



Foundations for *Inspiring Connections*

Session 4

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Welcome!

Foundations for Inspiring Connections - Session 4



What should I do before we get started?

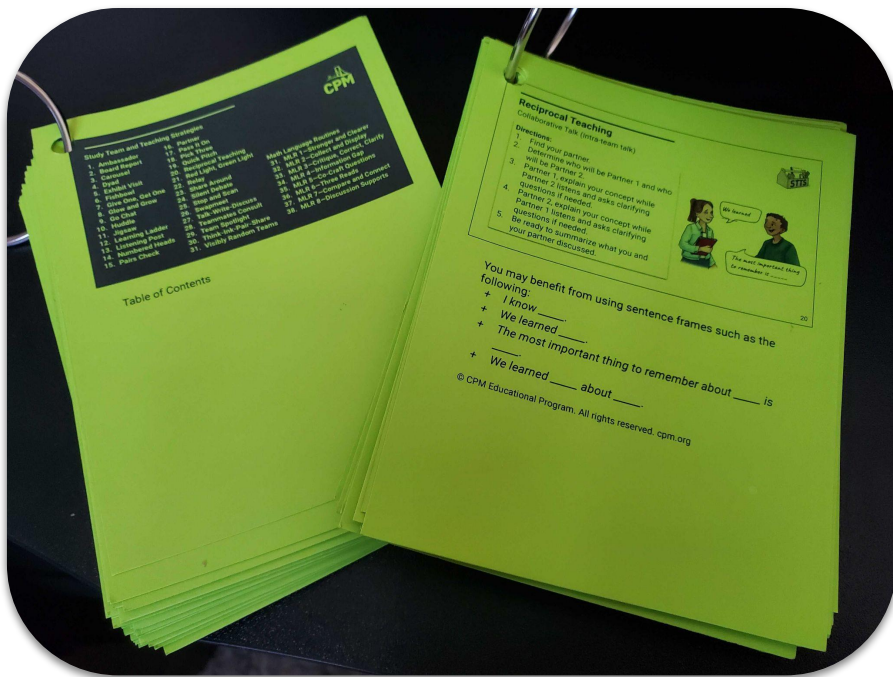
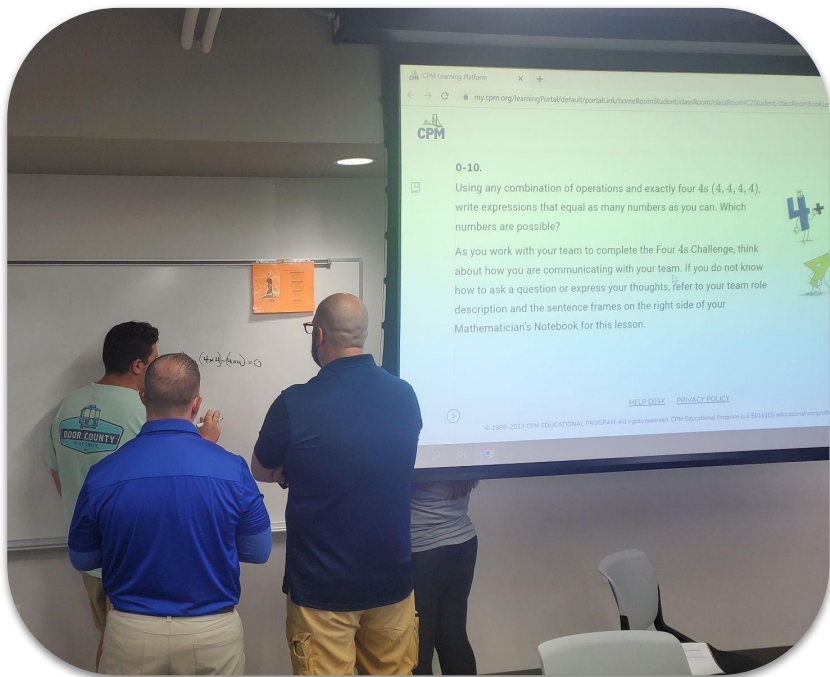
- + Respond to the door question (unmute or public chat) - Would you rather cook at home or eat at a restaurant?
- + Review our Virtual Routines.

Virtual Routines

- Join with microphone.
- Private Chat Facilitator for individual support.
- Share your ideas.

Welcome!

