

Subtracting: Count backwards or forwards on number line to do subtraction

Terminology

Some schools may use the term 'number track' rather than 'number line'. Check with the school - or the child and if so then use "track" consistently.

Remember to check with the school's calculation policy to see if they teach subtraction by counting forwards OR backwards on a number line.

Common misconception

Always reinforce that you subtract the smaller number from the bigger number. Children often forget and try to do it the other way round.

Race back from 20

Using a number line to 20, each player start with their counter on 20. Roll the dice and count backwards that many spaces. The first to 0 is the winner.

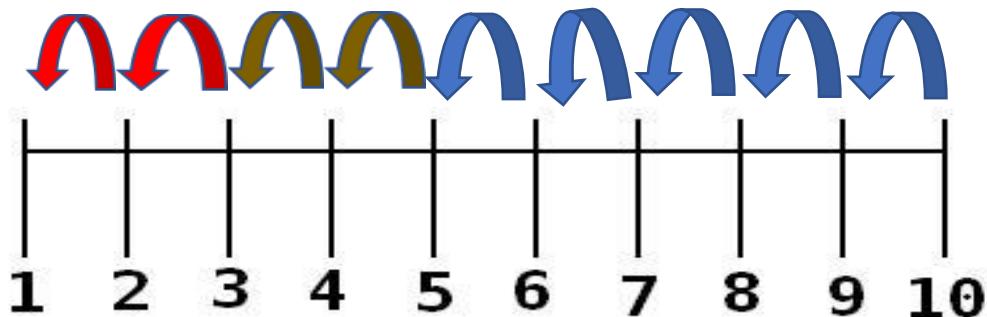
- What is the fewest number of moves you can do to get to 0?

A ruler makes a good number line to 20 or 30.

Number Stories

Give the child a counter and draw a face on it with whiteboard pen. Get the child to create a character for their counter. Then give them a number line. Tell them a story about their character and ask them to follow on the number line, counting as they go.

Eg, once upon a time there was a little girl who lived at Number 10 (place the counter on 10). The little girl went to the pet shop at Number 5 to buy some dog food (9, 8, 7, 6, 5). Next she went along 2 shops to Number 3 to get some ribbon (4, 3). Finally, she went to play at her friend's house. He lives at Number 1 (2, 1)



Number Stories (harder)

Use a number line to complete an abstract maths story.

Eg I start with 10, I take away 4, then I take away 1. Finally I take away 2 more. What number am I?

This could be done on a large number line (scrap A4 paper with the numbers written on) to get the child up and moving.

Subtraction on a number line

Explain that number lines can be used as a resource to solve subtraction problems. Write a subtraction number sentence together. Remind the child that they already know how to solve this using their fingers and objects. You can use the same process to work it out using a number line.

- What number do we need to start on?
- Are we jumping forwards or backwards?
- What number are we subtracting?
- How many spaces do we need to jump?
- What is the answer?
- Can you check it using objects or your fingers?

Playground number track

This can be a fun activity - if the playground has a number track, and you have access, and the weather is favourable! A number track will look like this – although it may of course go beyond 10.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|

Have the child do a subtraction physically. Eg, for $10 - 3$, the child stands on 10 and jumps back 3 (or steps 3 times). Repeat – or let the child give you a number sentence to work out and have the fun of watching you.

You can make a less exciting number track indoors by simply writing the numbers on paper.