

Table of Contents

Module 1: Overarching Design Structure.....	2
Topic 1: Course Design Structure.....	2
Topic 2: Unit Design Structure.....	3
Topic 3: Lesson Design Structure.....	4
Reflect.....	5
Module 2: Planning.....	6
Topic 1: How Do I Plan for a Lesson?.....	6
Topic 2: When Do I Assess?.....	8
Reflect.....	9
Module 3: Instructional Routines.....	10
Topic 1: Warm-up Routines.....	10
Topic 2: Math Language Routines.....	11
Reflect.....	12
Module 4: Building Math Community.....	13
Topic 1: Establishing a Positive and Inclusive Math Community.....	13
Reflect.....	18

Module 1: Overarching Design Structure

Topic 1: Course Design Structure

Connect to Your Practice

How is the course structure similar to and different from what you have taught in the past?

Familiarize yourself with the Scope and Sequence and Pacing Guide, located in the Course Guide. Explore the different topics that are addressed across the course and answer the following questions:

- What do you notice about the length of each unit?
- How are the units sequenced across the school year? What do you notice?
- How will you decide if the optional lessons are needed?

Topic 2: Unit Design Structure

Connect to Your Practice

Now that you know what content will be in Unit 1, what do you already know about teaching this concept, and what are some potential benefits and challenges that may arise with teaching this content first?

Read the unit and section narratives for Unit 1. Make note of the strategies and representations that are used, and how they build upon each other to support sense-making.

Topic 3: Lesson Design Structure

Connect to Your Practice

How does your teaching style fit with the lesson structure? What do you already do? What will be new to you?

Select a lesson from Unit 1 to read. Make note of the structure and content that is used in the Warm-up, Activities, Lesson Synthesis, and Cool-down.

Reflect

What new insights did you gain about the overarching design structure?

Use the sentence starters if they are helpful.

- Remember that students will have an opportunity to revisit _____ in unit _____.
- In Unit 1, students are introduced to _____ and they build on it in unit _____ when they _____.
- I want to learn more about why _____ is used as a representation and how it helps students make sense of _____.
- In the lesson video, I noticed that the teacher _____. I would like to try that.

Module 2: Planning

Topic 1: How Do I Plan for a Lesson?

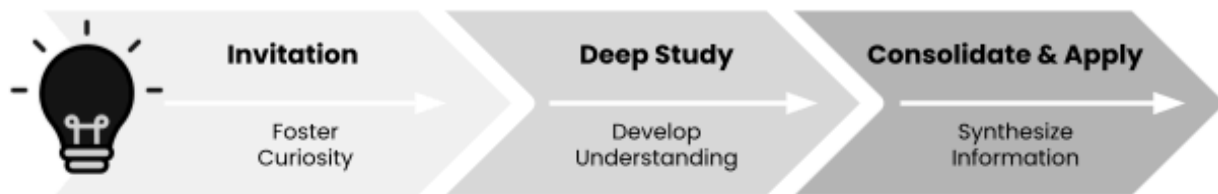
Connect to Your Practice

Lesson planning involves examining the learning goals, considering how students build understanding, and deciding what to prioritize. How have you made decisions about prioritizing content in the past?

Choose a lesson from an upcoming unit and use the following Lesson Planning & Prioritization Tool and the Planning for a Lesson [video](#) for support. Consider printing out the lesson plan or taking notes in your teacher's guide.

LESSON PLANNING & PRIORITIZATION TOOL

Use this tool to support thoughtful lesson planning and prioritization decisions while preserving the integrity of IM's overarching design structure.



WHAT IS THE PRIORITY LEARNING?

- ▶ Examine the learning goals and how they relate to the cool-down.
- ▶ Anticipate student responses to the cool-down.

HOW DOES STUDENT UNDERSTANDING BUILD?

- ▶ Examine the progression of the activities and how they build toward the lesson synthesis.
- ▶ Consider the strategies, representations, and tools that students use to show understanding of the learning goal.
- ▶ Identify opportunities to enhance access and challenge for your students.
- ▶ Find opportunities to clarify or connect concepts from a previous lesson.

WHAT DO I PRIORITIZE?

- ▶ Select questions or problems that are essential for your students to engage with in order for the lesson synthesis to be successful.
- ▶ Decide what to highlight or amplify.

Topic 2: When Do I Assess?

Connect to Your Practice

How are the assessment opportunities the same as and different from those you have used in the past?

