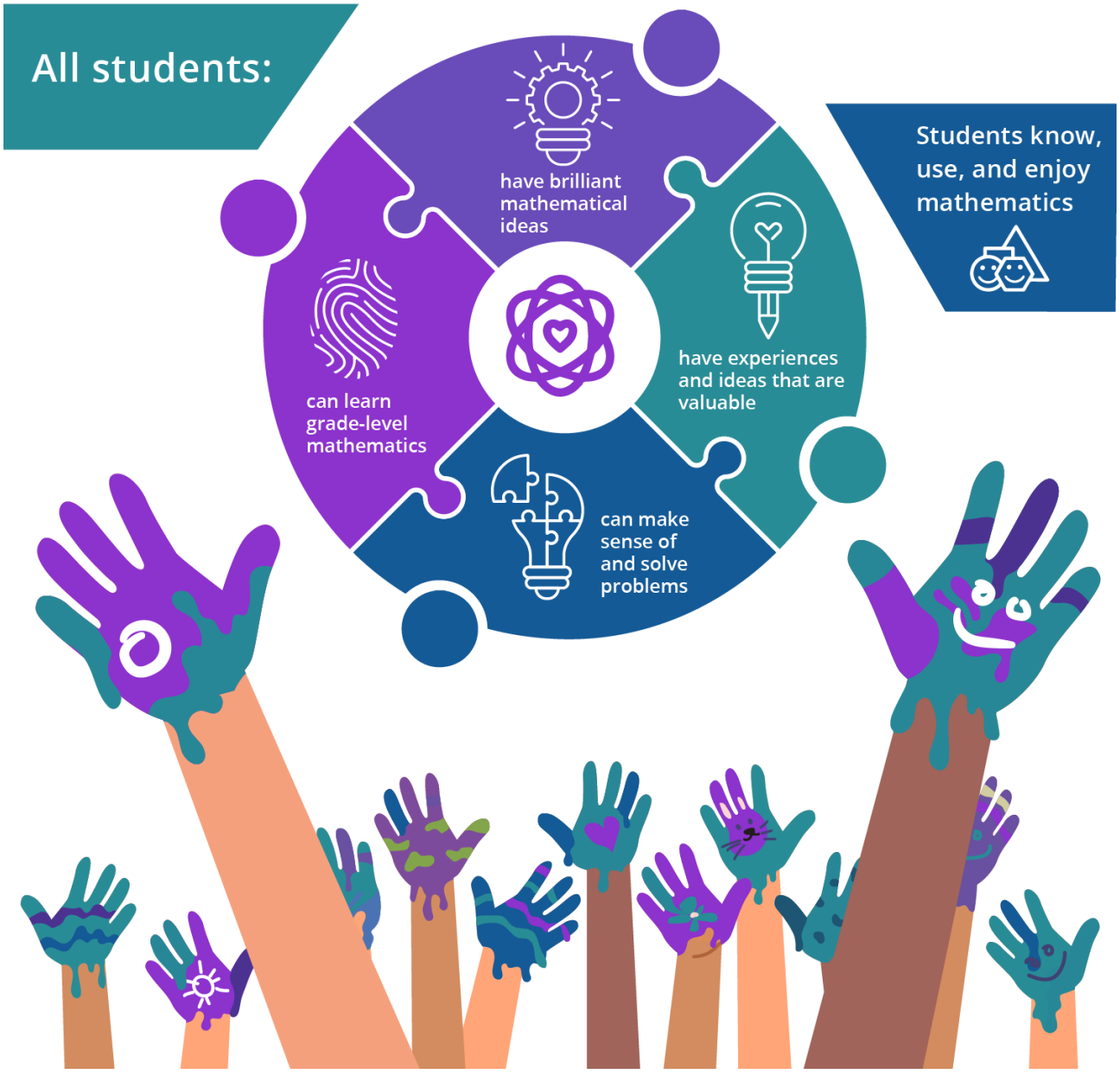
Sustaining Student Engagement During Deep Study

Reflecting on our instructional decisions and their impact on our learners



Task 1
Checking In

What are you bringing into our time together?

- I've recently tried . . . .
- A success is . . . .
- Since our last meeting, I've tried . . . .
- A challenge is . . . .

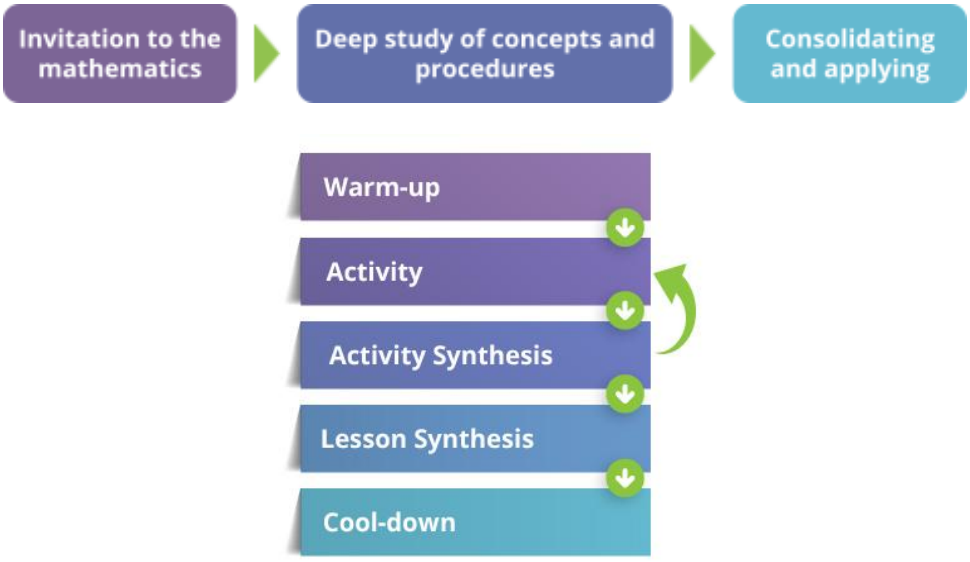
What are you hoping to get out of our time together?

