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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?

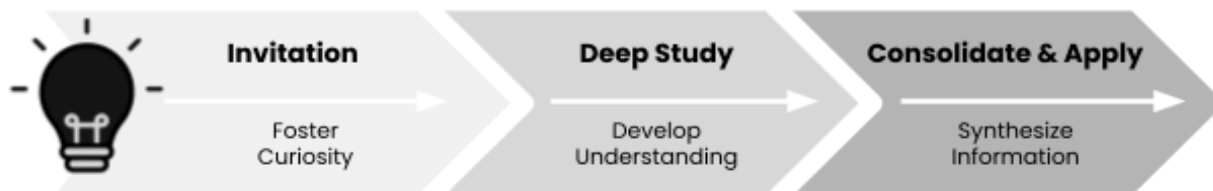
Connect to Your Practice

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

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 6		Grade 7		Grade 8	
Lesson	Warm-up Routine	Lesson	Warm-up Routine	Lesson	Warm-up Routine
Unit 1 Lesson 1	Which Three Go Together?	Unit 1 Lesson 2	Math Talk	Unit 1 Lesson 1	Which Three Go Together?
Unit 1 Lesson 2	Notice and Wonder	Unit 1 Lesson 4	Notice and Wonder	Unit 1 Lesson 2	Notice and Wonder

Make note of how the routines support student learning and discourse within the activity. A warm-up doesn't always feature a specific routine, but it will always invite students into the lesson and provide an opportunity to contribute to mathematical discussions.

Topic 2: Math Language Routines

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.

Grade 6		Grade 7		Grade 8	
Lesson	Math Language Routine	Lesson	Math Language Routine	Lesson	Math Language Routine
Unit 1 Lesson 2	Collect and Display	Unit 1 Lesson 2	Collect and Display	Unit 1 Lesson 1	Collect and Display
Unit 1 Lesson 4	Compare and Connect	Unit 1 Lesson 9	Critique, Correct, Clarify	Unit 1 Lesson 2	Discussion Supports

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

Reflect

What new insights did you gain about instructional routines?

Use the sentence starters if they are helpful.

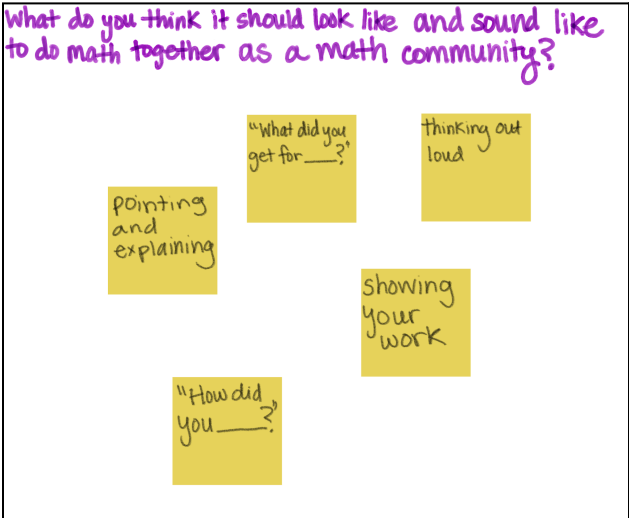
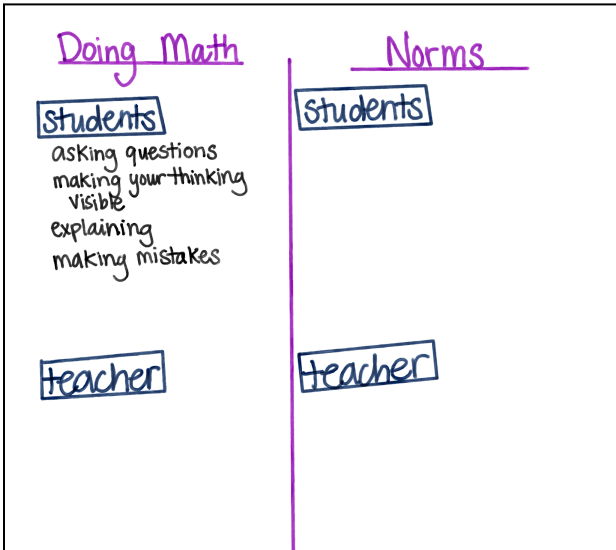
- I am excited to try _____.
- I want to rehearse _____ with a colleague so I can practice _____.
- A question I still have about _____ is _____.
- When recording student thinking during routines, I want to remember _____.

