# TIME 4 LEARNING

# learner workbook



supporting the radio numeracy series

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Writer: Monica Macnamara

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## Introduction

#### **Time 4 Learning Series**

Numbers come into many of our everyday activities, just think, from first thing in the morning.

What time do you get up at?	Time is based on numbers.
What number bus will you catch?	There are numbers all around us.
How much bus fare will you pay?	Money is also based on numbers.

This series will look at 3 areas:

- 1. Numbers for living
- 2. Understanding the time
- 3. Using money.

#### Freephone Tutor Support Line

The freephone tutor support line number is **1800 20 20 65**. Tutors are available to answer calls normally during normal working hours, Monday to Friday. The tutors will do their best to answer any questions you may have, or help you with any problems. It is a free and confidential service.

#### Local Literacy Service

There are 126 VEC adult literacy schemes throughout the country. These schemes also cover numeracy and can assist you in learning more about numbers. People join their local literacy schemes to work with tutors on a one to one basis or in small groups. The service is free and confidential. You can get 2 - 4 tuition hours per week. The local adult literacy organiser will meet you and find a suitable tutor for you. There are about 17,000 adults learning in literacy schemes around the country.

For information on your nearest service contact us:

freephone line at 1800 20 20 65

or

NALA at (01) 8554332 (Monday to Friday 9.30 a.m. - 5 p.m.)

## **Guidelines for Use**

This workbook is designed to be used along with the radio series Time 4 Learning. This workbook has 10 sections based on the 10 radio programmes. Each section has 9 worksheets.

Each programme will deal with 3 areas:

- 1. Numbers for Living
- 2. Understanding the Time
- 3. Using Money



There are 9 worksheets for each programme, 3 on each of the above areas. Some worksheets are used as you listen to the programme, the others are for you to practice on later.

It will start at the beginning with the basics. If you are past this stage, stay with it, it will get more difficult.

The following symbols will guide you through using the book.



You will see this sign,  $\in$ , in some of the worksheets. This is the sign for the euro. The euro is the money to be used in Ireland from 1st January 2002.

# PROGRAMME 1

# Planning Your Day





# **Planning Your Day**

#### **Programme 1: Planning Your Day**

This programme will cover:

#### **Numbers For Living**



- 1. Numbers 1 10
- 2. Missing Numbers
- 3. Values of These Numbers

#### **Understanding The Time**



- 1. Days and Months
- 2. Days Per Month
- 3. Years

#### **Using Money**



- 1. The Euro
- 2. What the Coins Look Like?
- 3. Value of Each Coin

#### The following symbols will guide you with the worksheets.

**INFORMATION** 

TIP





**WRITE** 



For help with any of the worksheets, contact the NALA freephone support line at 1800 20 20 65.

### Numbers 1 - 10



Did you know that all numbers - ones, tens, hundreds, thousands and even millions are based on the numbers 1 to 10.

The key skill is to know the numbers from 1 to 10 and then see how they are used to make bigger numbers.

1 2 3 4 5 6 7 8 9 10

To know the numbers 1 to 10 is more than just counting. You need to be able to:

- Know what each number looks like
- Write each number
- Know what each number is worth

You may know these numbers already if so, that's great. However it's easy to get mixed up between them.

Just to be sure of the numbers 1 to 10 before going on to more difficult skills, try this exercise.



#### Write the numbers 1 - 10 in the boxes below.







In these rows of numbers from 1 to 10 fill in the missing numbers.





#### Answer these questions.

What number comes before 7?

What number comes before 4?

What number comes before 6?

What number comes before 9?



# Values of These Numbers



It is important to know what each number is worth especially when we move on to understanding money.

The easiest way to show the value of a number is to use dots - just like on a dice or dominoes.

If you throw a dice and it shows up that's number 3.

Let's look at the value of each number.





Count up the dots on these dominoes and write the value on the line.





When planning your day it is helpful to be able to tell the time on a watch or clock. It is important first to understand time in general, that is days, weeks, months and years.

As you know there are seven days in a week.



#### Write these down for practice.

Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	

There are twelve months in a year.



#### Write these down for practice (and the numbers too).

NUMBER	MONTH	NUMBER	MONTH
1.	January		
2.	February		
3.	March		
4.	April		
5.	May		
6.	June		
7.	July		
8.	August		
9.	September		
10.	October		
11.	November		
12.	December		

# **Days Per Month**



Seven months have 31 days.

Four months have 30 days and one month has 28 days.

There is a short rhyme which reminds us how many days are in each month.

Thirty days has September April, June and November All the rest have thirty-one Except for February alone Which has only twenty-eight Now go off and make a date



Using this rhyme, fill in how many days are in each month. The first one is done for you.

1.	January	31
2.	February	
3.	March	
4.	April	
5.	May	
6.	June	
7.	July	
8.	August	
9.	September	
10.	October	
11.	November	
12.	December	





A millennium is a thousand years. Recently we celebrated the year 2000 that is two millennia. Now we are at the start of another thousand years, this is the year two thousand and one - 2001.

Knowing the date is useful for many reasons such as using a calendar or diary, making arrangements, filling in forms or planning a holiday.



Sometimes it is written all in numbers.

What number month is October? Check the previous page. So the date above could be written as 15 / 10 / 2001.



#### Write these dates in numbers.

I worked in the company from the 16 March 1998 to 10 June 2000.
 I worked in the company from the

<u>16</u> / <u>3</u> / <u>98</u> to \_\_\_ / \_\_\_ / \_\_\_\_.

2. Today's date is \_\_\_\_\_\_ or \_\_\_ / \_\_\_ / \_\_\_\_.

## The Euro



Money is important to all of us no matter how much you have! Next year our money will be changing from pounds and pence to euros and cent.

The first step is to get to know each coin, what it is called and what it looks like. For each coin we have now, there is a matching coin in the euro money.

There are 6 'pence' coins up to £1: 1p, 2p, 5p, 10p, 20p, 50p, £1. The pound is worth a hundred pence.

There are 6 'cent' coins up to 1 euro: 1c, 2c, 5c, 10c, 20c, 50c, €1. The euro is worth a hundred cents.

Here are the new euro coins.

€1

**50c** 

**20c** 

**10c** 

**5**c

**2c** 

**1**c

The pounds and pence will be taken away gradually after the 1st January 2002.







The symbol for the euro is  $\in$ .

The symbol for the cent is c, just as we say p for pence.

Note the different colours of the coins and how the value is marked clearly on each one.



On the back of each Irish euro coin is the word Éire meaning Ireland, the Irish harp and the year that the coin was made.



The euro leaflet enclosed with this pack shows the coins in full colour.

# Value of Each Coin





#### Match each euro coin to the amount it is worth.

The first one is done for you.



# **Practice Page**





# Bingo





# **Bingo**

#### Programme 2: Bingo

This programme will cover:

#### **Numbers for Living**



- 1. The 100 Square
- 2. A Bingo Card
- 3. Telly Bingo

#### **Understanding the Time**



- 1. A Full Day
- 2. am/pm
- 3. TV Listings

#### **Using Money**



- 1. Value of 1, 2, 5 and 10 cents
- 2. Value of 20, 50 cents and 1 euro
- 3. Using Coins

#### The following symbols will guide you with the worksheets.

**INFORMATION** 

TIP



**WRITE** 



For help with any of the worksheets, contact the NALA freephone support line at 1800 20 20 65.



## The 100 Square



In the last programme we covered the numbers 1 - 10. These numbers are used 10 times to make up 100.

You may be familiar with this but to ensure that everyone can see the pattern, we will make a 100 square.

Starting with zero (which means none or nothing) up to number 9 are the single numbers sometimes called units. These appear on each row.

On the first row they are on their own.

In the second row, to make the teens, put a one in front of every unit. In the third row, to make the twenties, put a two in front of every unit. In the fourth row, to make the thirties, put a three in front of every unit. And so on.



#### Fill in the square below.

The ones have been put in on the second row, continue with the 2 to make the twenties.

	0	1	2	3	4	5	6	7	8	9	
put a 1 in front of every unit	10	11	12	13	14	15	16	17	18	19	
put 2	0	1	2	3	4	5	6	7	8	9	
put 3	0	1	2	3	4	5	6	7	8	9	
put 4	0	1	2	3	4	5	6	7	8	9	
put 5	0	1	2	3	4	5	6	7	8	9	
put 6	0	1	2	3	4	5	6	7	8	9	
put 7	0	1	2	3	4	5	6	7	8	9	
put 8	0	1	2	3	4	5	6	7	8	9	
put 9	0	1	2	3	4	5	6	7	8	9	100
	-	-	-				-	-			~



A bingo card is based on the 100 number square. It has 9 rows across the card, the first row for units, the second for teens, the third for 20's and so on up to 90.

When a number is called out you don't need to look all over the card but just in the row where that number belongs.

	10	22		41	52		70	
1		24	32			60		80
	18		38	47	59		73	89
units	tens	twenties	thirties	forties	fifties	sixties	seventies	eighties

#### BINGO CARD

#### Play the game

In order to get used to seeing the pattern of the 100 number square, find the following numbers on the bingo card as if they were being called out at a game of bingo. Stop when you get all the numbers in a line across.



# Put a circle around the number on the bingo card when you find it.

The first one is done for you.