1. Describe the phases of an activity and what students and teachers are doing during each phase.
2. Anticipate barriers students might face during work on activities.
3. Plan and rehearse questions to ask and tools to use to sustain student engagement and keep student thinking moving forward during an activity.

How can we agree to work together?

- Make your thinking visible.
- 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.

The Structure of an Activity



Launch

During the launch, the teacher makes sure that students understand the context (if there is one) and what the problem is asking them to do. This is not the same as making sure the students know how to do the problem—part of the work that students should be doing for themselves is figuring out how to solve the problem.

Student Work Time

The launch for an activity frequently includes suggestions for grouping students, which may include students working on the activity individually, with a partner, or in small groups. During student work time the teacher monitors for anticipated strategies in preparation for facilitating the activity synthesis. The teacher also supports access for students in a way that helps their struggle remain productive.

Activity Synthesis

During the activity synthesis, the teacher orchestrates an opportunity for students to synthesize what they have learned. This time is used for students to begin solidifying mathematical connections between the activity and the learning goal and situate the learning within students' previous understanding.

✏️ *During student work time, my students ____, and I ____.*

Course ____ Unit ____ Lesson ____ Activity Title:

During each phase of the activity, what are students doing? What is the teacher doing?

Launch

Student Work Time

Activity Synthesis

Course ____ Unit ____ Lesson ____ Activity Title:

Learning Goals

Do the math

- Anticipate student responses.
- What will it look like when students are stuck?

What will the launch look like and sound like?

- What will the teacher do and say?
- What will students do and say?
- How will students work (individually, with a partner, in a small group)?
- What materials and tools will students need to access?

Planning Access

Select one of the potential scenarios and generate at least one idea for addressing that issue in this particular activity. Use the lesson plan and question bank as a resource.

Students might . . .	What might the barrier be?	What might I say, ask, do, or offer to move student thinking forward?
struggle to get started		
get started and get stuck		
finish quickly and have an incorrect or incomplete answer		
finish quickly and have a correct answer		

Tell Me More!

- Partner 1: Share your idea with your partner.
- Partner 2: Use one of the sentence frames to respond:
  - I'm not sure I understand what you mean. Can you tell me more about . . . ?
  - I want to add on to that idea. Have you also thought about . . . ?
  - I want to challenge that idea. Have you thought about . . . ?
  - I want to offer a specific example. If students are . . . you could . . . .
  - That sounds similar to my idea. Let's talk about what's the same and what's different.
- Switch roles.

Question Bank: Sustaining Student Engagement

questions that promote getting started	questions that promote continuing thinking	questions that promote deeper thinking
● What are you sure about? ● What do you think this situation is about? ● What do you think we might do first? ● Is there a word or phrase that you feel unsure about? (if so, define it for the student) ● What strategies could you use?	● What are you wondering? ● What was the last thing you did? ● Can you think of a representation or drawing that might help? ● What do you (and your partner or your group) agree on? ● What have you done so far?	● What is your answer, and what does it mean in this situation? ● How might you represent this situation? ● What are some connections between your representation and the computation on your paper? ● Compare your solutions (with a partner or other group members). What's the same and what's different?

Course ____ Unit ____ Lesson ____ Activity Title:

What is the mathematical work of the activity?

- What connections are there between the learning goals and the activity?
- What strategies and representations might students use?
- What might student responses look like?

What will the student work time look and sound like?

- What materials and tools will students need to access?
- What will the launch look and sound like? How will we transition to the activity?
- How will I know when to transition to the activity synthesis?

How will I move student thinking forward?

- How might student engagement look in this activity? What might the barriers be?
- What might I say, ask, do, or offer to move student thinking forward?

Student Work Time Rehearsal

I notice

- that you asked . . .
- that you chose to . . .
- that we needed . . .

I wonder

- what would happen if . . .
- why you chose to . . .
- if students might . . .

E = Excited What excites you about this topic?

W = Worrisome What do you find worrisome about this topic?

N = Next Step I commit to trying _____ and will ask _____ to hold me accountable.

S = Support The support I will need is . . . .

Adapted from Harvard Project Zero. (2015). *Compass Points*. Project Zero. Retrieved July 12, 2022, from http://www.pz.harvard.edu/resources/compass-points

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Continuing the Conversation
Are you ready for more?

Resources

The IM Resource Hub is the home for a variety of useful documents. You'll find resources such as cool-down guidance, unfinished learning adaptation packs, distance learning section guides, unit math story videos, and lesson summary videos.

https://hub.illustrativemathematics.org

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