

# Brushing up: a maths workbook

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



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ISBN number: 978-1-907171-24-6

Published by: National Adult Literacy Agency (NALA)

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We wish to thank Daniel Sellers for writing and editing this workbook and Helen McHugh for editing it.

### 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.

# Contents



# What is in the workbook?

Introduction	2
Section 1: Count on this!	5
• Numbers 0 to 10	6
Numbers in everyday life	26
Section 2: Shaping up!	35
• Learning about shapes	36
Shapes in everyday life	45
Section 3: Moving on!	51
Answers	75
NALA Membership Form	88

### 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 Quality and Qualifications 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.



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?

012345678910

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

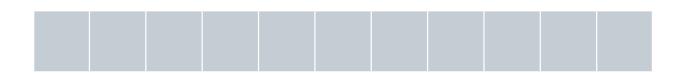
- know what each number looks like,
- write each number, and
- know what each number is worth.

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

### **Questions about numbers**

Answer these questions:

What number comes <b>after</b> 2?	
What number comes <b>before</b> 7?	
What number comes <b>between</b> 6 <b>and</b> 8?	
What number comes <b>before</b> 10?	
Give an example of a number that it <b>greater than</b> 3:	
Give an example of a number that is <b>less than</b> 8:	



# How do we write the words for the numbers?

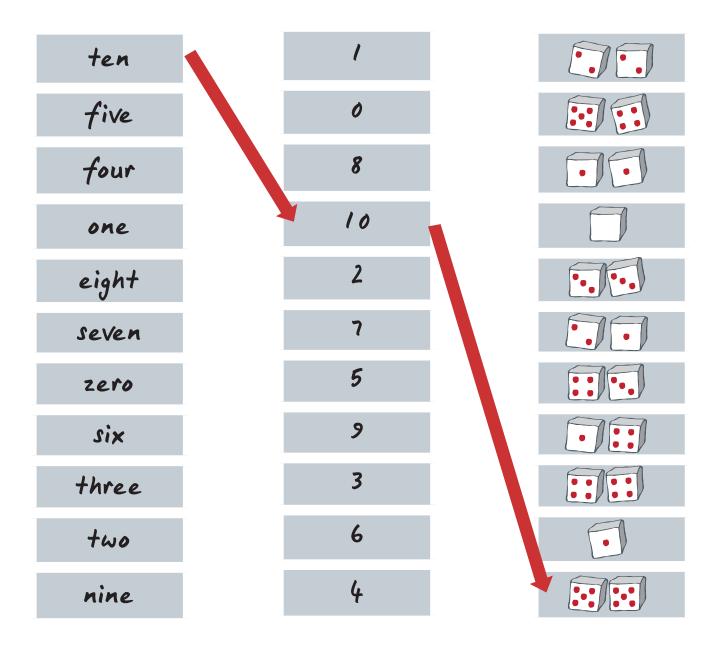
This is how we write the word for each number from 0 to 10:

0	zero
/	one
2	two
3	three
4	four
5	five
6	si×
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.





# **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
	/	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	/	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?

16

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:



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

0 + 6

3 + 3

4 + 2

5 + 1

8

0 + 8

1 + 7

2 + 6

3 + 5

4 + 4

5 + 3

6 + 2

7 + 1

8 + 0

0 + 7

1 + 6

2 + 5

3 + 4 4 + 3

5 + 2

6 + 1

7 + 0

6

1 + 5

2 + 4

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

2 + 0