22 47 70 38 60 1 73 24 52 32 10 80 18 41 89 59

# Telly Bingo



You may have heard of telly bingo. It is a bingo game run by the National Lottery which you can play from home.

You can buy a telly card bingo from any shop which is a lotto agent. It costs £2 or  $\pounds$ 2.54.

The telly bingo programme is on Network 2 on a Friday night usually at 8.30 - check your television guide.

The game is explained and the numbers are called out. Prizes can be from £5 (€6.35) to £20,000 (€25,400)

The telly bingo card looks like this:

The numbers are arranged in downward rows.

The first row 'B' has , the numbers 1 to 15.

The second row 'I' has the numbers 16 to 30.



The third row 'N' has the numbers 31 to 45.

The fourth row 'G' has the numbers 46 to 60.

The fifth row 'O' has the numbers 61 to 75. The date and time of the show.

#### How to play:

- To make it easier to call out the numbers they are called out with the letter of the row. For example B 12 or N 42.
- The first prize is for getting the 4 corner numbers. In this card they are B 05, O 63, B 07 and O 70.
- The second prize is for getting the x which is <u>marked on this card</u>. In this card they are B 05, B 07, I 27, I 28, G 55, G 46, O 63, 0 70.
- The next prize is for a 'snowball'. A snowball is where you get all the numbers by the time 45 numbers have been called out.
- If a snowball is not won, play continues for a 'full house'. This is the first person to get all the numbers.
- The game is well explained on the show as you go along. Mark every number called that you have on your card. Each card can only be used for one show. Good luck !
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We have covered the days, weeks, months and years. Now let's look at one full day.

There are 24 hours in one full day.

A new day starts at 12 o'clock midnight and continues on through the morning, afternoon, evening and night until 12 o'clock midnight again.

During this time there are two sets of 12 hours.

The first 12 are before midday. We call these hours am.

The second 12 are after midday. We call these hours pm.

am	pm
12 o'clock midnight	12 o'clock midday
1 o'clock	1 o'clock
2 o'clock	2 o'clock
3 o'clock	3 o'clock
4 o'clock	4 o'clock afternoon/evening
5 o'clock	5 o'clock
6 o'clock	6 o'clock
7 o'clock	7 o'clock
8 o'clock	8 o'clock
9 o'clock morning	9 o'clock night
10 o'clock	10 o'clock
11 o'clock	11 o'clock



#### Put a $\checkmark$ in the correct box.

Breakfast time is usually around	8 o'clock am	
	8 o'clock pm	
Lunch time is usually around	1 o'clock am 1 o'clock pm	
You might go to the pub at about	9 o'clock am	
	9 o'clock pm	





This poster is displayed in your shop window.

<b>BINGO</b> BALLYBAY PARISH HALL	
Saturday 29/9/2001 8pm - 10pm Sunday 7/10/2001 8pm - 10pm	
Books available Saturday 10am	

an an

#### Put a $\checkmark$ in the correct box.

1.	What night is the first bingo session on?	Friday Saturday Sunday	
2.	How many hours does the bingo go on for?	2 3 4	
3.	Does the bingo session start at 8 in the	morning evening	
4.	What night is the second bingo session?	Saturday Sunday	
5.	What month is the first bingo session?	August September October	
6.	Can books be bought in the morning?	Yes No	



#### **NETWORK 2**

- 6.30 Den 2 AM 37572440 10.15 80993260 Barney 10.45 Farthing Wood 41793043 11.10 Ketchup 83010227 11.15 Simba 80999444 11.45 Bouli 37252376 11.50 Scooby Doo 19852531 **12.15** Kipper 55690289 12.20 The Wiggles 50760802 12.45 Papa Beaver 38421482 1.00 Teletubbies 78509289 1.25 Ruairí Rua 27157192 1.35 Bear 36139802 2.00 Barney 36406024 2.25 Bob the Builder 35862734 2.40 Sheep 67524043 3.00 Happy Birthday 89317802 3.05 Tom and Jerry Kids 90486869 3.25 Creature Feature 89327289 3.35 Pokémon 77965192 4.05 Rugrats 41584531 4.25 Sports Stream 91760376 4.35 Draw with Don 23095444 5.05 Thunderbirds 60225531 5.35 FISH 92803666
- **6.30 THE SIMPSONS** Homer embarks on a quest to find a new hangout after Moe kicks him out of his tavern. 58251685
- 7.00 HOME AND AWAY More drama from Summer Bay. 23193208
- **7.30 FREAKS AND GEEKS** Teen drama series. 77567685
- 8.20 NEWS 2 40969937
- **8.30 TELLY BINGO** Online game show in association with the National Lottery. 15548802
- 8.50 MUSIC EXPRESS A profile of Radiohead. 84266734
- **9.20** FILM: OUT OF ANNIE'S PAST (1994, Thriller, 18) Catherine Mary Stewart, Dennis Farina. Crime drama about a woman who cannot escape form her own history. Despite having a new identity, the woman still lives in fear of an evil detective and the mob who want her dead. 70643550

Here is a TV listing for Network 2 on Friday starting with early morning programmes.

The following questions are about am times up to midday and pm times after midday.

#### Put a $\checkmark$ in the correct box.

1. What is on at 6.30am?

Den 2 AM The Simpsons

2. What is on at 11.15am?

Simba	
Kipper	

- 3. What time is Home and Away on?
  - 7 o'clock am
- 4. What time is Telly Bingo on?
  - 8.30 am
  - 8.30 pm

# Value of 1, 2, 5 and 10 cents



In the last programme we looked at the euro coins. Now let's look at the value of these coins.

When we start using the euro in the year 2002 it will be worth less than a pound, 79 pence to be exact.

Prices will look higher, e.g. for an item which you pay one pound for now, you will have to pay 1 euro and 27 cents.

But you will have more in your purse or pocket, e.g. if you had £5 in your pocket, you would have €6.35, so it balances out.

The changeover will be simplest if we just 'think euro' and do not keep converting back to pounds.





Look at value of coins within the euro system by showing a different way to make the value of each coin.





#### Show the amounts below by using different coins.

Draw the coins to give your answer.

The first one is done for you.











# **Using Coins**





#### Put a $\checkmark$ in the correct box.

The first one is done for you.

1. If you were going out to play Bingo and your bus fare was €1.20 (one euro and 20 cents) which coins would you use to pay?

€1	50c	20c	10c	5c	2c	1c
✓		✓				

2. If your Bingo card cost €1.80 which coins would you use to pay?

<b>€</b> 1	50c	20c	10c	5c	2c	1c

3. If you had to buy a set of pens which cost €1.10 which coins would you use to pay?

<b>€</b> 1	50c	20c	10c	5c	2c	1c

4. If you had a cup of tea which cost 50c and a biscuit which cost 20c, which coins would you use to pay?

€1	50c	20c	10c	5c	2c	1c

# **Practice Page**





# The Workplace







# The Workplace

#### **Programme 3: The Workplace**

This programme will cover:

#### **Numbers for Living**

- 1. Counting
- 2. Counting in Twos or Fives
- 3. Counting in Tens

#### **Understanding the Time**



- 1. The Clock
- 2. Long Hand and Short Hand
- 3. O'clock

#### **Using Money**



- 1. Euro Notes
- 2. Euro Note Quiz
- 3. Pay Packets

#### The following symbols will guide you with the worksheets.

**INFORMATION** 

TIP



WRITE







For help with any of the worksheets, contact the NALA freephone support line at 1800 20 20 65.



## Counting



In the first two programmes we covered the numbers from 1 to 100. The next number skill we will cover is counting.

Counting is a skill which we use regularly.

We count in many ways, for example:

- items in the supermarket 10 for €1
- products on a factory production line
- cards in a game
- calories in weight watching
- days before an important event
- money

The basic skill in counting, which you are probably familiar with is counting in ones, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, etc. There are more complex skills which are useful.

Before moving on to more complex skills, check your skills and accuracy at counting in ones.



# Count the dots in the boxes below and write your answer on the line.

The first one is done for you.



When counting dots or other items, you can mark them as you count them, so that you don't count them twice.



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Counting in twos is a useful skill which makes counting quicker. It is very helpful in counting pairs of items.

Counting in twos just means skipping over every second number.

Instead of	1	2	3	4	5	6	7	8	9	10
Count like this		2		4		6	,	8		10



Shade in every second number up to 20.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

Counting in fives is a similar skill to counting in twos. It means skipping over four numbers.



Counting in fives is especially useful when telling the time.



#### Shade in every fifth number up to 30.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30



Counting in tens is a similar skill to counting in twos and fives. It means skipping over nine numbers to the tenth number each time.

1	2	3	4	5	6	7	8	9	► 10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	<b>3</b> 0

Counting in twos, fives or tens can be very helpful when counting money or large numbers of items.

On a production line, products need to be grouped into tens. When the products are moving quickly, counting in twos can be a useful skill.



The manager may then require you to fill boxes of a hundred products. Counting in 10s is a quick way to do this.



Count the 10s up to 100.





We know that there are 24 hours in a day. These are split into two groups of 12 hours.

The first 12 hours are from midnight to midday.

The second 12 hours are from midday to midnight.

The clock with two hands is called the Analog clock and it uses the numbers from 1 - 12. We use this clock most often.



We will start with the basics of telling the time which some listeners will know already. Then we will move quickly on to more complex 'time skills'.

