



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: fit-content; 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?