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Learning Goals

1. Let's plan to tell the story of the unit.
2. Let's plan for student thinking to drive learning.
3. Let's locate and use all the resources to plan a unit and lesson.
4. Let's trust the curriculum.

Teach and Learn Virtual Note Page Links

Part 1 | Part 2 | Part 3 | **Part 4**

HANDOUT 2

Mathematical Community Norms

Mathematical Community	
<i>Doing Math sounds like...</i>	<i>Doing Math looks like...</i>
• • • • •	• • • • •
What norms, or expectations, help us to do math together as a mathematical community?	
In our mathematical community we . . . • • •	

IM Community Norms

Doing math together

- Quiet work time
- Sharing thinking is more important than sharing answers

Sharing our understandings

- Be open to different ideas
- Ensure everyone has the opportunity to share
- Question what we do and why we do it

Connecting and reflecting on our practice

- Be present; share, connect, and reflect with each other
- Be willing to question what you do and why you do it
- Speak about students as if they are in the room with us

HANDOUT 3

Unit Narrative and Mid-Unit and End-of-Unit Assessments

Make your own copy of the Planning a Unit template [here](#).

[Grade 6](#) | [Grade 7](#) | [Grade 8](#) | [Algebra 1](#) | [Geometry](#) | [Algebra 2](#)

Grade 6

Unit Narrative	Mid-Unit and End-of-Unit Assessments
<i>What new mathematical work is introduced in this unit?</i> <i>What insight does the Progression of Disciplinary Language (6–8) provide?</i> <i>How do representations progress?</i>	<i>What strategies and representations will students use to show understanding on the assessment?</i>
• • • •	• • • •

Grade 7

Unit Narrative	Mid-Unit and End-of-Unit Assessments
<i>What new mathematical work is introduced in this unit?</i> <i>What insight does the Progression of Disciplinary Language (6–8) provide?</i> <i>How do representations progress?</i>	<i>What strategies and representations will students use to show understanding on the assessment?</i>
• • • •	• • • •

Grade 8

Unit Narrative <i>What new mathematical work is introduced in this unit?</i> <i>What insight does the Progression of Disciplinary Language (6–8) provide?</i> <i>How do representations progress?</i>	Mid-Unit and End-of-Unit Assessments <i>What strategies and representations will students use to show understanding on the assessment?</i>
• • • •	• • • •

Algebra 1

Unit Narrative <i>What new mathematical work is introduced in this unit?</i> <i>How do representations progress?</i>	Mid-Unit and End-of-Unit Assessments <i>What strategies and representations will students use to show understanding on the assessment?</i>
• • • •	• • • •

Geometry

Unit Narrative <i>What new mathematical work is introduced in this unit?</i> <i>How do representations progress?</i>	Mid-Unit and End-of-Unit Assessments <i>What strategies and representations will students use to show understanding on the assessment?</i>
• • • •	• • • •

Algebra 2

Unit Narrative <i>What new mathematical work is introduced in this unit?</i> <i>How do representations progress?</i>	Mid-Unit and End-of-Unit Assessments <i>What strategies and representations will students use to show understanding on the assessment?</i>
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HANDOUT 4

Additional Planning a Unit Resources

[Pre-Unit Diagnostic Assessment](#) | [Unit at a Glance Documents](#) | [Unit Math Story Videos](#) | [Family Support Materials](#)

Pre-Unit Diagnostic Assessment: Check Your Readiness and Teacher Guide

Grade 6

Resource:	Pre-Unit Diagnostic Assessment: Check Your Readiness and Teacher Guide <i>What prior learning does this unit build on?</i> <i>How does the Teacher Guide help you identify and respond to additional learning opportunities within the unit?</i>
Description:	
Use for:	
Questions:	

Geometry

Resource:	Pre-Unit Diagnostic Assessment: Check Your Readiness and Teacher Guide <i>What prior learning does this unit build on?</i> <i>How does the Teacher Guide help you identify and respond to additional learning opportunities within the unit?</i>
Description:	
Use for:	
Questions:	

Unit at a Glance Documents

Grade 7

Resource:	Unit at a Glance Documents <i>What insight do the unit concept map, unit logistics map, and lessons at a glance provide about how understanding progresses through the unit?</i>
Description:	
Use for:	
Questions:	

