person to be responsible for focus.
  - Middle-height person to be responsible for coherence.
  - Shortest person to be responsible for rigor.
- Direct participants to follow **Save the Last Word for Me** text protocol on **p. 5**
- Participants should engage in the text protocol in groups of 3 instead of 4 to study the three key shifts.
- When all groups are finished send them back to their original groups then, **animate the slide.**

**Facilitator says:** Here are definitions for each of the shifts. Do you see your discussion points on this slide?

- **Focus:** This shift is about moving away from a mathematics curriculum that is a mile wide and an inch deep. Focus can inform educators on how to allocate their time, energy, and resources in the mathematics classroom because the standards call out the major work for each grade-level/course, making each grade/course unique.
- **Coherence:** This shift is about moving away from teaching topics in isolation to the interconnectedness of mathematics and students making sense of the mathematics within a grade and across grades. This shift requires educators to move away from considering each standard as an isolated event.
- **Rigor:** This shift is about moving away from a sole emphasis on procedures, conceptual understanding, or real-life situations, and gives equal value to all three aspects. This shift is not about giving students more or harder problems.
- We will use these definitions to guide our learning in future sessions.

**Looking at the Content**

Gr 6-9 Math task – Standard Sort	
Task	Standard
■	■
■	■
■	■
■	■

With your group:

- Match the task to the grade-level/course standard.
- Create a poster as shown.
- Be prepared to justify your reasoning.

Mentor Teacher Module 3 11

**Duration:** 12 minutes

### Critical Idea

A strong understanding of the LSSM is critical for teachers to implement the Tier 1 resources with fidelity and integrity. Teachers must be able to use the language of the standards to guide high-quality, standards-aligned teaching and learning.

### Facilitator says:

To make sense of the learning expectations of each grade-level and how students will be learning the mathematics content, we will spend the next few minutes analyzing sample problems pulled directly from the Problem Set component of your EngageNY lessons.

**Facilitator does:** Distribute a **sheet of chart paper and a card set for each group.** ( **M1\_CL-02 EngageNY Tasks — Standards Card Sort.** Prior to the session, a set of cards should be copied on cardstock, cut apart, and placed in a plastic bag for each group.)

**Facilitator says:** Your group has a set of 8 cards.

- Four of the cards include an EngageNY math task, one for each of the grades 6–9.
- The other 4 cards include the grade-level or course standard that the task is aligned to.
- You will notice that the grade-level and standard coding are not listed for each of the tasks.
- Your group’s task is to read through each tasks and identify the standard the task is aligned to.
- As you read and discuss, think about how the task is aligned to the language of the standards.
- When your group has come to a consensus, place your cards on chart paper as shown on screen.
- Then, choose a representative from your group to share and justify your placement of the standards.


**Facilitator does:** Allow 8 to 10 minutes for tables to discuss and create their posters. When groups have completed the task, debrief with a whole group discussion.

**Facilitator says:** How did the language of the standards help you identify the match and place the tasks into a progression? Have representatives from each group share a few specific examples of language from the standards that helped them to determine their placement.

**Facilitator does:** use the next to reveal the actual order of the standards, from grades 6–9. Move around groups, monitoring conversations, answering questions, and prompting discussions around the mathematics in the standards.

## Looking at the Content

Using the floor tiles design shown below, create 4 different ratios related to the image. Describe the ratio relationships, and write the ratio in the form A:B or the form A to B.



Define the constant of proportionality to answer the follow-up question.  
Bananas are \$0.59/pound.

a. What is the constant of proportionality, or  $k$ ?  
b. How much will 25 pounds of bananas cost?

→

→

**6.RP.A.1**  
Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."

**7.RP.A.2c**  
Represent proportional relationships by equations. For example, if total cost  $t$  is proportional to the number  $n$  of items purchased at a constant price  $p$ , the relationship between the total cost and the number of items can be expressed as  $t = pn$ .

12

Slide added if needed to display while discussing task-standard alignment.

**NOTE: This slide is animated**

## Looking at the Content

a. Natalie can paint 40 square feet in 3 minutes. Assuming the paint is at a constant rate, write the linear equation that represents the situation.

b. The table of values below represents the area painted by Steven for a few selected time intervals. Assume Steven is painting at a constant rate.

Time (min)	Area Painted (sq ft)
0	0
1	10
2	20
3	30
4	40

Who paints faster? Explain.

→

→

**8.EE.5**

Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.

**A1: F.IE.A.1b**

Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.

13

Slide added if needed to display while discussing task-standard alignment.

**NOTE: This slide is animated**

**Key Shifts**

**Rigor**  
Pursuing with equal intensity  
conceptual understanding, procedural skills  
and fluency, and applications

14

**Duration:** 1 minute

**Facilitator says:** The K–12 LSSM lay the foundation that allows students to become mathematically proficient by focusing on the key shift of rigor. Rigor includes three areas: conceptual understanding, procedural skill and fluency, and application. For this next activity, please refer to the definition of the components of rigor on **p. 8**. Use these definitions to ground your discussion.

**Words of Wisdom:** It is critical that teachers use the definitions of the components of rigor from **p. 8** to ground their conversation on the next slide.

**Identifying the Components of Rigor**

Gr 6-9 Math Task – Standard Sort

Problem	Standard	Component of Rigor
		Conceptual understanding because...
		_____ because...
		_____ because...
		_____ because...

**On your poster:**

- Identify the component of rigor that is evident in the task.
- Justify your reasoning.
- Choose a new reporter to be prepared to share out for your group.

Mentor Teacher Module 3 15

**Duration:** 12 minutes

### **Critical Idea**

For instruction to be rigorous, teachers must have a clear understanding of the components of rigor. This activity allows teachers to identify each of the components of rigor in the EngageNY tasks.

### **Facilitator says:**

- As a group, revisit the tasks on your poster. For each of the tasks come to a consensus on the component(s) of rigor that is evident in the task.
- Choose a recorder to write whether you think the task requires conceptual understanding, procedural skill and fluency, and/or application AND provide justification. Use the definitions from **pp. 5-6** to guide your discussion.
- It is important to note that application requires the other two components, thus it's not necessary to add them in addition to application if that's the primary component identified.
- Choose a new reporter to be prepared to share with the whole group when time is up.

**Facilitator does:** Give participants 10 minutes to discuss in small groups. **[Note:** Debrief the activity by asking the reporter of each group to share their thinking about one of the grade-levels. The first table group should begin with grade 6, the next table group with grade 7, etc., until all four problems have been discussed.

If it has not surfaced yet in conversation, summarize the debrief by reiterating the following:


- Each of the components of rigor is equally important to student mastery.
- Rigorous teaching in mathematics does not simply mean increasing the difficulty or complexity of practice problems.
- Incorporating rigor into classroom instruction and learning means exploring at a greater depth the standards and the ideas with which students are grappling.
- For instruction to be rigorous, teachers must have a clear understanding of the components of rigor and make connections in the Tier 1 resources.
- The element of rigor assigned to each standard is intended to help teachers understand how to facilitate the learning. For example, If the standard explicitly calls for conceptual understanding, then the focus of the instruction will be on building student understanding of how the math works with visual models. While, if the standard explicitly calls for procedural skills and fluency, then the instruction may continue to make use of those visual models but should be pushing for students to transition into more efficient strategies.

### **Words of Wisdom**

resources. As you circulate around the room, make note of points of contention in small group discussions (regarding the key shifts) and be prepared to clarify misconceptions heard in the whole group debrief.



## Looking at the Content

<p>Using the floor tiles design shown below, create 4 different ratios related to the image. Describe the ratio relationships, and write the ratio in the form A:B or the form A to B.</p> 	→	<p><b>6.RP.A.1</b></p> <p>Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."</p>	<p>Conceptual understanding because _____</p> <p>Application because _____</p>
<p>Define the constant of proportionality to answer the follow-up question.</p> <p>Bananas are \$0.59/pound.</p> <p>a. What is the constant of proportionality, or <math>k</math>?</p> <p>b. How much will 25 pounds of bananas cost?</p>	→	<p><b>7.RP.A.2c</b></p> <p>Represent proportional relationships by equations. For example, if total cost <math>t</math> is proportional to the number <math>n</math> of items purchased at a constant price <math>p</math>, the relationship between the total cost and the number of items can be expressed as <math>t = pn</math>.</p>	<p>Conceptual understanding because _____</p> <p>Procedural skills and fluency because _____</p>

16

Slide added for audience focus to discuss level of rigor of each task.

Gather several responses and reasons before **animating the slide** to show the level.

### 6. RP.A.1

- **Conceptual Understanding**

- This task is an example of how a problem targeting conceptual understanding can require limited arithmetic. The problem assesses students' ability to recognize the relationship, not their ability to subtract or reduce a fraction.

- **Application**

- This task shows a real-world context for learning and solving problems.

### 7.RP. A.2c

- **Conceptual Understanding**

- This problem assesses students' ability to recognize a relationship.

- **Procedural Skill and Fluency**

- Students must apply their knowledge of division, fractions and multiplicative reasoning to extend the proportional relationship.

## Looking at the Content

**8.EE.B.5**

4. Nadia can paint 40 square feet in 9 minutes. Assuming she paints at a constant rate, write the linear equation that represents the situation.

5. The table of values below represents the data gathered by Steven for a new selected one-variable, square function  $f$  painting at a constant rate.

Minutes	Area
1	20
2	40
3	60
4	80
5	100

Who paints faster? Explain.

**8.EE.B.5**

Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.

Application because \_\_\_\_\_

6. Determine the function type that could be used to model the data set above and explain why.

7. Complete the data set using the general pattern of the function you identified above.

8. If a value, find the minimum or maximum value for the function model. If there is a minimum or maximum, explain why.

**A1:F-LE.A.1b**

Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.

Conceptual understanding because \_\_\_\_\_

17

Slide added for audience focus to discuss level of rigor of each task.

Gather several responses and reasons before **animating the slide** to show the level.

### **8.EE.B.5**

#### ● ***Application***

- This problem provides a context for learning and the opportunity to solve problems in a relevant and a meaningful way. It is through real-world applications like this problem that students learn to select an efficient method to find a solution, determine whether the solution makes sense by reasoning, and develop critical thinking.

### **A1:F-LE.A.1b**

#### ***Conceptual Understanding***

- Students must make sense of the data, choose a model to best represent the data, and provide justification why. In order to complete this task, student must be able to determine why a model is most useful for this context.
- Students must apply prior knowledge to complete the data set and determine if there is a minimum or maximum value that exists for this scenario.

## What Skills Do Employers Value Most?

What implications does this have on planning and instruction?

How do the implications connect to the key shifts of the LSSM?

<p style="text-align: center;"><b>Attention</b></p> <ul style="list-style-type: none"> <li>- Ability to manage time and prioritize</li> <li>- Follow-through</li> </ul>	<p style="text-align: center;"><b>Curiosity &amp; Commitment</b></p> <ul style="list-style-type: none"> <li>- Willingness to learn after they graduate college</li> <li>- Problem solving</li> </ul>	<p style="text-align: center;"><b>Grit &amp; Agility</b></p> <ul style="list-style-type: none"> <li>- Ability to overcome setbacks</li> <li>- Changes directions quickly and effortlessly</li> <li>- Goals-driven</li> </ul>	<p style="text-align: center;"><b>Humility</b></p> <ul style="list-style-type: none"> <li>- Ability to ask for help when in need and admit what they don't know</li> <li>- Team player mentality</li> </ul>
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(Beaton, 2017) 18

**Duration:** 7 minutes

**Critical Idea:** In order to prepare students to be college and career ready, they must have **regular** opportunities in the classroom to develop a diverse set of skills including grit, humility, problem solving, and communication skills.

**Facilitator says:** Recall the quote that began this section. The end of the quote says, *...demands students know more than just content, but demonstrate that they know how to learn and build upon that content to solve problems. They must develop versatile communication skills, work collaboratively, and work competitively in a school or work environment.*

What skills do employers value most?

**Facilitator does:** Leave slide with the opening graphic. Do not animate until directed.

- Prompt participants to talk with an elbow partner and brainstorm at least three skills they anticipate will be included on the list.
- After 3 minutes, call on 2 or 3 participants to share with the group one of the skills they brainstormed.
- **Animate the slide** to reveal the list of skills from *Forbes* magazine. If any skills on the list were not mentioned in discussion, ask participants to reflect on why the skills might have been included.
- **Animate the slide.** Ask participants to discuss with their same elbow partner the questions on the screen.

**Facilitator says:**

- What implications does this have on planning and instruction?
- How do the implications connect to the key shifts of the LSSM?

