

Parent Resource Kit

BUILDING MATH SKILLS AT HOME





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Parents of children with learning disabilities (LDs) know that math can present some of the greatest hurdles in their academic careers, yet building math skills is necessary for succeeding in everyday life. We use math for cooking, shopping, playing games, sports and so much more. Math is everywhere and parents play an important role in supporting children's math learning. The video *Building Math Skills at Home* demonstrates how LDs can affect math, offers suggestions for collaborating with your child's school, and includes resources to support your child in building math skills at home.

This parent resource kit is a companion to the video *Building Math Skills at Home* and provides parents with information and activities to do with their children to support their math learning.

The parent resource kit includes the following sections:

- **Building a growth mindset** is important for math learners; you will find some information to encourage this mindset at home.
- **Roll the dice** is an activity to help children work on numeration, which is the act of calculating and/or assigning a number to something.
- **Self-advocacy cards** is an activity you can do with your child to help them identify their interests, strengths, learning needs, as well as what helps them learn, do homework and assignments, and write tests. These cards make it easier for your child to talk to their teacher about what they need to learn at school.
- **Key Messages** in the video.





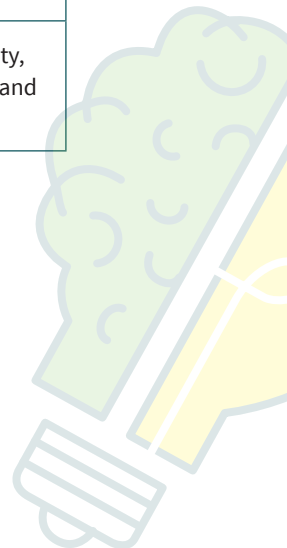


Building a Growth Mindset

The term “growth mindset” was coined by Carol Dweck, a Professor of Psychology, whose research demonstrated that “people with a growth mindset are those who believe that smartness increases with hard work, whereas those with a fixed mindset believe that you learn things but you can’t change your basic level of intelligence” (Boaler, 2016). It is important to foster a growth mindset in math, because everyone has the ability to learn and do math when provided with the right strategies. A growth mindset is especially important for children with LDs, who experience many challenges in the classroom and often have difficulty showing what they know. Adopting a growth mindset will help them persevere through challenging math problems, build their math skills, and recognize their learning strengths despite the roadblocks.

It is important for parents to adopt a growth mindset to encourage their child’s learning process. Here are a few examples on how to change a fixed mindset for a growth mindset:

Changing Mindsets	
 Fixed Mindset	 Growth Mindset
I’m just not good at math.	I’m going to train my brain to learn math.
Math is too hard.	Math takes time and effort.
I made a mistake. I can’t do my math homework.	Mistakes help us learn.
I can’t solve this math problem.	I can’t solve this math problem <u>yet!</u>
I’ll just copy off my friend. It’ll be way easier.	I can ask for help from my parents or teachers when I need it. It will help me get better.
I have a learning disability, so I’ll always have a harder time learning math.	I can learn math despite my learning disability, I may simply need different strategies, tools and supports.

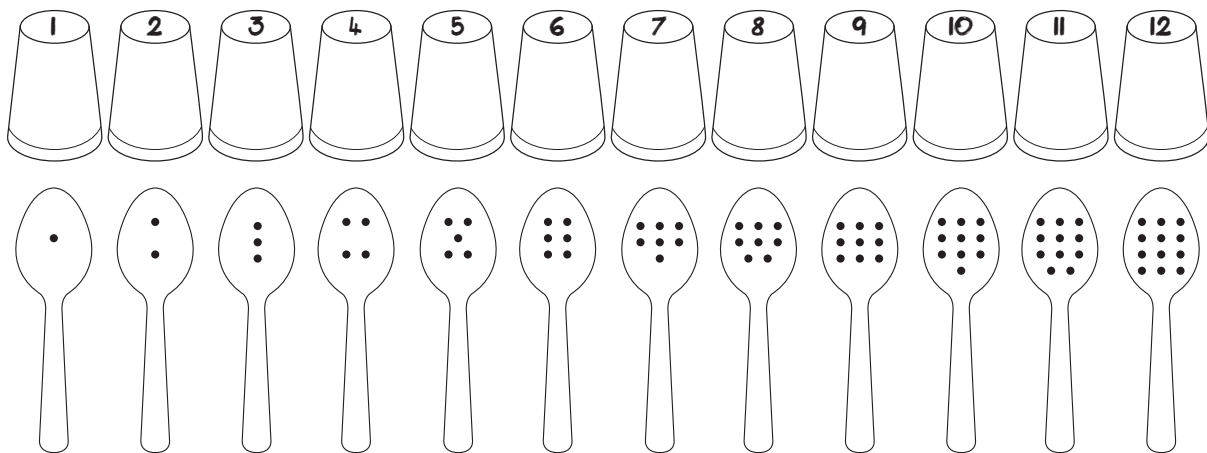
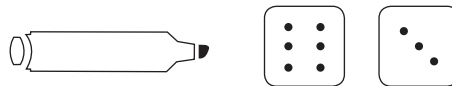




Roll the Dice

This simple activity is easy to recreate at home to work on numeration, the act of calculating or assigning a number to something.