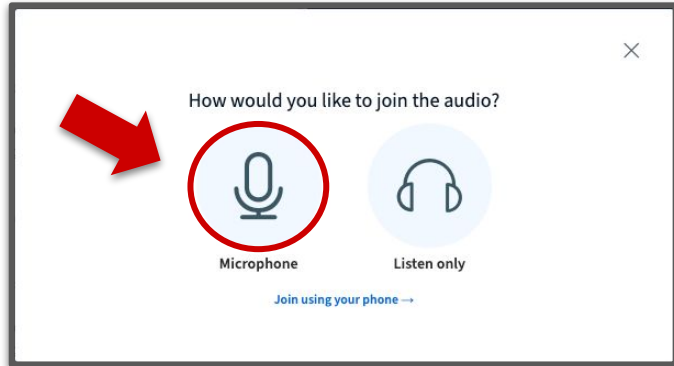
CPM Virtual Learning Series



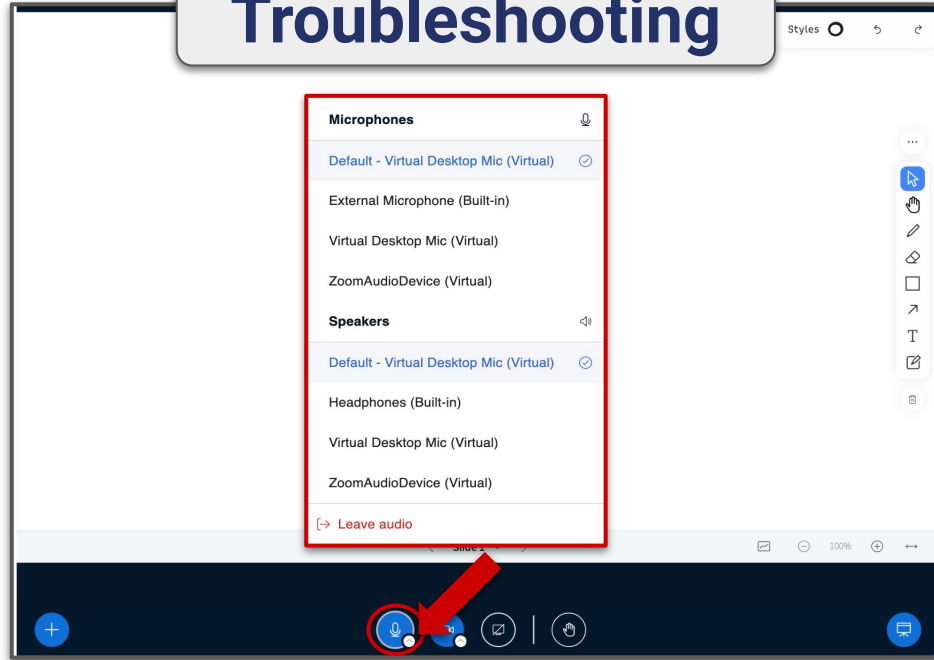
Tech Tip



Audio



Troubleshooting



Opening

Outcomes



Together we will:

explore and experience *Inspiring Connections*.

learn how the design of *Inspiring Connections* supports and develops collaborative learning.

reflect on current practices and beliefs to develop a plan for the implementation of *Inspiring Connections*.

collaborate and learn with other teachers.