Things to note.

- This clock has a short hand which points to the hour, on this clock, 3.
- It moves slowly taking 12 hours to go right around the clock.
- In one full day the short hand goes right around the clock twice.
- The long hand points to the minutes.
- When the long hand points to 12 that is zero minutes. It is exactly the hour and it is called o'clock.



#### What time is it from the clock above?



Remember:

- The short hand points to the hour.
- The long hand points to the minutes.
- When the long hand points to 12 that is zero minutes. It is exactly the hour and it is called o'clock.



#### What time is it on each clock?



\_\_\_\_\_ o'clock



\_\_\_\_\_ o'clock



\_\_\_\_\_ o'clock



\_\_\_\_\_ o'clock



\_\_\_\_\_ o'clock






In a workplace the working hours might be as follows:

1.	9 o'clock	Start work
2.	11 o'clock	Tea break
3.	1 o'clock	Lunch
4.	2 o'clock	Back to work
5.	5 o'clock	Finish normal shift
6.	8 o'clock	Finish late shift



Fill in these times on the clocks below by drawing in the long hand and the short hand. Write the time under each clock.



## **Euro Notes**



You are familiar with the euro coins, now let's look at the euro notes. There are seven notes altogether.

The notes have the same front and back throughout Europe. They do not have a different symbol for each country as the coins do on the back.

As the notes go up in value they get a little bit bigger in size.

Each note is a different colour.

On the front of every note there is a picture of a different type of gateway or window. The value of the note is shown clearly and also the twelve star symbol of the European Union (EU).

On the back of every note there is a picture of a different type of bridge. The value of the note is shown again and also the twelve star symbol of the European Union (EU).

#### Look at the euro leaflet for full colour detail.

TIP



"Draft banknote design © European Monetary Institute, 1997/European Central Bank, 1998".





It will take some time to get really used to the euros. This worksheet might help.



### Using the euro leaflet answer the following questions. Write the number in the box provided.

1.	Which euro note is the smallest?	euros
2.	Which euro note is the biggest?	euros
3.	How many different euros notes are there?	 
4.	Which euro note is mainly blue?	euros
5.	Which euro note is mainly red?	euros
6.	Which euro note is mainly grey?	euros
7.	Which euro note is mainly yellow?	euros
8.	Which euro note is mainly green?	euros

## Pay Packets





If you worked in a shop and got your wages in cash at the end of the week, which notes might you find in your pay packet?

#### Put a $\checkmark$ in the correct box.

The first one is done for you.

Your pay is €100	€	500	200	100	50	20	10	5
				✓				
			1			1		
Your pay is €125	£	500	200	100	50	20	10	5
10ur pay 15 0125	U	500	200	100	50	20	10	
Your pay is €150	€	500	200	100	50	20	10	5
Your pay is €170	€	500	200	100	50	20	10	5
Your pay is €200	€	500	200	100	50	20	10	5
Your pay is €250	€	500	200	100	50	20	10	5
		<u> </u>						

## **Practice Page**



# PROGRAMME 4

## Travel





## **Travel**

#### Programme 4: Travel

This programme will cover:

#### **Numbers for Living**



- 1. Counting On
- 2. Countries in the European Union (EU)
- 3. Finding Your Seat

#### **Understanding the Time**



- 1. The Minutes
- 2. Half Past
- 3. O'clock and Half Past

#### **Using Money**



- 1. Counting On
- 2. Counting in 2s, 5s, 10s
- 3. Practice in Counting

#### The following symbols will guide you with the worksheets.

**INFORMATION** 

TIP



WRITE





For help with any of the worksheets, contact the NALA freephone support line at 1800 20 20 65.



## **Counting On**



We have looked at counting in the usual way and also at counting in twos, fives and tens.

As we progress further in this series you will find how useful these skills are.

Another important counting skill is 'counting on'.

This means not having to go back to one but being able to start counting at any given number.

This skill is helpful in adding and in handling money.

You start with the given number, go on to the next and continue counting.

For example: 2, 3, 4, 5 7, 8, 9, 10

At first you might need to say the missing numbers in your head but with practice you will get much quicker.



#### Count on from the given number as far as spaces allow.



## Countries in the European Union (EU)

There are over 40 countries in Europe. 15 of them joined together in a sort of 'club' called the European Union. There are 15 countries in the European Union (EU), including Ireland. They are: Austria, Belgium, Denmark, England, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and Sweden.

Of these 15 countries, 12 countries so far, have agreed to share the same currency (money) - the euro. This will make travel and business between these countries much simpler. The 12 countries will start to use the Euro on the 1st of January 2002.

Three EU countries are not joining the euro currency. They are England, Denmark and Sweden.



# After January 2002, if you travel to the following countries could you use your Irish euro?

#### Put a $\checkmark$ in the correct box.

The first one is done for you.



## **Finding Your Seat**



Find your seat.

If you travel by plane, the seats are in rows. Each row of seats has a number. Each seat in that row has a letter.

Your ticket will show a number and a letter, for example 8 B, 14 A. You have to find the correct seat.

Find the right seat for each person.



#### Draw a line to join the name to the right seat.

The first one is done for you.





Whether you are travelling a short distance in a car or a long journey in a plane, it is helpful to be able to tell the time.

If you understand the time you can more easily plan your journey, buy tickets or arrange to meet someone.

So let's get back to the clock.

#### **TIP** The short hand points to the hour. The long hand points to the minutes.

There are 60 minutes in one hour.

The long hand goes around the clock once every hour.



Each number from 1 - 12 on the clock represents 5 minutes.

We usually tell the minutes in 5s - that's why counting in 5s will be helpful.



# Count the minutes around the clock in 5s and fill in the remaining numbers.

Page 46

## Half Past





Divide the clock in half from 12 to 6.

The right hand side of the clock (shaded) is minutes past the hour.

The left hand side of the clock (white) is minutes to the hour.

It takes the long hand 30 minutes to go from 12 (o'clock) to 6. It has gone half way around the clock so, when the long hand points to 6 it is half past the hour. To find out which hour, check what number the short hand has just passed.



Fill in the number below to show the time on each clock. The first one is done for you.





We have covered o'clock and half past.



Fill in the long hand on the clocks below to show the correct time.



4 o'clock



half past 2



7 o'clock



half past 1



8 o'clock



half past 9



11 o'clock



half past 12



half past 10

## **Counting On**



When you are counting up a mixture of coins, you can use two skills you have learnt so far to make it easier.

The skills are: 1. counting in 2s, 5s or 10s

2. counting on





Here is how it can be done. Start with the coin of the highest value - 50c.

Move to the next highest - 10c. There are three 10c coins. Counting on from 50c, count in tens to get 60, 70, 80.

Move to the next highest - 5c. There are two 5c coins. Count on from 80 in fives to get 85, 90.

Move to the next highest - 1c. There are three 1c coins. Count on from 90 to get 91, 92, 93.

# C.D.







#### The total is 93c.



Using the skills from the previous page, count up how much money is in each circle.



#### Write down your answer.

As you count each coin mark it with your pen to make sure you don't count it twice.









Match the price tag to the correct amount of money.

The first one is done for you.



## **Practice Page**



# PROGRAMME 5

# Shopping







## Shopping

#### **Programme 5: Shopping**

This programme will cover:

#### **Numbers for Living**



- 1. Numbers in Shopping
- 2. Weights
- 3. Use By and Best Before Dates

#### **Understanding the Time**



- 1. Minutes Past the Hour
- 2. Minutes Past the Hour
- 3. Minutes Past the Hour

#### **Using Money**



- 1. Understanding Prices
- 2. Writing Prices
- 3. Comparing Prices

#### The following symbols will guide you with the worksheets.

**INFORMATION** 

TIP



WRITE





For help with any of the worksheets, contact the NALA freephone support line at 1800 20 20 65.



## Numbers in Shopping



When you go shopping you will see numbers used in different ways.



and prices and change which we will cover in the money section of this workbook.

We have already covered counting, so let's look at weight.

Items such as fruit and vegetables are not marked with a price per item. They are priced by weight in kilogram, so they have to be weighed. Some shops have a weighing scales for the customer to weigh their own items, others weigh the items at the check out.

Examples:

If you wanted to buy 4 onions, **ONIONS** they are priced by the kilo. **€1.40** They have to be weighed to see how much they cost. per kilo 4 onions might weigh 500 grams. So they would cost 70c, half the price per kilo. If you wanted to buy a bag of mushrooms, they are priced by the kilo. **MUSHROOMS** They have to be weighed to see how much they cost. €2.00 Your bag of mushrooms might weigh 250 grams. per kilo So they would cost 50c, a quarter of the price per kilo.





Most items have the weight marked on the packet.



Solid items such as butter, cheese, flour, meat and tinned products are weighed in kilos and grams.



There are 1,000 (one thousand) grams in a kilogram.

Gram = g

Kilogram = kg





ΤΙΡ

Liquid items such as milk, fizzy drinks, alcohol, shampoo and orange juice are weighed in litres and millilitres.

There are 1,000 (one thousand) millilitres in a litre.

Litre = L

Millilitre = ml



Lemonade 2 L



Orange Juice



Shampoo

500 ml

Wine

1L



Tomato Sauce 400 ml



Fill in the weight of each of the following items from the pictures above.

