

# How to Help Your Child with Math at Home

Current math instruction focuses on teaching our learners to be flexible thinkers who have a strong conceptual understanding of mathematics. We pursue conceptual understanding, procedural skills and fluency, and application, with equal intensity.

## What kind of support should you provide today?

Outdated Math Support:	Current Math Support:
Check the child's homework for accuracy: focus on correct answers.	<p>Ask your child to explain his or her thinking and reflect on the process of solving. Try to make connections to other problems he or she solved that week.</p> <p>What did you come up with? What are you thinking?            How did you begin working on the problem?            How might you explain your solution?            What have you found so far?</p>
Explain the steps to the child so he or she can replicate the procedure.	<p>Let your child work through the problem before you intervene. Students should develop conceptual understanding before procedural fluency and memorization. Link your child's explanation to his or her understanding.</p> <p>What do you already know that could help you figure this out?            How did you get that answer?            Why did you...?            How might you use a representation to show me how that works?            Walk me through your steps. Where did you begin?            What do you mean by...? Can you give an explanation?</p>
Make sure the child does many problems of the same type.	<p>Give your child fewer problems, and encourage the use of multiple strategies. Extend their thinking to challenge them.</p> <p>Have you found all the possible answers?            Could you explain that in a different way?            What is another way to solve this problem?            What is another situation in which we can use the same strategy to solve...?</p>
Drill students to memorize facts.	<p>Realize that children's mathematical thinking is developmental. Encourage your child to use related facts and relational thinking to learn new facts and solve problems.</p> <p>What is another situation in which we can use the same strategy to solve...?            What would happen if the numbers were changed to...?            How might you use a representation to show me how that works?</p>

\*Adapted from the book "Reimagining the Mathematics Classroom" by Cathery Yeh, Mark Ellis, and Carolee Koehn Hurtado

## So what does that really look like?

Scenario:	Support Suggestions:
<p>Your child says: “I don’t know how to solve this problem.”</p>	<p>Ask your child to read the problem aloud to you. Then ask: “what do you think the problem is asking? Can you make a picture in your mind to help you solve it?”</p> <p>Then you can ask: “What do you know that could help you figure this out? Where could you begin?” “What can you do next?”</p>
<p>Your child shows you his/her work and it’s full of incorrect answers.</p>	<p>Ask them: “Looks like you worked really hard on that assignment. Can you tell me more about it? How did you get that answer? Can you walk me through your steps?”</p> <p>If you find the section where they made a mistake you could ask: “why did you...” to help them notice the mistake without you finding it for them.</p> <p>You could also ask: “What do you mean by...? Can you give an explanation?”</p>
<p>Your child says: “This homework is too easy.”</p>	<p>You can ask: “Have you found all the possible answers? Can you come up with a more challenging situation in which we can use the same strategy to solve...?”</p>
<p>Your child is having a hard time on fact fluency.</p>	<p>Ask your child to try to make some visual representations of facts. Can they use tens-frames or number lines for addition and/or subtraction? Can they draw arrays for multiplication or division?</p> <p>You can also ask them to teach you some games they’ve played at school. They can use their Investigations online account to pull up some games from school.</p>
<p>You are running errands together.</p>	<p>Ask them questions about the time. “How many more minutes until your soccer practice?”</p> <p>Ask them questions about money at the grocery store. “If I gave them a \$20 bill how much money will I get back?”</p> <p>Play 20 questions or ask number riddles in the car. You can also ask them to use their mental math skills to follow along with a “guess my number” problem. “I’m starting with 10, then adding 10. Subtract 5. Now add 6. What number did I end on?” (Adapt to an appropriate challenge level.)</p>