The slide is titled "Reflection" in a teal header. It contains two rounded rectangular boxes with light blue borders. The first box on the left contains the text: "Identify one connection between the sample EngageNY problems and the components of rigor." The second box on the right contains the text: "What does it look like when we ask students to work on procedural skill and fluency versus conceptual understanding or application?" The slide has a yellow footer bar with the number "19" in the bottom right corner.

**Duration:** 4 minutes

**Critical Idea:** Reflecting on our learning is important to solidifying understanding and making progress toward accomplishing the goals of the initiative.

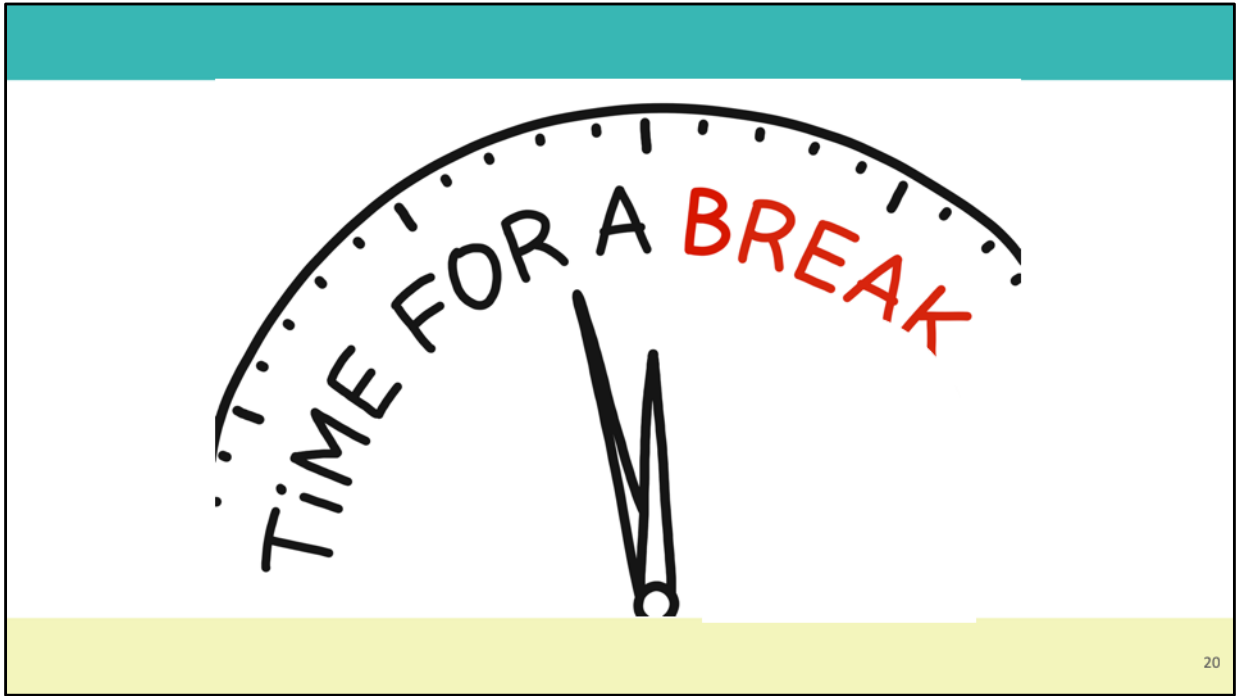
**Facilitator does:** Give participants 2 minutes to reflect on the questions. Participants should record their responses on **p. 9** of their handout. Once participants have completed their reflections, review the goal of session 1 before going on break.

**Facilitator says:** The goal of session 1 was to define the key shifts in the standards, describe how these key shifts guide decisions about teaching and learning, and identify specific examples of how the components of rigor manifest in the EngageNY resources. We will build on this knowledge after our break when we explore the key shifts of focus and coherence.

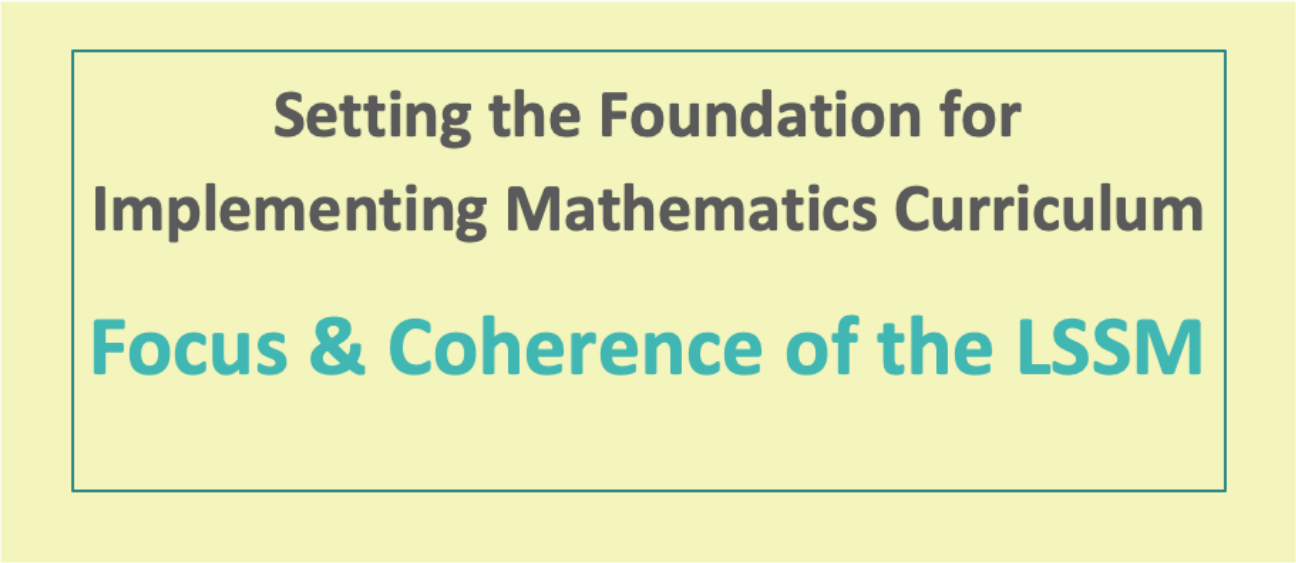

**Words of Wisdom:** This is an opportunity for participants to share their learning from session 1.

Again, if you perceive any resistance, the basic strategy is:


- (1) acknowledge the resistance,
- (2) honor and validate it with a reason or two,
- (3) provide a rationale for engaging, and
- (4) tie it to the work of the day.



This break should be no longer than 15 minutes.



**Setting the Foundation for  
Implementing Mathematics Curriculum  
Focus & Coherence of the LSSM**



21

**Duration:** 1 minute

**Facilitator says:** We will continue to extend our learning about the shifts in mathematics. This focus relates specifically to the fourth overarching goal about strengthening your own content knowledge and pedagogy in order to develop your mentee's.

## Focus and Coherence of the LSSM

The Louisiana Student Standards for Mathematics is structured around essential instructional shifts:

### Shift 1: Focus

...focus deeply on only the concepts that are prioritized in the standards...

### Shift 2: Coherence

The standards are designed around coherent progressions from grade to grade. Learning is carefully connected across grades so that students can build new understanding onto prior skills and knowledge.

22

**Duration:** 3 minutes

**Critical Idea:** The key shifts are what make the LSSM different from previous standards. These key shifts should guide decisions about teaching and learning.

**Facilitator says:** We've already discussed the first shift of rigor & now we are going to explore how the other two shifts of focus and coherence play a significant role in implementing the LSSM.

**Animate the slide and say:** When referring to the focus of the standards, we are making reference to how the standards focus deeply on concepts that are prioritized in the standards. The Louisiana Student Standards for Mathematics are manageable with fewer standards than before, and clearly state what is expected of the students at each grade-level.

**Animate the slide and say:** Coherence is about making the math make sense. This is accomplished in two ways. First, you will see coherence across grades as the standards direct us to have students apply learning from a previous grade to learn a new topic. Second, you will also see coherence within a grade in the standards as they direct us to reinforce a major topic in a grade by utilizing a supporting topic.

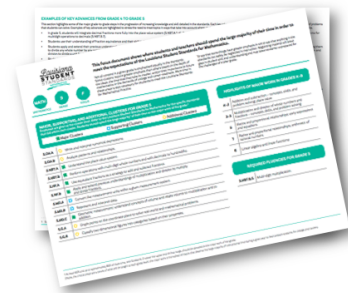
**Facilitator says:** Let's begin by taking a closer look at focus.

## Focus on the Major Work of the Grade

[www.louisianabelieves.com/resources/library/k-12-math-year-long-planning](https://www.louisianabelieves.com/resources/library/k-12-math-year-long-planning)

Take a few minutes to familiarize yourself with the Focus documents.

- How would you summarize the *major work* of your grade?
- Is there anything that you thought should be a part of your grade's major work that is not?
- How do the supporting and additional clusters support the major work in your grade?



23

**Duration:** 10 minutes

**Critical Idea:** The LSSM focus deeply on concepts prioritized by the major work of the grade-level/course.

**Facilitator does:** Have participants select their grade-level Focus documents from <https://www.louisianabelieves.com/resources/library/k-12-math-year-long-planning>, or have documents printed for each person prior to the session.

**Facilitator says:**

- The front of this document shows the domains and cluster headings for your specific grade-level.
- Cluster headings marked with green squares indicate the major clusters for this grade and are the main focus of the grade.
- The supporting clusters (blue squares) and the additional clusters (yellow circles), are also important. All standards should be covered for a grade-level; these supporting and additional clusters are just standards that support the learning of the main focus of the grade.
- The green squares represent concepts students **MUST** leave their grade knowing. Without a solid foundation of these ideas, they will be set up for failure as they continue



through the years.

- Notice the footnote at the bottom of the page → 65 to 85 percent of class time should be devoted to the major work of the grade.

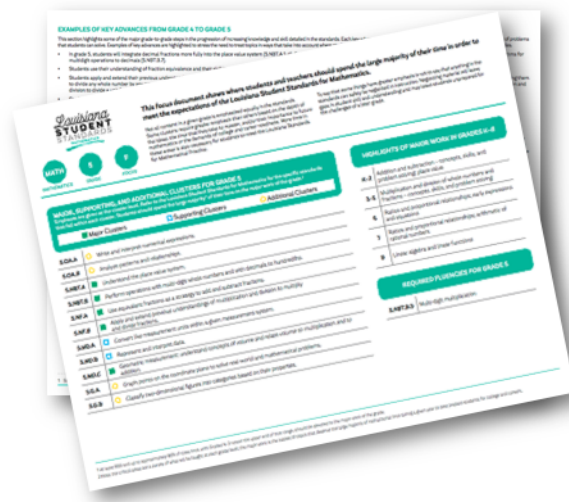
**Animate the slide and say:** Take a few minutes to explore and familiarize yourself with this document. When you have had a chance to read over it, have a conversation with your group around these questions.

**Facilitator does:** Allow 5 minutes for participants to read and discuss the questions. Have several participants share responses to the questions.

**Words of Wisdom:** Major work for a grade-level should be a summary that encompasses all of the major clusters. The supporting clusters should be presented in the context of the major work.

# Focus on the Major Work of the Grade

- What additional information can be found on this document?
- Why is it important?



**Duration:** 7 minutes

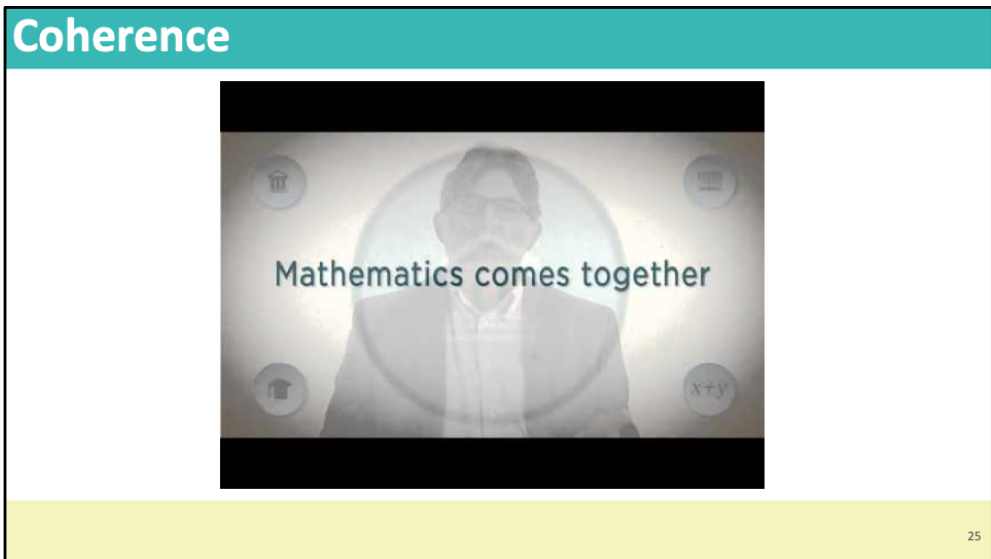
**Facilitator says:**

- This document includes important information in addition to the major focus of the grade-level.
- Take a minute to examine the additional information that is provided for you on the back of this document and discuss with your group why this information is important for your grade-level.