Module 4: Building Math Community

Topic 1: Establishing a Positive and Inclusive Math Community

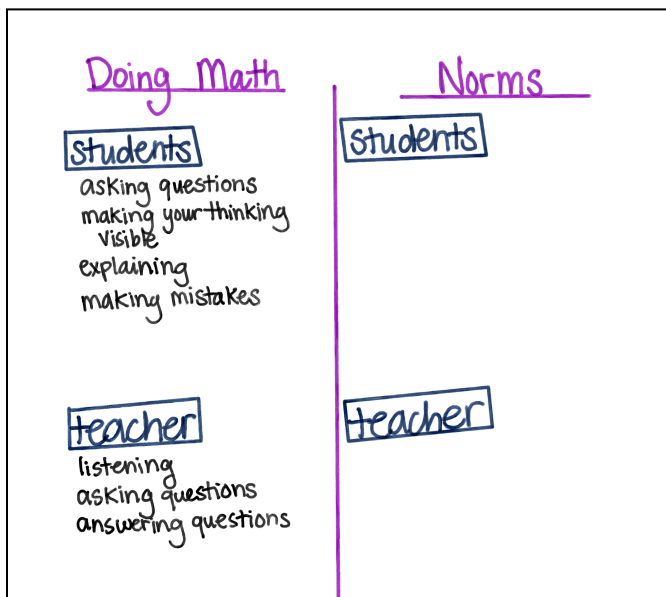
Building Community in Units 1 and 2

Throughout Units 1 and 2, 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.	
Review Themes that Arose During Brainstorming Review, affirm, and add ideas about what it looks like and sounds like to do math as a community.	

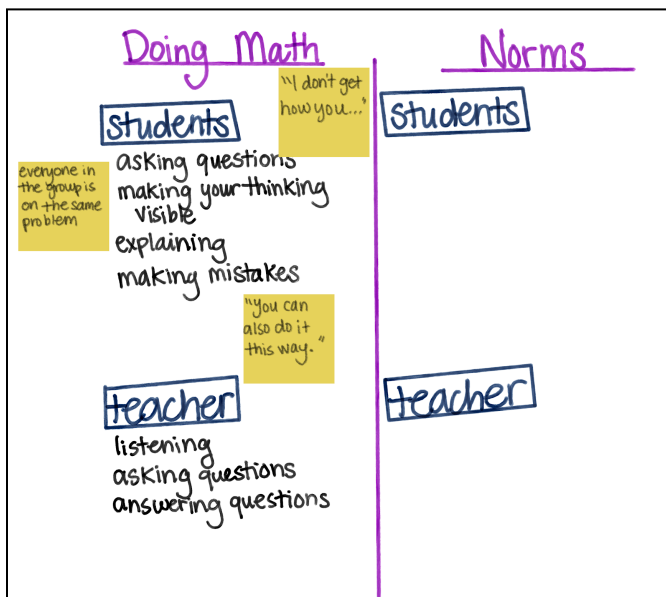
Review Teacher Commitments

The teacher shares their draft commitments as part of the mathematical community. Students are invited to suggest additions to the teacher sections of the chart.