Opening

Agenda



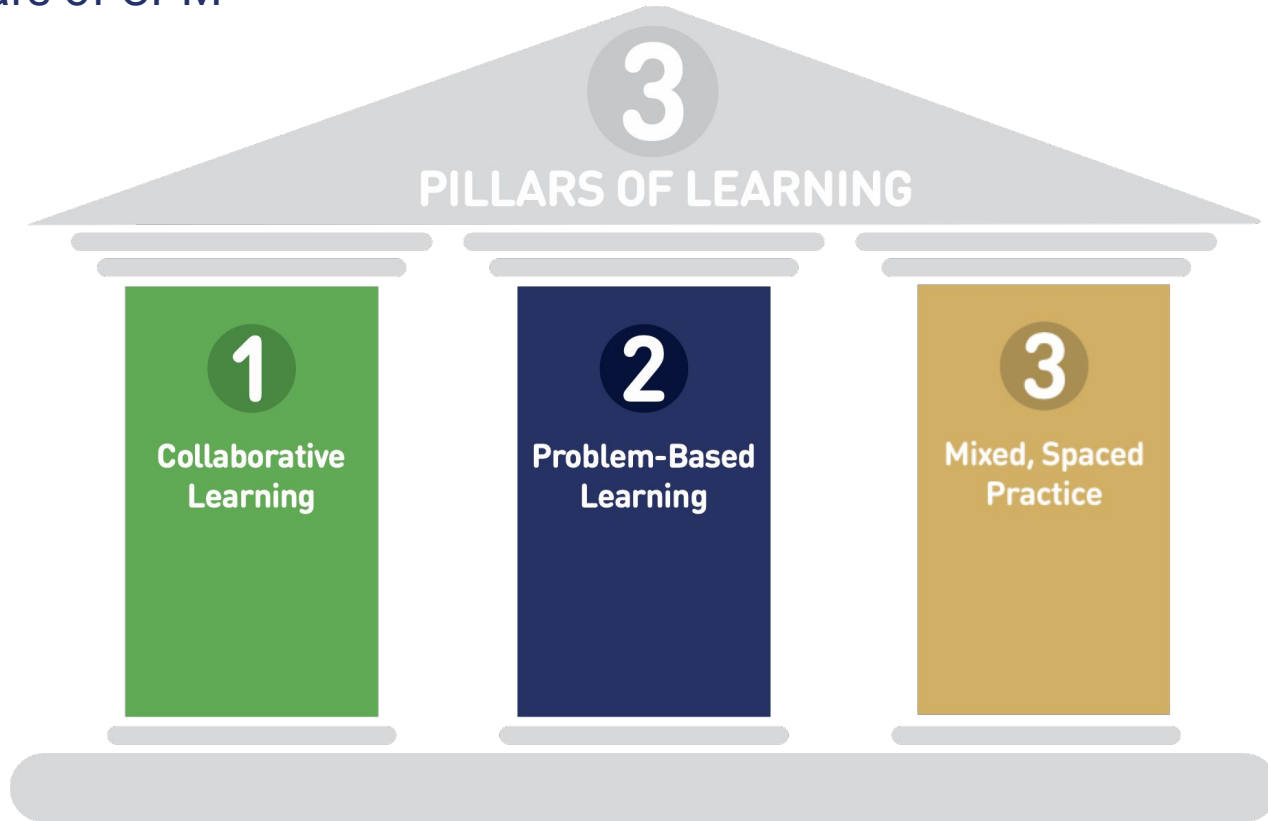
Focus: Collaborative Learning

- + Icebreaker
- + Effective Study Teams
- + Math Lesson
- + Course Support
- + Closure

Learning Target: I can get ready to learn.

Opening

Three Pillars of CPM



Opening

CPM's Guiding Principles



Students deepen their mathematical understanding when they are engaged with concepts over time.



Students have significantly better retention of mathematics when concepts are grounded in context.



Students' involvement in effective study teams increases their ability to learn mathematics.



Effective study teams are guided, supported, and summarized by a reflective, knowledgeable teacher.



Assessing what students understand requires more than one method and more than one opportunity.



When students and stakeholders embrace a growth mindset, they understand that mastery takes time, effort, and support.

Opening

Working Agreements



- + Be willing to take **risks**.
- + Have a **visionary** mindset.
- + Stay **engaged**.
- + Explore and reflect on our **beliefs**.
- + Give **grace** to others and ourselves.

Change takes time, effort, and support!

Set your status to thumbs up if you are ready to begin.



Agenda

Session 4



Focus: Collaborative Learning

- + **Icebreaker**
- + Effective Study Teams
- + Math Lesson
- + Course Support
- + Closure

Learning Target: I can use a task to develop a collaborative community.

Tech Tip



Share Screen

Choose what to share

Choose what to share with m001068.rna1.blindsidenetworks.com

The site will be able to see the contents of your screen

Chrome Tab Window Entire Screen

- BigBlueButton - Session 1 - Default
- Helpful tips for Big Blue Button - Googl...
- 02 Session 0 (Orientation) - Slides (6.9...
- UPDATED TECH TIP for all teams - Goo...
- public chat big blue button - Google Se...
- New Tab
- Session 1
- VL Sessions in the Professional Learnin...

Also share tab audio

Cancel Share

Take presenter



Icebreaker

IC3 0.1.2



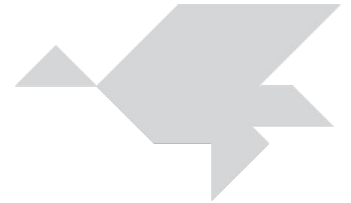
PUZZLE A



PUZZLE B



PUZZLE C



PUZZLE D

Agenda

Session 4



Focus: Collaborative Learning

- + Icebreaker
- + **Effective Study Teams**
- + Math Lesson
- + Course Support
- + Closure

Learning Target: I can develop effective study teams.

Effective Study Teams

Collaboration Brainstorm



What does good collaboration look like?

Tech Tip

Tools



Whiteboard Tools

The screenshot shows a whiteboard interface with a dark blue background. A whiteboard area is centered, displaying a toolbar with various tools. A red circle highlights a three-dot menu icon in the top right corner of the toolbar. A red arrow points from this menu to a callout box on the right containing two options: "Fullscreen Presentation" and "Snapshot of current slide", with the latter being highlighted by a red box. Another red arrow points from the "Snapshot of current slide" option to the toolbar. A red arrow points from the "Styles" menu to a callout box in the bottom left that says "Click here to turn on multi-user whiteboard". The CPM logo is visible in the bottom left corner of the whiteboard area. The bottom of the whiteboard shows a navigation bar with "Slide 1", a zoom level of "100%", and navigation arrows. At the very bottom of the screen, there are three circular icons: a microphone, a video camera, and a whiteboard icon.



Collaboration is not...