Choose an upcoming unit. Review the end-of-unit assessment to understand what skills are assessed. Then, look at each section checkpoint and take note of how the strategies and representations build towards the end-of-unit assessment.

Use the sentence starters if they are helpful.

- One progression of understanding I see building across assessments is _____.
- In the section checkpoints, the Responding to Student Thinking guidance suggests _____, whereas in the end-of-unit assessment guidance _____.
- There are multiple opportunities to assess _____.

Reflect

What new insights did you gain about lesson planning, prioritization, and assessment guidance?

Use the sentence starters if they are helpful.

- When I am reviewing a lesson, I should remember to prioritize ____.
- One way I can incorporate the Responding to Student Thinking suggestions into my lesson is to ____.
- I want to learn more about ____.

Module 3: Instructional Routines

Topic 1: Warm-up Routines

Connect to Your Practice

Which warm-up routines are unfamiliar to your teaching style or may require practice?

Use the lessons provided in your grade-level table below to examine how warm-up routines are embedded.

Grade 3	
Lesson	Warm-up Routine
Unit 1 Lesson 1	Notice and Wonder
Unit 1 Lesson 5	Number Talk

Grade 4	
Lesson	Warm-up Routine
Unit 1 Lesson 1	Which Three Go Together?
Unit 1 Lesson 3	Choral Count

Grade 5	
Lesson	Warm-up Routine
Unit 1 Lesson 1	Which Three Go Together?
Unit 1 Lesson 3	Number Talk

Make note of how the routines support student learning and discourse within the activity.

Topic 2: Math Language Routines

Connect to Your Practice

Which Math Language Routines are unfamiliar to your teaching style or may require practice?

Use the lessons provided in your grade-level table below to examine how math language routines are embedded.

Make note of how the routines support student learning and discourse within the activity.

Grade 3		Grade 4		Grade 5	
Lesson	Math Language Routine	Lesson	Math Language Routine	Lesson	Math Language Routine
Unit 1 Lesson 1	MLR 8 Discussion Supports	Unit 1 Lesson 1	MLR 2 Collect and Display	Unit 1 Lesson 1	MLR 2 Collect and Display
Unit 1 Lesson 5	MLR 7 Compare and Connect	Unit 1 Lesson 3	MLR 8 Discussion Supports	Unit 1 Lesson 3	MLR 8 Discussion Supports

Reflect

What new insights did you gain about instructional routines?

Use the sentence starters if they are helpful.

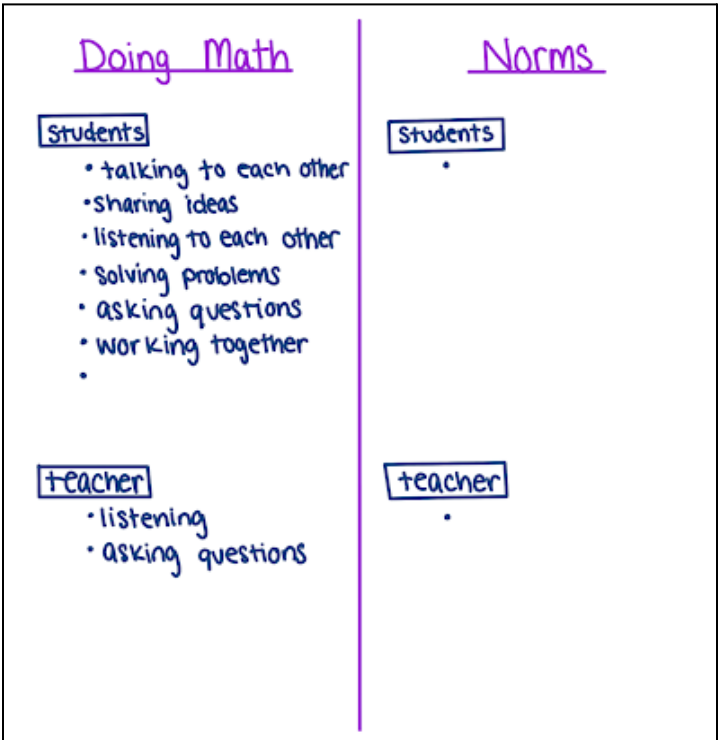
- I am excited to try _____.
- I want to rehearse _____ with a colleague so I can practice _____.
- A question I still have about _____ is _____.
- When recording student thinking during routines, I want to remember _____.

