

Effective Questioning

Some good prompts to use while you are working with your student are:

- How did you think about the problem?
- What was the first step?
- What did you do next?
- Why did you do it that way?
- Can you think of a different way to do the problem?
- How do the two ways relate?
- What could you change about the problem to make easier or simpler?

For problem solving:

- What do you need to find out?
- What information do you have?
- What strategies are you going to use?
- Will you do it mentally? With pencil and paper? Using a number line?
- Will a calculator help?
- What tools will you need?
- What do you think the answer or result will be?

When the student gets stuck:

- How would you describe the problem in your own words?
- What do you know that is not stated in the problem?
- What facts do you have?
- How did you tackle similar problems?
- Could you try it with similar numbers? Fewer numbers? Using a number line?
- What about putting things in order?
- Would it help to create a diagram? Make a table? Draw a picture?

To build confidence and rely on their own understanding:

- Why is that true?
- How did you reach that conclusion?
- Does that make sense?
- Can you make a model to show that?

To learn to reason mathematically:

- Is that true of all cases? Explain.
- Can you think of another example?
- How would you prove that?
- What assumptions are you making?

To check progress:

- Can you explain what you have done so far? What else is there to do?
- Why did you decide to use this method?
- Can you think of another method that might have worked?
- Is there a more efficient strategy?
- What do you notice when . . . ?
- Why did you decide to organize your results like that?
- Do you think this would work with other numbers?
- Have you thought of all the possibilities? How can you be sure?

To encourage conjecturing:

- What would happen if. . .? What if not?
- Do you see a pattern? Can you explain the pattern?
- What are some possibilities here?
- Can you predict the next one? What about the last one?
- What decision do you think he/she should make?