The first one is done for you.

1 L

Beans	420g	Sausages	Biscuits	
Lemonade		Jam	Milk	
Butter		Orange Juice	Shampoo	



All food products must have a 'use by' or 'best before' date printed on them. This is a way of making sure that foods we eat are fresh and have not been left on the shelf too long. Different foods last for different lengths of time, so the 'use by' and 'best before' dates can vary a lot.

There is a difference between a 'use by' date and a 'best before' date.

The 'use by' date is normally seen on foods which can go off (go bad) quickly. It is the date by which the product must be used otherwise it might be bad for you.

The 'best before' date is normally seen on longer lasting foods. It tells you when the food is at its best but the food can still be used for a short time after this date.

For example: A sliced loaf of bread would have to be used within 4 days of being baked.

A tin of beans could have a best before date for 2003, that is in two years time.



# Look at the sell by dates given below and write out the months.

The first one is done for you.





Beans Best before 06.05.02

Tea bags Best Before 20.10.01



Milk Use by 16.07.01



Sausages Use by 01.12.01

6 May 2002



We have looked at o'clock and half past, let's look now at other times on the past side of the clock.

The counting in 5s skill which we covered in programme 4 comes in very useful here.



The right hand side of the clock (shaded) is minutes past the hour.

We start at 12 (which is o'clock) and count in 5s from 1 to 6.

Each of the numbers on the clock represents 5 minutes when the long hand points to it.

Counting in 5s, each number from 1 to 6 represent 5, 10, 15, 20, 25 and 30 minutes past the hour. 1 = 5; 2 = 10; 3 = 15; 4 = 20; 5 = 25

**15** minutes past is usually called a quarter past as the long hand has moved a quarter way around the clock.

### TIP

**30** minutes past is usually called half past as the long hand has moved half way around the clock.

## i

Every hour the long hand goes right around the clock from 12 around to 12 again. As the long hand moves around the clock the short hand moves very slowly from one number to the next.

By the time the long hand has moved to half past, the short hand is half way between one number and the next.

Page 58

## **Minutes Past the Hour**





Fill in the time on the clocks below.

The first one is done for you.



The short hand points to the hour. The long hand points to the minutes.



5 past 9



10 past 7



15 (a quarter) past 8



10 past 6



20 past 11



5 past 4



25 past 2

9



15 (a quarter) past 1







Write the time on each of the clocks below.

The first one is done for you.



The short hand points to the hour. The long hand points to the minutes.



## **Understanding Prices**



In the next programme we will be adding up prices. It is useful first to know how to read and write down a price correctly.

Prices need to be divided into euros, 10s and cents.

Look	at the following price	e: €7.65 ← S	Start at the right hand side
First you can see the euro sign.	The next number/s before the dot (decimal point) are the euros.	The number after the dot (decimal point) is 10s of cents.	The last number on the right is always the cents.

euros	10s	cents
7	6	5



When you see a price written down remember the numbers before the dot (decimal point) are euros and the numbers after the dot are cents.

If you get the idea of this it will make adding easier.

It can be confusing when there are zeros.

The rule is write down the zeros.

You can see from this example that it makes a big difference where the zeros are placed.

euros 10s cents
= 0 0 5

the first amount is only 5 cents but...

€5.00 ←



the second amount is 5 euros.





Here is a selection of items with prices marked on them.





# Write down the price of each item. Then divide it into euros, 10s of cents and cents.

The first one is done for you. Remember to write in the zero.

			euros	10s	cents
Eggs	€1.4-5	_	1	4	5
Milk	€	_			
Flour	€	-			
			r		
Beans	€	-			
Tea bags	€	-			
			[		
Cake	€	-			
Orange Juice	€	-			
					]
Matches	€	-			

Page 62



Usually in a supermarket there will be many different brands of the one product. For example, if you were buying a large sliced loaf of bread, there will be different makes and different types of bread.



It is good to compare prices to make sure that you are getting the best value for your money.



Compare the following prices.

Tick which item is the cheapest (least amount of money)?

Loaf A	€1.05	
Loaf B	€0.90	
	01.05	<b></b>

Loaf C €1.25

Tick which item is the cheapest (least amount of money)?

- Cake A
   €3.25

   Cake B
   €3.85
- Cake C €3.10 □

Tick which item is the dearest (most amount of money)?

- Jam A €0.95 🗋
- Jam B €1.25 🗋
- Jam C €2.05 🗋
- Jam D €1.70 🗋

## **Practice Page**





# Eating In or Out





## Eating In or Out

#### Programme 6: Eating In or Out

This programme will cover:

#### **Numbers for Living**



- 1. Adding Single Numbers
- 2. Adding Two Digit Numbers
- 3. Exercises on Adding

#### **Understanding the Time**



- 1. Minutes to the Hour
- 2. Minutes to the Hour
- 3. Minutes to the Hour

#### **Using Money**



- 1. Adding in a Restaurant
- 2. Adding for a Chinese Take Away
- 3. Adding in a Coffee Shop

#### The following symbols will guide you with the worksheets.

**INFORMATION** 

TIP



WRITE



For help with any of the worksheets, contact the NALA freephone support line at 1800 20 20 65.



## **Adding Single Numbers**



Adding to something means making it bigger.

We do this in all sorts of situations. For example:

- Adding more coal to the fire makes a bigger fire.
- Adding more food to your plate makes a bigger meal.
- Adding more money to your savings makes the amount bigger.

+

=

Adding two or more numbers together is the same idea and the total is a bigger number.



The following sum may seem very basic but it will explain the idea of adding.

		(	6			+	7	=	13
•	•	٠	٠	٠	•		• • • • • • •		
1	2	3	4	5	6		7 8 9 10 11 12 13		

#### i

#### When we add two numbers together we add the value of the second number on to the first number.

The dots show the value of the numbers. You can use dots or fingers when you are adding, if it helps you.

The counting on skill is also useful. We did this skill in programme 4. Look at this example

7 + 6 = 138 9 10 11 12 13



Pick the bigger number first. Then count on for the value of the smaller number to get the total.

We have looked at adding single numbers (units). These are the numbers between 0 and 9.



We have looked at adding single numbers on the last page. Adding two digit numbers is much the same. Counting on or using dots or fingers gets more complicated as the number gets bigger. So we have to split up the number.



#### STEPS

- Split the number into tens and units.
- Always start on the right and add the units.
- Pick the bigger number first. In this example, I have 7.
- Count on for the value of the smaller number. In this example, 2.
- Write your answer under the line on the units side. In this case, 9.
- Repeat the process for the tens.
- Pick the bigger number first. In this example, I have 5.
- Count on for the value of the smaller number. In this example, 3.
- Write your answer under the line on the tens side. In this case, 8.
- If there are hundreds, repeat the process again for the hundreds.

## **Exercises on Adding**





#### Add these two digit and three digit sums.

The first one is done for you.



Use the method on page 68.

26	63	4 2	33
+ 4 2	+ 2 6	+ 5 7	+ 5 6
68			
41	23	25	50
+ 5 3	+76	+ 4 1	+ 2 7
262	248	352	
+116	+ 4 1 0	+ 1 1 4	
555	211	356	
+ 2 1 3	+476	+ 1 2 3	



Contact the NALA freephone support line at 1800 20 20 65. for help with this worksheet.



We have looked at the **'past'** side of the clock, let's look now at the **'to'** side which tells the minutes to each hour.



The 'to' side of the clock (shaded) tells us the minutes to the hour.

We start at 12 (which is o'clock) and count in 5s from 11 back around to 6.

Each of the numbers on the clock represents 5 minutes when the long hand points to it.

Counting in 5s, each number from 11 to 6 represent 5, 10, 15, 20, 25 and 30 minutes to the hour.

The further we move away from 12 (o'clock) the more minutes it is to the hour.

## 15 minutes to is usually called a quarter to as the long hand has a quarter way to go until the hour.

**i** Every hour the long hand goes right around the clock from 12 around to 12 again. As the long hand moves around the clock the short hand moves very slowly from one number to the next.

By the time the long hand has moved to half past, the short hand is half way between one number and the next.

Page 70

## Minutes to the Hour





Fill in the time on the clocks below.

The first one is done for you.



The short hand points to the hour. The long hand points to the minutes.







20 to 5



5 to 7



15 (a quarter) to 4



25 to 10



20 to 9

 $\begin{array}{r}
11 & 12 \\
10 & 2 \\
9 & \cdot & 3 \\
8 & 4 \\
7 & 6 & 5
\end{array}$ 

5 to 12



15 (a quarter) to 6

10 to 8






Write the time on each of the clocks below.

The first one is done for you.



The short hand points to the hour. The long hand points to the minutes.



## **Adding in a Restaurant**



We discussed how to add numbers. Adding prices is the same and by doing this you can work out how much you will spend on a few items.

Look at this menu.

Bernie's B	Ristro
Sausage + chips	€3.80
Sausage, egg + chips	<b>€</b> 4.50
Chicken + chips	<b>€</b> 4.50
Steak + chips	€6.50
Apple tart	€2.25
Black Forest Gateau	€3.00
Ice cream	<b>€</b> 1.50
Tea/coffee	€1.00

You have chicken + chips, apple tart and tea.

