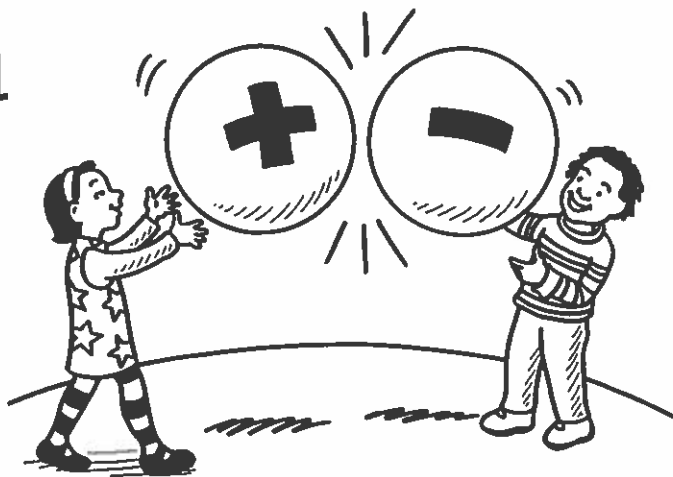


Fun with Addition and Subtraction

Want to help your youngster master addition and subtraction? Let her paint a picture, tell a story, or build a city! Activities like the ones in this guide make math practice playful.



Paint by number

Here's a colorful way to add math to your child's art projects.

Materials: paper, watercolor paints, paintbrushes, coloring books, pencils

On a blank sheet of paper, have your youngster paint a spot of every color in her paintbox and label each one with a different number (red = 3, purple = 5).

Next, you can each choose a page in a coloring book and write a math problem in every space. For example, if blue = 4, she could write $3 + 1$ or $8 - 4$ in the spaces for the sky. (Note: Make sure the answers match a color on the key.) Now trade pictures, solve the problems, and paint!

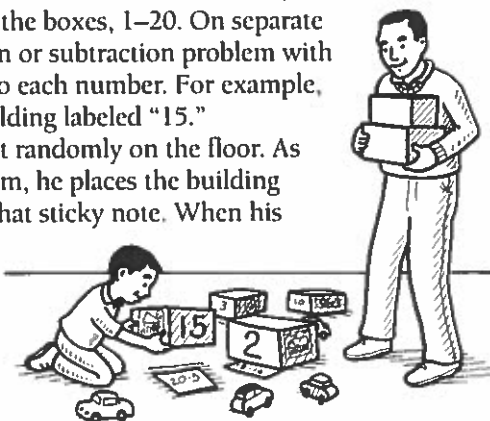
Math city

Let your child use his math skills to design a 3-D city that he can drive his toy cars through.

Materials: old magazines, scissors, glue stick, 20 boxes, markers, sticky notes, toy cars

Help your youngster cut pictures of houses and buildings from old magazines and glue one onto each box. Then, have him use a marker to number the boxes, 1–20. On separate sticky notes, write an addition or subtraction problem with an answer that corresponds to each number. For example, write $20 - 5$ to match the building labeled "15."

Spread the sticky notes out randomly on the floor. As your child solves each problem, he places the building that matches the answer on that sticky note. When his city is complete, he can add toy cars and play in his town. Note: Leave his city set up, and give him new math problems another day.



Toys and tally marks

Have your child use *manipulatives* (small objects he can count) to help him solve math problems. He could stack 12 blocks and then remove 3 to find $12 - 3 = 9$. Or he might visualize the problem by drawing pictures or making tally marks. For instance, he can replace $3 + 4$ with tally marks (||| + ||||) and count them to get the answer (7).

Once upon a time...

Making up stories that combine math and favorite toys is an easy way for your youngster to see word problems in action.



Materials: paper, pencil, toys

Write an addition or subtraction problem on a piece of paper, and ask your child to use toys to tell a story that matches it. If you write $8 + 3 = 11$, she might gather 8 ponies, add 3 more, and count the total.