**Facilitator does:**

- Allow 5 minutes for participants to read and discuss the additional information found on the back of the document.
- Choose several participants to share key findings and describe the importance of each.

**Words of Wisdom:** Make sure the participants notice the Examples of Key Advances from the previous grade as well as the Fluency Expectations.



**Duration:** 12 minutes

**Critical Idea:** Coherence in mathematics is identifying how ideas logically flow from previous understandings to higher-order structures.

**Facilitator says:**

- The standards are related to one another in a variety of ways. One way is the relationship you just explored, where standards within a grade-level address or support the major work for that grade.
- Another way that standards relate is across grade-levels. You can see the coherence across the grades as you see how the students apply learning from the previous grade to learn a new topic. **In other words, we want to understand how does what you teach your students in any one school year influence their success in subsequent years.**
- We are going to watch a short video with one of the lead writers of the Common Core standards, William McCallum. In this video, he explains the importance of connections within mathematics and the value of students understanding the structure and coherence of the subject.
- As you watch the video, I would like for you to think about two or three key takeaways from what you hear about coherence. Be ready to share these takeaways with your group when the video is over.

**Facilitator does:**

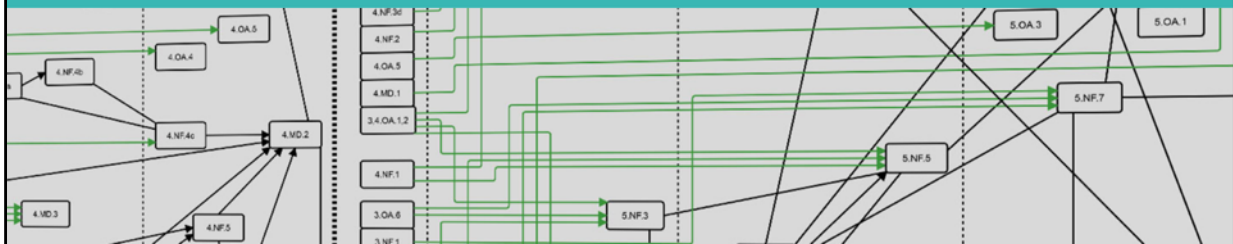
- Play video on slide (also located here: <https://vimeo.com/81639437>) [5-minute video].
- Once video is complete, allow no more than 5 minutes for participants to share with their group their key takeaways from the video.
- Have several participants share one takeaway they discussed in their small group.

**Possible responses:**

- Students don't see the connections in math even though they have memorized steps and procedures.

- In math, different ideas later become unified.
- Standards are not intended to be a list of discrete bullets.

## Coherence Map



- Build student understanding by linking together concepts within and across grades.
- Identify gaps in a student's knowledge by tracing a standard back through its logical prerequisites.
- Visualize and understand how supporting standards relate to the major work of the grade.

26

**Duration:** 3 minutes

**Critical Idea:** Slides 28-33 guide participants through how to use the Coherence Map.

**Facilitator says:**

- The Coherence Map is an interactive website that illustrates the coherent structure of the standards for mathematics K–8. This site provides one representation of how the standards are connected to each other, and is derived from the wiring diagram you see in this image.
- The Coherence Map can be used to: **[Note: Animate each point.]**
  - Build student understanding by linking together concepts within and across grades.
  - Identify gaps in a student's knowledge by tracing a standard back through its logical prerequisites.
  - Visualize and understand how supporting standards relate to the major work of the grade.

**Words of Wisdom:** It is important to clarify that the Coherence Maps were created for the CCSSM, not the LSSM. Acknowledge that this is not overly problematic, but there exist cases

where this is problematic.

<https://achievethecore.org/page/2801/learn-more-about-the-coherence-map>

# Coherence Map

<https://achievethecore.org/coherence-map/>

The Coherence Map shows the connections between Common Core State Standards for Mathematics.

Get Started

Build student understanding by linking together concepts within and across grades.

Identify gaps in a student's knowledge by tracing a standard back through its logical pre-requisites.

Visualize and understand how supporting standards relate to the major work of the grade.

27

**Duration:** 2 minutes

**Facilitator does:** Provide participants with the link to the Coherence Map (<https://achievethecore.org/coherence-map/>) and invite them to follow along as you guide them through how to use/navigate the site.

**Facilitator says:** When you arrive at the opening page for the Coherence Map, you will notice the same statements that we just discussed listed here as a reminder. You will begin exploring the Coherence Map by clicking on the 'Get Started' button in the center of the screen.

## Coherence Map



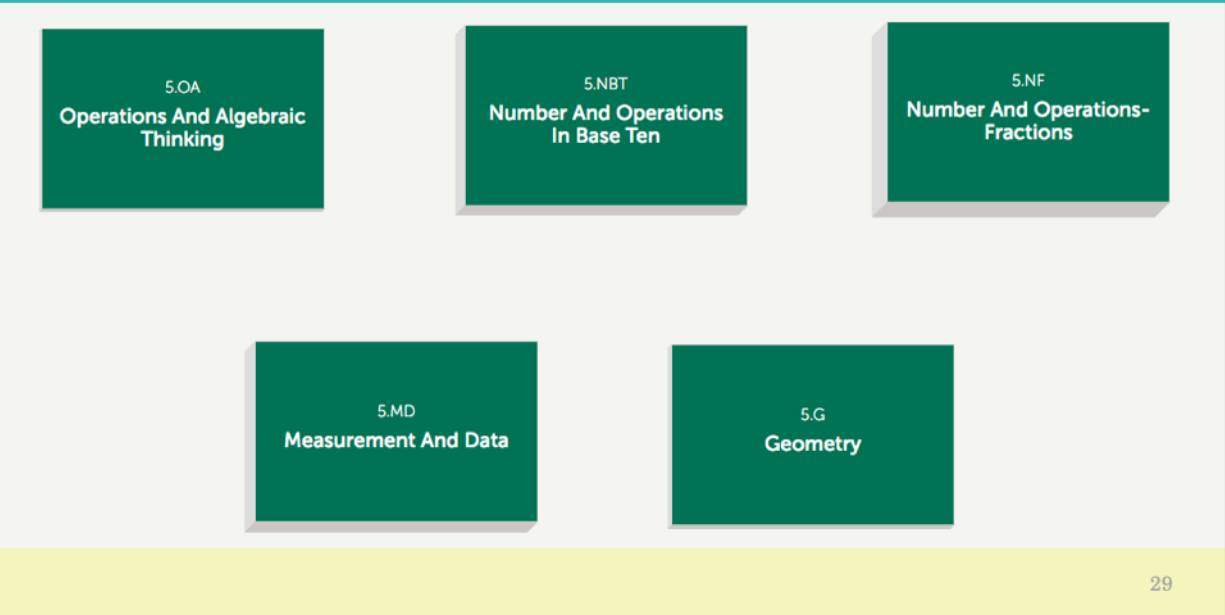
**Duration:** 1 minute

**Facilitator says:**

- The standards in the Map are organized by grade.
- Select the grade you wish to explore on this page.



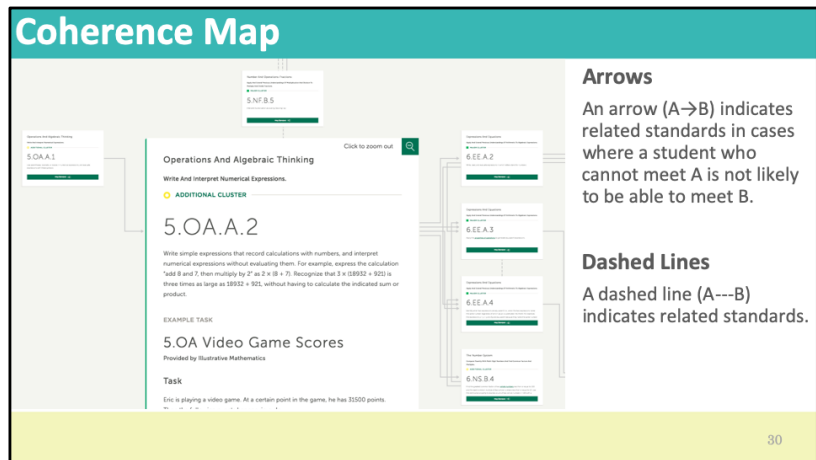
## Coherence Map



**Duration:** 1 minute

**Facilitator says:**

- Once you have selected your grade-level, the standards within that grade are organized by domain.
- Select the domain 'Operations and Algebraic Thinking.'



**Duration:** 5 minutes

**Facilitator says:**

- Now you will see a list of all the standards falling under that domain for your grade-level.
- They are organized by cluster and are in order by their standard number.

**Facilitator does:** Animate the slide.

**Facilitator says:**

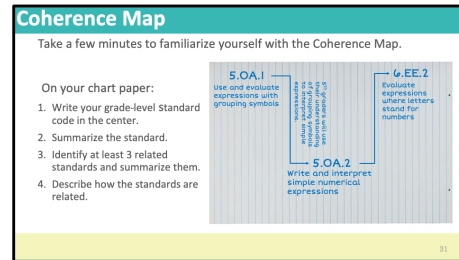
- When you click on the 'Map Standard' button for a standard, it will open up a wire diagram showing all the related standards for this standard.

**Animate the slide and say:**

- To read this diagram, the arrows indicate related standards in cases where a student who cannot meet A is not likely to be able to meet B.
- In this example, if a student has not had experience with standard 5.OA.A.1, then they are unlikely to be successful with 5.OA.A.2.
- The same could be said for the other side: if a student does not get sufficient experience with the selected standard of 5.OA.A.2, then they are unlikely to be successful with any of these related 6<sup>th</sup> grade standards in the following year.
- Sometimes the prerequisite standards identified on the map are from a previous grade-level, but sometimes there are prerequisite standards within the same grade-level as well, as you see here.

**Animate the slide and say:**

- The dashed lines that appear on the map represent related standards that are not necessarily intended to come before or after, but can be taught as support concurrently with the selected standard.



**Duration:** 20 minutes

**Critical Idea:** To plan for remediation, it is critical that teachers understand how standards are related.

**Facilitator says:**

- Take a few minutes to explore the Coherence Map and familiarize yourself with its structure.

**Facilitator does:**

- Allow no more than 5 minutes for participants to explore the Coherence Maps. While participants are exploring, pass out chart paper and markers.
- Ask 1 or 2 participants to share an observation about the Coherence Maps.
  - If it hasn't surfaced already, acknowledge that only grades K–8 have active Coherence Maps. Student Achievement Partners will publish high school maps in the future. Until then, teachers will **use the Louisiana Algebra I Remediation Guide** to support exploration of standards.

**Facilitator says:**

- For this activity, we will explore the coherence of the standards we used in earlier for the rigor card sort activity.
- **Locate your grade-level's standard from the card sort activity and find that standard on the site.**
- First, on your chart paper, you are going to write the grade-level standard code in the center.
- Then, you will work with your group to summarize the main focus of that standard.
- Next, using the Coherence Map, you will identify at least three related standards and summarize them. Try to place them in similar locations on your chart as they are on the Coherence Map. Don't forget to draw the arrows or dashed lines to show the relationship.

**Animate the slide** and **say:**

- Finally, you will work with your group to discuss how the standards are related and write a description of that relationship near the arrows. For example, in this visual, students will use what they learned about evaluating expressions with grouping symbols in 5.OA.1 to write and interpret simple numerical expressions in 5.OA.2.
- Are there any questions about what you are going to do?


Answer any clarifying questions.

Before releasing them to work, **say:**

- Remember the most important part of this activity is the conversation around the relationships of the standards. Don't rush this conversation; take your time to discuss how standards are related and why that is important.


**Facilitator does:** Allow 20 minutes for the participants to complete this activity.

## Louisiana Remediation Guides



DEPARTMENT of  
**EDUCATION**  
Louisiana Believes

[www.louisianabelieves.com/resources/library/k-12-math-year-long-planning](http://www.louisianabelieves.com/resources/library/k-12-math-year-long-planning)



Louisiana  
**STUDENT**  
STANDARDS

### 6<sup>th</sup> Grade Remediation Guide

Focused remediation helps target the skills students need to more quickly access and practice on-grade level content. This chart is a reference guide for teachers to help them more quickly identify the specific remedial standards necessary for every Grade 6 math standard. Students should spend the large majority of their time on the major work of the grade (■). Supporting work (■) and, where appropriate, additional work (■) can engage students in the major work of the grade.