It would cost:	Chicken + chips	€4.50
	Apple tart	€2.25
	Теа	€1.00
	Total	€7.75



## You have sausage + chips, black forest gateau and coffee. How much would it cost?

Sausage + chips	€	
Black Forest Gateau	€	
Coffee	€	
Total	€	



SOI	MENU		
1.	Won Ton Soup	€2.20	
2.	Crab Meat and Sweetcorn Soup	€2.20	
3.	Chicken and Mushroom Soup	€1.70	
4.	Chicken and Sweetcorn Soup	€1.70	
5.	Chicken and Mixed Vegetable Soup	€1.70	
STA	ARTERS		
6.	Chicken Balls in Batter (6)	€3.00	
7.	Chicken Balls in Batter (8)	€3.50	
8.	Prawn Crackers	€1.00	
9.	Spring Rolls (2)	€1.60	The prices
10.	Vegetable Spring Rolls (2)	€1.60	are given
11.	Szechuan Chicken Rolls (2)	€2.00	on the
12.	Roast Duck Balls (2)	€2.00	vight hand
13.	<b>Deep Fried Chicken Curry Triangle (3)</b>	€1.20	
14.	Sesame Prawns on Toast (2)	€2.80	side.
15.	Chicken Toast (2)	€2.60	
16.	B-B-Q Spare Ribs	€3.80	
17.	Honey Spare Ribs	€3.80	
18.	Sweet and Sour Spare Ribs	€3.80	
19.	Spare Ribs in Fruity sauce	€3.80	
20.	Fried Spare Ribs in Salt Pepper	€3.80	
21.	Skewered King Prawn Satay (5 x 2)	€3.80	
22.	Crispy Fried Won Ton (10)	€3.00	
23.	Chicken Wing in Salt Pepper	€3.00	
24.	Deep Fried Crispy Beef Triangle (3)	€1.20	
25.	Deep Fried Onion Rings	€2.00	
			4



Each item is

numbered to make it easier to order.

If you ordered the following items, how much would it cost?

- Won Ton Soup €
   Prawn Crackers €
- 12. Roast Duck Balls (2) €
- 15. Chicken Toast (2) €

Total

€

## Adding in a Coffee Shop



Look at this menu.



Write down the prices and then add them up.

The first one is done for you.

Sandwich	€1.50	Coke	€
Tea	€1.00	Chips	€
TOTAL	€2.50	TOTAL	€
Coffee	€	Sandwich	€
Cake	€	Теа	€
TOTAL	€	Cake	€
		TOTAL	€
Sandwich	€	Chips	€
Doughnut	€	Sausage Roll	€
Tea	€	Cake	€
TOTAL	€	Coffee	€
		TOTAL	€

## **Practice Page**





## Telephone



### Telephone

#### **Programme 7: Telephone**

This programme will cover:

#### **Numbers for Living**



- 1. Adding with Carrying Over
- 2. Adding with Carrying Over
- 3. Adding Practice Sheet

#### **Understanding the Time**



- 1. Setting the Alarm
- 2. Phone Charge Per Minute
- 3. Minutes To and Past

#### Using Money



- 1. Adding Money with Carrying Over
- 2. Practice Sheet
- 3. Adding Pay Phone Costs

#### The following symbols will guide you with the worksheets.

**INFORMATION** 

TIP



Π

WRITE





For help with any of the worksheets, contact the NALA freephone support line at 1800 20 20 65.





In programme 6 we looked at adding 2 and 3 digit numbers. In this programme we will move on to the skill of carrying over.

f

Carrying over is used when the answer to any line of the sum, hundreds, tens or units is more than 9. That is because 10 units make one ten. Any number bigger than 9 can split into tens and units.

Let's look at carrying over with a 2 digit sum first.

tens units			
4	5	8	
+ 2	2 1	4	
8	8	2	

#### STEPS

- Split the number into tens and units.
- Always start on the right and add the units. In this example, 8 + 4 = 12.
- 12 is bigger than 9 so it splits into tens and units, 1 ten and 2 units.
- Only units can be written on the units side.
- Write down the 2 units under the answer line and carry the one over to the tens side to add in with the other tens.
- Add up the tens. In this example, 5 + 2 + 1 (carried over) = 8. Write the answer under the line on the tens side.
- The answer is 82.



#### Add these 2 digit sums.

The first one is done for you.

81				
+ 3 4	+ 3 6	+ 2 9	+ 1 9	+ 2 8
4 <sub>1</sub> 7	5 6	2 5	73	65

Carrying over with a 3 digit sum is done in the same way.

Just like 10 units makes one ten to carry over, 10 tens makes one hundred to carry over.

Here is a 3 digit sum where you have to carry over.

### TIP

If the answer to any line of the sum is more than 9, you have to carry over.

hı	undred	s tens	units
	4	6	8
+	2 1	<b>5</b> <sub>1</sub>	6
	7	2	4

#### STEPS

- Split the number into hundreds, tens and units.
- Add the units first. In this example, 8 + 6 = 14.
- 14 is bigger than 9 so it splits into tens and units, 1 ten and 4 units.
- Write down the 4 units under the answer line and carry over the one ten.
- Add up the tens. In this example, 6 + 5 + 1 (carried over) = 12. This is one hundred and two tens.
- Write down the 2 tens under the answer line and carry over the one hundred.
- Add up the hundreds. In this example, 4 + 2 + 1 (carried over) = 7.
- The answer is 724.

## **Adding Practice Sheet**





#### Add these 2 digit and 3 digit sums.

You must carry over when the answer to any line is more than 9.



The number 10 means 1 ten and 0 units. If this is your answer write 0 under the units and carry over the 1 ten.

2 4	58	4 7
+ 6 9	+ 1 2	+ 3 8
473	1 5 8	2 4 6
+ 2 5 9	+ 2 7 3	+ 3 7 4
294	7 1 8	2 6 5
+ 4 0 8	+ 1 5 5	+ 3 7 8
483	295	188
+ 3 4 3	+ 4 0 6	+ 3 2 2



Contact the NALA freephone support line at  $1800\ 20\ 20\ 65$ . for help with this worksheet.

## Setting the Alarm



In programmes 5 and 6 we covered minutes to and past the hour. In this programme we will go over these times but first we will look at an alarm clock.

An alarm clock has a short hand and a long hand as usual to tell the hours and minutes. It also has another hand to set the alarm - the alarm hand. The alarm hand is often a different colour from the other two hands.

There is a knob at the back of the clock to move the alarm hand.

To set the alarm for a particular time, say half past 7. Turn the knob to move the alarm hand to half way between 7 and 8.

There is only one alarm hand so you put it before or after the hour depending on when you want to get up.

If you were going to bed at 11 o'clock and you wanted to set the alarm.



Position the alarm hand for getting up at the following times.

The first one is done for you.

Set alarm for half past 7

Set alarm for 10 to 8



Set alarm for a quarter past 6

Page 82



There are 60 minutes in an hour.

If you make a telephone call on a pay phone, a mobile phone or a house phone, you have to pay for each minute that you spend on the phone.

#### The longer your phone call - the more you will have to pay.

The telephone system is computerised. The telephone companies can work out for every phone exactly what calls were made and how much they cost.

	More Expensive	Less Expensive
1. The type of phone you use	Mobile	House phone
2. Where you are calling	Long distance	Short distance
3. The time of day	Working hours (8am - 6pm)	Evenings and weekends
4. How long you spend on the phone	Long calls	Short calls

The cost of a telephone call depends on:

## TIP

## If you want to keep your telephone costs down, try to go for the less expensive options.

Here is an example of part of a monthly mobile phone bill.

DATE	TIME	NUMBER PHONED	LENGTH OF CALL	COST
10/08/01	09.05	0166677XX	00:04:22	1.3100
10/08/01	09.56	0873334XX	0000:34	0.0384
10/08/01	11.02	0876667XX	0016:02	2.8732
10/08/01	12.56	0144455XX	0002:55	0.6754
11/08/01	10.07	042777XX	0011:34	1.1568
Saturday 11 August	7 mi past	nutes Phone nun 10	hber11 minutes34 seconds	€1.15







What is the time on each of the clocks below.

The first one is done for you.



Refer to pages 58 - 60 in programme 5 and page 70-72 in programme 6 for a quick reminder.



Contact the NALA freephone support line at 1800 20 20 65. for help with this worksheet.



TIP

At the start of this programme, we looked at adding 2 digit and 3 digit numbers using the skills of **carrying over**. The same skill is used when adding sums of money.



STEPS

- Split the number into tens of cents and cents.
- Add the cents first. In this example, 8 + 6 = 14. 14 is 1 ten and 4 cents.
- Write down the 4 cents and carry over one ten.
- Add the tens. In this example, 4 + 3 + 1 (carried over) = 8.
- The answer is 84 cents.

Here is an example with euros.

	euros	tens	cents
	3	8	6
+	<b>2</b> <sub>1</sub>	<b>3</b> <sub>1</sub>	7
	6	2	3

#### STEPS

- Split the number into euros, tens and cents.
- Add the cents first. In this example, 7 + 6 = 13. 13 is 1 ten and 3 cents
- Write down the 3 cents and carry over one ten.
- Add the tens. In this example, 8 + 3 + 1 (carried over) = 12.
  12 is 2 tens and 1 hundred (1 euro).
- Write down the 2 tens and carry over 1 euro.
- Add the euros. In this example, 3 + 2 + 1 (carried over) = 6.
- The answer is €6.23





#### Add up the following sums of money.

The first one is done for you.



