

NUMBER KNOWLEDGE

Numeracy Book 4

- Counting
- Hundreds Boards and Thousands Book
- Up to Ten
- Patterns to 10
- Number Mats and Number Fans

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2 Number tile subtraction

We are learning to count down to solve subtraction problems.



Number tiles 1 to 20

The picnic

The tennis club had a picnic.

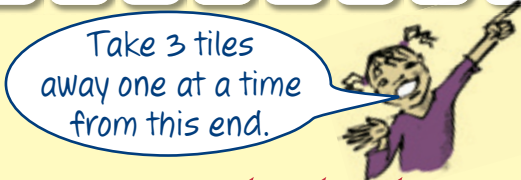
Example

Ryan made 13 cakes.
3 were eaten for morning tea.
How many cakes were left?



Arrange 13 tiles in order.

1 2 3 4 5 6 7 8 9 10 11 12 13



Take 3 tiles away one at a time from this end.

1 2 3 4 5 6 7 8 9 10 11 12 13

$13 - 3 = 10$

There are 10 left.



Write down the numbers as you count back.

13, 12, 11.
10 are left.

Activity 1



A Use number tiles to help subtract these.



- 1 12 cakes – 2 cakes =
- 2 13 cakes – 2 cakes =
- 3 14 cakes – 2 cakes =
- 4 14 cakes – 3 cakes =
- 5 15 cakes – 3 cakes =
- 6 14 cakes – 4 cakes =
- 7 15 cakes – 4 cakes =
- 8 16 cakes – 4 cakes =
- 9 15 cakes – 3 cakes =
- 10 17 cakes – 3 cakes =



B 1 Ella made **15** pies for the picnic.
4 of them were apple.
How many pies were not apple?

2 Liam made **14** cakes.
His brother ate **3** of them.
How many cakes were left?

3 Tana brought **18** small cans of juice.
He drank **5** of them.
How many cans were left?



C 1 $14 - 3 =$ 2 $15 - 3 =$ 3 $16 - 4 =$ 4 $18 - 5 =$



Challenge



Find **two ways** of working these out.

1 There were **15** sandwiches on a plate.
Ryan ate **2** of them.
Chloe ate **3** of them.
How many were left?

2 There were **15** cakes on a plate.
Ryan ate **4** of them.
Chloe ate **1** of them.
How many were left?

Aunt Nyree

Aroha and Hemi were going to see Aunt Nyree.

Example

Aroha had \$15.
She spent \$4 on a present for Aunt Nyree.
How much money does she have left?

Imagine 15 tiles.



Start from 15 and count back 4.

15, 14, 13, 12

11 are left.

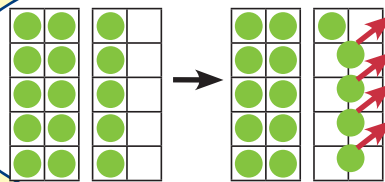


$$15 - 4 = 11$$

Aroha has \$11 left.

I know that
5 minus 4 is 1
so 15 minus 4 is 11.

OR



Activity 2



A How much money is left?

1 $\$16 - \$4 =$ 2 $\$17 - \$2 =$

3 $\$18 - \$3 =$ 4 $\$19 - \$3 =$

5 $\$17 - \$4 =$ 6 $\$16 - \$5 =$

7 $\$18 - \$5 =$ 8 $\$19 - \$4 =$

Only count back
if you need to.



B Try and work these out without counting back.

1 $12 - 2 =$ 2 $15 - 5 =$

$14 - 2 =$ $25 - 5 =$

$18 - 2 =$ $35 - 5 =$

$15 - 2 =$ $45 - 5 =$

$17 - 2 =$ $65 - 5 =$

$95 - 5 =$

Do you need to
count back when
you subtract 5 from
a number with 5 in
the ones place?



C 1 Aunt Nyree had **17** kittens.
She gave **5** away.
How many did she have left?

2 Aunt Nyree has **16** windows in her house.
Yesterday she washed **3** of them.
How many were left to wash?

3 Aunt Nyree put **18** biscuits on a plate.
Aroha and Hemi ate **4** of them.
How many biscuits were left?

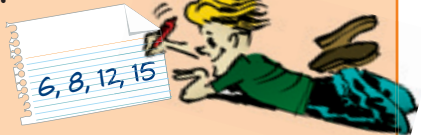


D 1 $16 - 5 =$ **2** $17 - 3 =$ **3** $15 - 3 =$ **4** $18 - 4 =$

Subtraction bingo game



- The leader is the person with the next birthday.
- Write down **4** numbers between **5** and **21**.
- The leader calls out the subtractions, one by one, in any order.



$$\begin{array}{cccc}
 14 - 3 = & 10 - 4 = & 18 - 3 = & 17 - 3 = \\
 17 - 5 = & 20 - 4 = & & 15 - 5 = \\
 10 - 1 = & 19 - 2 = & 16 - 3 = & 10 - 2 = \\
 20 - 2 = & 22 - 2 = & 20 - 1 = & 10 - 3 =
 \end{array}$$

- If the answer is a number you wrote down, cross it off.
- The first person to cross off all of their numbers is the winner.

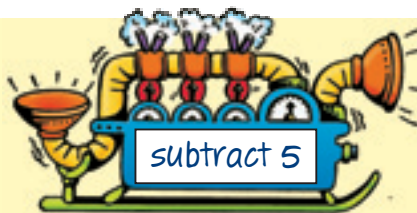
Mr Mad's number machines

Mr Mad makes number machines.

Example

What number will come out of this machine?

37 →



The machine subtracts 5.
I know that $7 - 5 = 2$.
So $37 - 5 = 32$.



$$37 - 5 = 32$$

The number that comes out is 32.

Activity 3



Practice your facts to 10 first.



A What number comes out of these machines?

1 16 →



= ?

2

24 →



= ?

3 25 →



= ?

4

37 →



= ?

5 48 →



= ?

6

55 →



= ?

7 86 →



= ?

8

98 →



= ?

B 1 $29 - 4 =$

2 $46 - 4 =$

3 $78 - 3 =$

4 $89 - 5 =$

5 $45 - 3 =$

6 $59 - 4 =$

7 $68 - 5 =$

8 $76 - 4 =$



C 1 Mr Mad made **27** number machines this week.
4 of them broke down.
 How many still worked?

2 Mr Mad had **38** workers in his factory.
5 of them left.
 How many workers does he have now?

3 Mr Mad takes **44** hours to make a red machine.
 He takes **4** fewer hours to make a blue machine.
 How long does it take to make a blue machine?

4 One of Mr Mad's machines started making mistakes.
 Today it made **67** mistakes.
 Yesterday it made **5** fewer mistakes.
 How many mistakes did it make yesterday?



D 1 $28 - 5 =$ **2** $89 - 4 =$ **3** $148 - 5 =$ **4** $155 - 3 =$



Challenge

1 Write five subtraction number sentences that have an answer of **8**.

$$11 - 3 = 8$$



2 Write five subtraction number sentences that have an answer of **13**.

3 Write five subtraction number sentences that have an answer of **27**.