6 <sup>th</sup> Grade Standard	Previous Grade(s) Standards	6 <sup>th</sup> Grade Standards Taught in Advance	6 <sup>th</sup> Grade Standards Taught Concurrently
<p><b>6.RP.A.1</b> Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” For every vote candidate A received, candidate C received nearly three votes.”</p>	<p><b>5.OA.A.1</b> Multiply or divide to solve word problems involving multiplicative comparisons, e.g., “Being wrong and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison (Example: 8 times as many).”</p> <p><b>5.OA.A.2</b> Know relative sizes of measurement units within one system of units including: ft, in, mi, cm, kg, g, lb, oz., l, ml, hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. (Conversions are limited to one-step conversions.)</p> <p><b>5.OA.A.3</b> Read measurement quantities in a two-column table. For example, know that 7 ft 11 in is longer than 7 ft 6 in. Express the length of 4 ft 10 in as a sum of whole units of length, e.g., use a conversion table for ft and in, and label the number parts (1, 11, 10, 10).</p> <p><b>5.OA.B.1</b> Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Label the ordered pairs (0, 0), (3, 6), (6, 12).</p> <p><b>5.OA.B.2</b> Understand multiplication as scaling (resizing). a. Compare the size of a product to the size of one</p>		

32

**Duration:** 10 minutes

**Facilitator says:**

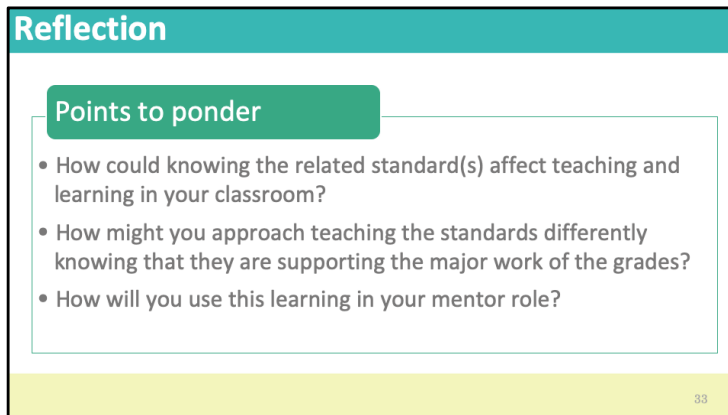
- On the Louisiana Believes site, there is a resource called a ‘Remediation Guide.’
- Take a look at some of the information this document provides for you.

[Note: Participants can either navigate to the document on their laptops (<https://www.louisianabelieves.com/resources/library/k-12-math-year-long-planning>) or just look at the example on the slide.]

**Facilitator says:** Have a quick discussion at your table groups. What information does this document provide for you? How does this information relate to what we just learned? How will this document be helpful for you when planning?

**Facilitator does:** Allow no more than 5 minutes for participants to discuss, and then have a few participants share. Possible responses:

- The Remediation Guide connects our grade-level standards to any related standards, whether it be from a previous grade-level, the same grade-level that should be taught in advance, or from the same grade-level that can be taught concurrently.
- It also shows the color coding for which standards are part of the major work or supporting the major work.
- This is similar to the Coherence Map in that it shows me the related standards for my grade-level (though it doesn’t show the related standards for the next grade-level).
- This document can help when planning around gaps in student learning by showing me what prerequisite standards to refer back to for support.

A presentation slide titled "Reflection" with a teal header. Below the header is a white box with a green title "Points to ponder" and three bullet points. The slide has a yellow footer with the number "33".

**Reflection**

**Points to ponder**

- How could knowing the related standard(s) affect teaching and learning in your classroom?
- How might you approach teaching the standards differently knowing that they are supporting the major work of the grades?
- How will you use this learning in your mentor role?

33

**Duration:** 10 minutes

**Facilitator says:** Take a moment and do some personal reflection on what we just learned about focus and coherence. As you think about the answers to these questions, write your thoughts down on a post-it note.

**Facilitator does:** Wait no more than 2 minutes for participants to reflect quietly.

**Facilitator says:** Locate someone in the room you haven't talked to today. Take your post-it note with you and share your thinking around these questions.

**Facilitator does:**

- Allow 5 minutes for participants to find a new partner and share their reflections.
- Have several participants share what they discussed.
- Tell participants to return to their original seats.



**Duration:** 45 minutes

## One-Minute Papers

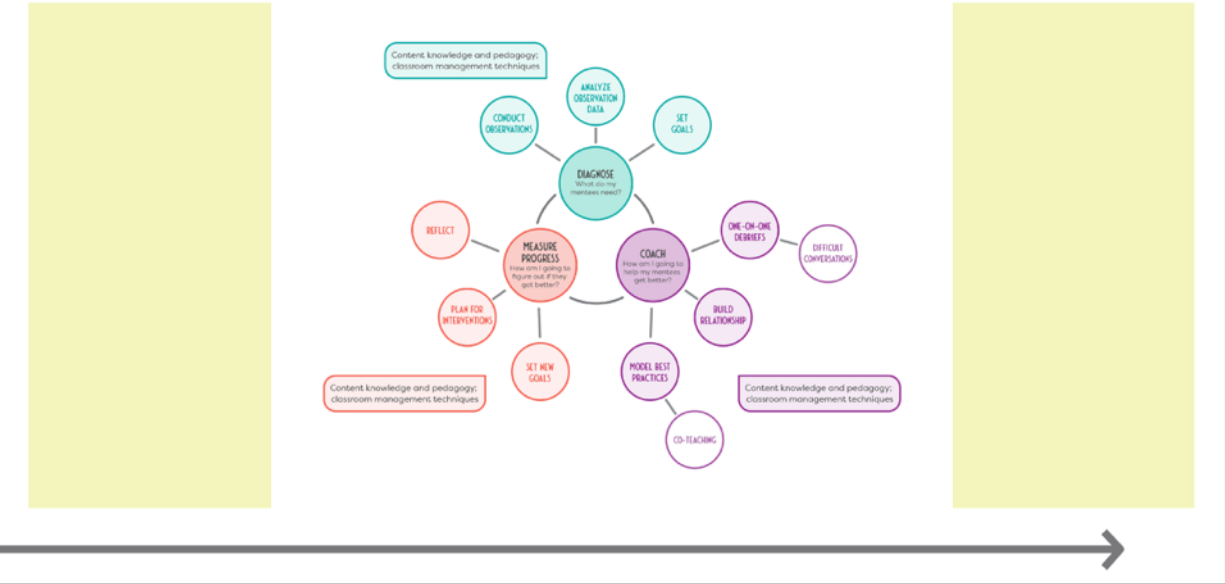


How do you see yourself using the math content knowledge you built this morning as a mentor?

**Duration:** 3 minutes

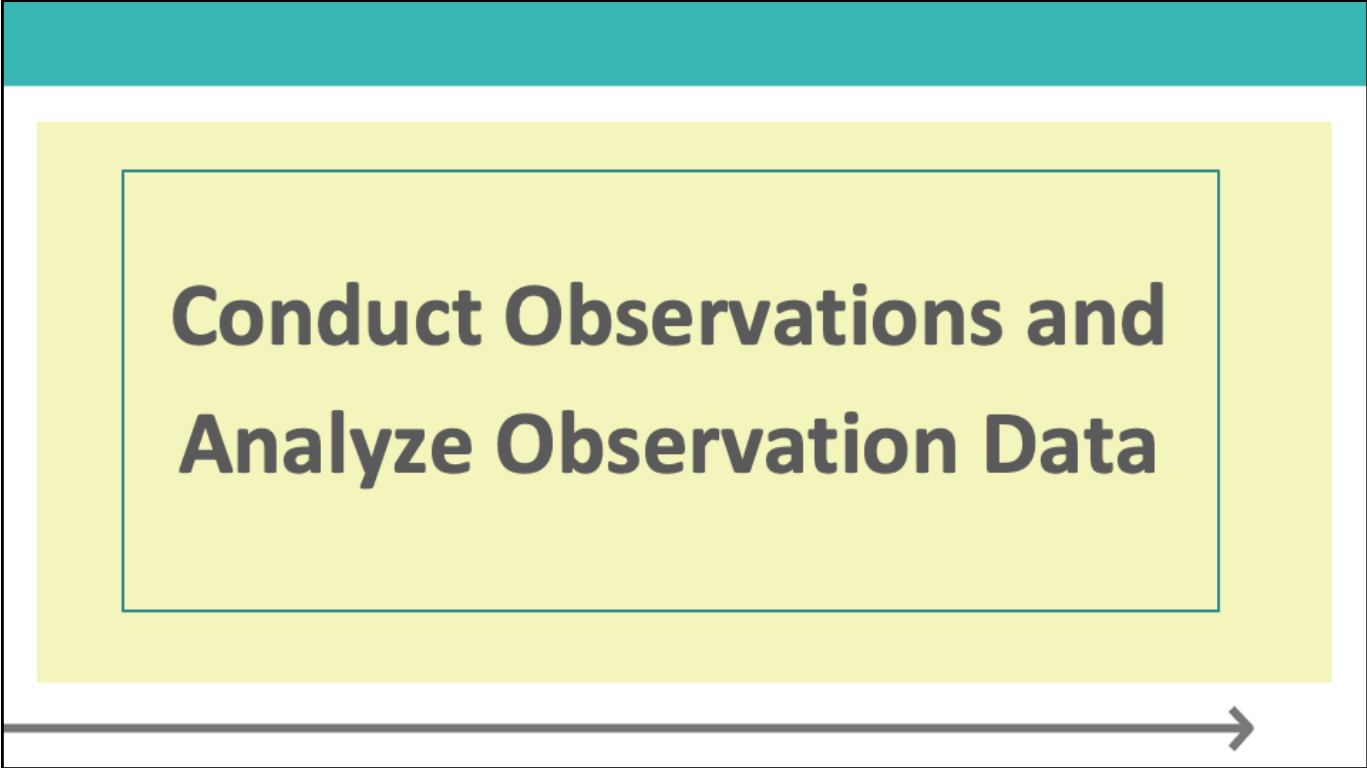
**Facilitator Says:** As we are coming back from lunch, we're going to be transitioning from learning about math content to applying it to your mentoring practice. To get warmed up for that, we're going to do an activity called One-Minute Papers. I'm going to put a question up on the screen. On page **10** of your packet, there is space for you to write. The key to this activity is to try to write for the full minute. If you run out of steam, try to push yourself to keep going. Sometimes the best ideas will come up for you at the very end of the time after you've been stuck for a bit! Then, we'll take 1 minute to share what you've written with your shoulder partner.

# The Mentoring Cycle



- **Duration:** 30 seconds
- **Facilitator says:** Remember, all of our work is grounded in the mentoring cycle.





# Conduct Observations and Analyze Observation Data

- **Duration:** 30 seconds
- **Facilitator says:** Welcome back from lunch! Let's get started!

## Module 2 Afternoon Outcomes



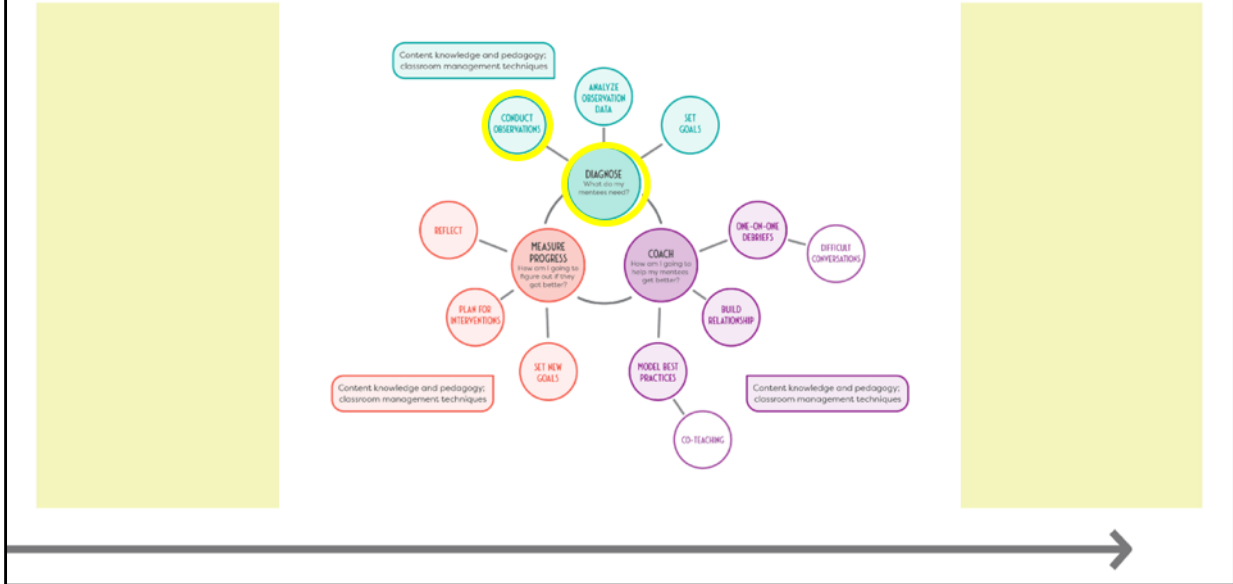
### DIAGNOSE

- Conduct classroom observations to collect data on student and teacher actions.
- Analyze data to identify needs for improving student learning and mentee instructional practice.

