



# Effectively Executing the Investigations Curriculum: Monitoring Summer 2016





# Objectives and Agenda

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## Objectives:

- WWBAT set the environment and aggressively monitor both on-track and off-track students during work time
- WWBAT identify the classroom trend, choose samples for charting during discourse, and conference with selected students.

## Agenda:

- Set the Environment
- Aggressively Monitor
- Conferencing with Students
- Determining the Class Trend
- Prepare to Chart
- Practice





## Monitoring: Set the Environment

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**As you watch the model,**

1. What specific actions does the teacher take to set the environment in the first minute of work time?
2. What impact does this have on students?

## **Core Idea:**

You must take time to set the environment at the beginning of independent work to ensure the monitoring time is spent on academic feedback and not redirections.



# Set the Environment

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1. Set timer for length of work time and get clipboard and pen in hand.
2. Square up in your power corner and scan the room to ensure all students are on task.

## Helpful hints

- Make timer visible so students can self monitor their work time.
- During the first minute, the only teacher student interaction involves behavioral redirections.
- Setting the environment takes 30-60 seconds.





## Monitoring: Procedural Lap

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As you watch the [video](#),

1. What is the purpose of the teacher's monitoring during the first minute of her circulation?
2. What specific actions does the teacher take in this minute?



# Procedural Lap

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1. Complete a quick lap (1-2 minutes) around your zone to provide oral and written feedback and to prompt for evidence of strong habits of productivity.
2. Start with the faster problem solvers first to allow time for slower workers to get started.

## Helpful hints

- Check in with all students!
- Determine an efficient method of giving feedback (i.e. MOLE) to ensure you can move quickly.
- Don't forget to give positive praise too.



## **Core Idea:**

A moment without feedback is a moment wasted.





# Mini Practice- Set & Lap

## Protocol

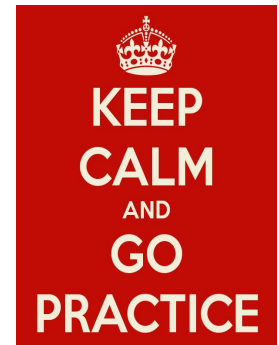
- Prep ( 1 min)
  - Review the MOLE prompting one pager
  - Script out your actions and statements for the first minute of work time.

**Objective:** Practice executing setting the environment and the procedural lap according to the stated vision of excellence.

**Materials:** Cheat Sheet, Sample student work, place to record feedback

**Structure:** Groups of 3: 1 teacher, 2 students

- Mini Practice - Partner A (30 sec)
- Mini Feedback - Partners B & C (1 min)
- Mini Practice - Partner B (30 sec)
- Mini Feedback - Partners A & C (1 min)
- Mini Practice - Partner C (30 sec)
- Mini Feedback - Partners B & A (1 min)





# Levels of Understanding

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Task: Students were given the problem, “ $4+9=?$ ” You have on your handout, four sample responses from students. Review the responses and reflect on the following:

- What are the similarities between these responses?
- What are the differences between these responses?
- Which student responses show a stronger level of mathematical understanding of the task?

Mark a check in those boxes and explain your rationale.



# Levels of Understanding

## On Track

### On Track Student: A

Clear Representation:  
All student thinking is shown, and is clear and correct.

$$4 + 9 = 11 \text{ because, } 10 + 3 = 13$$

### On Track Student: B

Requires Elaboration:  
Student answer is correct, but understanding or strategy is not clearly shown. Student will need to verbally elaborate.

## Off Track

### Off Track Student: C

Basic Error:  
Student work clearly shows that error is around performing the strategy. This will be a quick fix.

### Off Track Student: D

Deep Misunderstanding/Misconception:  
Student work shows major confusion or error is unclear and requires probing.

## **Core Idea:**

If you can't immediately understand why a student solved either correctly or incorrectly, you must dive deeper to further unpack their misunderstanding.



# Monitoring: Conceptual Lap

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1. When you aggressively monitor during the conceptual lap, you track data on your clipboard with two foci:
  - a. On-track (correct) and off-track (incorrect)
  - b. Strategy usage (i.e. direct modeling, or counting strategy)
2. Conference with on track and off track students.



# Monitoring: Prompting

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As you watch the [video](#),

1. What prompts does the teacher use?
2. Why does she choose to use these prompts?



# Monitoring: Prompting

If there is a clear and complete representation of student thinking on paper:

- On track students (5 sec)
  - Affirm: “Great job!”
  - Extend the task: “Explain your thinking in writing”, “Show me another strategy”.
- Off track students (15 sec.)
  - Provide a lightning quick redirect: “Read the problem again.” “Count again.”

If the student representation is limited or requires elaboration, probe for more and determine if it is on track or off track: “How did you solve the problem?”

- After student elaborates, use the on track or off track prompts listed above.
- If there is a deeper misconception revealed, prompt with the following:
  - Universal Prompts: “Use your model”, “Use a resource”, “Reread the problem.”

## **Core Idea:**

Without probing, we are just engaging in guesswork. It's our job as the teacher to probe so we understand, but also to help understand.





# Mini Practice

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## Protocol

- Prep ( 1 min)
  - Look at Sample G for your grade level: ID the level of understanding (either on track - clear representation or requires elaboration) and the corresponding prompts.

**Objective:** Practice executing setting the environment and the procedural lap according to the stated vision of excellence.

**Materials:** Cheat Sheet, Sample student work, handout to record feedback

**Structure:** Groups of 3: 1 teacher, 2 students

- Partner A looks at student work and prompts/Partner B is the student (30 sec)
- Partner B provides feedback (1 min)
- Partner A does a mini re-do, implementing feedback from Partner B (30 sec)
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# Monitoring: Preparing to Chart

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Prepare to Chart (1-2 min):

- Teacher strategically circulates to understand and track which strategies children are using to solve the problem
- Identify at least two students' work to chart during the discourse in order of sophistication based on the learning goals/objectives for the day.
- Conference with those students to ensure they can thoroughly explain their strategy.

## **Core Idea:**

The goal of charting is to push the largest mass of the class to the next highest level of understanding.