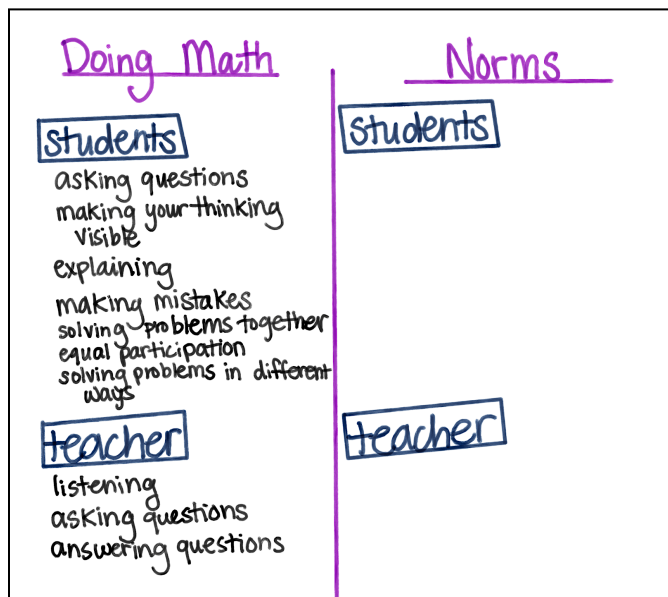


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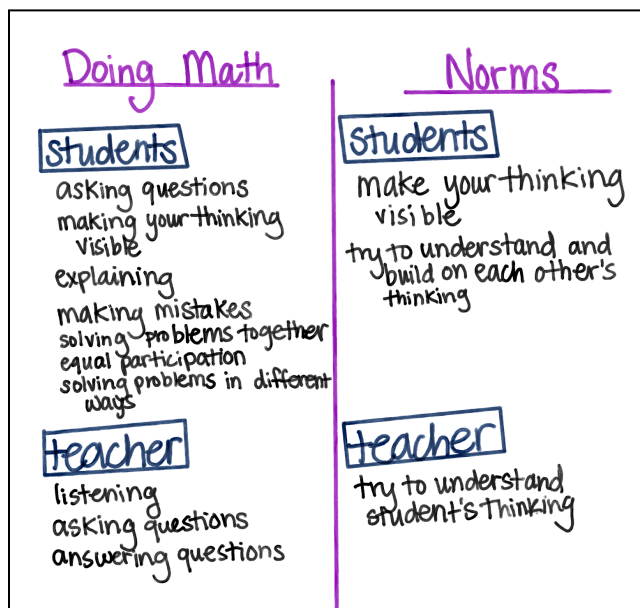
Students use sticky notes to document actions in the Doing Math sections of the Math Community Chart that they see or hear throughout the lesson. They also suggest additions for the chart.



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.



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.



Revise Norms

Students provide feedback on the norms, sharing those they agree with and those they feel need revision or removal.

Doing Math	Norms
Students asking questions making your thinking visible explaining making mistakes solving problems together equal participation solving problems in different ways	Students make your thinking visible try to understand and build on each other's thinking learn from mistakes
Teacher listening asking questions answering questions	Teacher try to understand student's thinking answer questions help students make connections

Strength-Based Reflections

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

Doing Math	Norms
Students asking questions making your thinking visible explaining making mistakes solving problems together equal participation solving problems in different ways	Students make your thinking visible try to understand and build on each other's thinking learn from mistakes same problem same time
Teacher listening asking questions answering questions	Teacher try to understand student's thinking answer questions help students make connections

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

Read the lesson narratives for the identified lessons in Units 1 and 2 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 6	Grade 7	Grade 8
Unit 1 Lesson 1	Unit 1 Lesson 1	Unit 1 Lesson 1
Unit 1 Lesson 2	Unit 1 Lesson 3	Unit 1 Lesson 3
Unit 1 Lesson 5	Unit 1 Lesson 7	Unit 1 Lesson 6
Unit 1 Lesson 8	Unit 1 Lesson 10	Unit 1 Lesson 8
Unit 1 Lesson 11	Unit 2 Lesson 1	Unit 1 Lesson 11
Unit 1 Lesson 13	Unit 2 Lesson 3	Unit 1 Lesson 13
Unit 1 Lesson 17	Unit 2 Lesson 6	Unit 2 Lesson 1
Unit 1 Lesson 18	Unit 2 Lesson 7	Unit 2 Lesson 5

Lesson	Emphasize	Incorporate	Gather
1	Name specific words and actions.	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 _____.