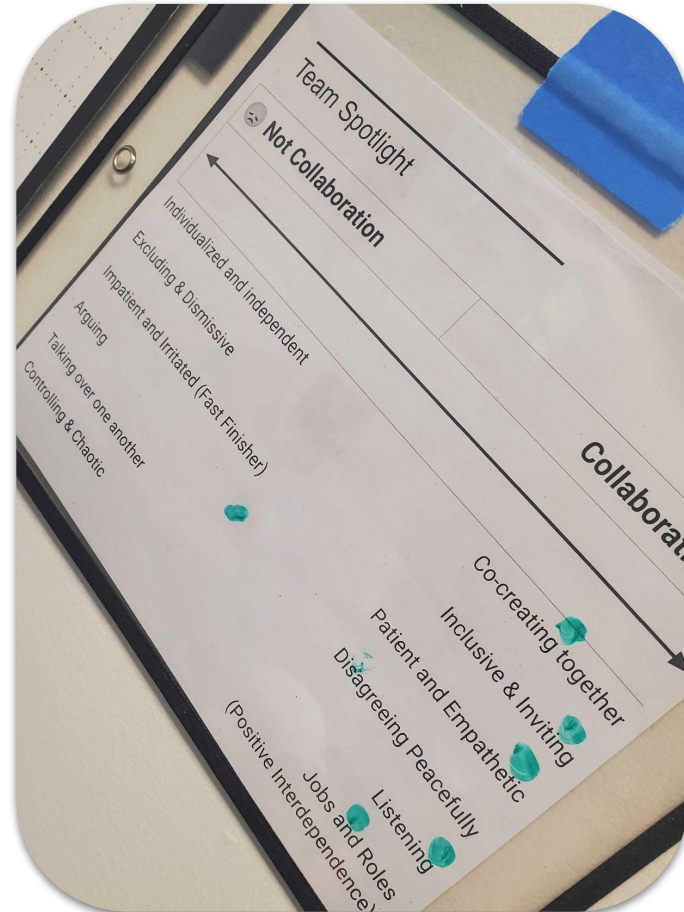
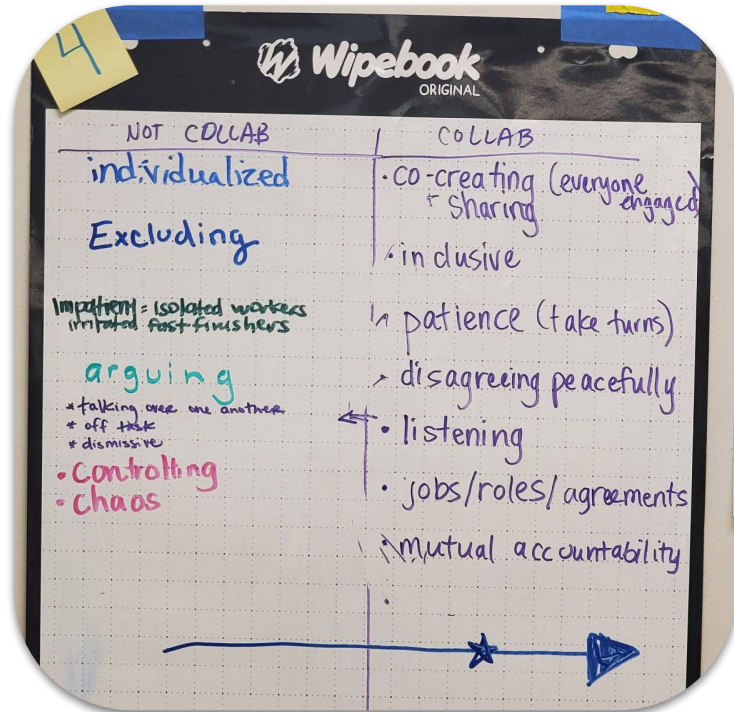
Collaboration is...

Example: *Being closed minded to others' ideas.*

Example: *Being open minded to others' ideas.*

Effective Study Teams






Observational Rubric



Effective Study Teams

 **Not Collaboration**

Collaboration 

- | | | |
|---|--|--|
| 1 | Excluding/ignoring/isolating people or ideas | Including and inviting of people and ideas |
| | |  |
| 2 | Teammates copying without thought | All teammates questioning sharing |
| | |  |
| 3 | Put downs or talking over someone | Positive words and taking turns |
| | |  |
| 4 | Working independently | Huddled together |
| | |  |
| 5 | One attempt (give up) | Trial and error (perseverance) |
| | |  |

Effective Study Teams

Positive Interdependence



“The strength of the team is each individual member. The strength of each member is the team.”

- Phil Jackson

Effective Study Teams

Teacher Tips

Learning Agreements

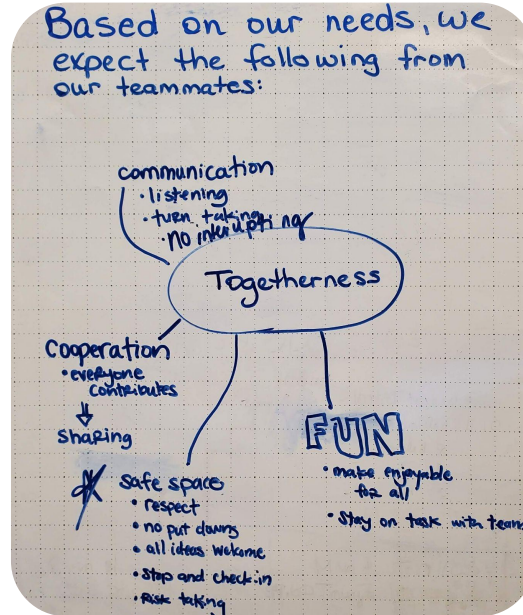
Involve Students

Provide Time for Feedback

Display & Use Regularly



Team Spotlight



Agenda

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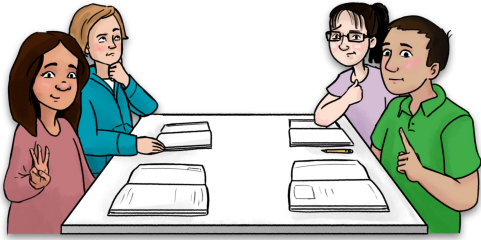