Module 4: Building Math Community

Topic 1: Establishing a Positive and Inclusive Math Community

Building Community in Unit 1

Throughout Unit 1, students across all grades are invited to establish a shared understanding of their math classroom norms. Explore the following example of how an anchor chart evolved across the lessons. Make note of how the teacher incorporates students' ideas into the development of the norms.

Community Building Task	Anchor Chart						
Brainstorm About Doing Math as a Community Discuss what a math community is and share initial thoughts of what it looks and sounds like to do math together as a community.	 <table border="1"> <thead> <tr> <th>Doing Math</th> <th>Norms</th> </tr> </thead> <tbody> <tr> <td> Students • talking to each other • sharing ideas • listening to each other • solving problems • asking questions • working together </td> <td> Students • </td> </tr> <tr> <td> teacher • listening • asking questions </td> <td> teacher • </td> </tr> </tbody> </table>	Doing Math	Norms	Students • talking to each other • sharing ideas • listening to each other • solving problems • asking questions • working together	Students •	teacher • listening • asking questions	teacher •
Doing Math	Norms						
Students • talking to each other • sharing ideas • listening to each other • solving problems • asking questions • working together	Students •						
teacher • listening • asking questions	teacher •						

Make Revisions

Review, affirm, and add ideas about what it looks like and sounds like to do math as a community.

Doing Math	Norms
Students • ~~talking to each other~~ • sharing ideas • listening to each other • solving problems • asking questions • working together • make mistakes	Students •
Teacher • listening • asking questions • answering questions	Teacher •

Reflect on Doing Math

Reflect and make personal connections to the listed math actions. Gain insight into the norms that students may choose to list in the next exercise.

Doing Math	Norms
Students • focused conversations • sharing ideas • listening to each other • solving problems • asking questions • working together • making mistakes	Students •
Teacher • listening • asking questions • answering questions	Teacher •

Develop Norms

Consider which norms would connect and support the math actions that were recorded in the Math Community Chart, and add the norms to the chart.

Doing Math

Students

- focused conversations
- sharing ideas
- listening to each other
- solving problems
- asking questions
- working together
- making mistakes

Teacher

- listening
- asking questions
- answering questions

Norms

Students

- listen to what others are saying
- be kind + encourage others
- use mistakes as inspiration

Teacher

- ask thoughtful questions
- answer questions to help you understand

Revise Norms

Discuss revisions to the list of norms and record any revisions on the Math Community Chart.

Doing Math

Students

- focused conversations
- sharing ideas
- listening to each other
- solving problems
- asking questions
- working together
- making mistakes

Teacher

- listening
- asking questions
- answering questions

Norms

Students

- listen to what others are saying *↑ try new ideas*
- be kind + encourage others *↑ safe space*
- use mistakes as inspiration

Teacher

- ask thoughtful questions *↑ encourage thinking*
- answer questions to help you understand
- listen to students + encourage new strategies

Reflect on Norms

Make connections to the list of norms. Maintain and enhance norms that support doing math together as a community.

Doing Math

Students

- focused conversations
- sharing ideas
- listening to each other
- solving problems
- asking questions
- working together
- making mistakes

Teacher

- listening
- asking questions
- answering questions

Norms

Students

- I will listen to others and try new ideas
- I will make this a safe space by being kind and encouraging
- I will use mistakes as inspiration

Teacher

- I will ask thoughtful questions to encourage student thinking
- I will answer questions to help you understand
- I will listen to students and encourage new strategies

How have you intentionally planned for building a math community in the past?

Read the lesson narratives for the identified lessons in Unit 1 to see what the community-building exercises look like for your grade level. As you read, use the table to make note of important teacher moves you'd like to emphasize, supports or customizations you want to incorporate, and materials to gather. An example is shown in the first row of the table.

Grade 3	Grade 4	Grade 5
Lesson 1	Lesson 1	Lesson 1
Lesson 2	Lesson 2	Lesson 2
Lesson 3	Lesson 3	Lesson 3
Lesson 4	Lesson 4	Lesson 4
Lesson 5	Lesson 5	Lesson 5
Lesson 6	Lesson 7	Lesson 6

Lesson	Emphasize	Incorporate	Gather
1	"These are connected to our whole class expectations, but special for math."	visuals	Sticky notes Poster - 2 column chart

Reflect

What new insights did you gain about building a math community?

Use the sentence starters if they are helpful.

- I will know I am building a positive math community if I see and hear _____.
- I might need support with _____.
- I commit to _____ so that _____.