



**K-12**



**Handout**

**Understanding Student  
Thinking to Synthesize  
Learning**

## Part 1: Anticipate Student Responses

**Directions:** Anticipate how students might approach the activity and jot down specific questions you can ask to monitor and guide their thinking.

**Lesson:** \_\_\_\_\_ **Activity:** \_\_\_\_\_

What is the purpose of the activity?

Anticipated Responses	Questions to Surface Thinking	Who	Order
		<div style="border: 1px dotted black; border-radius: 15px; padding: 20px; width: 80%; margin: auto;"> <p>Use these columns to record which students demonstrate the anticipated responses and how you plan to order their contributions during the synthesis.</p> </div>	

## Question Chart

Use this chart to determine questions that will help you better understand student thinking.

- What does \_\_\_\_ represent in the problem?
- What do you know about this problem?
- How did you decide which strategy to use to solve the problem?
- Can you tell me how you came up with this number?
- What are you still trying to find out?
- What is this problem about?

- How do you know your answer makes sense?
- How do you know both answers are correct?
  - How does your *[diagram/expression/equation]* represent the situation?
- What tools might you use to help you solve this problem?
- How do you know \_\_\_\_ is equal to \_\_\_\_?

- How can you use what you did in the first problem to help you here?
  - What would happen if we changed the number to \_\_\_\_?
- How are these problems the same? How are they different?
  - How can you use a picture, blocks, diagram, etc. to represent the problem?
- Will this strategy work for all the problems like this one?
- Is there a rule or strategy you can use to solve other problems like this?

## Part 2: Analyze Student Work

**Directions:** Use the QR code to access the four student work samples. Review each sample and complete the chart for all four.

### Work Sample A

What does the student understand?	How do you know?

Write a question that will help you better understand the student's thinking.

### Work Sample B

What does the student understand?	How do you know?

Write a question that will help you better understand the student's thinking.

**Work Sample C**

What does the student understand?	How do you know?
Write a question that will help you better understand the student's thinking.	

**Work Sample D**

What does the student understand?	How do you know?
Write a question that will help you better understand the student's thinking.	

### Part 3: Select and Sequence

**Directions:** Discuss your selections with your group and work together to decide on three responses to sequence. Be prepared to explain the reasoning and instructional value behind your chosen sequence.

First	Second	Third
Sample _____	Sample _____	Sample _____
How does this sequence enhance learning?		

### Part 4: Connect to the Learning Goal

**Directions:**

#### Facilitation Round 1

- One group member acts as the teacher and uses the sequenced work samples to lead the synthesis discussion.

#### Reflection and Feedback

- Discuss as a group:
  - How did sequencing and connections support understanding?
  - What actionable suggestions (feedforward) can improve the facilitation?

#### Facilitation Round 2

- A different group member facilitates, applying the group's feedback.

#### Closing Reflection

- As a group, reflect:
  - How did applying the feedback impact the second facilitation?
  - How did sequencing and connections enhance understanding?