

Sugar Rush



Number Hops

$$32 \div 4 =$$

How many groups of 4 carrots are there in 32?

Draw a number line with **0** at the start and the target number **32** at the end.

Now the rabbit is going to see how many hops of 4 it will take to get to 32.

Number Hops

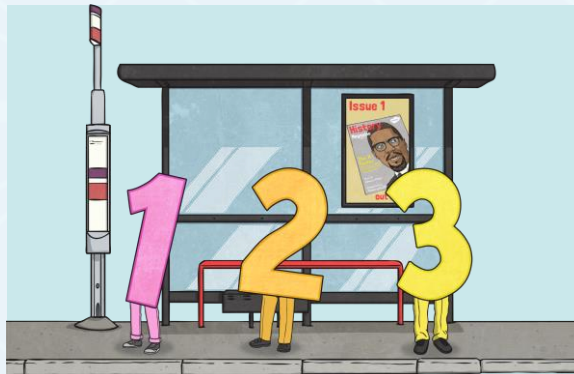
$$32 \div 4 = 8$$

How many groups of 4 are there in 32? **8**

We just worked this out by hopping along the number line.

We can also set this out using a **formal written method**.

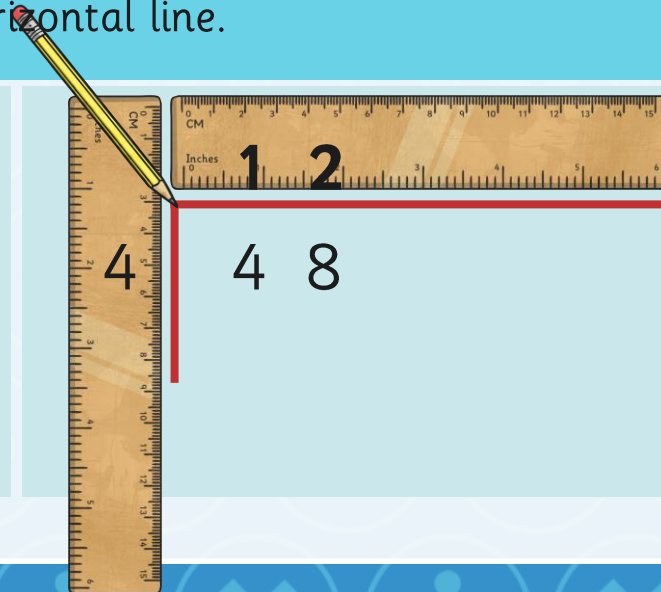
It's called **short division**, but sometimes we call it the bus stop method. This is because the layout we use looks a bit like a bus stop.



The Bus Stop

$$48 \text{ sweets} \div 4 \text{ people} =$$

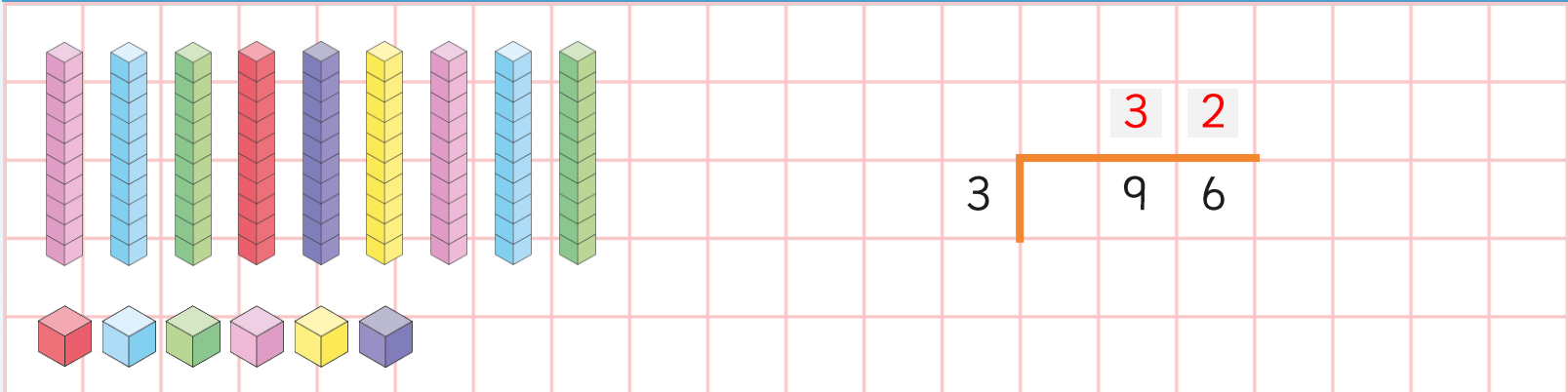
1. Draw the layout for the formal written method. This looks a bit like a bus stop!
2. Write the number you are dividing by in front of the vertical line. This is the **divisor**.
3. Write the number that is being divided after the vertical line. This is the **dividend**.
4. The answer goes on top of the horizontal line.



The Bus Stop

We solve short division problems by dividing 1 digit at a time.

$$96 \div 3 = 32$$



Put the 9 tens into 3 groups. How many tens would be in each group?

Now, let's look at the ones.

Share the 6 ones into 3 groups. There are 2 in each group.