Focus: Collaborative Learning

- + Icebreaker
- + Effective Study Teams
- + **Math Lesson**
- + Course Support
- + Closure

Learning Target: I can identify ways to support collaboration in many venues.

How many are there?
How do you see it?

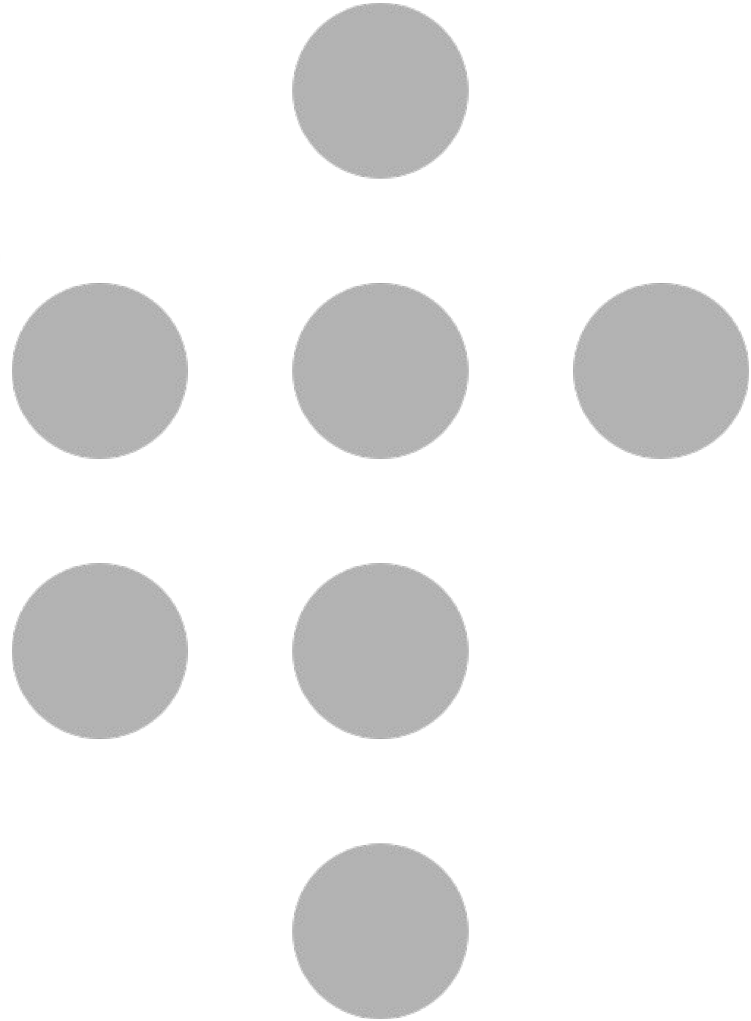


Update your status

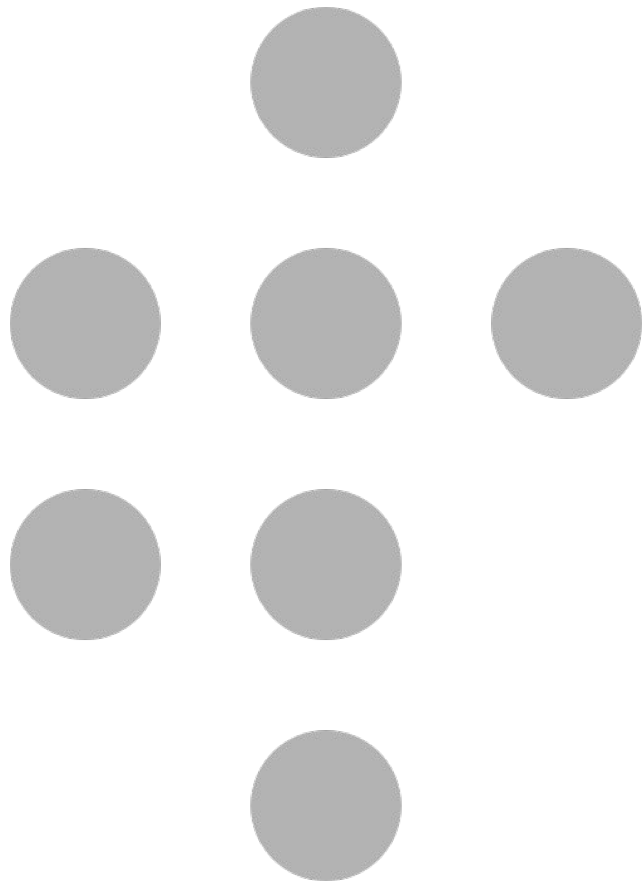
One Method: Smiley Face

Two Methods: Thumbs Up

Three+ Methods: Applause



How many are there? How did you see it?



