PLANNING GUIDE FOR DISCUSSIONBASED MATH LESSONS

MINDFUL MATH COACH

Planning Guide For Discussion-Based Math Lessons

KFFP THIS COPY TO REFERENCE

<u>Part 1</u>: What is the learning goal of the lesson?

Considerations:

- Aligns to grade-level content
- Matches the language and rigor of standard(s)
- Describes the cognitive understanding you want students to have (not SWBAT...)
 - Example: Students will understand that they need to find a common denominator before adding fractions because we can only add equal size parts

<u>Part 2</u>: What problem or task will be the focus of the discussion?

Considerations:

- Aligns to grade-level content
- Matches the language and rigor of standard(s)
- Interesting and relevant to students
- Provides opportunities for reasoning, problem-solving, and/or explaining
- You believe discussion of this problem can lead to deeper understanding

<u>Part 3</u>: How will you increase access to the grade-level problem?

Ideas:

- Scaffold the task
- Introduce the task using an instructional routine (ie. Notice & Wonder)
- Provide a concrete or visual model to illustrate the problem context
- Quick refresher on prerequisite skills during 'Do Now'
- Ensure the problem has multiple entry points and/or solution strategies that can be used to solve
- Check for understandings to ensure students are familiar with the problem context and vocabulary they will need to make sense of the problem



<u>Part 4</u>: How will you launch the problem?

Considerations:

- Hook / Motivation (some ideas below)
 - Present the problem as a challenge
 - Accountability: "Be ready to when we come back together in X minutes."
 - Show an engaging video or visual that connects to the problem
- Clear directions
 - What <u>exactly</u> are you asking students to do? (state it simply)
 - Tell students they should work silently, by themselves for X number of minutes

<u>Part 5</u>: What strategies and solutions do you anticipate students using, and which of these will you highlight in the discussion?

Considerations:

- Correct and incorrect solutions
- Most common strategies
- Concrete strategy share to increase accessibility for all students [example: picture, drawing, use of manipulative]
- Visual strategy share as a bridge between concrete and abstract [example: tape diagram]
- Abstract strategy must include if required by the standard [example: equation]
- Incorrect solutions share to address a common misconception

<u>Part 6</u>: What takeaway(s) do you want students to have at the end of the lesson?

Plan the lesson summary:

- Main point(s) you want to reinforce, connected to the learning goal (write them out!)
- Student work you can highlight to illustrate the mathematics tied to the learning goal
- Decide how you will structure and facilitate the lesson summary



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USE TO PLAN YOUR LESSON

Part I: What is the learning goal of the lesson?
Students will understand that (describe the cognitive change you want students to have)
Part 2: What problem or task will be the focus of the discussion?
Include the problem here:
Part 3: How will you increase access to the grade-level problem?
Ideas to increase access:



Part 4: How will you launch the problem?
Hook / Motivation:
Directions:
<u>Part 5</u> : What strategies and solutions do you anticipate students using, and which of these will you highlight in the discussion?
Solve the problem using several strategies below:
Which of the strategies will you highlight in the discussion? (list and order them)
Part 6: What takeaway(s) do you want students to have at the end of the lesson?
Plan the lesson summary:

