14 WAYS TO MAKE MATH FUN!

Getting and staying motivated is not always easy, even for adults. Imagine how your child must feel when faced with the task of working through a large math book. Whether your child works from a textbook or in a workbook, chances are he sometimes becomes bored or feels overwhelmed.

I know the frustration of working with a child who is slumped over a math textbook, not doing his work and not learning. And I knew there must be a better way to teach math. Fortunately, there are simple ways to keep your child motivated and excited. This article shares the tools, tips, and techniques I used to help my children and others overcome the math-book blues.

Before we discuss them, here are a few points to keep in mind:

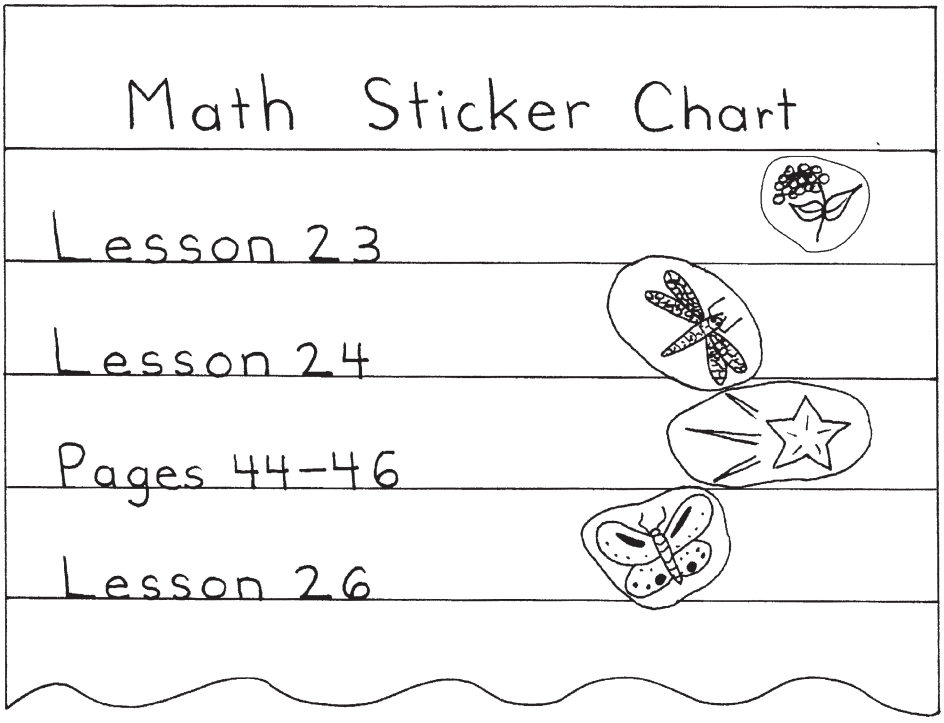
- Break big lessons into bite-sized pieces. Keep assignments short, so your child doesn't feel overwhelmed. Most children will work enthusiastically towards an achievable goal.
- Give exercise breaks often.
- Make sure your child is well fed and rested. A hungry or tired child can't concentrate well.
- Explain the lessons slowly and clearly.
- Be patient. Learning math takes time and lots of practice.
- Do math when your child is most alert.

Now here are the fourteen great ideas to help you put the fun back into math!

Idea 1: Make a Sticker Chart

Write ten assignments in a list down the left side of a sheet of construction paper. Attach the chart to a wall. Provide sheets of interesting stickers.

On the first few charts, make the assignments short so he can do them quickly. Increase the length of the assignments as he gains confidence. Each time your child finishes an assignment, congratulate him and invite him to place a sticker on the chart. When a chart is finished, give him a big hug and celebrate.



Idea 2: Make a Book

If your child copies work from a textbook, have him do it on quarter-, half-, or full-sheets of paper, then bind the pages into a book. Do this by adding a colorful construction paper cover to the pages and stapling them at the side. Write on a title, such as Saxon Math pages 33–44, and add his name and the date. Making a series of small books gives him a sense of accomplishment and sets a pattern of success.

Idea 3: Race Against a Timer

For this, you'll need an old-fashioned three-minute egg timer—the kind where the sand drops through the glass. Look for one in discount stores or supermarkets. To keep it special, bring out the timer for this activity, and then put it away when done.

