Number Champions
1 2 3 4 5
fun + skills = confidence

Resource for Year 2 Core Curriculum

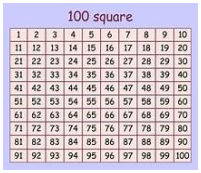
Year 2: Addition: Use 11-1=10 to add and subtract 11 mentally.

11s to 100

Aim of the Game

Be the first to reach 100 by adding or subtracting 11s.

You will need




or

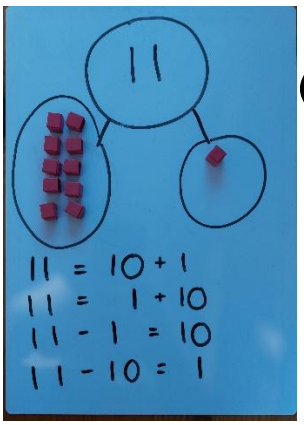

Before you play….

Can they add 10 and subtract 10 quickly?

- Explain that the game today is about adding/subtracting 11s - but you can only play it if you know how to add/subtract 10 quickly!
- Check the child knows how to add/subtract 10 from any number on the 100 square (go down/up one row) - practice and praise! Can they do it without the 100 square?
- Agree that they are brilliant at adding/subtracting 10 in their head or with the 100 square but 11 is a bit harder to do quickly in our heads so we will learn a great strategy to do it very quickly!

Do they understand 11=10+1 and 10=11-1?

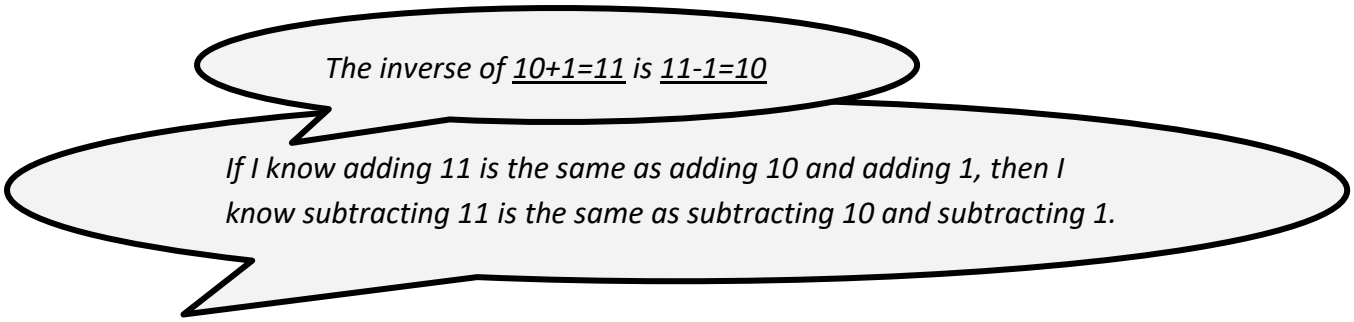
- Explain we are going to use what we know about 10 and 11 to help us add and subtract 11 quickly.
- Use cubes with a part/whole model to show the 10/11/1 ‘fact family’, discuss inverse as opposite.



If I know 11= 10+1, then I know that adding 10 then adding 1 is the same as adding 11.

Practice

- Practise adding 11s from any number mentally using the strategy +10+1 with the 100 square to support them. Prompt them to notice what is happening on the 100 square: they are going down 1 row (+10) and forward 1 (+1).
- When ready, move on to - 11. Look at the part/whole model - what do you know?



- Practise subtracting 11 from any number using -10-1 and the number square.
- Prompt them to notice what is happening on the 100 square - it is the *inverse (opposite)* of when we added 11. To subtract 11 we go up one row (-10) and back 1(-1)
- Practise subtracting 11s from any number mentally using this strategy (100 square to support).

Play

- Label the blank die + 11, +11, +11, -11, -11, ? (? = choose to +11 or - 11)
- Take turns to roll the labelled die and mentally add or subtract 11, moving your counter to the correct number on the 100 square.
- Don't go into negative numbers - just notice 'that would be less than zero' and roll again.
- Think out loud to show the strategy in use.
- Bonus points for landing exactly on 100 but passing 100 is a win too.

Reflect

- How did you feel about adding and subtracting 11s at the start? Has that changed?

Adapt

- Just do either adding or subtracting until confident.
- Remove the 100 square if they don't need it. Jot the answers on paper /whiteboard instead. (They can always check the 100 square if they need it).

Maths talk

In this game, children **practise mentally maths strategies** and build on their **understanding of inverse, the relationship between addition and subtraction and the number system. They need to be secure in number bonds to 11 and finding one more and one less.**

Things to look out for

- Is their place value knowledge secure?
- Can they add/subtract 10s mentally?
- Are they getting confused? Give plenty of support with concrete resources or come back to it another time.