Materials:



- 1 marker
- 2 dice
- 12 disposable cups
- 12 disposable spoons

DIRECTIONS:

Creating the Game

1. On the bottom of each cup, write the numbers 1 to 12. Each cup should only have one number written on the bottom, as seen in the image above.
2. On the front of each spoon, draw dots to represent the numbers 1 to 12, as seen in the image above.
3. Place all cups facedown on a table or flat surface, in a row, so that each number written on the bottom of the cup is visible. Place spoons directly below in a similar fashion.



Playing the Game

1. Roll both dice and ask your child to add the numbers shown on each die together.
2. Find the sum of the dice represented on the cup as a number, and on the spoon as dots.
3. Continue to roll the dice, calculate, and find the matching cup and spoon.

Strategies to Support Your Child

1. Model how to play by going first. Demonstrate and explain your approach.
2. Get your child to use their finger to count the dots on the dice and spoons.
3. Start by putting the cups and spoons in ascending order.
4. Play with only one die until your child is comfortable with the representations of numbers 1-6. To build up gradually, fix one die to a low number and roll the other die. This helps them consolidate addition facts as well.



Some schools offer “Parents’ Engagement Night” or “Family Math Night”. This is a great opportunity for educators, parents and children to come together, share math activities and strategies to recreate at home and learn together. St. Michael the Archangel Catholic Elementary School shared this activity with families during a Parents’ Engagement Night. Talk to your child’s administrator about how you can engage with the school-team to learn new math activities you can do at home to build your math skills as a family.





Self-Advocacy Cards

In the format below, developed by Julia Osborne, self-advocacy cards allow children to identify their interests, strengths, learning needs and what helps them learn, do homework and assignments, and write tests. Update the cards every year and share with their teachers.

Use the template (see next page) to create a self-advocacy card with your child. Consider including any strategy, tool, or support. It is important that your child personalize their self-advocacy card and take ownership over its creation. The self-advocacy cards should include your child's:

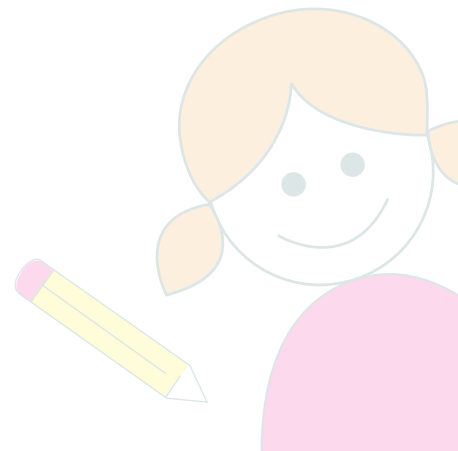
- Photo
- Hobbies and interests
- Strengths and needs
- Goals
- Strategies, approaches, technologies and tools for learning

Message to Parents:



Although this was a strategy initially designed to be used solely within the school environment, this is a great activity that you as a parent can do with your child. The benefits of this approach are that your child will begin to understand themselves as a learner and it will push them to find their voice. Although parents are essential in the advocacy journey of a child, it is also crucial that students begin to learn how to advocate for their own needs. By supporting your child in their growth and self-advocacy, you will help your child to develop into a strong, confident young man or woman who will gain perspective about everything they can accomplish!

– Julia Osborne





Template

FRONT



Name:

Interests:

Here are my strengths:

-
-
-
-
-

Here are my learning needs:

-
-
-
-
-

Fold here

BACK

This is what helps me

Learn:

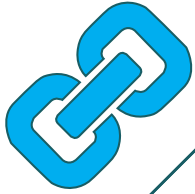
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Do homework and assignments:

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Write Tests:

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Key Messages

- Children with LDs have average to above average intelligence, and have the potential and ability to learn, think and reason in math when provided with the right strategies and supports.
- A growth mindset allows children to recognize that they have potential to learn math.
- Teachers are often a great starting point in identifying strategies and resources. Teachers can help parents understand their child's learning profile (i.e., their strengths, interests and needs) and provide some insight about what's being taught in the classroom and how to make it applicable to the "real world".
- Family Math Nights present an opportunity for parents, children and teachers to come together and learn about new math resources.
- There are several math resources that can provide additional support at home (e.g., Mathies, Homework Help).
- Parents should encourage children to advocate for themselves, ask questions, and learn about the unique way their brains work.
- With a growth mindset, the right resources, and a collaborative partnership between parents and school, any child can learn and do math.





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Disclaimer

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