

Helping with Math at Home

In helping students learn, one goal is to assist them in figuring out as much as they can for themselves (constructing meaning). You can help by asking questions that guide, without telling what to do. Good questions and good listening will help students make sense of mathematics, build self-confidence, and encourage mathematical thinking and communication. A good question opens up a problem and supports different ways of thinking about it. Here are some questions you might try; notice that none of them can be answered with a simple "yes" or "no."

Getting Started

What do you need to find out?

What do you need to know?

How can you get that information?

Where can you begin?

What terms do you understand or not understand?

Have you solved similar problems that would help?

What similar examples can you find that you've already done?

While Working

How can you organize the information?

Can you make a drawing (model) to explain your thinking?

Are there other possibilities?

What would happen if.....?

Can you describe an approach (strategy) you can use to solve this?

What do you need to do next?

Do you see any patterns or relationships that will help solve this?

How does this relate to.....?

Can you make a prediction?

What did you.....?

What assumptions are you making?

Reflecting about the solution

How do you know your solution (conclusion) is reasonable?

How did you arrive at your answer?

How can you convince me your answer makes sense?

What did you try that did not work?

Has the question been answered?

Can your explanation be made clearer?

Responding (helping your student clarify and extend their thinking)

Tell me more about this.

Can you explain it in a different way?

Is there another possibility or strategy that would work?

Help me understand this part . . .