

Questions To Support My Student's Math Understanding

Making sense of the math:

- "How would you describe the problem in your own words?"
- "What information do you have? What do you need to find out?"
- "What tools will you need?"

Getting "unstuck:"

- "Tell me what you are thinking"
- "Can you explain what you have done so far?"
- "Can you think of another strategy that might work?"
- "Is this a problem in which starting simpler might help?"
- "Could you write a similar problem that you know how to solve already?"
- "Could a calculator help you check your answer?"
- "What do you think the answer or result will be (an estimate)?"
- "Would it help to create a diagram? Make a table? Draw a picture? Sketch a graph? Explain in words? Write an equation?"
- "Can you use guess and check?"

Helping students to rely on themselves to determine if something is mathematically correct:

- "Why do you think that?"
- "Why is that true?"
- "How did you reach that conclusion?"
- "How does your answer connect to the question? Does it make sense?"
- "Could you check your answer by trying different numbers?"

Learning to conjecture, invent, and solve problems:

- "What would happen if...?"
- "Do you see a pattern? How would you describe the pattern?"
- "What are some possibilities here?"
- "Can you predict the next one? The last one?"
- "How did you think about the problem?"
- "What is alike and what is different about your method of solution and others'?"

Learning to reason mathematically:

- "Does that always work?"
- "Is that true for all cases?"
- "Can you think of a counter example (a rule-breaker)?"
- "What assumptions are you making?"
- "What mistakes did you make and how did you learn from them?"