1

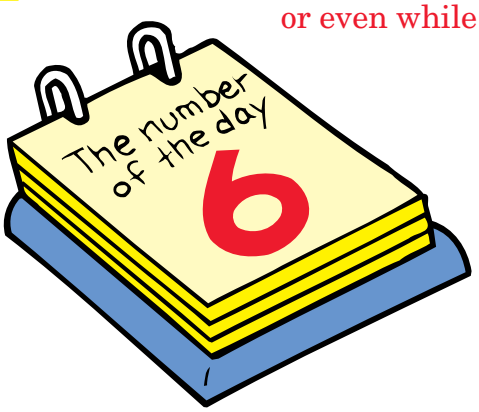
Number of the day

Materials

Paper and pencil (optional)

"The number of the day was 6. Sarita made 1 + 2 + 3. I did 24 ÷ 4. Dad's was 20 – 15 + 1, and Grandma said 4 x 25 – 80 – 14. She had to explain that one!"

You can use this activity to give your children lots of computation practice. Try it just about anywhere—on the bus, in the kitchen, or even while folding laundry.



Before you begin

Choose a number that you will call the "number of the day." The first time you do this activity, choose a number under 15.

1. Find one way to make the number of the day

Ask your children to think up different ways to make the number of the day, using equations.

"Let's all try to come up with different ways to make 11. Here's one way: 8 + 2 + 1 = 11. Can you find a different way?"

2. Collect everyone's equations

- If your children know how to write equations, they list their ideas and take turns reading them.
- When you're in the car, or if younger children need help, appoint one person "record keeper." As people give their ideas, the record keeper writes them down in equation form.
- When everyone's hands are busy making dinner, folding laundry, or pulling weeds, just take turns telling each other how you made the number—no writing is needed.

3. Find more ways to make the number

See how many different ways everyone can find to make the number of the day. You can offer specific challenges to give children practice with something they're doing in school, or just for variety.

For ages 5–7, try using ...

Addition with three numbers
1 + 3 + 7 = 11
Subtraction
13 - 2 = 11
Addition and subtraction
6 + 6 - 1 = 11
Coin values
2 nickels and 1 penny is 11 cents

For ages 7–9, try using ...

Pairs of the same number
2 + 2 + 3 + 3 + 1 = 11
Multiplication
4 x 5 - 9 = 11
Multiples of 5 and 10
25 + 15 - 30 + 1 = 11
The number 100
100 - (3 x 25) - 14 = 11

For ages 9–11, try using ...

A fraction or decimal

22 x .5 = 11

All four operations in one equation

(150 ÷ 10) x 3 - 40 + 6 = 11

Only one numeral

(33 - 3) ÷ 3 + (3 ÷ 3) = 11

The year you were born

1991 - 1900 - 80 = 11

Note: When an equation has parentheses, do the parts in parentheses first. To solve 100 - (3 x 25), first do 3 x 25, then subtract the result from 100.

When you repeat this activity

Family members can take turns choosing the number of the day. If you have young children, keep the number under 15. Otherwise, try a variety of numbers, including large ones (such as 312 and 50,429) and small ones (such as the day of the month, a child's age, or a fraction or decimal less than 1). Small numbers can be just as challenging as large ones.

Every now and then, ask children to explain their thinking: "How did you come up with 27 - 18 = 9? What was going through your head?" Be sure to explain your own thinking sometimes, too.

Talking about thinking is also a good way to handle mistakes. Children may notice and correct a mistake as they talk about how they arrived at the answer. If not, try to use their explanations as a basis for helping. For example, suppose a child says, "7 + 3 = 9 because 7, 8, 9—that's 3." You might respond, "Counting is a good way to do it. What's 1 more than 7? … OK, 8. What's 2 more?"

Variations

Use a starting number (ages 7–11)

Everyone's equations must start with the same number. For example, suppose the number of the day is 57 and you pick 10 as the starting number. Here are two possible equations:

10 + 40 + 7 = 57

10 x 5 + 7 = 57

Stories about the number of the day (ages 5–11)

Make up story problems with the number of the day for the answer. For example, for the number 27:

"When we went for a walk yesterday, Ebony found 12 pretty stones. Bryce found 9, and I found 6. How many stones did we find in all?"

"I bought 4 books of postage stamps. Each one had 10 stamps. I used 13 stamps to mail party invitations. How many stamps did I have left?"