• **Duration:** 30 seconds

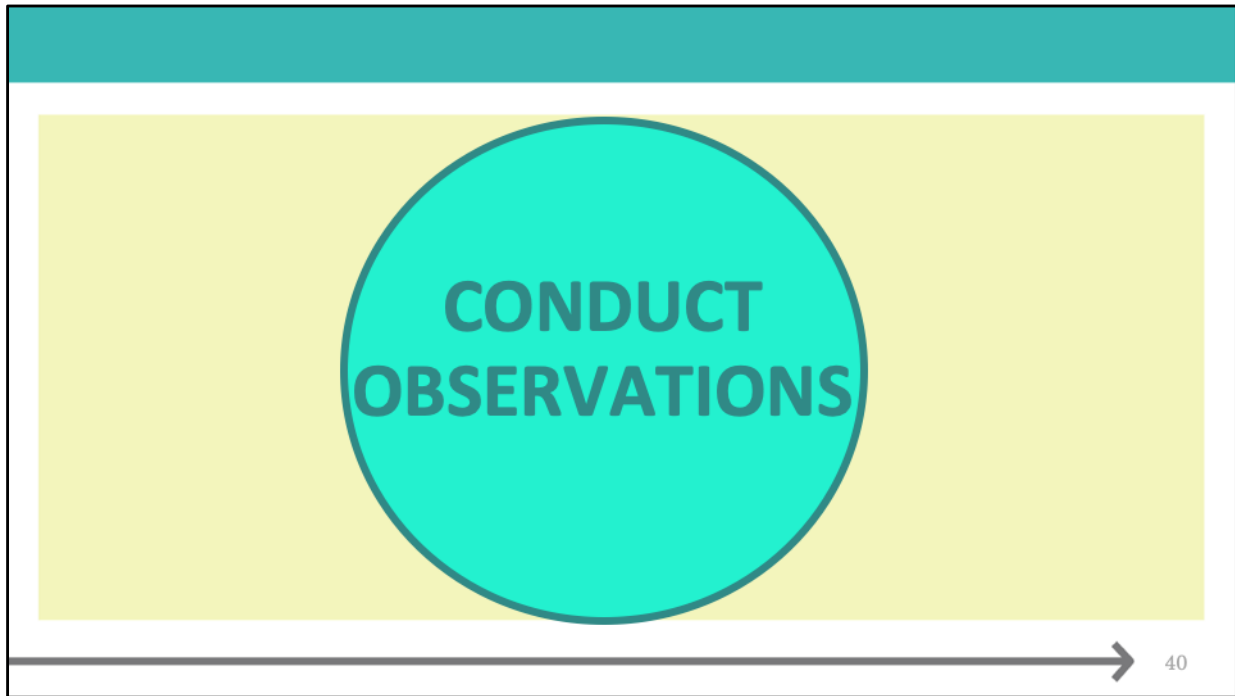
• **Facilitator Says:** This afternoon we will dive into the first two components of DIAGNOSE in the mentor cycle, based in our content area from this morning: conducting observations and analyzing the observation data you collect

# The Mentoring Cycle



- **Duration:** 30 seconds

- **Facilitator says:** Let's take another look at the mentor cycle to remind ourselves that conducting observations occurs during the Diagnose stage of the cycle.



- **Duration:** 30 seconds
- **Facilitator says:** Now that we have developed a deeper understanding of the three shifts in mathematics we will focus our learning on conducting an observation in a mentee's classroom. We'll practice conducting observations using the three shifts in mathematics as a lens for our observation. The observation tool will help focus what you are looking for when you are observing your mentee.

## Conduct Observations: 3 Key Components

- Confirm observation details
- Observe students and teacher in action
- Record notes using “look-fors”



41

- **Duration:** 1 minute
- **Facilitator says:** Every section of the mentor cycle has three key components. As we proceed through the 9 modules of the mentor teacher course, each time we dive into one of the sections of the mentor cycle we will break it down into three key components.
- There are three key components to remember when conducting observations. These can be found on **page 11** of your handout. These are: confirming the observation details, observing the teacher in action with his or her students, and while conducting the observation the mentor should be recording notes using a classroom observation tool that focuses on the look-fors aligned to the selected instructional practice.
- **Facilitator does:** animate the slide to highlight the first key component
- **Facilitator says:** Let’s dive into the first key component, confirm observation details and what that entails.

## Confirm Observation Details

- Observation **day and time**
- Observation **classroom/logistics**
- **Instructional goal** of the lesson
- **Focus** of the observation
  - Use the **Teacher Preparation Competencies** to help
- **Student work and data** to collect
- **Confidentiality**
- **Debrief conversation** day/time



42

- **Duration:** 7 minutes

- **Facilitator says:** An important part of being an effective mentor is working together with your mentee to set up clear expectations. When conducting a classroom observation, setting up clear details for the observation ahead of time will go a long way towards getting the observation off on the right foot. You may be nervous about conducting an observation - and that's normal when it's a new practice for you. Also, your mentee will likely be nervous about being observed. Taking the time to talk to them beforehand, either in person or digitally to make sure you are both on the same page about the details of the observation can help you both get ready.

- These are the details you will want to confirm with your mentee prior to going into their classroom to conduct an observation. We've also created a tool for you to use when going through this step in your real work with your mentees. This tool can be found on **page 12** of your handout. Follow along on the handout as we go through these key components.

- **Facilitator does:** Click to animate for each detail

- **Facilitator says:** First, you'll want to confirm the day and time of the observation. This includes when you will be coming to observe and for how long you will stay in

the mentee's classroom. As you can see on the handout, we've included some guiding questions that you can use when having this conversation with your mentees.

- Next, you'll want to review some classroom logistics. Take a look through the guiding questions for this component. (Pause 30 seconds) It is comforting, for both the mentor and mentee, to know ahead of time where the mentor will be located in the room during the observation. You don't want to be distracting to the students during the time you are observing, and yet you don't want to be removed from the action and missing what's going on. Anything else you would add to this part?
- Next, you'll want your mentee to share with you the lesson they will be teaching at that time and the lesson's instructional goal. Remember that because one of your main jobs as a mentor is to support your mentees in teaching the curriculum well, you always need to know what lesson from the curriculum they are teaching and the goal of the lesson.
- You will also want to confirm the focus of the observation including what specific skill or instructional practice you will focus your notes on during the observation. **In today's practice, our focus will be on the key shift of Rigor**, since that was one of our focuses in this morning's learning and because it is one of the areas where most new teachers struggle. However, the focus of your observation will change depending on the goals of your work together. The Teacher Preparation Competencies can be an excellent source of ideas for specific skills and practices to observe for.
- In regards to the student work and data you'll gather, there are a few different forms this could take. Will students be producing work for the mentee to collect? Will you be taking notes of student's oral responses? Or might you be taking video of student discussion? Different lessons and focuses will lend themselves to different kinds of data collection. You do always want to collect data to inform your one-on-one debrief conversation. This is also a great time to remind your mentee that your observation is strictly to help the teacher improve their practice in that particular skill and should not be seen as evaluative. Yes, you will be taking notes while observing and may be looking at student work, but this is for the solely for the purpose of informing the one-on-one debrief conversations following the observation.
- Answering the guiding question under confidentiality helps build trust with your mentee - what needs to be kept confidential between the mentor and mentee to enable authentic growth?
- And finally, you will want to decide with your mentee when you will have your follow-up conversation after the observation. In the mentor cycle this is the one-on-one debrief. You do not want this to be more than 48-72 hours after you've conducted the observation because the more time that passes between the observation and the debrief, the less impactful the observation data becomes.
- Talk at your tables about why you think confirming these details prior to the

observation is important and if you are thinking about any other details you would want to add in when confirming the details with your mentee, share those with your tablemates as well.

- **Facilitator does:** After 2 minutes invite some responses.



## Conduct Observations: 3 Key Components

- Confirm observation details
- Observe students and teacher in action
- Record notes using “look-fors”



43

- **Duration:** 1 minute
- **Facilitator does:** animate the slide to highlight the second key component
- **Facilitator says:** Now that you have confirmed the details of the observation with your mentee, let's look at what it means to observe the students and teacher in action. As you are new mentors, this may be your first time going into another teacher's classroom to observe them. It's completely normal to feel anxious and unsure of how to behave when you haven't done it before. So let's dive in!

## Observe Students and Teacher in Action

Do? Don't?

CONDUCT OBSERVATIONS

44

- **Duration:** 4 minutes
- **Facilitator says:** Think back to the times when you have been observed while teaching. Think about what the observer did when they were in your classroom. How effective were those practices? How did they make you feel?
- With a shoulder partner, take two minutes discuss what you think some important Do's and Don'ts of conducting observations of teaching are.

## Observe Students and Teacher in Action

Do	Don't

CONDUCT OBSERVATIONS

45

- **Duration:** 8 minutes

**NOTE:** This slide includes animation that fades out to reveal text in the table.  
Please do not change.

- **Facilitator says:** With a shoulder partner, take a few minutes to look over the “Do’s and Don’ts” for when observing a teacher in your **handout on page 13**. Discuss what you think each suggestion means in the chart and be ready to share our your ideas with the whole group.
- **Facilitator does:** Give participants 5 minutes to look over the chart and discuss what they think each suggestion means, circulating and listening in on conversations. If you hear a strong interpretation, ask that participant to share their thoughts with the larger group when the time comes. After 5 minutes, ask participants to share their ideas with the larger group.
- **Facilitator says:** I heard lots of great ideas regarding the dos and don’ts of observing a teacher in action. I want to clarify a few points. (Advance animation)

Stay close to the action means do not be too far away from where teaching and learning is taking place. For example, if a teacher is teaching in a smaller group, you may want to move from your original spot from which you were observing so you can hear both the student and teacher talk. (Advance animation) Also, remember that your job is NOT to get in there and “fix” the kids in that moment. You will need to resist that temptation. Your purpose during the observation is to see what is really going on in the classroom in order to help that teacher improve in the future, not to make just this one lesson better in isolation because you happen to be present that one day. (Advance animation) It can also be tempting to notice lots of things - because classrooms are busy places and there are likely to be LOTS of things that a mentee needs help with! Resist that - stay focused - it will make your work on that focus area that much stronger.

- (Advance animation). Let’s take a few minutes to talk a little more about what this last point means, script exactly what you hear from teacher and students.

## Script Exactly What I Hear?

- Script what students say/do
- Script what the teacher says/does
- Practice, practice, practice
- Use shortcuts
- Stick to the focus (e.g., rigor)



46

- **Duration:** 2 minutes

• **Facilitator says:** Scripting exactly what the teacher says and does as well as what students say or do is a challenging task that gets easier with practice. At first this can be really challenging as things happen so quickly that it's easy to miss what is being said and done. It takes a lot of practice to be able to type or write everything that is happening as it's happening. However, with more practice, you all will get faster over time. You will also begin to develop your own shortcuts, or shorthand for scripting such as writing ST for students, T for teacher, and other symbols to code your notes. Also, by focusing on one thing that you are looking for in a particular observation, this will help focus your notes/script as well. So on what do we record our script and notes on when observing a teacher? Let's look at a classroom observation tool that can help us capture what we are seeing during an observation.

# Observe Teacher in Action

The form is titled "Classroom Observation Tool" and includes logos for the Louisiana Department of Education and Learning Forward. It features a "Focus of Observation" section, a "Look-Fors" section, and two columns for "Teacher Behaviors" and "Student Behaviors". A circular button labeled "CONDUCT OBSERVATIONS" is located in the bottom right corner of the form area.

Classroom Observation Tool		
Focus of Observation:		
"Look-Fors" What does strong teaching for the focus area look like? <i>(observer complete prior to observation)</i>	Teacher Behaviors	Student Behaviors

- **Duration:** 10 minutes
- **Facilitator says:** After you've confirmed the observation details with your mentee, it is now time to actually observe the teacher in action with her students. When you are observing your mentees you will be taking notes on an observation note-taking tool. There are MANY different classroom observation tools out there that mentors and coaches use when conducting a classroom observation. We are going to present you with one, generic observation tool today, that we will use throughout the remaining modules. You can find the classroom observation tool on **pages 14-17** of your handout. What is nice about this tool is that it is generic in nature, so regardless of the focus of the mentee's lesson, you can use this same tool over and over again.

