# Language Routines Overview

The language routines embedded in i-Ready Classroom Mathematics offer structured methods to help students make sense of problems, communicate their thinking, and engage in meaningful discourse throughout the Try-Discuss-**Connect Instructional Framework.** 

Language routines are introduced in Lesson 0, where students learn to speak, listen, read, and write about mathematical concepts, situations, and ideas. Learn about each routine below.

# Three Reads



# **Purpose:**

• Helps students interpret the language, understand the situation, and process the mathematical relationships in the Try It problem before attempting to solve it

### How:

Present the entire Try It problem. With your class, read through it three times, each with a different focus. With each read, you may record student responses.

- Read 1 (1-2 min.):
  - **Focus:** comprehending the text
  - Ask: What is the problem about?
- Read 2 (1-2 min.):
  - Focus: understanding the question
  - **Ask:** What are we trying to find out?
- Read 3 (1-2 min.):
  - Focus: identifying and analyzing the important information
  - **Ask:** What are the important quantities and how are they related?



Watch the Video



Optional: Students can use this note catcher to capture their thoughts during this language routine.

# **Co-Craft Questions**



# **Purpose:**

- Helps students build understanding of the context of a mathematical situation without the pressure of producing an answer
- Allows students to explore the language of mathematical questions and learn that one context can spark different questions

## How:

- Present the Try It situation without a question. (1 min.)
- Students work with a partner or in small groups to come up with questions that could be answered using the information. (1-2 min.)
  - Note: You may choose to support the brainstorming based on the needs of your students.
- Choose several students, partners, or groups to share out their questions. (1-2 min.)
- Reveal the Try It problem and allow students time to begin solving.



Watch the Video



# Spark Student Engagement:

Mix up this language routine even more by presenting an equation or model and asking students to create their own story.

# Notice and Wonder



## **Purpose:**

- Encourages students to view words, images, models, and symbolic representations through a curious mathematical lens
- Promotes a supportive and productive learning environment, where the pressure of problem-solving is removed

### How:

Display the Try It situation without the problem.

- **Ask:** What do you notice?
  - Action: Record as many responses as time and interest allow without comment or with only encouraging comments. (1-2 min.)
- Ask: What do you wonder? What are you wondering that mathematics can answer?
  - Action: Record responses. (1–2 min.)
- Reveal the problem and draw connections between students' responses and the problem. (1-2 min.)



Watch the Video



# Spark Student Engagement:

Use this language routine flexibly! Notice and Wonder is particularly helpful with geometry and data problems that include visual information, as well as realworld problems with many quantities.

# Say It Another Way



## **Purpose:**

- Helps students process the Try It problem and confirm their understanding
- Provides opportunities to self-correct, ask for clarification, and hear the problem in different ways

### How:

- Display the Try It problem and have students read it or listen to it read loud. (1 min.)
- Provide Individual Think Time for students to process. (1-2 min.)
- One student paraphrases the text. Other students use hand signals to show they agree, disagree, or have another idea. (1 min.)
- Facilitate a whole class discussion based on student responses. (1-2 min.)



Watch the Video



# Spark Student Engagement:

Teachers may call on several students to "say it another way" in order to keep everyone engaged or to give the class time to think about what the problem means.

# Compare and Connect





### **Purpose:**

- Provides students with the opportunity to identify, compare, and contrast different mathematical representations, models, and approaches to build a deeper conceptual understanding of the math
- Builds awareness and validates that there are multiple ways of thinking and talking about math

### How:

- Carefully select and sequence student strategies (use Teacher's Guide if needed)
- Ask preselected students to share their strategies with the class. As students share, engage the class in a discussion by asking:
  - How are these strategies alike?
  - How are they different?
  - How are they related?



Watch the Video

# Spark Student Engagement:

Use the Ask/Listen For prompts (found under Discuss It: Support Whole Class Discussion in the Teacher's Guide) to focus on the specific mathematical relationships, operations, and strategies related to the session purpose.

# Collect and Display





# **Purpose:**

- Increase students' awareness of how their informal language can be matched up to be more precise academic or mathematical language
- Provide a visual display of language for students to reference during a lesson or unit

## How:

- As students engage in discussions, collect the informal or conversational language they use to talk about the quantities or relationships in the problem and their solution strategies.
- Organize the words and key phrases, adding diagrams or pictures when helpful. Create a display that explicitly connects their informal language to more precise academic and mathematical language.
- Post the display and prompt students to refer to it during academic discussions.
- The display may be updated and revised throughout the unit.





Increase engagement while supporting the development of mathematical and academic language for all students by using the following:

- Student Handbook
- Multilingual Glossary
- Academic Vocabulary Glossary

# Act It Out



### **Purpose:**

• Provides support for making sense of written or spoken language by using pictures, objects, or role-playing

### How:

- As needed, clarify mathematical concepts, or have students do so using any of the following:
  - Pictures
  - Objects
  - Role-playing
  - Actions/gestures



# Spark Student Engagement:

When students do the action, the teacher can provide words for the actions and confirm understanding.

Encourage students to use mathematical vocabulary words as they use this routine.

# Co-Constructed Word Banks



## **Purpose:**

• Helps students collaborate to clarify contexts, develop language, and speak and write clearly

### How:

- When launching a task, ask students to suggest or highlight unfamiliar words or phrases that will be helpful in talking or writing about the problem.
- Create a word bank, adding words or phrases as needed.
- Display the Word Bank for reference or have students record them.





This routine can be used with:

- Interactive word walls
- Bulletin boards
- Journals
- Index cards in baggies/ on rings

# Stronger and Clearer Each Time



### **Purpose:**

• Enables students to increase the clarity and completeness of first drafts of writing in mathematics

### How:

Students draft a response and revise it several times based on the feedback of partners.

- Pre-Write: Students draft a response to a problem or prompt in complete sentences if possible.
- Think Time: Give a minute for students to think about what they will say to a partner to explain the response.
- Structured Pairing:
  - Students meet with a partner and share their responses orally.
  - The goal is either to explain the response so that the other person truly understands (early in learning about the topic) or to explain the response as a mathematician would (after many experiences with the topic).
  - Partners can paraphrase what they heard or ask clarifying questions related to language, completeness, and justification.
- **Switch:** As time allows, students switch partners one to three more times.
- **Post-Write:** Have students write their final drafts in complete sentences. They can also use drawings explained by sentences.



# **Spark Student Engagement:**

Use this routine when problems ask students to:

- Explain their strategy or idea
- Describe a mistake
- Justify their strategy

Provide words or sentence frames as needed for students to be successful.