Refer to pages 79, 80 and 85 in this programme for a quick reminder. Don't forget to put the dot (decimal point) between the euros and the cents.

5 4 c	4 8 c	7 3 c
$+ 2_{1} 7 c$	+ 3 2 c	+ 1 8 c
Blc	c	c
€ 1.2 7	€ 2.64	€ 2.7 1
+ € 2.4 5	+ € 3.3 9	+ € 3.5 3
€	€	€
€ 2.84	€ 4.1 5	€ 5.78
+ € 3.4 6	+ € 3.3 6	+ € 2.2 6
€	€	€
€ 1.4 3	€ 2.2 5	€ 3.2 7
€ 2.1 5	€ 1.3 4	€ 4.5 3
+€1.20	+ € 2.4 2	+ € 1.5 2
€	€	€



Contact the NALA freephone support line at  $1800\ 20\ 20\ 65.$  for help with this worksheet.

## **Adding Pay Phone Costs**



If you use a public pay phone, you have to put coins into the phone. The minimum charge for a call is usually 40 pence. The longer you talk the more money you will have to put in. There is a little screen which shows how much money you have left. You will hear beeps sounding when you are running out of money.

#### I made 4 phone calls on a pay phone. The circles show how much I spent on each one.



Add up the coins for each call and write it down.







Which call was the most expensive? \_\_\_\_

## **Practice Page**



# PROGRAMME 8

## Cinema





### Cinema

#### Programme 8: Cinema

This programme will cover:

#### Numbers for living



- 1. Subtraction (take away)
- 2. Practice sheet
- 3. Borrowing one

#### Understanding the time



- 1. Digital time
- 2. Digital time
- 3. Cinema listings

#### Using money



- 1. Working out change
- 2. Working out change
- 3. Spending at the cinema

#### The following symbols will guide you with the worksheets.

INFORMATION

TIP



ΠP



WRITE



For help with any of the worksheets, contact the NALA freephone support line at  $1800\ 20\ 20\ 65$ .





Programmes 6 and 7 covered how to add small and larger amounts of money. With this skill you can work out how much money you have spent when you buy a few items. The next thing to learn is how to work out how much change you should get.

#### This is called subtraction or take away. The sign for take away is –

The dots show the value of the number. Dots are useful for explaining how to work out take away sums. You may not need them.

The bigger number is always on top. The value of the smaller number is taken away from the value of the bigger number.

Here is a 1 digit take away sum.

$$7 \not / / / / \cdots$$

$$\frac{-4}{3} \qquad 123$$

STEPS

Π

- Make the dots for the value of the bigger number. In this example, 7.
- Cross off these dots for the value of the smaller number. In this example, 4.
- Count how many dots are left to find your answer. In this example, 3.

The method is the same for a 2 digit take away sum.

	tens	units	
<i>, ,</i>	6	8	+ + + + + • • • •
1234	- 2	5	123
	4	3	

#### STEPS

- Split the sum in tens and units.
- Always start on the right with the units.
- Make the dots for the value of the bigger number. In this example, 8.
- Cross off these dots for the value of the smaller number. In this example, 5.
- Count how many dots are left to find your answer. In this example, 3.
- Then repeat on the tens side.





#### Practice these take away sums.

The first one is done for you.



#### Use the method on page 91.

68	76	89
_ 4 4	- 5 2	- 3 6
24		
2 8	5 4	3 5
- 1 7	- 2 2	- 1 2

The same method is used with 3 digit take away sums.

2 3 5	4 3 3	544
- 1 2 1	- 2 1 1	- 3 2 2
637	8 5 4	645
- 2 1 5	- 5 2 3	- 2 1 3

### **Borrowing one**



Sometimes take away sums are a bit more complicated and you have to 'borrow one'.

Here's an example to show you how and when this is done.

Although 64 is a bigger number than 28, when you begin with the units you cannot take 8 from 4.

#### STEPS

- You have to borrow one ten from the 10 side to make the 4 into 14.
- The number you borrowed from, in this case 6 must be changed to a 5.
- Then the sum continues.
- Make dots for the value of the bigger number, in this example, 14.
- Cross off these dots for the value of the smaller number, in this example, 8.
- Count how many dots are left to find your answer, in this example, 6.
- Then repeat for the tens side.
- Make dots for the value of the bigger number, which is now 5.
- Cross off these dots for the value of the smaller number, in this example, 2.
- Count how many dots are left to find your answer, in this example, 3.
- The answer is 36.



#### If you are used to borrowing in a different way then stick with that.

#### Try these take away sums.

The first one is done for you.

4 7	52	69	3 3	5 2
- 2 4	- 2 5	- 3 6	- 1 5	- 2 8
23				

## **Digital time**



The last 5 programmes have covered telling the time on an ordinary clock. Now we are going to look at digital time.

Digital time is time written and spoken in numbers rather than words. For example, 10.30 instead of half past ten.

Digital clocks and watches are used a lot. When time is written or printed, for example, in TV and cinema listings, it is usually given in digital time.

With the ordinary clock we have learnt about minutes past and minutes to the hour. The main difference with digital time is that we speak only of minutes past.

There are 60 minutes in the hour. Every minute past 12 is a minute past the hour.

Even when it is one minute before the next hour, in digital time it is 59 minutes past the last hour.

Digital time is said and written in a very easy way.

The hour is said or written first and then the number of minutes.



Ordinary time 20 past 9 Digital time 9.20



40 minutes after the last hour which is 8

## **Digital time**



In digital time we say or write the hour first and then the number of minutes past.

In programme 3 we covered counting in 5s. The minutes around the clock are counted in 5s up to 55 to give digital time.



10 o'clock In digital time the exact hour, o'clock, is written as 10.00

that is, 10 exactly, no minutes past.



a quarter past 10 In digital time you do not say or write 'a quarter past'. Just write down the hour and the number of minutes past.

#### 10.15



half past 10 In digital time you do not say or write 'half past'. Just write down the hour and count the minutes past.

10.30

a quarter to 11

In digital time you do not say or write 'a quarter to'. Just write down the hour and count the minutes past.

#### 10.45

## hour and the num



Here is a cinema listing. It lists the films that are on and the times that each film can be seen. The times are given in digital time.

IRG CINEMAS	BRIDGET JONES DIARY (15) 2.15 4.30 6.45 9.05	PEACHES (15) 2.25 4.50 7.10 9.25
0 - 1 ( - 1 - 1 - 0	THE WEDDING PLANNER (15)	CHOCOLAT (12)
Green Centre	12.30 3.00 5.30 8.30	5.30 8.20
Greenpark Street	ALMOST FAMOUS	TRAFFIC (18)
	1.10 3.50 6.25 9.00	2.45 5.20 8.10
Advance Booking	WHEN BRENDAN MET TRUDY (15)	
10am-8pm Daily	2.25 4.50 7.10 9.25	
	RUGRATS IN PARIS (GEN)	
(01) 6665555	2.10 4.00 6.05	

Look at the film called 'Almost Famous'. It can be seen at four different times.



## Fill in those times on the four clocks below and write the digital time underneath.

The first one is done for you.



## Working Out Change



At the start of this programme we covered subtraction or take away sums. Now we are going to use that skill to work out change.

## If you had 75 cents and you spent 42 cents, how much change would you have?

tens	cents
7	5 c
_ 4	2 c
3	3 c

STEPS

- Write down the amount you had.
- Write down the amount you spent.
- Split the sum into tens and cents.
- Always start on the right with the cents. In this example, 5 2 = 3.
- Then the tens. In this example, 7 4 = 3.
- Your change is 33c.

The method is the very same when using euros.

## If you had €5.68 and you spent €2.35, how much change would you have?

euros	tens	cents
€ 5.	6	8
- € 2.	2	5
€ 3.	4	3

STEPS

- Write down the amount you had.
- Write down the amount you spent.
- Split the sum into euros, tens and cents.
- Always start on the right with the cents. In this example, 8 5 = 3.
- Then the tens. In this example, 6 2 = 4.
- Then the euros. In this example, 5 2 = 3.
- Your change is €3.43.



As with the other take away sums, when you split the sum into euros, tens and cents, you may have to borrow one.



## If you borrow one, remember to change the number that you borrowed from.

	euros	tens	cents
You have	€4	. 4 \$	<sup>1</sup> 2
You spend	-€2	. 3	6
Your change	€2	. 1	6

#### **STEPS**

- Split the sum into euros, tens and cents.
- Always start on the right with the cents.
- You cannot take 6 from 2 so borrow 1 ten from the 10 side to make the 2 into 12. And so 12 6 = 6.
- The number you borrowed from must be changed. In this example from 5 to 4.
- Then the tens. In this example, 4 3 = 1.
- Then the euros. In this example, 4 2 = 2.
- Your change is €2.16



#### Try these sums.

Vour change	£	£	£	
You spend	-€2.64	-€4.25	-€3.55	
You have	€ 4.8 3	€ 7.5 0	€ 6.4 7	



## If you went to the cinema and you had €10.50 and you bought the following items, how much change would you have?

Cinema ticket	€ 6.00
Popcorn	€ 1.25
Coke	+€1.00
	€ 8.25

#### STEPS

- First add up what you spent, in this example it is €8.25
- Write down the amount you had.  $(10.4)^{4}$
- Write down the amount you spent.

