



NALA

National Adult Literacy Agency
Áisíneacht Náisiúnta Litearthachta do Aosaigh

Brushing up: a maths workbook

Using numbers and shapes in everyday life at level 1 and 2



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What is NALA?

The National Adult Literacy Agency (NALA) is an independent membership organisation. We work to ensure that adults with literacy and numeracy difficulties can fully take part in society and have access to learning opportunities that meet their needs.



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Introduction

What is this workbook?

Welcome to Brushing Up: a maths workbook. In this workbook, you will learn how to use numbers and shapes in everyday life. The workbook has 3 sections.

Each section will:

- ✓ tell you what you **need to know**,
- ✓ let you **practise**, and
- ✓ let you **check** to see if you have **learned**.

Is it for me?

The workbook is designed for adults who want to learn skills they did not have the chance to learn before. You can use it on your own or with the support of a tutor.

It is also for people who want to brush up on “rusty” skills.

If you want to make sure you understand some of the most important skills you need when using numbers or shapes, this workbook is for you.

What will I learn?

You will have the chance to learn topics that are mapped to 2 QQI Level 1 qualifications. The qualifications are:

QQI: Quantity and Number (Level 1)

and

QQI: Shape and Space (Level 1)

You will also be able to learn topics that are included in 2 QQI qualifications at Level 2. The qualifications are:

QQI: Quantity and Number (Level 2)

and

QQI: Shape and Space (Level 2)

Introduction



QQI stands for **Q**uality and **Q**ualifications Ireland.

You and your tutor can read more about these qualifications on the QQI's website: www.qqi.ie (You need to click **awards information** and then type the name of the qualification into the **Title** box.)

How will I learn?

There is more than one way to learn. And there is more than one way to use this workbook.

You can:

✓ Work through it on your own, starting at the beginning. You can read the instructions, then practise and check your answers at the back of the book.

or

✓ Use the workbook with a tutor. You can discuss with your tutor what you want to learn and decide which exercises to work on together.

or

✓ Work on your own and with a tutor, in case you get stuck or have questions to ask.



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If you have any questions as you are using this book, call the NALA freephone support line, **1800 20 20 65**, Monday to Friday, 9.30 am – 5 pm.



If you call outside of these hours, please leave your name and number and we will be happy to call you back.



Section 1: Count on this!

By the end of this section, you will be able to:

- use and write numbers between 0 and 10,
- count and write down numbers of objects, up to 10,
- use words to do with numbers that we use in everyday life, and
- add up numbers between 0 and 10.



Numbers 0 to 10

Do you know the numbers 0 to 10?

0 1 2 3 4 5 6 7 8 9 10

To know the numbers 0 to 10 is more than just counting. You need to be able to:

- know what each number looks like,
- write each number, and
- know what each number is worth.

You may know these numbers already. If so, that is great! However, it is easy to get them mixed up.

Just to be sure of the numbers 0 to 10 before going on to more difficult skills, try this exercise.



Write the numbers 0 to 10 in the boxes below.

--	--	--	--	--	--	--	--	--	--	--

Missing Numbers



These are rows of numbers from 0 to 10. Fill in the missing numbers.

0	1	2		4		6	7		9	10
---	---	---	--	---	--	---	---	--	---	----

	1	2	3		5	6		8		
--	---	---	---	--	---	---	--	---	--	--

0	1		3			6			9	
---	---	--	---	--	--	---	--	--	---	--

				4				8		
--	--	--	--	---	--	--	--	---	--	--

		2					7			
--	--	---	--	--	--	--	---	--	--	--

Questions about numbers

Answer these questions:

What number comes **after** 2? _____

What number comes **before** 7? _____

What number comes **between** 6 **and** 8? _____

What number comes **before** 10? _____

Give an example of a number that is **greater than** 3: _____

Give an example of a number that is **less than** 8: _____



The answers are on page 76

How do we write the words for the numbers?

This is how we write the word for each number from 0 to 10:

0	zero
1	one
2	two
3	three
4	four
5	five
6	six
7	seven
8	eight
9	nine
10	ten

Matching words, numbers and dots



Draw lines to match the word with the number and then the dots that show that number. Count all the dots on the dice to find the number that matches.

10 is done for you.

ten	1	
five	0	
four	8	
one	10	
eight	2	
seven	7	
zero	5	
six	9	
three	3	
two	6	
nine	4	



The answers are on page 77

Roll the dice!


You will need 1 (one) dice.



Roll it.

Copy the dots that are showing on the top face. Then write the dots as a number. Then write the number as a word. The first one is done for you.

Keep going until you collect all the numbers from 1 to 6.

Dots on the dice	Number	Word
	1	one

Writing the numbers



The numbers below are written in a standard style.

Practise writing the numbers here.



Write over the grey number first. Then write it again in the boxes below.

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

0	1	2	3	4	5	6	7	8	9	10

Writing the numbers as words

Now try writing the numbers as words.

Write over the grey word first. Then write it again in the boxes on the right.

zero	zero				
one	one				
two	two				
three	three				
four	four				
five	five				
six	six				
seven	seven				
eight	eight				
nine	nine				
ten	ten				

Number bonds – What are they?



Number bonds are pairs of whole numbers that add together to make another number. Whole numbers are the numbers 0, 1, 2, 3 and so on.

The number bonds for 10 (ten) are:

0 + 10
1 + 9
2 + 8
3 + 7
4 + 6
5 + 5
6 + 4
7 + 3
8 + 2
9 + 1
10 + 0



Write down the missing number bond in these sums:

(a) $3 + \square = 10$

(b) $8 + \square = 10$

(c) $1 + \square = 10$

(d) $0 + \square = 10$



The answers are on page 77

Number bonds for other numbers up to 10

10

$0 + 10$

$1 + 9$

$2 + 8$

$3 + 7$

$4 + 6$

$5 + 5$

$6 + 4$

$7 + 3$

$8 + 2$

$9 + 1$

$10 + 0$

9

$0 + 9$

$1 + 8$

$2 + 7$

$3 + 6$

$4 + 5$

$5 + 4$

$6 + 3$

$7 + 2$

$8 + 1$

$9 + 0$

8

$0 + 8$

$1 + 7$

$2 + 6$

$3 + 5$

$4 + 4$

$5 + 3$

$6 + 2$

$7 + 1$

$8 + 0$

7

$0 + 7$

$1 + 6$

$2 + 5$

$3 + 4$

$4 + 3$

$5 + 2$

$6 + 1$

$7 + 0$

6

$0 + 6$

$1 + 5$

$2 + 4$

$3 + 3$

$4 + 2$

$5 + 1$

$6 + 0$

6

$0 + 6$

$1 + 5$

$2 + 4$

$3 + 3$

$4 + 2$

$5 + 1$

$6 + 0$

4

$0 + 4$

$1 + 3$

$2 + 2$

$3 + 1$

$4 + 0$

3

$0 + 3$

$1 + 2$

$2 + 1$

$3 + 0$

2

$0 + 2$

$1 + 1$

$2 + 0$