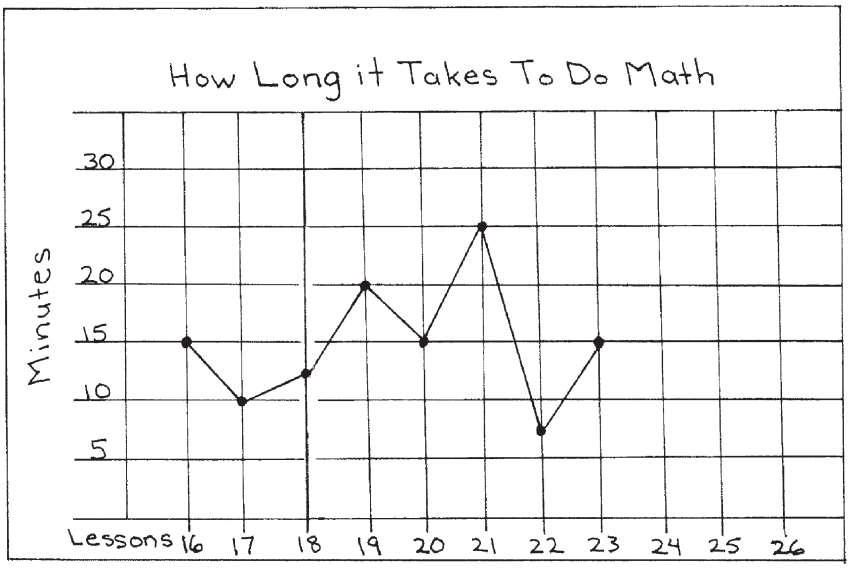
Challenge your child to race against the timer. Have the first races be with material his is very familiar with, so he will be sure to "win."

Idea 4: Make a Line Graph

Charting your child's work helps him see his progress in a new way. Try making one of these two line graphs:

- Chart 1: Shows how long it takes to finish each math lesson.
  On paper, draw lines to form a graph, as shown in the illustration.
  Write the time, in 5-minute increments, up the left edge of the paper.
  Write the lesson numbers (or page numbers) along the bottom edge.
- Chart 2: Shows how many pages completed each day.
  On paper, draw lines to form a graph. Write numbers ($^1/_2$, 1, $1^1/_2$, 2, $2^1/_2$, etc.) up the left edge of the paper. Write dates along the bottom.

Have your child mark the chart after each math session. After several days, connect the dots with a line.



Idea 5: Skip Stuff He Knows

Most textbooks and workbooks are written to follow a traditional school schedule. They repeat material throughout the year and review it in each higher grade. While repetition is valuable for practice, sometimes it is too much. Once your child knows his math facts or has learned a new concept and can work the problems easily, move on! Don't feel that he must do every problem in a book just because it's there. Also, some books give long lists of problems. If your child becomes bored or fatigued, cut out some of the work.

The goal of math education is for your child to learn the math facts and operations, not to solve endless sets of problems. Keep this goal in mind and tailor the curriculum to meet your child's needs.

Idea 6: Follow Math with a Really Fun Project

Plan to do an activity your child likes immediately following math. Build excitement for it by discussing what fun he will have. Make sure to do the promised activity.

Idea 7: Fill a Jar Incentive

Each time a piece of work is finished, have your child drop an object such as a marble, cotton ball, fir cone, walnut, or other item into a jar. Make sure the jar is the right size so it won't take too long to fill. Decide on a treat or reward. Draw a picture of it and place it near the jar. When the jar is full, your child gets the reward.

Idea 8: Build a Crossword Puzzle

Draw a crossword puzzle on paper, copying from a magazine or inventing it yourself. Make the boxes large. Tape the puzzle on the wall. Write clues on slips of paper. Fold them in half and place them in a basket. Each time your child finishes a math lesson, invite him to choose a clue from the basket, solve it, and write the word on the chart.

Idea 9: Build It!

Design ongoing projects that your child can build over a series of days. Each day, following math, he adds to the construction project. Anticipation of the project helps motivate him through his math work. Movement in the project is a welcome change from sitting.

Introduce the project by telling your child that he can do this activity when

math is done. He will add to it each day until he feels it is finished. Give him a little package with a set of building materials. Wrap the items in colorful tissue paper to make them more inviting. Keep the project on a tray and put it away after each session.

Here are some ideas for building materials:

- Ten sugar cubes a day: Build into towers, castles, pyramids, etc.
- Colored marshmallows and toothpicks: Built on a clay base.
- Pieces of colored paper: Glue onto paper to form a mosaic.
- Fabric scraps, ribbon, seeds, bark, pasta, or other items: Glue onto stiff paper or cardboard to make a collage.

Idea 10: Count Downs

This activity lets your child know that you are thinking about him, while allowing you to work on something else.

Have your child tell you how many math problems are left on the page. Each time he finishes a problem, have him call out how many are left, "Just five more left, Mom." Be sure to acknowledge him each time, "Great! Tell me when you have four." A variation is to have him tell you each time he does two or five problems, or reaches certain numbers. Some children love to surprise you by doing several problems, then announcing that they completed more than you expected.