The Bus Stop

We solve short division problems by dividing 1 digit at a time.

$$84 \div 4 = 21$$



Share the 8 tens into 4 groups. How many tens would be in each group?

Now, let's look at the ones.

Share the 4 ones into 4 groups. There is 1 in each group.

Regrouping

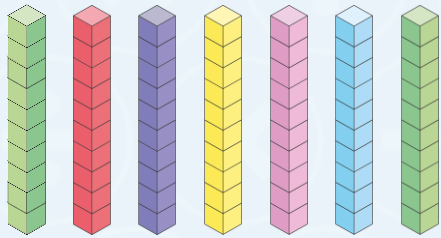
Sometimes when we are dividing 1 digit at a time, the digits don't divide exactly and there are some left over.



We solve this by regrouping.

Regrouping

$$76 \div 2 = 38$$

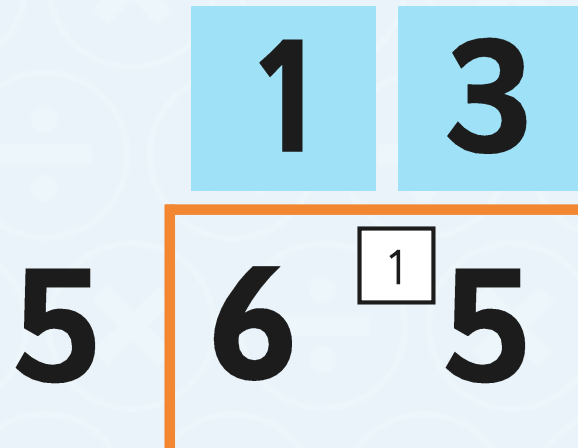
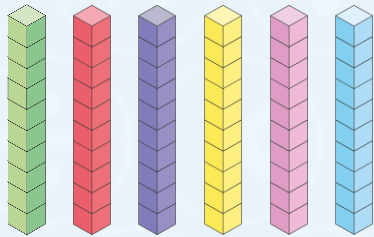


$$\begin{array}{r} 38 \\ 2 \overline{) 76} \\ \underline{76} \\ 0 \end{array}$$

Share the 7 tens into 2 groups. How many tens sticks are in each group?

Regrouping

$$65 \div 5 = 13$$



Share the 6 tens into 5 groups. How many tens sticks are in each group?

Regrouping

$$92 \div 4 = 23$$

$$\begin{array}{r} 23 \\ 4 \overline{) 92} \end{array}$$

How many 4s are there in 9 tens?

Sugar Rush Activity



Sugar Rush

I can solve division problems using a formal written method.

- How many 5s are there in 25? ($25 \div 5 = ?$)
- How many 4s are there in 36? ($36 \div 4 = ?$)
- How many groups of 8 are there in 16? ($16 \div 8 = ?$)
- How many 3s are there in 15? ($15 \div 3 = ?$)
- How many 4s are there in 44? ($44 \div 4 = ?$)

6. $8 \overline{) 80}$ 8. $8 \overline{) 88}$

7. $3 \overline{) 42}$ 9. $4 \overline{) 64}$

Will there be any remainders... (Use the grid to work out your answers)

- If you divide 41 sweets by 4?
- If you share 34 sweets by 43?
- If you divide 53 sweets by 44?
- If you share 50 sweets by 45?

twinkl planit
Maths | Year 3 | Multiplication and Division | Lesson 2 of 2: Sugar Rush

Sugar Rush

I can solve division problems using a formal written method.

- $8 \overline{) 80}$ 3. $8 \overline{) 88}$
- $3 \overline{) 42}$ 4. $4 \overline{) 64}$

Use a ruler to help you set out the written method and complete the calculations.

6. 48 sweets + 4 people =	<input type="text"/>
7. 36 sweets + 3 people =	<input type="text"/>
8. 55 sweets + 5 people =	<input type="text"/>
9. 96 sweets + 8 people =	<input type="text"/>
10. 88 sweets + 8 people =	<input type="text"/>

Will there be any remainders... (Use the grid to work out your answers)

- If you divide 41 by 4?
- If you share 34 between 3?
- If you divide 53 by 4?
- If you share 50 by 5?

twinkl planit
Maths | Year 3 | Multiplication and Division | Lesson 2 of 2: Sugar Rush


Sugar Rush

I can solve division problems using a formal written method.

- $3 \overline{) 45}$ 3. $4 \overline{) 52}$ 5. $8 \overline{) 88}$
- $9 \overline{) 90}$ 4. $3 \overline{) 57}$

Will there be any remainders...

- If you divide 41 sweets by 4 people?
- If you share 34 sweets between 3 people?
- If you divide 53 sweets by 4 people?
- If you share 50 sweets by 5 people?



Use a ruler to help you set out the written method and complete the calculations. Some of them might have remainders – watch out!

10. $48 \div 4 =$	<input type="text"/>
11. $38 \div 3 =$	<input type="text"/>
12. There are 37 sweets. Karim shares the sweets between five friends. How many sweets does each person receive? Are there any sweets that can't be shared?	<input type="text"/>
13. The Stanley family won 84 sweets in a raffle. Conor must share the sweets between his 8 children. How many sweets does each child receive? Are there any sweets that can't be shared?	<input type="text"/>

twinkl planit
Maths | Year 3 | Multiplication and Division | Lesson 2 of 2: Sugar Rush