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?