Algebra 2

Resource:	Unit at a Glance Documents <i>What insight do the unit concept map, unit logistics map, and lessons at a glance provide about how understanding progresses through the unit?</i>
Description:	
Use for:	
Questions:	

Unit Math Story Videos

Grade 8

Resource:	Unit Math Story Videos <i>What insight does the video provide about how understanding progresses through the unit?</i>
Description:	
Use for:	
Questions:	

Family Support Materials

Algebra 1

Resource:	Family Support Materials <i>What do the family materials reveal about the story of the unit?</i>
Description:	
Use for:	
Questions:	

HANDOUT 5

Planning a Lesson Resources

Make your own copy of the Planning a Lesson template [here](#).

[Lesson Narrative and Goals](#) | [Cool-down with Cool-down Guidance](#) | [Warm-up and Activity Launches and Syntheses](#) | [Lesson Synthesis](#) | [Student Lesson Summary](#) | [Required Materials and Required Preparation](#)

Grade 6

Resource:	Lesson Narrative and Goals <i>How does the lesson fit into the story of the unit?</i>
Description:	
Use for:	
Questions:	

Grade 7

Resource:	Cool-down with Cool-down Guidance <i>Do the math.</i> <i>What connections are there between the learning goals and the cool-down?</i>
Description:	
Use for:	
Questions:	

Grade 8

Resource:	Warm-up and Activity Launches and Syntheses <i>Do the math for the warm-up and activities. Describe the progression of understanding from one activity to the next.</i> <i>How is this warm-up an invitation to the mathematics?</i> <i>What strategies and representations will students use to show understanding of the learning goal?</i>
Description:	
Use for:	
Questions:	

Algebra 1

Resource:	Lesson Synthesis <i>What questions or actions provide students the opportunity to consolidate understanding before the cool-down?</i>
Description:	
Use for:	
Questions:	

Geometry

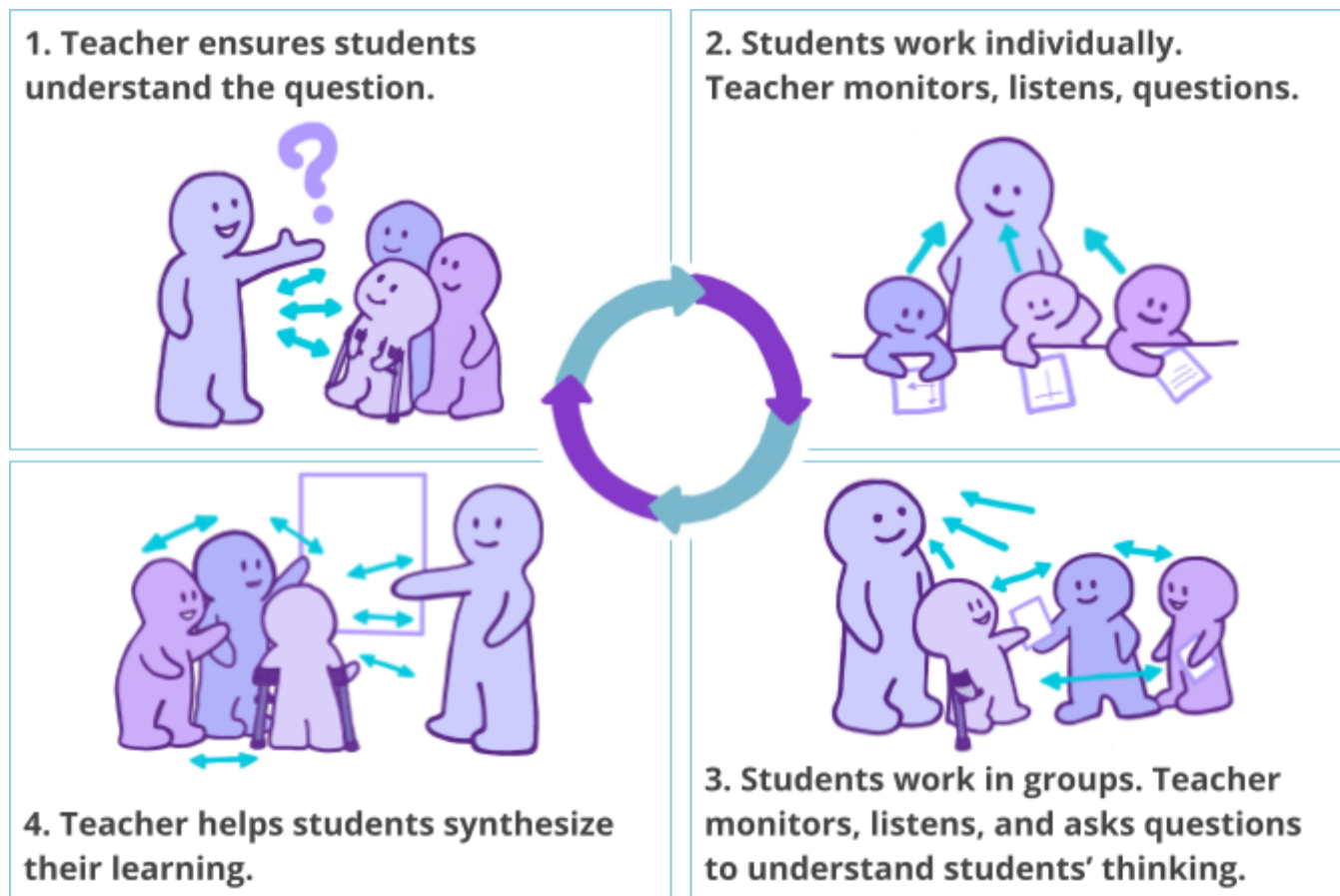
Resource:	Student Lesson Summary <i>How does the student lesson summary compare to the lesson synthesis?</i> <i>How might I use the student lesson summary to help consolidate learning before the cool-down?</i>
Description:	
Use for:	
Questions:	