-€	8.2	5
€	2.2	5

- Split the sum into euros, tens and cents.
- Take away the smaller number from the bigger number. Borrow one if necessary.
- Your change is €2.25



#### Try this exercise.

You had €15.50 and you paid for the following:

Bus fare	€ 1.50
Cinema ticket	€ 6.00
Ice-cream	€ 1.75
	€
	-

Amount you had		€	15.50	
Amount you spen	t	€		
Change		€		

## **Practice Page**





## Calculator







#### Programme 9: Calculator

This programme will cover:

#### Numbers for living



- 1. Introduce the calculator
- 2. Adding with a calculator
- 3. Practice sheet

#### Understanding the time



- 1. 24 hour clock
- 2. Changing am/pm times into 24 hour clock
- 3. Practice sheet

#### Using money



- 1. Adding money with a calculator
- 2. Adding shopping items
- 3. Adding shopping items

#### The following symbols will guide you with the worksheets.

INFORMATION

TIP



WRITE



RITE



For help with any of the worksheets, contact the NALA freephone support line at  $1800\ 20\ 20\ 65$ .



### Introduce the calculator



We have done a lot of work on adding.

There are different ways of adding. You can:

- add numbers in your head
- write sums down and add them
- use a calculator.

i

To calculate means to work things out, that is where the name calculator comes from.

A calculator is like a small computer and you tell it what to do.

You give the instructions by pressing the button. The calculator will add, subtract, multiply or divide any number and give the right answer as long as you press the right buttons.

The different parts of the calculator are shown here.





Calculators come in all shapes and sizes and the cost varies a lot also. It is possible to buy a pocket calculator for as little as €2.50. If you get used to using it, a calculator can be very useful in working out the cost of items and calculating your change.

Before trying to do sums with the calculator take a little time to get used to it.

- Turn on the calculator.
- You will see zero (0) on the screen.
- Press the buttons 1 to 8 and see them appear on the screen.
- Press the clear button (C), the numbers will be cleared away leaving you with zero (0).

There are 5 steps in doing an adding sum with a calculator.

For example: 4 + 3 =

#### STEPS

- 1. Make sure the calculator is on and you can see zero (0) on the screen.
- 2. Press the first number, in this case, **4**.
- 3. Press the adding button (+)
- 4. Press the second number, in this case, **3**.
- Press the equals button (=). Your answer will appear on the screen. The answer is 7.



Do the following adding sums using a calculator.





Check after you press each number that the correct number comes up on the screen.

Page 104



When adding 2 digit numbers using a calculator, you do not split up the number into tens and units.

You simply press the button for the first digit and straight away the button for the second digit.

For example, for the sum 54 + 42

#### **STEPS**

- 1. Make sure the calculator is on and you can see zero (0) on the screen.
- 2. First press **5** and then press **4**.
- 3. Press the adding button (+).
- 4. Then press **4** and then **2**.
- 5. Press the equals button (=). The answer is 96.

Do the following 2 digit sums using a calculator.54 + 32 =47 + 34 =14 + 42 =58 + 25 =40 + 33 =

The same applies to 3 digit numbers. Do not split up the number. On your calculator press the button for the first digit then the second then the third.



Do the following 3 digit sums using a calculator.

$$241 + 327 = 504 + 152 = 672 + 115 =$$





Back in programme 2, we learnt that there were 24 hours in one full day. That is, from 12 o'clock midnight tonight until 12 o'clock midnight tomorrow, there are 24 hours.

In programme 2, we separated these into:

the 12 hours from midnight to midday and the 12 hours from midday to midnight

Now we are going to look at the 24 hour clock. It is mostly used when times have to be very accurate. For example, for bus, train and plane times.

If you were told that your plane was leaving at 10.30, how would you know if it was 10.30 in the morning or 10.30 at night? Yes, they could use am and pm but mistakes can be made and people can get confused so the 24 hour clock is used.

There is one main difference between the 24 hour clock and the way we normally tell the time. When the time passes 12 o'clock midday, instead of going back to one o'clock for the next hour it goes on to 13 o'clock, then 14 o'clock, then 15 o'clock and so on up to 24. Each hour in the day has its own number so that there can be no confusion.

The 24 hour clock is used with digital time which we covered in the last programme.

So, 8 o'clock in the morning is 8.00 but 8 o'clock at night is 20.00

The list on the next page shows all of the 24 hours.





Usual hours	24 hour clock		
12 o'clock midnight	00.00		
1 o'clock in the morning	1.00		
2 o'clock in the morning	2.00		
3 o'clock in the morning	3.00		
4 o'clock in the morning	4.00		
5 o'clock in the morning	5.00		
6 o'clock in the morning	6.00		
7 o'clock in the morning	7.00		
8 o'clock breakfast time	8.00		
9 o'clock start work time	9.00		
10 o'clock in the morning	10.00		
11 o'clock break time	11.00		
12 o'clock midday	12.00		
1 o'clock lunch time	13.00		
2 o'clock return to work	14.00		
3 o'clock in the afternoon	15.00		
4 o'clock in the afternoon	16.00		
5 o'clock in the evening	17.00		
6 o'clock teatime	18.00		
7 o'clock in the evening	19.00		
8 o'clock at night	20.00		
9 o'clock at night	21.00		
10 o'clock at night	22.00		
11 o'clock at night	23.00		

## Starting at 12 o'clock midnight, compare the usual hours with the 24 hour times.



#### Write down these times in 24 hour time.

The first one is done for you.6 o'clock in the morning9 o'clock in the morning1 o'clock lunch time4 o'clock in the afternoon5 o'clock in the evening8 o'clock at night10 o'clock at night




Write the time shown on each clock in 24 hours

digital time. The first one is done for you. am is before midday and pm is after midday



a quarter past 5 (am) 5.15



5 past 7 (am)\_\_\_\_



half past 3 (am)\_\_\_\_\_



25 past 11 (am) \_\_\_\_\_



8 o'clock (pm)\_\_\_\_\_

TIP

Contact the NALA freephone support line at  $1800\ 20\ 20\ 65$  if you need any help with this worksheet.

Page 108



As already mentioned a calculator can be very useful when you are shopping. In the supermarket you can add up the prices of items as you put them into your basket or trolley. You will then know how much you have to pay at the check out.

When adding prices on a calculator it is important that you enter the numbers carefully. They say a calculator is only as good as its user.

You have to press the decimal point (dot) button between the euros and cents of any price.

For example: For the price	€5.30
You must press	the button 5
	the dot button $\bullet$
	the button 3
	the button zero 0



Without this decimal point (dot) the amount would be €530 five hundred and 30 euros instead of €5.30 five euros and 30 cents. There is a big difference.



**Practise entering these prices onto your calculator.** After each price press the clear button (C) to clear the screen.

€ 2.25	€4.80	€6.55	€2.99	€4.62
€ 10.40	€13.95	€15.42	€12.00	€ 10.99



## Adding shopping items

#### Here is a list of common items from a shop.

Toilet Rolls	€1.40	
Litre of milk	€0.90	
White sliced bread	€1.20	PR O
White Lemonade	€1.48	
Tin of beans	€0.60	
Potatoes	€2.00	
40 Tea bags	€1.56	JUCE
Sausages	€1.72	
Apple	€0.30	
Washing up liquid	€1.35	
Crisps	€0.35	
Orange juice	€0.90	
Biscuits	€0.80	



Write down the prices of the items below in the space. Then add the prices together using a calculator.





Remember to press the adding (+) button between each item and the equals (=) button to get your answer at the end.





#### Using the selection of items below, practice adding the list of items.





TIP

Write down the prices of the items below in the space. Then add the prices together using a calculator.



between the euros and cents in each price.

## **Practice Page**



# PROGRAMME 10

## The Bus









### The Bus

#### **Programme 10: The Bus**

This programme will cover:

#### Numbers for living

- 1. Subtracting with a calculator (take away)
- 2. Practice sheet 2 digits
- 3. Practice sheet mixed digits

#### Understanding the time



- 1. 24 hour clock bus timetable
- 2. Bus timetable practice
- 3. Airport arrivals information

#### Using money



- 1. Subtracting money with a calculator
- 2. Working out change
- 3. A weekly budget

#### The following symbols will guide you with the worksheets.

**INFORMATION** 

TIP



WRITE





For help with any of the worksheets, contact the NALA freephone support line at 1800 20 20 65.





We have done a lot of work on subtraction or take away.

There are different ways of taking away. You can:

- take away numbers in your head
- write sums down and take away
- use a calculator.

The method of using a calculator to do take away sums is just like using it to do adding sums. You use the take away button (-) instead of the adding button.

There are 5 steps in doing a take away sum with a calculator.

For example: 8 - 3 =

#### **STEPS**

- 1. Make sure the calculator is on and you can see zero (0) on the screen.
- 2. Press the biggest number first, in this case, 8.
- 3. Press the take away button (–)
- 4. Press the smaller number, in this case, **3**.
- 5. Press the equals button (=). Your answer will appear on the screen. The answer is **5**.



#### Do the following take away sums using a calculator.

$$7-4 = 6-1 = 8-3 =$$

$$9-5=$$
  $7-2=$   $9-6=$ 



When taking away 2 digit numbers using a calculator, you do not split up the number into tens and units.