Take a few minutes at your tables to look over the classroom observation tool in your packet. Discuss with your tablemates what you may write in each section of the observation tool when observing your mentees, and how the different parts tie together.

- **Facilitator does:** Circulates during conversations. After 2 minutes, have a few participants share out their thoughts. Then make sure to highlight the following points about the observation tool:
- **Facilitator says:** Remember that the focus of the observation will be determined when you confirm your observation details. So you can have this section filled out prior to observing the teacher. The focus could be any of the content topics we have covered in our modules so far including classroom management and the three instructional shifts in math. For today's classroom observation practice, our focus is going to be on just one of the instructional shifts, Rigor. The reason we are going to narrow our focus to just Rigor is because it's key to not have too broad of a lens when observing, and if new teachers are using their Tier 1 curriculum, then the curriculum should already be focused and coherent. When teachers implement the lesson, it is imperative that they include all 3 components of Rigor including conceptual, procedural skill/fluency, and application as is called for in the lesson, which also makes this something concrete we can look for in a classroom observation.
- We've given you several copies of the observation tool. We'll use two during today's session to practice; the others are for you to take back and make copies to use in your mentor practice. Turn to the first copy on **page 5** and let's start prepping for our observation practice today. Since we'll be watching a video, you don't need to confirm the observation details and we can jump right to this second step.
- So let's all fill in our **focus as rigor during math instruction**. Now we have to consider what are our "look-fors" - this means what data might we be looking for and collecting about rigor during math instruction to determine how the mentee is doing in this area.
- Remember that in your mentoring practice, you'll complete the "look fors" section with your mentee as you are meeting with them to plan your observation. The document we used earlier this morning titled **Looking for Evidence of Student Engagement in the Key Shifts on page 7** of your handout as well as the **math section of the Teacher Preparation Competencies** provides us with strong look-fors for our observation tool. With a shoulder partner, use those two documents to help you complete the "look-fors" section of your observation tool with our sole focus on rigor in the math classroom. Be ready to share our your thoughts and ideas.
- **Facilitator does:** Circulate during conversations, which should last 5-8 minutes.

# Rigor Look Fors

Classroom Observation Tool	
Focus of Observation	Classroom
Focus of Observation: Rigor	
What does strong teaching for the focus area look like? (observer completes prior to observation)	Teacher Behaviors
<u>Balance</u> <u>conceptual</u> - explain ideas - models/structure - non/examples <u>procedural/fluency</u> - tools - communicate thoughts - flexibility <u>application</u> - plan - de/contextualize in problems	

CONDUCT OBSERVATIONS

48

- **Duration:** 5 minutes

**NOTE:** This slide includes animation. Please do not change.

- **Facilitator does:** Have a few participants share out their ideas of what “look-fors” they would include for this particular observation on rigor in the math classroom. It is helpful to point out when a participant has figured out a creative way to shorten the wording for a look-for. As participants share out have everyone else update the “look-fors” column of their own observation tool.
- **Note:** Mentors do not need to write in complete sentences in the look-for column. They simply need to keep the ideas in mind when observing the teacher and student behaviors during the lesson.
- After having several participants share, click to reveal the completed observation sheet.
- **Facilitator Says:** Look-fors for an observation on rigor should include the following:
  - a balance of conceptual understanding, procedural skill/fluency, and application
  - you may not see all three in every single lesson, but when you see one of the



- components, here is what it should include:
- conceptual understanding parts of the lesson should include students:
    - explaining mathematical ideas
    - using examples/nonexamples to make conjectures
    - creating and using a variety of models
    - making use of patterns and structure
  - procedural skill/fluency parts of the lesson should include students:
    - selecting tools that are relevant to the task
    - communicating thinking
    - looking for patterns
    - demonstrating flexibility in procedures and skills to solve problems
  - application parts of the lesson should include students:
    - decontextualizing and contextualizing quantities in problems
    - making a plan to apply their knowledge in different situations
- **Facilitator says:** Once you have your focus and look-fors sections of the observation tool complete, you are ready to observe the teacher in action.

## Conduct Observations: 3 Key Components

- Confirm observation details
- Observe teacher in action
- Record notes using “look-fors”



49

- **Duration:** 1 minute
- **Facilitator does:** animate the slide to highlight the third key component
- **Facilitator says:** Now that you know some things to keep in mind about observing your mentee in action, and you know what your Look-For observation sheet looks like, let's practice how you'll record notes during an observation. You will complete the teacher behaviors and student behaviors sections as you observe the lesson. Let's talk a little bit more about these two sections.

## Record Notes Using “Look-Fors”

- Stick to the facts
- Teacher and student talk
- Teacher and student moves
- Student learnings and outcomes

Teacher Behaviors	Student Behaviors



50

- **Duration:** 2 minutes

• **Facilitator says:** Our third key component of conduct observations is to record notes using the “look-fors” we just discussed, which you will plan before the observation. The main two sections of your observation tool that you will be recording notes on while observing are the teacher and student behaviors sections. This is where your scripting skills will be put to use. It is important that the notes you take **simply stick to the facts**. We don’t want to make inferences or judgments about a teacher’s instruction when taking notes. As mentors, the data we collect must be facts, rather than inferences or judgments. You can script exactly what you hear teachers and students saying, what you see teachers and students doing, and what student learning and outcomes you are observing as it all relates to your observation focus. This will allow your observations to be free from judgments. Remember that you are specifically looking for evidence of the focus you and the mentee agreed upon prior to the observation.

## Scripting vs. Interpretation

**Statement 1:** Teacher posted helpful examples on the board.

**Statement 2:** “I’m posting examples of how you might explain your thinking up here for you to use.” Example 1: “I chose this strategy to solve the problem because...” Example 2: “The reason I \_\_\_\_\_ instead of \_\_\_\_\_ is...” Example 3: “I decided to \_\_\_\_\_ because...”

**Statement 1:** Teacher placed an emphasis on students looking for patterns in the number string.

**Statement 2:** Teacher told the students to be sure to look for patterns during the number string activity three times.



51

- **Duration:** 8 minutes
- **Facilitator says:** It is important you stick to the facts when observing in a classroom. The notes you take can help you remain objective about what’s happening instead of making judgements. Let’s engage in a quick activity to make sure we are all on the same page about what constitutes a scripted vs. an interpreted/judgmental observation that you might make when looking for rigor in your mentee’s math classroom. This activity is called scripted versus interpreted/non-judgmental. Two statements will pop up on the screen that are examples of what someone may record during an observation. After you read the two statements, turn to a shoulder partner and discuss the differences between the two statements. When you identify which one you believe is the scripted (non-judgmental) statement, discuss why this type of comment is more effective for an observation.
- **Facilitator does:** **animate the slide to reveal the first two statements.** Circulate while participants discuss the differences between the two statements and why the second statement would be more effective for an observation. After 2 minutes

invite a few participants to share their thinking with the group. (Possible answers may include: statement 2 is more specific, includes specific examples of how the teacher is supporting students in developing their conceptual understanding of the concept, it is free of judgement i.e. “helpful”, can start a conversation with a mentee “you said and did this: \_\_\_\_\_. Tell me about it. What impact did that have on students? Let’s look at their work and see.” as opposed to “What you said and did was helpful.”)

- **Facilitator says:** Let’s try one more. After the two new statements pop on the screen, read them and discuss with a partner the differences between the two statements. When you identify which one you believe is the scripted (non-judgmental) statement, discuss why this type of comment is more effective for an observation.
- **Facilitator does: animate the slide to reveal the second two statements.** Circulate while participants discuss the differences between the two statements and why the second statement again would be more effective for an observation. After 2 minutes invite a few participants to share their thinking with the group. (Possible answers may include: statement 2 is more specific because it describes what “placed an emphasis” means - the teacher said it three times, it demonstrates how the teacher and students were engaging in procedural/fluency skill practice, it describes exactly what happened (the teacher TOLD the students something) - you can imagine if the students didn’t do what was expected, being able to go back in the notes and see what the teacher did beforehand would be key. Placed an emphasis doesn’t actually tell you what the teacher did - did she say it? write it? how many times?), you may think 3 times is an emphasis, but that’s a judgement call on your part.

## Judgment

**Statement 1:** Wonderful questions!

**Statement 2:** Your questions are not effective.



52

- **Duration:** 2 minutes
- **Facilitator says:** Take a look at the two statements on this page. Notice that both are not just inferential but actually judgmental. Unspecific praise and criticism are both judgments. And, judgment can erode trust and build dependency in which the mentee, rather than learn to ask strong, higher-order thinking questions, seeks the mentor's approval only. Observational data that leads to analysis and reflection -- and that opens up learning conversations -- needs to be scripted and specific, not judgmental.

## Conduct Observations

### Let's Reflect:

- What are you most excited about with conducting observations?
- What do you see as your biggest area of growth before we try conducting an observation?



53

- **Duration:** 5 minutes

- **Facilitator says:** Let's take a quick minute to reflect on what we've discussed so far about conducting observations. Take 1 minute to think about the following 2 questions: What are you most excited about with conducting observations? What do you see as your biggest area of growth before we try conducting an observation? [Pause for a minute of quiet reflection time] Now we are going to do a SU-HU-PU, Stand up, Hand up, Pair up. When I say go, you will stand up, put one hand up in the air, and find a new partner to reflect with at a different table by giving them a high five to pair up. Once with your new partner, introduce yourself and share your thoughts on the two questions.

- **Facilitator does:** Circulate while participants are standing up, pairing up and discussing the questions on the slide. After about 3 minutes, invite participants to return to their seats.

## Conducting Observations: Focus on Rigor

CONCEPT DEVELOPMENT

Mathematics Assessment Project  
CLASSROOM CHALLENGES  
A Formative Assessment Lesson

**Comparing Lines  
and Linear Equations**

Mathematics Assessment Resource Service  
University of Nottingham & UC Berkeley

For more details, visit: <http://map.mathshell.org>  
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located at <http://creativecommons.org/licenses/by-nc/4.0/>. All other rights reserved.

<https://www.map.mathshell.org/index.php>

CONDUCT OBSERVATIONS

54

- **Duration:** 10 minutes
- **Facilitator says:** We are about to conduct our very first observation using a video we have selected specifically for our focus on Rigor. Before we view the video, I will give you an opportunity to gain some background information about the lesson you are observing. **\*\* lesson is a separate handout\*\***
- You will each need a copy of Comparing Lines and Linear Equations. This is a copy of the Mathematics Assessment Resources Service (MARS) Task lesson plan that addresses the same standard/topic that you will see in the video clip. [Give participants time a few minutes to read through the lesson plan they are about to observe, then continue.]
- Remember that as you watch the video you are to script notes in the teacher and student behavior columns on your observation tool paying specific attention to those look-fors as evidence of rigor.
- **Facilitator does:** Creates ideal viewing conditions, encouraging participants to



move if necessary to have a good view of the screen. Circulate to assess the data gathering processes mentors are using and encourage them to persist in their data gathering to increase objectivity and evidence. [Note: Participants will be challenged to take notes for the entire time, so encourage them to use an on-off process if they find continuous notetaking difficult. Ask them to jot times in the lesson when they are taking notes and when they are not.]

**NOTE about MARS Tasks:** <https://www.map.mathshell.org/index.php>

The Mathematics Assessment Project aims to bring the Common Core State Standards (CCSSM) to life in a way that will help teachers and their students turn their aspirations for achieving them into classroom realities. The project materials exemplify CCSSM in explicit down-to-earth performance terms and were produced as part of a collaboration between the University of California, Berkeley and the Shell Center team at the University of Nottingham, with support from the Bill & Melinda Gates Foundation. The team works with the Silicon Valley Mathematics Initiative and school systems across the US and UK to develop improved assessment.

## Conduct Observations Practice



**Antoinette Villarín**  
Teacher, Eighth Grade Math

[Link to Video](#)

CONDUCT OBSERVATIONS

55

**Duration:** 10 minutes

LINK to Video --

<https://drive.google.com/open?id=19PJzFDBByAINAadWOtpqDxTfxBbq82InY>

- **Facilitator says:** Watch the video (about 9 minutes) of an 8th grade math lesson on comparing lines and linear equations. This lesson relates to the following Standards for Mathematical Content in the Common Core State Standards for Mathematics:
  - 8.EE: Understand the connections between proportional relationships, lines, and linear equations.
  - 8.F: Define, evaluate and compare functions. Use functions to model relationships between quantities.
- **Facilitator says:** The video begins with the teacher facilitating a guided practice around a problem situation.
- **Facilitator does:** Start the video and allow participants to practice scripting. After

the video is over, explain that since this is their first time scripting (and the video is pretty short) you are going to give them the opportunity to watch the video a second time so they can add to their observation notes in more detail. [If ahead of schedule, you might play the video a second time.]