IC1 Lesson 1.1.2

Where do these numbers go on this line?



Door Question: What is something that helps make any day better?

Reflection & Practice: 1-13 to 1-18



I can position whole numbers, mixed numbers, fractions greater than one, and decimal numbers on a horizontal number line.



I can compare whole numbers, mixed numbers, fractions greater than one, and decimal numbers.



I can include and invite all members of my team and their ideas.



p.19 & 20

IC1 Lesson 1.1.2

Where do these numbers go on this line?



1-11 Resource Page

<p style="text-align: center;">1</p> <p style="text-align: center;">SET 9</p>	<p style="text-align: center;">$\frac{3}{4}$</p> <p style="text-align: center;">SET 9</p>	<p style="text-align: center;">$3\frac{1}{6}$</p> <p style="text-align: center;">SET 9</p>	<p style="text-align: center;">1.5</p> <p style="text-align: center;">SET 9</p>
--	---	--	--



1-11

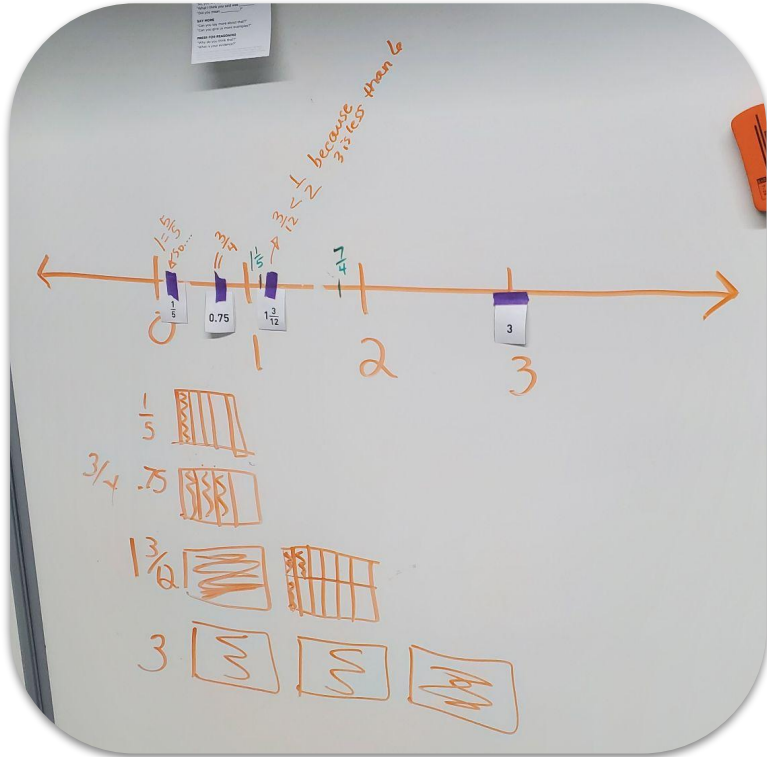


Discussion Supports:

- + **Add On:** *I would like to add on to what _____ said.*
- + **Reasoning:** *I [agree/disagree] because _____. / I think this is true because _____.*
- + **Revoicing:** *So, you are saying _____. / Did you mean _____?*
- + **Say More:** *Can you say more about that? / Can you give another example?*
- + **Press for Reasoning:** *Why do you think that? / What is your evidence?*

IC1 Lesson 1.1.2

Whole Class Discussion



Welcome Back!

Set your status to reflect how your team did with meeting the Team Goal.



I can actively listen and contribute to my team.

IC1 Lesson 1.1.2

Lesson Closure



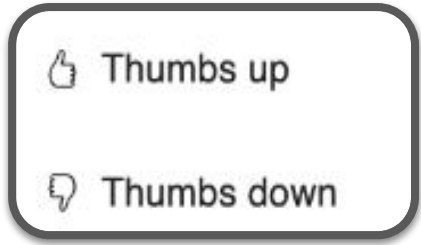
Where do these numbers go on this line?



Public Chat



Whiteboard Tools



Status Change



Team 1



Team 2



Team 3



Team 4



Team 5



Team 6



Team 7



Team 8





Closure

Your teacher will lead your class through a clothesline activity.

After the activity, write a note to your future self in your Mathematician's Notebook about what you did and what you learned. Use the following sentence frames as prompts to start your thinking, and then add anything that will help you remember what you learned today.

- When hanging _____ on the clothesline, I knew _____ so I _____.
- When placing numbers on the clothesline, it is important to pay attention to _____ because _____.
- When our class discussed hanging _____ on the clothesline, someone said _____ which made me think _____.



