

## Questions that...

1. Help students rely on their own understanding
  - a. Where have you seen this before?
  - b. Do you remember when...?
  - c. What are some questions or preconceptions you have?
  - d. Are there any words or numbers you recognize?
  - e. Can you rephrase the question?
2. Help students reason mathematically
  - a. Can you explain your reasoning.
3. Check student progress
  - a. What do you have so far?
  - b. What have you been able to do at this point?
  - c. How do you know if you're on the right track?
4. Help students collectively make sense of mathematics
  - a. What have you discussed as a group?
  - b. Have you compared and contrasted your work?
  - c. Has anyone else done the problem in a different way? What does that show you?
5. Encourage conjecturing
  - a. What would happen if...?
  - b. What causes the pattern you noticed?
  - c. What is the connection between...?
6. Promote problem solving
  - a. What techniques have you used before?
  - b. Can you look at a simpler case?
  - c. Did you draw a diagram?
  - d. Did you notice any patterns?
  - e. What is something else to investigate?
7. Help when students get stuck
  - a. What have you done so far?
  - b. What do you think you do now?
  - c. Can you re-read the problem? Is there something you missed?
8. Make connections among ideas and applications
  - a. Where have you seen this before?
  - b. Is that related to something we did earlier?
9. Encourage reflection
  - a. What do you think you do now? Why?
  - b. How could you say that to a 4<sup>th</sup> grader? How could you say it with fewer words?