

Figure 5.2: Supporting Student Mathematics Learning at Home

1. **Help your child develop automatic recall of basic facts.** Although it is important that students learn the meaning underlying basic addition, subtraction, multiplication, and division facts first, it is ultimately important for them to develop immediate fact recall. Immediate recall is a function of practice, and there is limited time in the school day for such practice. You can use basic fact practice as an opportunity to help your child learn. Note that this practice does not require any materials. Orally presenting facts promotes immediate recall better than worksheets. Perfect times to practice are while driving, walking, bike riding, waiting in line, and so on.
2. **Play games.** Games are a great way to practice mathematics concepts and skills and also promote positive parent-child relationships. Both traditional board games, but also the wide variety of online games and apps now available, can make math practice fun and engaging for your child. You can go to www.parents.com to find some great recommendations for your child.
3. **Provide support with problem solving.** Because your child will work on complex problems at home, use these questioning strategies to help him or her without solving the problems yourself.
 - What is the problem asking you to find out?
 - What does the problem tell you?
 - Can you tell me the problem in your own words?
 - Is there anything you don't understand? Where can you find answers to your questions?
 - What will you try first? Next?
 - Will it help to draw a picture or graph? Act it out? Make a list?
 - How do you know if your answer or solution method is correct?
 - What do you estimate the answer will be?
 - Have you ever worked a problem like this before?
4. **Find mathematics everywhere.** Mathematics problems are part of everyday life. Encourage and engage your child to solve everyday problems as they arise. The appendix in *Helping Your Child Learn Mathematics* (U.S. Department of Education, 2005) has many suggestions for such problems.
5. **Monitor your attitude.** What is your own attitude toward mathematics? Parents who communicate ideas such as, "Math is hard," "It's OK that you're not doing well in mathematics," or "I never did well in mathematics either" promote attitudes that are counterproductive to their children's success. Instead, give messages consistent with the belief that success in mathematics comes from hard work and effort; it's something everyone can do; and it's important to do well in mathematics to be prepared for the future.
6. **Support lots of practice at home.** Practice is a necessary part of learning mathematics. Encourage your child to complete his or her practice, but do so without actually doing the homework for him or her. Give your child feedback on how he or she is doing on homework, and then encourage him or her to take action if it is not correct.
7. **Talk to your child about mathematics.** Talk to your child about the ways you use mathematics. Talk about mathematics when you are shopping, making various decisions, and when you see mathematics in news stories you read or see.
8. **Constantly ask your child, "Why?" and "How do you know?"** These simple questions reinforce the importance of understanding and justifying one's work.