IC1 Lesson 1.1.2

Lesson 1.1.1 Reflection & Practice



😊 ★ = Good to

go
! ? = Need Support



p.14 - 16

Reflection & Practice

1-5. Kylo and Ren are playing a word game. After Ren placed the word math, Kylo placed backschool, which is not a word. If backschool had counted, how many points would Kylo have earned? [Hint: Each player calculates their score by adding the values of all the letters in their word.]

M
B A C K T O S C H O O L
T
H

1-5 27

1-6. I can position whole numbers and decimal numbers on a horizontal number line.

Corban's class placed their shoe-size data on a clothesline. Use this clothesline to answer the questions below.

a. Corban insists that they move the sticky notes for size 8 slightly to the right. Why might this be?

b. Ashley says, "We need to move the 2 to the left." Kim asks, "Why? The 2 is to the left of all the other numbers, so it is in the correct place." Explain why Ashley wants to move the 2 to the left. How far to the left should it go?

c. Rosana, who wears a size 5½ shoe, joins the class. Which sticky notes would you need to move to place Rosana's shoe size on the clothesline? Where would you move them to?

d. Once Rosana's sticky note is added, Raj says that there are 22 shoe sizes represented on the graph. Santiago says that there are only 9 shoe sizes but 22 students. Explain why Santiago is correct.

1-6 a. There is no space between 7 and 8 for people with size 7½ feet. Even if no one in the class has feet that size, it is still part of the number line.

b. 2 needs to move over far enough to have space for 2½, 3, 3½, 4, and 4½.

c. I'd move 5 left to make space for the 5½. It's only moving the 2 and 5.

Or, I could move all of the 8½, 8, space for 7½, 7, 6½ and 6 over. There's too much space between 8½ and 10 anyway.

c. Because many students have the same size feet, there are 22 sticky notes, but only 9 unique shoe sizes.

1-7. [from Lesson 0.1.3] Which of these figures have an odd number of dots? Explain how you can determine whether the number of dots is even or odd without having to count all of the dots.

FIGURE A: 3 dots in a row

FIGURE B: 6 dots in a row

FIGURE C: 3 dots in a triangle (1 on top, 2 below)

FIGURE D: 10 dots in a row

Reflection & Practice continues on page 52.

1-7. Odd numbers are pairs + 1. With 2 rows of dot patterns, you just have to look for the ones with extra.

Fig A
Fig C
Fig D

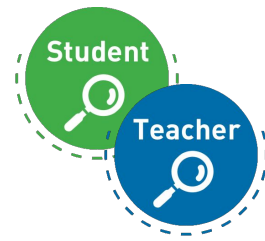
Chapter 1 51

Mathematician's Notebook, Inspiring Connections, Course 1

IC1 Lesson 1.1.2

Lesson 1.1.1 Class Clothesline





Lesson

IC1 Lesson 1.1.2 Debrief

How does *Inspiring Connections* support a collaborative classroom?



How did collaboration support your learning?

To support collaboration I _____.

To support collaboration my peers _____.

To support collaboration my teacher _____.



What did the teacher do to support collaborative learning during the different parts of the lesson?

The teacher _____.



p.21

Screen Break

Take a break and walk away from the computer.



Agenda

Session 4



Focus: Collaborative Learning

- + Icebreaker
- + Effective Study Teams
- + Math Lesson
- + **Course Support**
- + Closure

Learning Target: I can access support to help in my implementation.



Authors' Vision

Prelude

- + Develop collaborative learning expectations
- + Highlight different ways of thinking mathematically
- + Focus on respect and valuing perspectives
- + Build trust and routines

Chapter 1

- + Introduce the course content
- + Establish content threads
- + Continue to use instructional routines and introduce new ones

Course Support

Module Access



p.22

Open the link in the public chat

Tech Tip



Share Screen

The image shows a presentation control bar with several elements: a 'Take presenter' tooltip over a plus icon, a 'Share your screen' tooltip over a screen-sharing icon, and a navigation bar with 'Slide 30', zoom controls, and navigation arrows. A vertical toolbar on the right contains icons for hand, undo, delete, and refresh. Red arrows point to the plus and screen-sharing icons.

Take presenter

Share your screen

Slide 30

100%

Course Support

Chapter 1 Snapshot & Storyline



The Chapter Introduction provides an excellent starting point as you prepare to teach. Each introduction contains the chapter's Table of Contents, Learning Targets, and Progression, which details the storyline of the chapter.

Consider the question below for the Prelude and Chapter 1 as you review the Chapter Introduction and Mathematician's Notebook pages.

QUESTION TO CONSIDER

How would you describe this chapter in one sentence?

DIGITAL PLATFORM

- Review the Chapter Introduction.

Prelude - Chapter 1

MATHEMATICIAN'S NOTEBOOK

- Skim the chapter and Reference Materials.

File for the Prelude - Chapter 1.

Describe the chapter in one sentence.



p.22

Course Support

Reflection



Learning Targets:

I can access support to help in my implementation.



Share Around: Share one thing you noticed or wondered in the public chat.



p.22

Add questions, comments, good ideas to share, and burning issues to the Parking Lot!