She could move the ponies around and tell a story like this: "I saw 8 ponies playing at the park. Then, 3 more ponies joined them. All 11 ponies galloped around together." Now ask her to write a problem for you to solve and act out.

continued

Talk it out

As you do these activities, encourage your youngster to explain her thinking out loud. For example, she might say, "I know that $3 + 3 = 6$. Since 4 is 1 more than 3, then $3 + 4$ must equal 7." Talking about how she got the answers will help her understand math concepts.



Teddy bear picnic

Serve up fact-family fun with a pretend picnic.

Materials: masking tape, pencil, four stuffed animals, four plastic or paper plates, four plastic or paper cups, paper

Together, make a math fact family for each stuffed animal. (Note: A fact family is made of three related numbers—you can add or subtract two of them to get the third.) Let your youngster pick two numbers from 1 to 9 (say, 5 and 7). Have him add them ($5 + 7 = 12$) and write each of the three numbers (5, 7, 12) on separate pieces of masking tape. Ask him to stick the largest number on a stuffed animal and the other numbers on a plate and a cup. After he makes four sets of related facts, he can place the animals around the kitchen table while you mix up the plates and cups. His job is to match the dishes to their fact-family animals!

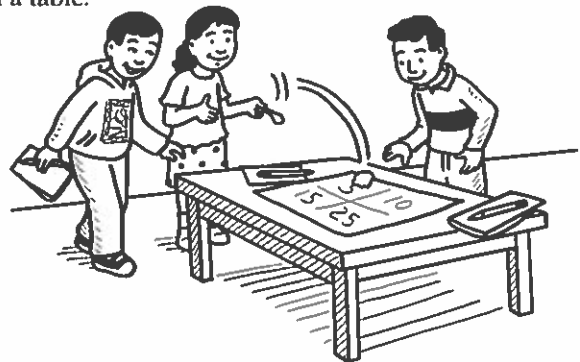
Help him write the addition and subtraction facts for each family. Example: $5 + 7 = 12$, $7 + 5 = 12$, $12 - 5 = 7$, and $12 - 7 = 5$. Tip: Talk about using addition facts to solve the subtraction ones. You might say, "Let's think about $12 - 5$. What number would you add to 5 to equal 12?" (7)

Up-and-down race

Hit the target, race to 100—and then back to 0.

Materials: paper, pencils, spoon, cotton ball

Have your youngster draw a giant plus sign to divide a sheet of paper into four equal sections. He should number the sections 5, 10, 15, and 25 and place the paper in the center of a table.



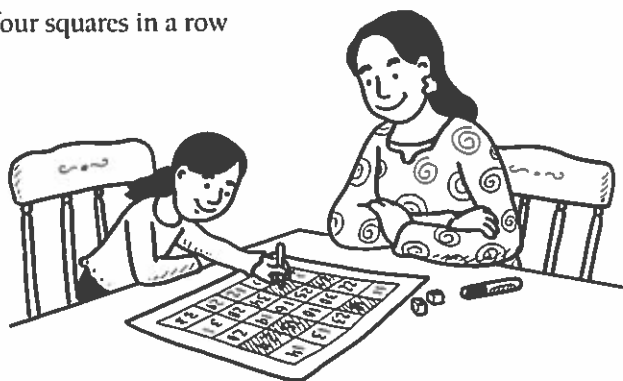
Take turns using the spoon to toss the cotton ball onto the paper target. Add the number it lands on to your score. Each player keeps tossing and adding until he has exactly 100 points. If a toss would put his score over 100, he scores no points that turn. When he reaches 100, he keeps playing but then starts subtracting his tosses from his score. Whoever is first to get all the way to 100 and then back to 0—by exact toss—wins.

Four in a row

The first person to color four squares in a row wins this two-player game.

Materials: paper, pencil, a pair of dice, two different-color crayons, calculator

Make a game board by drawing a 5×5 grid on paper. Randomly fill each square in the grid with a number from 10 to 34.



Your child picks any square on the board, rolls the dice, and adds the two numbers she rolled to the one she selected on the board. If she picked the 12 square, for instance, and rolled a 5 and a 3, she would say, " $12 + 5 + 3 = 20$."

If correct (she can check her answer with a calculator), she colors in the 12 square. If not, she leaves the square blank. Then it is your turn to pick a square, roll, and add. Color four boxes in a row (down, across, or diagonal) to win.