On your calculator press the button for the first digit and then the button for the second digit.

For example, for the sum 39 - 17

#### **STEPS**

- 1. Make sure the calculator is on and you can see zero (0) on the screen.
- 2. First press **3** and then press **9**.
- 3. Press the take away button (–).
- 4. Then press **1** and then **7**.
- 5. Press the equals button (=). The answer is **22**.



## Do the following 2 digit take away sums using a calculator.

87 – 39 =	58 – 26 =	74 – 28 =
<b>67</b> – <b>25</b> =	59 – 39 =	<b>68</b> – <b>59</b> =

The same applies to 3 digit, numbers. Do not split up the number. On your calculator press the button for the first digit then the second, then the third.



Do the following 3 digit take away sums using a calculator.

499 - 135 =	689 - 547 =	600 - 499 =





Practise these	e take away su	ms using a calcula	ator.
4.7	2.0	4.1	
47	39	41	65
-14	- 27	-19	- 4 7
117	198	647	508
- 3 4	- 9 9	-132	- 4 9 9
266	25	43	876
- 3	-7	- 4 0	- 3 3 9
4 9	678	599	488
- 1 5	- 4 3	- 2 9 9	- 2 9





## Check the list of 24 hour times from the last programme (page 107) to work out the times

Bus and other timetables usually use the 24 hour clock so that there is no confusion about the given time.

Here is a timetable for a Dublin Bus, the number 28 from Edenmore to the city centre of Dublin.



#### Circle the following times on the timetable.

The first one is done for you.

Monday to Friday	5 to 7 in the morning $\checkmark$
Monday to Friday	20 past 8 in the morning
Monday to Friday	6 minutes past 6 in the evening
Saturday	5 past 9 in the morning
Saturday	20 past 4 in the afternoon
Sunday	2 o'clock in the afternoon
Sunday	a quarter past 10 at night

#### From EDENMORE 28

Edenmore Harmonstown Rd. Howth Rd. Fairview City Centre (Lr. Abbey St.)

MONDAY	ТО	FRIDAY	SA	ATURDA	YS	S	SUNDAYS	5
0610	1224	1631	0655	1240	1631	0930	1510	1850
0655	1240	1643	0710	1250	1643	1020	1525	1910
0710	1250	1655	0725	1305	1655	1045	1540	1925
0725	1305	1707	0735	1318	1707	1110	1550	1940
0735	1319	1719	0750	1329	1719	1135	1600	2000
0750	1329	1729	0805	1340	1729	1200	1620	2015
0800	1340	1744	0820	1352	1744	1225	1630	2050
0805	1352	1806	0830	1416	1806	1250	1640	2105
0820	1416	1828	0845	1426	1828	1315	1655	2120
0830	1426	1845	0905	1438	1845	1340	1710	2140
0845	1438	1902	0922	1452	1902	1400	1730	2155
0855	1452	1924	0935	1504	1924	1410	1745	2215
0905	1504	1952	1003	1514	1952	1420	1800	2230
0922	1514	2020	1018	1524	2020	1435	1820	2250
0935	1524	2048	1033	1534	2048	1450	1835	2305
1003	1534	2116	1058	1544	2116	1500		
1033	1544	2143	1113	1554	2143			
1058	1554	2209	1128	1604	2209			
1128	1609	2238	1154	1612	2238			
1154	1619	2303	1209	1620	2303			
1209			1224					



Here is a timetable for a Dublin Bus, the number 31 from Howth to the city centre of Dublin.



#### Give the times below in the 12 hour clock, indicating am or pm. Then circle each on the timetable.

The first one is done for you.

Monday to Friday	13.20	20 past 1 (pm)
Monday to Friday	10.40	
Monday to Friday	20.00	
Saturday	8.20	
Saturday	21.10	
Saturday	23.05	
Sunday	11.20	
Sunday	13.00	
Sunday	23.30	

	SUNDAYS	S	ζS	ATURDAY	SA	FRIDAY	AY TO I	MOND
2000	1550	0935	1845	1335	0655	1825	(1320)	0648
2015	1600	1000	1900	1350	0720	1835	1340	0710
2030	1615	1020	1910	1410	0735	1852	1350	0725
2045	1625	1040	1920	1425	0800	1900	1400	0740
2055	1640	1100	1935	1440	0820	1920	1420	0755
2105	1655	1120	1950	1455	0840	1930	1440	0805
2120	1705	1140	2005	1505	0850	1943	1500	0815
2135	1720	1200	2020	1515	0905	2000	1510	0820
2150	1735	1220	2040	1530	0920	2015	1520	0830
2205	1745	1240	2055	1545	0945	2030	1530	0840
2215	1800	1300	2110	1600	0955	2045	1540	0850
2230	1815	1320	2125	1615	1020	2100	1550	0900
2245	1825	1340	2145	1630	1040	2120	1600	0920
2300	1840	1400	2200	1640	1100	2135	1610	0930
2315	1855	1415	2215	1655	1110	2150	1620	0940
2330	1910	1425	2235	1710	1120	2205	1630	1000
2345	1925	1440	2250	1725	1140	2220	1640	1020
2350	1935	1505	2305	1740	1200	2240	1650	1040
0010	1945	1520	2325	1750	1215	2250	1700	1100
		1535	2340	1800	1230	2310	1710	1120
			2350	1815	1245	2325	1720	1140
			0010	1830	1305	2345	1732	1200
					1320	2400	1745	1220
						0010	1800	1235
							1805	1300



The arrivals information at the airport might look like this.

Flight		Arrival time
A 106	from AMSTERDAM	7.15
A 198	from ROME	8.55
B 108	from PARIS	9.05
B 112	from MADRID	11.45
C 152	from NEW YORK	13.50
C 106	from TORONTO	14.35
D 192	from CORK	18.10
D 180	from MUNICH	19.40
E 126	from LONDON	21.20
E 140	from GLASGOW	22.15



The arrival and departure times of airplanes are always given in 24 hour digital time.



## Answer the questions about arrival times, using the information above.

The first one is done for you.

#### The plane from

1.	Which plane comes in at 5 past 9 in the morning?	Paris
2.	Which plane comes in at 10 past 6 in the evening?	
3.	Which plane comes in at a quarter past 7 in the morning?	
4.	Which plane comes in at 10 to 2 in the afternoon?	
5.	Which plane comes in at 20 past 9 at night?	
6.	Which plane comes in at 20 to 8 at night?	





In the last programme, you used a calculator to add up a number of prices and work out how much you spent.

The next thing to work out is how much change you should get.

This can be done quickly using the calculator.

#### STEPS

1. First press the calculator buttons for the amount you have.



#### Don't forget the decimal point (dot) between euros and cents.

- 2. Then press the take away (-) button.
- 3. Press the calculator buttons for the amount you spent. This might be the price of one thing or the price of a number of things added together
- 4. Press the equals button (=) to see how much change you should get.
- TIP

Before working out your change on the calculator, be sure you know how much money you have at the start (how much you are going to give the shopkeeper). If you wish to buy more than one thing, add up all the things before trying to work out your change.

How much change do you have if you have  $\notin 5.00$  and you spend  $\notin 3.45 + \notin 1.20$ ?

First add €3.45 and €1.20 to get €4.65 Then €5.00 - €4.65 = €0.35



**Try this:** How much change do you have if you have €10.00 and you spend €2.40, €1.25 and €3.50?



Do the adding first.



### Working out change

#### Here is a list of common items from a shop.





### You have €20.00 and you want to buy the following items.

How much change will you get?

		100		
Orange juice	€	( China )	A	
Biscuits	€	1	53	
Apple	€		$\bigcirc$	
Bread	€			Th
Potatoes	€			KS I
Milk	€	C.		
Sausages	€		5	
Tea bags	€			
Total cost	€		-	7
Change from €20	€	e.		0



## A weekly budget





#### Use a calculator to work out this weekly budget.

I earn (net)

€200.00

I spend (my expenses)

Total spent	€
Mobile phone	€20.00
Lunches at work	€20.00
Pub	€10.00
Keep fit	€10.00
E.S.B.	€15.00
Food	€40.00
Rent	€60.00

#### How much is left to spend or save?

€\_\_\_\_

Take the amount spent from the amount you earned to get your answer.



If you want to manage your money better, it might help to make out a weekly budget of all your regular expenses and extras. Then you will know exactly where your money is going.

## Tips



**Signs** 

THE SIGN	WE SAY	IT MEANS		
+	plus	add		
_	minus	subtract / take away		
=	equals	is equal to		

#### **TIP** Remember when adding or subtracting

- Split the number into hundreds, tens and units.
- Always start on the right and add or subtract the units.
- Write your answer under the line on the units side.
- Repeat the process for the tens.
- If there are hundreds, repeat the process again for the hundreds.

For example:

hui	ndreds	tens	units		tens	units	
	4	1	6		8	9	
+	2	4	3	-	4	5	
	6	5	9		4	4	

For help with any of the worksheets, contact the NALA freephone support line at  $1800\ 20\ 20\ 65$ .





National Adult Literacy Agency 76 Lower Gardiner Street Dublin 1

TEL: (01) 855 4332 FAX: (01) 855 5475 EMAIL: literacy@nala.ie WEBSITE: www.nala.ie







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