Idea 11: Basketball Chart

This nifty chart is great for kids that like to rip, crumple, and throw paper. Kids look forward to finishing their math so they can "shoot the basket." The Basketball Chart has two parts:

To Make Chart 1:

1. Cut a piece of construction paper or cardstock in half lengthwise. Glue them together, short-end to short-end, and let dry.
2. Cover the strip with clear Con-Tact® paper and attach it to a bulletin board or wall (the Con-Tact® paper allows you to tape on and remove papers repeatedly).

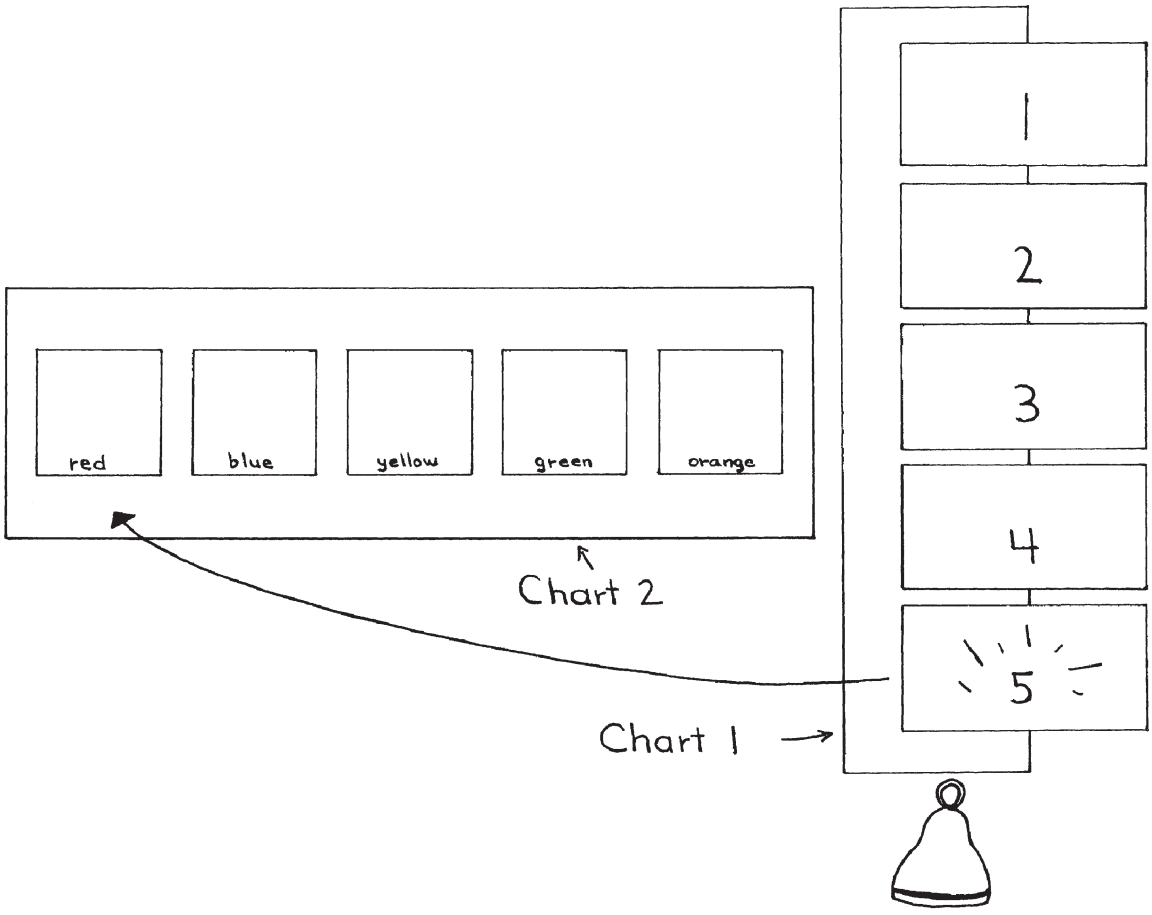
3. Cut two pieces of white paper into thirds (approximately $3^{5}/_{8}$- by 8-inches). Five of the rectangles are paper "flags," you will not use the remaining piece.

4. Number the flags from 1 to 5 with a red marker.

4. Tape the flags to Chart 1.

6. Make four more sets of flags, following Steps 3–4 above, with this change: number each set with a different color marker—blue, yellow, green, and orange.

7. Place a bell at the base of the chart.



To Make Chart 2:

1. Glue two-and-a-half pieces of white construction paper short-end to short-end.
2. To make pockets, cut one 4- by $4^1/_2$-inch piece of paper from red, blue, yellow, green, and orange construction paper. You will have five pockets, each a different color.
3. Glue them at the sides and bottom onto the strip of white construction paper. Leave the top of each square open to form a pocket. You now have a chart with five colorful pockets. Attach it to a bulletin board or wall.