**NOTE to LDOE:**

This is a MARS task video, provided by the UT Dana Center. The alignment to content standards is strong and clear. While we would prefer to use a video with students using Eureka mathematics, no video with a corresponding Eureka Math lesson was available at the secondary level. In searching the LDOE video library, while there were secondary videos, none of the lessons utilized Eureka Math.

Searches were also made on the EngageNY website. Similarly the videos of classroom instruction stop with grade 5.

## Conduct Observation

- Share your notes with a partner.
- Compare your processes (similarities and differences).
- Discuss what worked and what was challenging.
- Summarize what you learned about gathering data in classroom observations.



From <https://pixabay.com/photos/office-business-colleagues-meeting-1209640/>



- **Duration:** 8 minutes

- **Facilitator says:** Let's take some time to debrief the process we just went through in observing a lesson. Since we have been sitting for a little while, I would like for you to take your notes, a few sticky notes, and something to write with and stand up. Find someone at a different table who is wearing the same color shirt as you. With your new partner compare your notes. Discuss how you went about taking notes. Share the notes you took with each other. How are they the same and different? Discuss what worked and what you found challenging about the process. Then summarize what you learned about conducting a classroom observation.

- **Facilitator does;** Allow five minutes for partner conversation. Facilitate a whole group discussion addressing each of the bullet points on the slide and having a least one or two participants share their thoughts/reflections per bullet point.

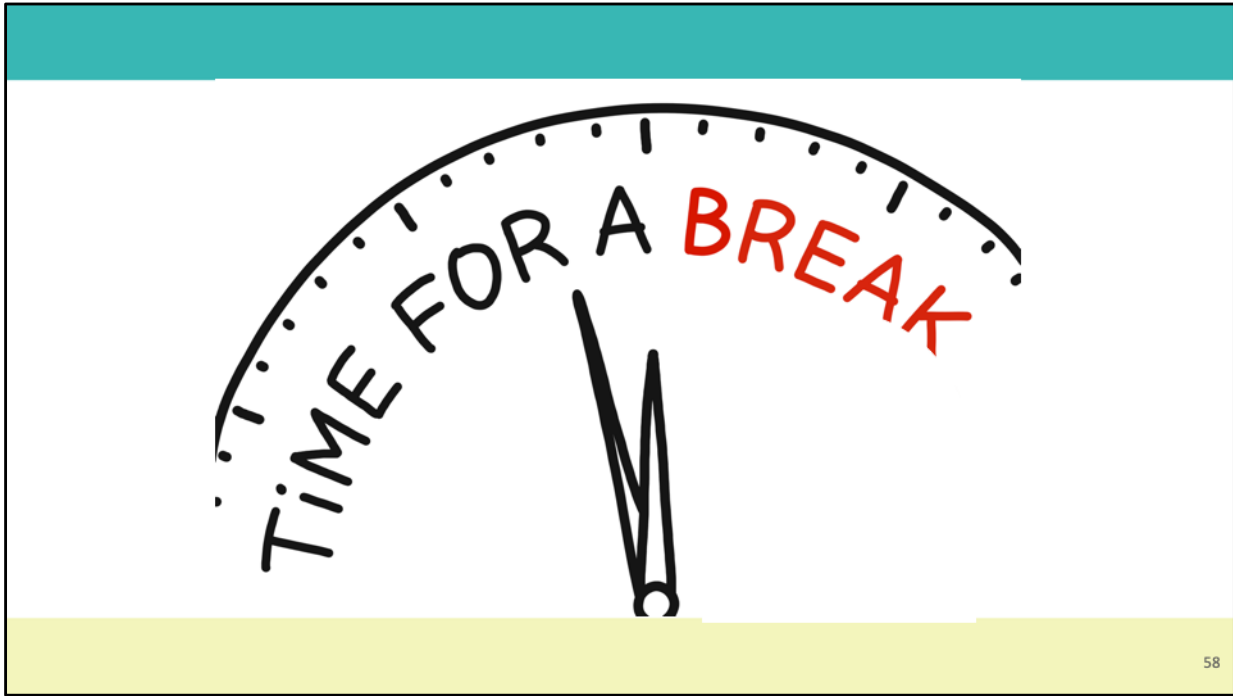
## Key Takeaway

Conducting observations in classrooms allows the mentor to collect non-judgemental data on student and teacher actions



From <https://pixabay.com/vectors/bulb-electricity-energy-light-153200/> and <https://pixabay.com/illustrations/remind-reminder-remember-hand-1556610/>

- **Duration:** 30 seconds
- **Facilitator does:** Read slide



**Section start: 2:00**

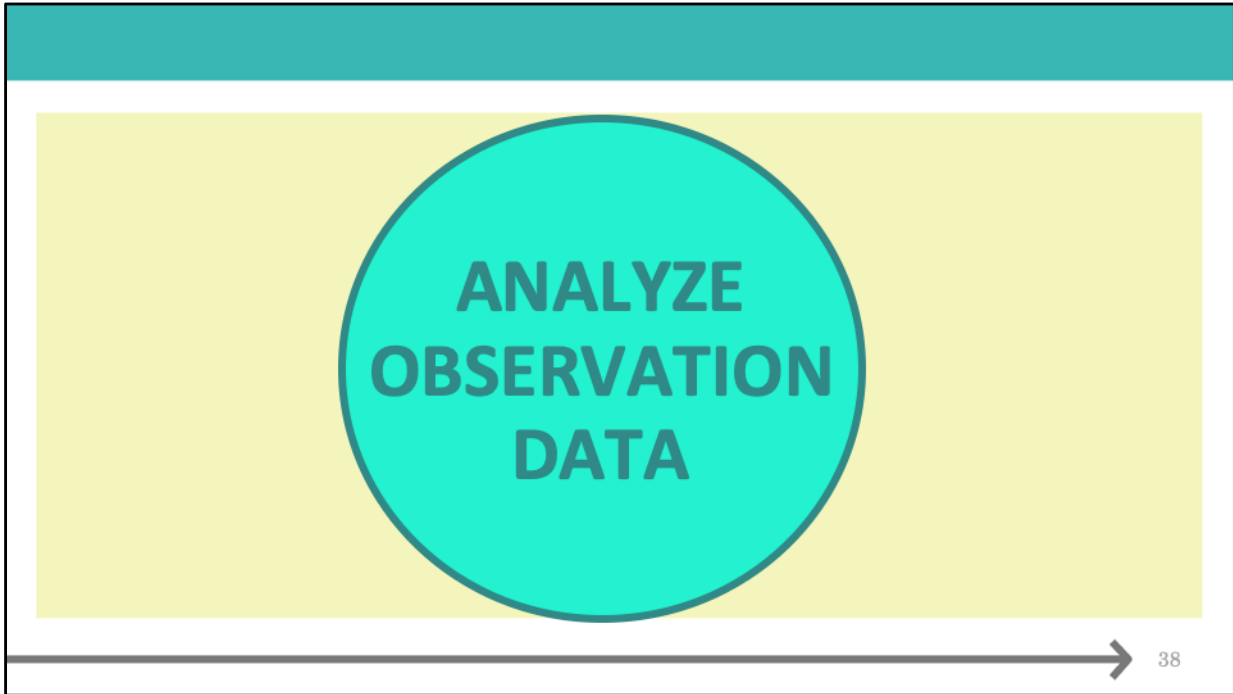
**Duration:** This break should be no longer than 15 minutes.

# The Mentoring Cycle



## Section start: 2:15

- **Duration:** 30 seconds
- **Facilitator says:** Now that we've practiced conducting an observation, we will continue to focus on the "diagnose" section of the mentoring cycle and discuss how you will take the notes from your observation and analyze the data you collected to determine how to best support your mentee.



- **Duration:** 30 seconds

- **Facilitator says:** In the Diagnose process the next step after conducting an observation is analyzing the observation data.



## Analyze Observation Data: 3 Key Components

- Analyze observation notes
- Recognize strengths and areas for growth
- Prioritize



61

- **Duration:** 1 minute
- **Facilitator does:** animate the slide to highlight the first key component
- **Facilitator says:** There are three key components to adhere to when analyzing your observation data, which can be found on **page 19** of your handout. First, you analyze your observation notes, then recognize strengths and areas for growth, and then you will prioritize the needs. Let's dive in a little deeper to each of these components starting with analyzing our observation notes.

## Analyze Observation Data

As you analyze your observation notes:

- Keep the **focus of the observation** in mind.
- Look for **evidence or lack of evidence** of the focus.
- **Highlight and make notes** in another color with that lens.



62

- **Duration:** 2 minutes

- **Facilitator says:** With your classroom observation notes in front of you, you want to go back and analyze them to start to figure out what you will work on with your mentee - the goal you'll focus on in your work with them. The goal is drafted after analyzing the observation data.

- As you review your notes keep the focus of the observation in mind. For our practice we focused on teaching a balance of rigor during math class.
- Look in your notes for evidence or lack of evidence of this focus. If you have access to student work, this can also serve as supporting evidence or lack of evidence.
- We recommend highlighting and making additional notes on your observation data in another color to help you begin to determine the strengths and possible areas for growth specific to the focus area of your observation. Remember that you might have seen other issues that you might want to address, but it is important to stick to the focus of your observation. Jumping to something else that is different from what you and your mentee agreed upon will erode the trusting relationship you're

building together. Instead make a note to return to the other areas of need that you observed at another time.

# Analyze Observation Data

Focus of Observation: Addressing the rigor in the standards during the lesson. (8.EE - conceptual, 8.F - procedural application)		
"Look-Fors" What does strong teaching for the focus area look like? (observer complete prior to observation)	Teacher Behaviors	Student Behaviors
<p><u>Balanced</u></p> <p><u>Conceptual</u></p> <ul style="list-style-type: none"> <li>- explain ideas</li> <li>- models</li> <li>- patterns/structure</li> <li>- examples/non-examples</li> </ul> <p><u>Procedural Fluency</u></p> <ul style="list-style-type: none"> <li>- tools</li> <li>- communicate thoughts</li> <li>- flexibility</li> </ul> <p><u>Application</u></p> <ul style="list-style-type: none"> <li>- plan</li> <li>- (re)characterize in problems</li> </ul>	<p>* Tell me what's happening to the height of the liquid? (asked while demonstrating)</p> <p>Turn and talk How do you know how many cm of liquid in when you know number cm in top?</p> <p>What do you think this is representing?</p> <p>Use quantities if understand what they mean and can explain</p> <p>Slope; rate <math>\rightarrow</math> rate of one centimeter per second</p>	<p>Liquid moving from top to bottom</p> <p>teacher paraphrases/reflects using specific math language (decreasing/increasing)</p> <p>Students using specific vocab (process) language</p> <p>S1: height in centimeters decreased in seconds</p> <p>S2: for me it's going down and ends in zero, it's going to five, but there's seconds</p>

What did this mentor notice when they analyzed their notes?

How might this help them prepare to support their mentee?

ANALYZE  
OBSERVATION  
DATA

➔ 63

- **Duration:** 8 minutes
- **Facilitator says:** Turn to **page 20 of your handout packet**. There, you will see a very short snippet of observation notes from the video we just watched, as well as some analysis notes. They are also here on this slide. Take 2 minutes to review the analysis notes. What did this mentor notice when they analyzed their notes? How might this help them prepare to support the mentee?
- **Facilitator does:** Provide 2 minutes of review time
- **Facilitator says:** Now, turn to a new shoulder partner and discuss the two questions on the screen. You have 4 minutes.

## Analyze Observation Data

As you analyze your observation notes:

- Keep the **focus of the observation** in mind.
- Look for **evidence or lack of evidence** of the focus.
- **Highlight and make notes** in another color with that lens.



64

- **Duration:** 15 minutes
- **Facilitator says:** You will now have some time to analyze the entirety of your observation data that you took on the video using the steps on the slide. You will have 8-10 minutes to go through your notes, and then you will have 4-5 minutes to share your analysis with a shoulder partner.
- **Facilitator does:** As participants work independently on analyzing their observation notes, circulate to provide support and take note on anyone struggling with the process. After 8-10 minutes, instruct participants to pair up with a shoulder partner and take several minutes to share their analysis with one another before moving on to the next slide.

## Analyze Observation Data: 3 Key Components

- Analyze observation notes
- Recognize strengths and areas for growth
- Prioritize



65

- **Duration:** 1 minute
- **Facilitator does:** animate the slide to highlight the second key component
- **Facilitator says:** Now that we've taken a closer look at our observation notes, let's start to look closely for strengths and areas for growth.

