

## Year 2: Counting: Estimate the sum of 2 numbers to the nearest 10

### Bingo

#### Aim of the Game

Be the first to cover a line or the whole bingo card by estimating the sum of 2 numbers to the nearest 10.

#### You will need



#### Get Ready – check they can round to the nearest ten.

- Look at a number line to 100 together and explain that we are going to use it to help us round to the nearest ten. This will help us to estimate for the game later.
- First count together in tens from 0-100. Point to the tens on the number line as you go.
- Ask them to roll a 0-9 die – find that number on the number line and work out which tens number is it closest to? 0 or 10? They should be able to do this by comparing how many jumps there are to get back to 0 and how many jumps forward to get to 10.
- Keep rolling till you get a 5 – what do we do here? Help them notice it's exactly between 0 and 10 – what do we do?! Luckily there is a maths rule to help us!

*If the ones digit is 1 to 4 – round down to the tens as before.*

*If the ones digit is 5 to 9 – round up to the next ten on the line.*

*(This is a rule to make sure we all do the same thing - like driving on the left!)*

- What if the ones digit is 0? It's already a tens number so we don't need to round it!
- Now roll two 0-9 dice to generate a 2-digit number, find it on the number line, then either use their number sense or the rule/rhyme.
  - 34 – the ones digit is 4 so we *round down to the tens as before* which is 30.
  - 67 – the ones digit is 7 so we *round up to the next ten on the line* which is 70.
  - 95 – the ones digit is 5 so we *round up to the next ten on the line* which is 100.
  - 40 – the ones digit is 0 – it's already a tens number so we keep it as 40.

## Play

- Have a bingo card in front of you both.
- Take turns to draw 2 cards from the deck to generate a 2-digit number. Picture cards can be 0.
- Roll the 0-9 die to generate a 1-digit number to add to the 2-digit number.
- Estimate the sum of the 2 numbers to the nearest 10. E.g.  $56 + 8$  can be estimated as  $60 + 10 = 70$
- Cover the estimated 10s number with a counter.
- First to cover a line or whole card wins.
- Jot down the numbers / sums/ use concrete/pictorial resources to support as necessary.

## Reflect

- What helped us estimate the nearest ten?
- Can remember the rule to know which tens number a number is closest to?

## Adapt

- You can choose the order of the digits i.e. 6 and 4 could be 64 or 46 – making the right choice can help you win!
- Create a bespoke bingo game with the blank bingo card print out / make your own.
- Stick to adding single digits in which case the sum's nearest 10 will be either 0 (1,2,3,4) or 10 (5,6,7,8,9,10,11,12,13,14) or 20 (15, 16, 17, 18, 19)
- Take out cards above 5 / use 1-6 die to keep sums manageable.

## Maths talk

In this game, children build on their **understanding of the number system by identifying, representing and estimating numbers using different representations, including the number line.** They need to be secure with finding the nearest tens number before playing this game.

## Things to look out for

- Is their place value knowledge secure?
- Can they say the numbers they have generated?
- Are they using strategy to choose which digits will be tens or ones to their advantage?
- Would concrete / pictorial resources support understanding?
- Do they understand how to use a number line and find numbers efficiently?
- Can they apply a rule to finding the nearest 10?

## Mathematical Language

*I rolled the digits \_ and \_ so I can make the number \_ \_ or \_ \_.*

*\_\_\_\_\_ is in between \_\_\_\_\_ and \_\_\_\_\_.*

*The closest tens number to \_\_\_\_\_ is \_\_\_\_\_.*

*The sum of \_\_\_\_\_ and \_\_\_\_\_ is equal to \_\_\_\_\_.*

10

30

50

60

70

40

90

50

100

110

80

20

50

20

60

40

70

10

80

30

110

90

100

60