The Eight Mathematical Practices of Common Core Math

Questions to ask to make students mathematically proficient.

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Informational Source:

http://elementarymath.cmswiki.wikispaces.net/Standards+for+Mathematical+Practice

Directions: Copy on cardstock, laminate, and cut. Punch a hole in the corner of each and place them on a ring. Ask students the questions when you do a math talk.

Questions to ask to make students mathematically proficient.

1. Make sense of problems and persevere in solving them.

- How would you describe the problem in your own words?
- What do you know that is not stated in the problem?
- Could you try this with simpler numbers? Fewer numbers?
- Would it help to create a diagram? Make a table? Draw a picture?

2. Reason abstractly and quantitatively.

- What does it mean when...

3. Construct viable arguments and critique the reasoning of others.

- What do you think about what _____ said?
- Do you agree? Why/why not?
- Can you explain what _____ is saying?
- Can you explain why his/her strategy works?
- How is your strategy similar to___'s?
- Can you convince the rest of us that your answer makes sense?

4. Model with mathematics.

- What number sentence represents your drawing/picture/ representation?
- How could we use symbols to represent what's happening?

5. Use appropriate tools strategically.

- How did using that tool help you solve the problem?
- If we didn't have access to that tool, what other one would you have chosen?

6. Attend to precision.

- Can you tell me why that is true?
- How did you reach your conclusion?
- How does your answer connect to the question? Does it make sense?
- Can you make a model to show that?
- Can you convince the rest of us that your answer makes sense?
- What new words did you use today? How did you use them?

7. Look for and make use of structure.

- How do you know your rule/equation will always work?

8. Look for and express regularity in repeated reasoning.

- Is there a shortcut / algorithm you could use?