## Recognize Strengths and Areas for Growth

I know what strong teaching for rigor looks like, so....



- Where do I see this in my mentee's teaching? (strengths)
- Where do I see areas of missed opportunity with my mentee's teaching? (growth)
- Find 2-3 strengths and 2-3 areas for growth



66

- **Duration:** 20 minutes

- **Facilitator says:** Because we know what strong teaching for rigor looks like as identified in our “look-fors”, we should now be able to continue analyzing our notes looking specifically for strengths and areas of growth as it pertains to rigor. The questions you may ask yourself during this process include: Where do I see this, as in teaching for rigor, in my mentee's teaching?, Where do I see areas of missed opportunity with my mentee's teaching?
- Some examples of strengths when teaching for rigor may include that the teacher gave the students opportunities to contextualize quantities in problems, or that they gave the students opportunities to model the concepts they were working with, either concretely or pictorially.
- Some areas for growth when teaching for rigor may include the opposite! Maybe the teacher didn't give the students opportunities to contextualize quantities in problems, or didn't give the students opportunities to model the concepts they were working with, either concretely or pictorially.
- You will have 10 more minutes to think about these questions on your own as you continue to examine your observation notes. **During that 10 minutes you will list 1-**

**2 strengths and 1-3 areas for growth on your data analysis handout on page 21.**

After 10 minutes, I will ask you to return to that same shoulder partner and share your defined areas of strength and for growth with one another. Any questions?

- **Facilitator does:** As participants work independently on recognizing strengths and areas for growth, circulate to provide support and take note on anyone struggling with the process. After 10 minutes, instruct participants to pair up with their shoulder partner and share their lists with one another before moving on to the next slide.



## Analyze Observation Data: 3 Key Components

- Analyze observation notes
- Recognize strengths and areas for growth
- Prioritize



67

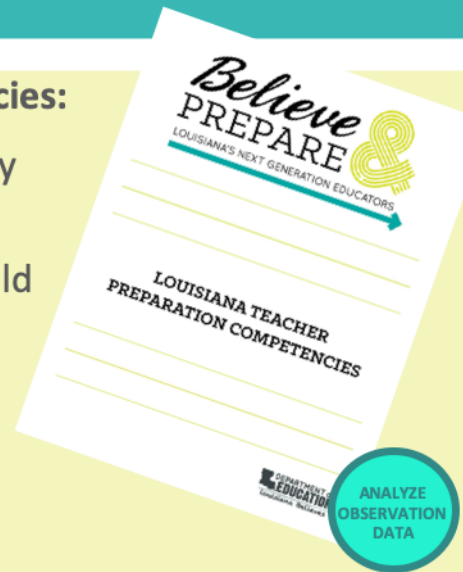
- **Duration:** 1 minute
- **Facilitator does:** animate the slide to highlight the third key component
- **Facilitator says:** The last step is to prioritize the areas for growth.

## Prioritize

### Use the Teacher Preparation Competencies:

- Where should I focus my work with my mentee?
- Is there an area of strength I could build on?
- Is there an area of growth they seem almost ready for?

**Choose ONE!**



68

- **Duration:** 20 minutes

- **Facilitator says:** The Teacher Preparation Competencies are a very useful tool for taking your analyzed notes and deciding where to focus your work. Because you won't be able to work on all of the areas for growth you found, you'll need to prioritize just one. Remember, the Teacher Competencies for your subject area are the most important things new teachers need to learn how to do. Which stand out as an area of strength you could build on? Which stand out as an area of growth they seem almost ready for?

**Pick ONE!**

- **Facilitator does:** As participants work independently on prioritizing the areas for growth, circulate to provide support and take note on anyone struggling with the process. After 10 minutes, instruct participants to pair up with their shoulder partner and share their priorities with one another. After working with their partner for 5 minutes bring the whole group back together and ask a few participants to share their priorities with the whole group and draw their attention to any they may have missed (see below).

- **Note:** For the focus on rigor, the following aspects of the Teacher Preparation Competencies align: Any of these would make an excellent area for the mentor to focus on with the mentee. Mark these in your facilitator copy of the Teacher Preparation Competencies ahead of time to support you in facilitating this share out.
  - Exhibits an integrated, functional grasp of mathematical concepts and procedures.
  - Explains concepts and executes procedures flexibly, accurately, efficiently, and appropriately.
  - Selects or designs standards-based tasks that use varied strategies, including but not limited to real-life applications, manipulatives, models, diagrams/pictures, that present opportunities for instruction and assessment.
  - Selects or designs practice sets that include scaffolding and differentiation of mathematical content to provide opportunities for students to develop and demonstrate mastery.
  - Poses challenging problems that offer opportunities for productive struggle, encouraging reasoning, problem solving, and perseverance in solving problems in the face of initial difficulty
  - Recognizes and uses the connections between the topics identified in the relevant standards and problems arising in real-world applications.

## Key Takeaway

Analyzing observation data helps the mentor identify areas of strength and the greatest area for growth so they can prepare to support their mentee in growing their practice.



- **Duration:** 30 seconds
- **Facilitator does:** Read slide.

# Connection to Assessments

**Section start: 3:30**

- **Duration:** 30 seconds
- **Facilitator says:** So let's take a look at where conducting observations and analyzing observation data appear in the assessments of your mentoring practice. We will also look at which assessment the morning content aligns with.

## Mentoring to Improve Content Instruction

Louisiana Department of Education

### Mentoring to Improve Content Instruction

Started

Hide Description ^

To ensure students master the content they need to be successful, educators need both deep knowledge of their content and the ability to plan and deliver effective instruction. As part of the mentoring cycle, mentor teachers will diagnose and prioritize areas for growth, provide coaching and support, monitor progress, and adjust course as needed in order to support improvements in a mentee's content instruction. Through continuous relationship building and effective individualized support, mentor teachers can support significant improvement in teaching practices.

- **Duration:** 2 minutes
- **Facilitator says:** Take 1 minute and read through the description of this assessment. (After 1 minute, ask) Where do you see the connection in this assessment with what we've learned so far? (invite a few answers from participants)
- **NOTE:** Answers should include the following:
  - "...educators need both deep knowledge of their content and the ability to plan and deliver effective instruction" - connects to AM math content as an option to use for this assessment
  - "...mentor teachers will diagnose and prioritize areas for growth..." taught this afternoon in module 2

# Demonstrating Math Content Knowledge

Louisiana Department of Education

Demonstrating Math Content Knowledge

Started

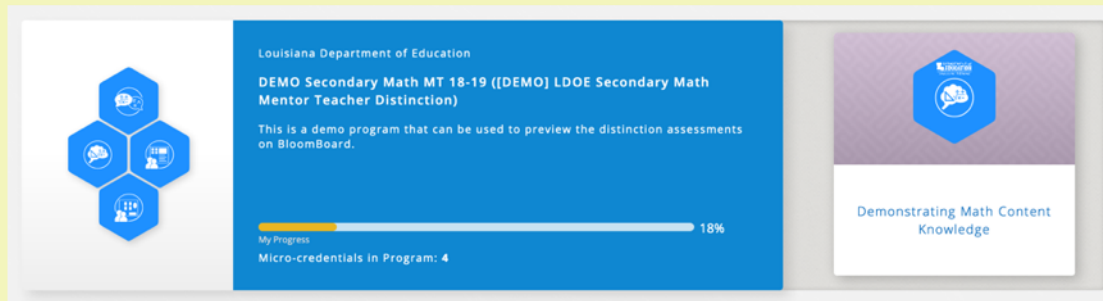
Hide Description ^

The educator connects deep mathematical content knowledge and understanding of the Louisiana Student Standards for Mathematics (LSSM) to the planning and implementation of a Tier 1 math curriculum. Within a Tier 1 math curriculum, the educator applies their knowledge of the key shifts in the mathematics standards focus, coherence, and rigor in order to engage in purposeful, collaborative planning and implement the curriculum with fidelity in the classroom.

- **Duration:** 2 minutes
- **Facilitator says:** Take 1 minute and read through the description of this assessment. (After 1 minute, ask) Where do you see the connection in this assessment with what we've learned so far? (invite a few answers from participants)
- **NOTE:** Answers should include the following:
  - "...applies their knowledge of the key shifts in the mathematics standards focus, coherence, and rigor..." - this morning's content focus of module 2

## The Assessments

<https://my.bloomboard.com/home>



- **Duration:** 5 minutes
- **Facilitator says:** I'm going to log on to the platform and give just a high-level overview of each of these two assessments so you can continue to make connections between what we've learned so far and the expectations of these two assessments.
- **Facilitator does:** Log on using the generic username and password below.
- Review the following highlights live on the platform for participants:
  - Mentoring to Improve Content Instruction
    - Analyze - participants are technically ready to accomplish this part of the assessment. They know what to "look-for" when it comes to strong math instruction and they know how to conduct an observation and analyze that data to prioritize a need. They are not quite ready to submit the narrative piece because they haven't done the "set goals" part of the cycle.
  - Demonstrating Math Content Knowledge
    - Analyze - participants are ready for this part of the assessment. Note that they will get even more practice with this in module 4. They will need to identify which levels of rigor are applicable in the lesson they select.



- Develop - here they are simply adding annotations to the selected lesson plan to ensure proper and strong implementation.
- Implement - now they will actually teach the lesson from the first two steps making sure to collect 3 work samples of different mastery levels.
- Evaluate - they will write a reflection on the implementation of the lesson by answering the questions listed.
- **\*\*\*They could complete this assessment as quickly as they'd like since they will be readily equipped come the start of the school year\*\*\***

<https://my.bloomboard.com/>

**Username:** learningforwarddemo@bloomboard.com

**Password:** BBLearning4ward

## Work Time



- **Duration:** 15 minutes
- **Facilitator says:** Now take some time to log on yourself and explore these two assessments and see what additional work you see needing in order to accomplish the tasks. Think about what you already feel prepared to complete come the start of the school year. Start to make a plan for completing these assessments. You know your school year, curriculum scope and sequence, etc. When do you see the best time will be to complete these assessments during the school year? We will circulate around as you do this to support and answer any questions.

## Work Following Modules 1 and 2

Continue to plan forward for how you'll lay the groundwork for the work required for the *Mentoring to Improve Content Instruction* and the *Demonstrating Math Content Knowledge* assessments.

*Bring all of your mentor materials to all of the sessions - especially the artifacts of your work you'll be collecting when you start your work with your mentee!*

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**Duration:** 1 minute

- **Facilitator says:** At the end of every module, we'll let you know what makes the most sense for you to focus on back at your school. Because you are not yet matched with your mentee and actually engaging in mentoring work yet, following this module we recommend that you continue to plan forward for how you'll engage in the work we practiced today. One additional recommendation - since we'll have time to connect to the assessments during every module, your best bet will be to create a binder for yourself for all of your mentor materials - the materials from the modules as well as your mentoring artifacts from your actual work with your mentee. Having those materials all in one place will make it easier for you to complete the assessments and prove your mentoring competence.

## Module 2 Morning Outcomes

- Describe key shifts in mathematics standards and instruction (rigor, focus, and coherence).
- Identify how to support mentees in using the key shifts to guide decisions about teaching and learning mathematics.

76

• **Duration:** 1 minute

• **Facilitator Says:** So as we wrap up for today, let's take a quick look at the outcomes we achieved today. In building your content knowledge we [read slide].

## Module 2 Afternoon Outcomes



DIAGNOSE

- Conduct classroom observations to collect data on student and teacher actions
- Analyze data to identify needs for improving student learning and mentee instructional practice

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• **Duration:** 1 minute

• **Facilitator Says:** And in building your mentoring practice we [read slide].

## Exit Card

1. Before I thought ... and now I think...
1. The most useful thing from today for my own teaching is...
1. The most important thing from today for me to remember about working with my mentee is...



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- **Duration:** 3 minutes
- **Facilitator says:** The next session, module 3, will occur at the Summit. Due to the logistics of having sessions at the Summit, you may be with folks from your learning team, and you may not. You may have us as your facilitators, and you may not. So we will collect exit cards from you today to help us plan forward for the next time all of cohort will be together in our usual location - Module 4. So before you leave today, please complete an **exit card on page 23**. On your exit card please use the 3 sentence prompts and fill in the blanks.
- **Leave your completed exit card on your tables when you leave.**
- As a reminder, please clean up your workspace. Throw away your trash, straighten the supplies so that they are in the center of the table, and place your name plates and tags inside your team folder. Thank you so much for spending these last two days with us and we look forward to seeing you again soon!

- **Note to facilitators:** After participants leave for the day, work together as a facilitator pair to review the exit tickets and make notes for yourself.

What trends do you see in the responses? Take note of what you want to review and bring up at the beginning of Module 4. There will be time at the beginning of the session for you to share these trends.