

# Unit Internalization

January 13th, 2023



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## Educator Hat vs Facilitator Hat

### Educator Hat

Learning Mode

Questions “as if” you’re an educator.

Save facilitation questions for the parking lot.

### Facilitator Hat

Application Mode

Questions about facilitation welcome.

Leverage your time as an educator- participant.



# Collaborative Group Norms

Understand that those who work, learn.

Look for solutions, not blame.

Focus on systems, not people.

Recognize that everyone has expertise.

Be honest.

Challenge ideas.

Share talk time.

Mistakes are expected, respected, and inspected



# Today's Goals

## Unit Introduction

- Determine the goals and expected student outcomes in your unit of study
- Determine the key **representations** and **strategies** within the unit

## Arc of Learning

- Determine the goals, representations, and strategies within each Module or chunk of learning within the unit
- Name how mathematics learning builds across the unit



# Agenda

Time	Topic
10 minutes	Introductions and Purpose for Learning
10 minutes	Let's Do the Math!
30 minutes	Unit Overview
10 minutes	Break!
30 minutes	Discovering the Arc of Learning
10 minutes	Closing

## Materials Matter

When teachers have access to high-quality, aligned instructional materials, it makes a difference in their classroom practice and the instruction students receive.

“When students who started the year behind grade level were given more grade-appropriate assignments, stronger instruction, deeper engagement, and higher expectations, the gap between these students and their higher achieving peers began to narrow substantially.”



## Purpose for this Work

“

**Lesson Study values  
teachers by supporting  
them as agents of  
improvement in their  
own classrooms.**

**- Vicki Collet**

in Education Week Teacher



**Let's Do the Math!**

# Assessment Item

In the chat, you will find a link to an assessment item from the end of unit assessment.

1. Individually complete the assessment item as you hope students would complete the item.
2. Discuss in a small group:
  - a. What do students need to know in order to be successful on this item? (Conceptual Knowledge)
  - b. How should students represent their thinking on this item? (Representations i.e. a number line, place value chart, area model, graph, etc.)
  - c. What strategies would you hope students have available to them in order to complete this item? (make a 10, distributive property, compensation strategies, solving a one-step equation, etc.)

# Group Discussion



What were your group's “aha” moments from this activity?

OR

How did thinking through these components benefit your group?

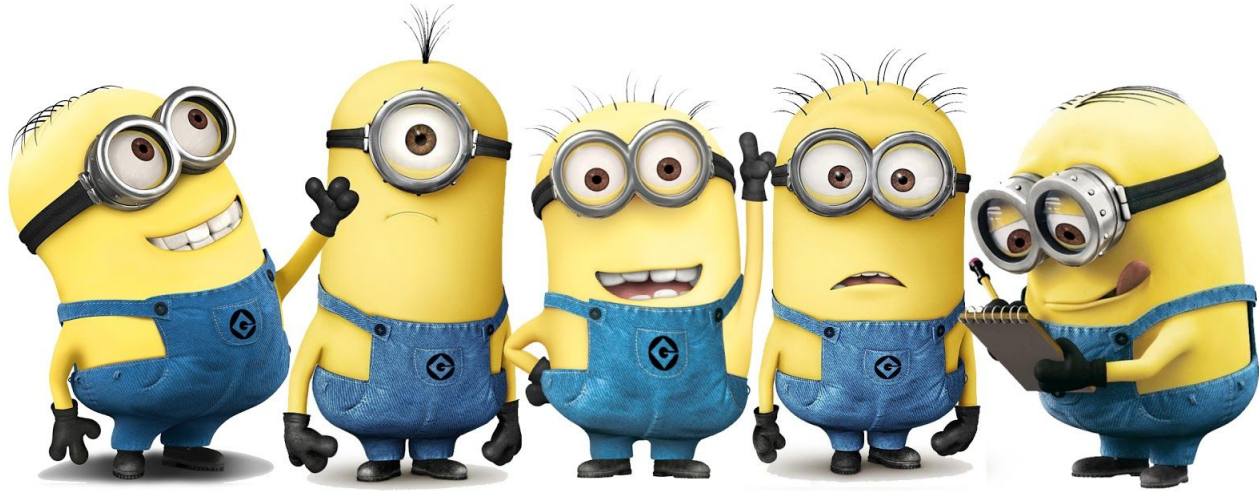
## Unit Overview

# Unit Overview

For this portion of our time together, we will focus on your unit overview.

1. 20 minutes: Read the overview. Using the notation, identify the
  - a. **concepts** (what do we want students to know?)
  - b. **representations** (how will students show what they know?)
  - c. **strategies** (what thinking and processes will students need in order to be successful?)
2. 10 minutes: Turn to your full end-of-unit assessment. How do you see your named concepts, representations, and strategies within the assessment?

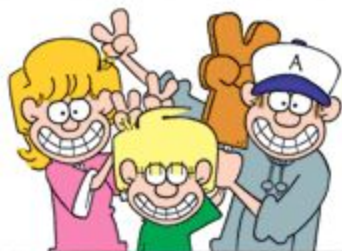
# Group Discussion



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How did thinking through these components benefit your group?