Course Support

PL Portal Modules



Before You Start Inspiring Connections:

- + Getting to Know Your Materials
- + Setting Up Your Classroom
- + Lesson Planning Tips
- + Questions and Other Resources

Course Content in Inspiring Connections:

- + Doing the math of your course with intentional chapter task cards.

Agenda

Session 4



Focus: Collaborative Learning

- + Icebreaker
- + Effective Study Teams
- + Math Lesson
- + Course Support
- + **Closure**




Learning Target: I can identify next steps for implementation of *Inspiring Connections*.


Closure






Inspiring Connections Action Plan



Professional Learning

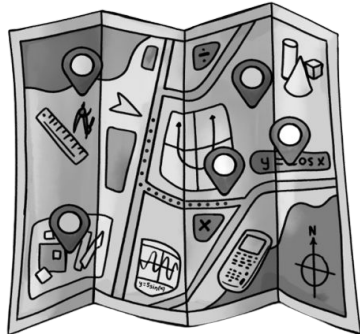
-  Professional Learning Portal
-  Event Registration
-  Podcast

Danielle Boggs 

-  My Dashboard
-  Profile
-  Learning Log
-  File Cabinet
-  Action Plans

Closure

Inspiring Connections Action Plan



DAY TWO

COLLABORATIVE LEARNING

How will you use the resources in *Inspiring Connections* to support collaborative learning?

Consider:

- Beliefs
- Research
- Big ideas
- Vocabulary
- Tools and resources to support you

To support collaborative learning, I will _____.

No response yet

Closure

Outcomes



Together we have had the opportunity to:

explore and experience *Inspiring Connections*.

learn how the design of *Inspiring Connections* supports and develops collaborative learning.

reflect on current practices and beliefs to develop a plan for the implementation of *Inspiring Connections*.

collaborate and learn with other teachers.



p.3

Closure

Study Team and Teaching Strategies & Math Language Routines



Ambassador	Go Chat	Pass It On	Stop and Scan	Stronger & Clearer
Board Report	Huddle	Pick Three	Swapmeet	Collect & Display
Carousel	Jigsaw	Quick Pitch	Talk-Write Discuss	Critique, Correct, Clarify
Dyad	Learning Ladder	Reciprocal Teaching	Teammates Consult	Information Gap
Exhibit Visit	Listening Post	Red Light, Green Light	Team Spotlight	Co-Craft Questions
Fishbowl	Numbered Heads	Relay	Think-Ink-Pair-Share	Three Reads
Give One, Get One	Pairs Check	Share Around	Visibly Random Teams	Compare & Connect
Glow and Grow	Partner	Silent Debate		Discussion Supports

Closure

Three Research Pillars



SECTION ONE: The pillars that represent necessary first steps in any implementation.

Collaborative Learning

Students and teachers are aware of the purpose for and value of working in teams, and are familiar with team norms and roles.

Problem-Based Learning

Students and teachers share math authority as they value and engage in productive struggle. Teachers guide without taking over the thinking.

Mixed, Spaced Practice

Both individual lessons and chapters are followed, using suggested pacing. Reflection and Practice problems are assigned and valued as an essential part of learning.

Closure

Collaborative Learning Embedded Supports



What is it?

How does it support effective collaborative learning?

**Visibly Random
Teams**

Team Roles

**Collaborative
Learning Agreements**

**Integrated
Instructional
Supports**

**Circulation and
Questioning**


**Vertical
Non-Permanent
Surfaces (VNPS)**

Closure

Management Tips & Ideas

TEAM Roles

- Be Intentional to assign tasks
- Colored dots
- include in my planning RICO (who do I want to do what?)
- Sheet on Desk (Placemat) - Maybe Color Coded dots
- Poster - Review Roles
- HANDOUT
- make sure everyone has a job each class
- Team Picker: RICO
- Alphabetical
- practice "daily" roles that stay consistent
- lanyards
- Handomized
- Roles sheet at each table
- simplify to one thing each class
- color-coded



Visibly Random Teams

- Passout Note cards with Student Names
- Dice
- Pop Sticks Flippity
- Random # generator
- Display on big screen
- change AFTER R+P time
- Take random pictures cut them up and find mate
- popstick sticks → maybe
- Pick a wheel!
- flippity
- Class Top
- Online generator
- Facebook BTC group for ideas
- Matching → factors of 24 (1x24, 2x12, etc)
- eg. equiv. fractions, ratios etc
- Number Desks / color-code tables
- Blink cards ✓
- Flippity
- Popstick sticks ✓
- just ordered a set of 'Blink' cards (Amazon)



Closure



- + **Parking Lot**

- + **Attendance**

Enter passcode in the portal: #####

- + **Before Next Session:**

- IC3 1.1.3 Reflection & Practice 1-20 to 1-25



p.24 & 25

- Use the “Course Content in Inspiring Connections” module to work through the Prelude and Chapter 1 as a student.
- Explore the (yellow) “Before you Start Inspiring Connections” Module



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