Show your child the charts and place them near his work area. Each time your child finishes a lesson, have him go to Chart 1 and rip off the a numbered flag. He begins with flag 1. Tell him to crumple the paper and toss it in a basket or box. He can retrieve the paper ball and repeat this many times for fun and exercise.

When he completes five lessons, he will take the 5 flag from the chart and ring the bell in victory. But he will *not* crumple the flag. Instead he will carry it to Chart 2 and place it in the first pocket which is red and matches the red color of the 5.

Meanwhile, you replace five flags on Chart 1, this time with numbers written with blue marker. The process repeats until he fills Chart 2 with each of the different-colored number-5 flags. When this happens, celebrate with a treat or special activity.

Idea 12: Point System

Make a list of activities and treats that your child enjoys. Your list could include getting a new book or music recording, going swimming or bowling, renting or attending a movie, getting an ice cream cone, having time to play a computer game, getting a new toy or game, visiting a friend, getting a new puzzle or set of stickers, or visiting a museum, park, or beach.

Assign a point value to each treat. Now give a point value to each math lesson (or give points to parts of each lesson).

Explain to your child that as he completes math work, he earns points redeemable for special things or activities. Discuss the program with him and add any of his ideas that seem reasonable. You could also make a chart to track his points.

Idea 13: Mix It Up

Add a bit of mystery and fun to the math-book work by mixing up the assignments. Review each lesson ahead of time and decide which, if any, problems to eliminate. On three to five small pieces of paper, write directions for doing sections of work within a lesson. Write on each paper with a different colored marker following the pattern of this example:

> Paper 1 (red): Do section C, problems 1, 3, 6, 7, 9, and 12.
> Paper 2 (blue): Do all of section A. Try to finish it in seven minutes.
> Paper 3 (yellow): Do problems 1–5 and 8–12 of section B.

Put the papers into a box, bag, or basket. Invite your child to close his eyes and select a paper. Have him do the work as directed and draw a matching colored marker dot over the number of each problem when he completes it.

Idea 14: Try Something New

When all else fails and your child cannot be motivated, take a break from the work and think about what could be causing the problem:

- Does he find the presentation and work boring?
- Is he tired or hungry?
- Is he struggling to understand the material?
- Does he feel overwhelmed by too much repetition of material he already knows?
- Is he suffering from poor self-esteem . . . a sense that he isn't smart enough or can't do the work?
- Are there too many distractions in his work area?

Look in the math book's table of contents to find the concepts your child needs to know. He must learn the basic addition, subtraction, multiplica-

tion, and division facts by heart. And he needs to understand how the numbers relate to each other in each of these operations. He needs to become familiar with fractions. In addition, he must learn to apply numbers and their functions in mathematical problems and real-life situations.
If you see that your child is having difficulty making progress because he is unclear about specific math concepts or has trouble remembering addition, subtraction, multiplication, or division facts, try isolating the problem and working on it in a different way. When your child returns to the book, he will approach the work with new confidence. Here are some ideas for presenting math without a textbook or workbook:

- If he needs help understanding and remembering basic math facts, have him build problems with sets of small items such as cereal, pasta, or markers.
- Have him write problems on slips of paper and form them into small books. Do this by adding a construction paper cover and stapling at the left edge.
- Have him make ten-page books for addition, multiplication, and subtraction. This is an ongoing project. Have your child make the pages in short sessions over many days. Congratulate him each time he completes a page. Have him read you the math facts several times throughout the day. Review the pages often.

  For each book, cut lined paper to form ten narrow rectangular pages. The pages should be wide enough to accommodate one problem, and long enough for ten problems. On the first page of an addition book, your child will write 1 + 1 = 2, 1 + 2 = 3, 1 + 3 = 4, . . . 1 + 10 = 11. The second page will have addition with 2. A multiplication book could be made following the same pattern. For subtraction, he would write problems like this: 10 – 1 = 9, 9 – 1 = 8, 8 – 1 = 7, . . . 1 – 1 = 0. Repeat with the numbers 2–10. The number of problems on each page will decrease, with the final page having only 10 – 10 = 0. When ten pages are completed, add a construction paper cover and staple at the left edge.
- Invite your child to recite math facts while driving, washing dishes, folding clothes, or at other times. Say, “Sam, tell me the plus fives,” or

"Let's say the times sevens together." Or simply say various problems at random and have him answer.

- Copy workbook pages. Cut them up into sections. Mix the day's work up in a box and have him grab the sections at random. Make a game of having him do the work quickly. Say, "Let's see if you can get that done before I finish making lunch." or "Let's race! Think you can finish that page before I finish writing this letter?"

Hopefully, these tips can help your child overcome the math-book blues. For more great ideas, visit PaoliniMethod.com.

Happy teaching!

Talita Paolini

PaoliniMethod.com