Algebra 2

Resource:	Required Materials and Required Preparation <i>What do I need to gather and prepare for the lesson?</i> <i>Where do I go for a quick reference?</i>
Description:	
Use for:	
Questions:	

HANDOUT 6

A Note to My Future Self



What do you want to remember about the problem-based teaching and learning cycle? About

- launching activities
- supporting independent work time
- supporting student collaboration and discourse
- synthesizing activities and the lesson?

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HANDOUT 7

Learning Targets

1. I can recognize the progression of understanding across the unit and how it is assessed.
2. I can begin to plan a unit and a lesson using the progression of understanding.
3. I can plan a lesson that uses student thinking to drive learning.
4. I can trust the curriculum.

HANDOUT 8

My Reflections

Teaching a Unit	I have learned...
	My next step is . . .

HANDOUT 9

Are You Ready for More?

Teach and Learn Post-Work

The following reflective post-work will help you further consolidate and apply your learning from each of the Teach and Learn sessions

- Part 1: Experiencing Problem-Based Instruction
- Part 2: Inviting Student Thinking
- Part 3: Enhancing Access to Mathematics
- Part 4: Teaching a Unit

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- ☐ What do you want to keep in mind about Problem-Based Teaching and Learning?
 - ☐ What steps will you take to be more curious about and trusting of your students' thinking
 - ☐ What do you want to keep in mind about the cycle of Problem-Based Teaching and Learning and how it shows up in the daily lesson structure?
 - ☐ Try out an Instructional Routine with your students and reflect on the experience.
 - ☐ Who got to do math? How do you know?
 - ☐ How did the routine invite students to engage in mathematics?
 - ☐ How might you use or adjust the routine so all students do math in your classroom?
 - ☐ What do you want to keep in mind when you plan your first Info Gap?
 - ☐ What do you want to keep in mind when you plan your first unit? How might you use the Planning a Unit template? (Click [here](#) to make your own copy.)
 - ☐ What do you want to keep in mind when you plan your first lesson? How might you use the Planning a Lesson template? (Click [here](#) to make your own copy.)

Joining the IM Community

The IM Resource Hub is the home for teachers of Illustrative Mathematics authored curricula and people who support them. Here you will find resources to support the collective work of building a world where learners know, use, and enjoy mathematics. Join us at <https://hub.illustrativemathematics.org/home>.

You'll find resources such as cool-down guidance, unfinished learning adaptation packs, distance learning section guides, unit math story videos, and video lesson summary videos.



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