# FoxTrot

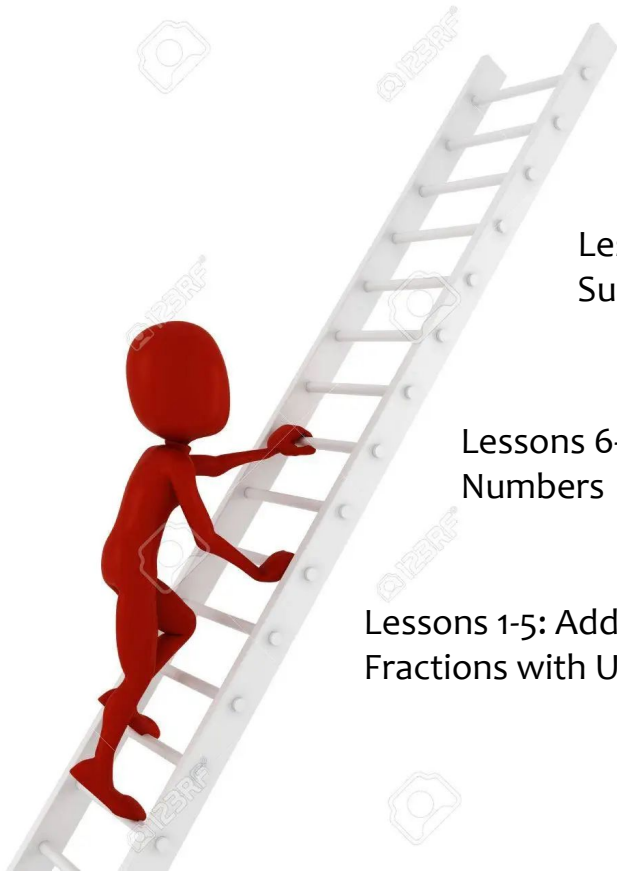
by Bill Amend



## Discovering the Arc of Learning



# Building the Arc of Learning (From Grade 5, Unit 9)



Lesson 9: Problem Solving with Adding and Subtracting Mixed Numbers

Lessons 6-8: Adding and Subtracting Mixed Numbers

Lessons 1-5: Adding and Subtracting Fractions with Unlike Denominators

# Building the Arc of Learning

For this portion of our time together, you will be using the information you gathered from your unit overview as well as the exit tickets to investigate how learning builds within each module/chunk of learning.

For each module/chunk of learning, name...

1. The concepts, representations, and strategies that are most important within the module for students to experience.
2. Where the learning starts and how it builds understanding over time.

Finally, discuss how the modules build on each other to create understanding of the main concepts within the unit.

## **Reflection and Closing**

# Today's Goals

## Unit Introduction

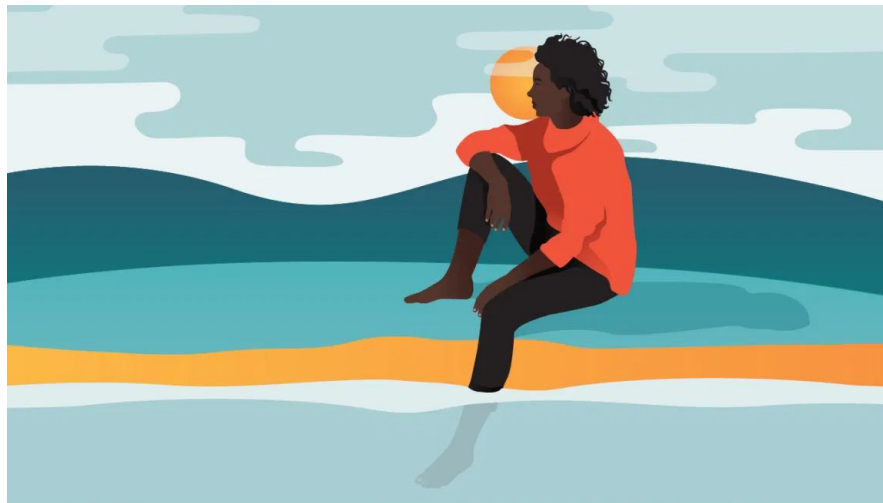
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# Reflection and Closing



**Reflect on today's big ideas:**

1. How does doing this work together impact students?
2. How does doing this work together impact instruction?
3. What support would you need in order to carry this work forward?

Put on your **facilitator hat!**





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# Key Moments

## Before Unit Internalization

- Collect all materials: units, texts (if applicable) and access to online resources as necessary. Make sure all participants have access to materials.
- Adapt slides to be reflective of the curriculum teachers are using. Think through the action plan and highlight any areas for the school leader to speak to.
- Review the units to be studied and do the work for at least 1 lesson that teachers will do.
- Meet with leaders to familiarize them with the process and think through potential areas of strength and concern with teachers in this work
- Make sure you have enough time allotted for the support–1 hour minimum, but a half day is ideal.





# Key Moments

## During Unit Internalization

- The school leader should open up the session stamping the importance of this work and connecting the work to the actions of the school.
- During teacher work time, make sure to have questions prepared to push teachers' thinking and affirmations ready for those “aha” moments.





## Key Moments

### After Unit Internalization

- Collaborate with the school leader on systematizing this work—how will the time be protected for this to occur as regularly as possible? How will the leader monitor the completion and quality of work?





## Reflect and Write

How does unit internalization support the overall implementation of HQIM?

How might you support systems at a school to ensure a common approach to preparing for units?



