

# Mathemagic & Destination Maths

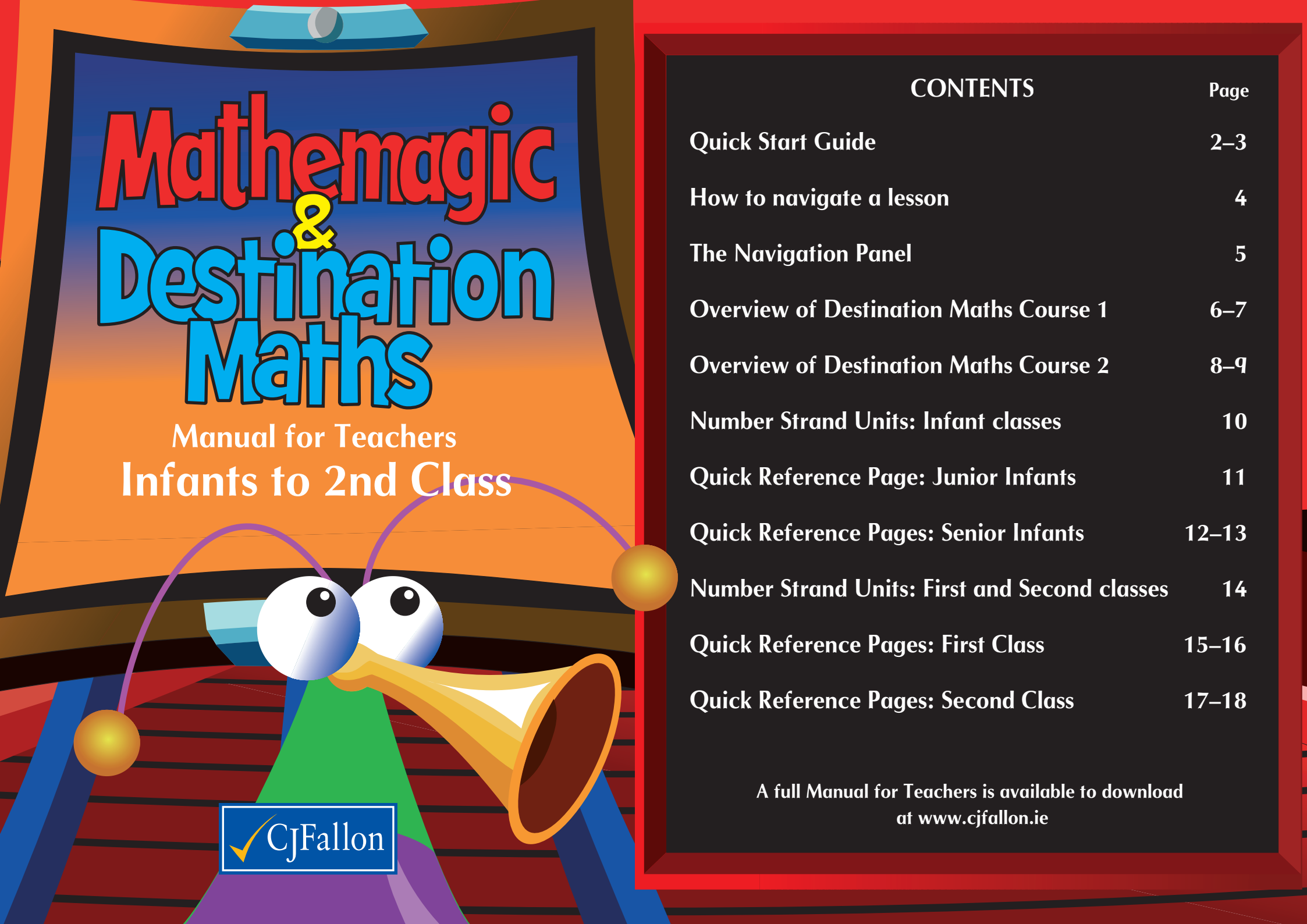
Manual for Teachers  
Infants to 2nd Class

Seamus O'Neill



 CJ Fallon





# Mathemagic & Destination Maths

Manual for Teachers  
Infants to 2nd Class



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A full Manual for Teachers is available to download  
at [www.cjfallon.ie](http://www.cjfallon.ie)

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# Mathemagic & Destination Maths

## Manual for Teachers Infants to 2nd Class

*Destination Maths* offers pupils an enjoyable means of developing and consolidating crucial mathematical concepts and skills.

This 'Quick Start Guide' will help you to get started with *Destination Maths* and shows how it can be used in conjunction with our **Mathemagic** series.

We have revised the bulk of *Destination Maths* to support the objectives of the revised Irish Primary Maths curriculum but it is worth noting that there are some aspects that are not directly applicable. They have been included because they may offer opportunities for extension and enrichment and may also provide support in managing differentiation in the classroom. *Destination Maths* supports all levels of mathematical ability in a clear, attractive and challenging manner.

To acquaint yourself with the layout of *Destination Maths*, we suggest you start with the five step tour. Once you become familiar with its layout, you will be better able to locate the *Destination Maths* sessions that correspond with the lessons in **Mathemagic**.



# Quick Start Guide to Destination Maths . . . . .

We start with a 5-step tour of Destination Maths.

# 1

[www.cjfallon.ie](http://www.cjfallon.ie)

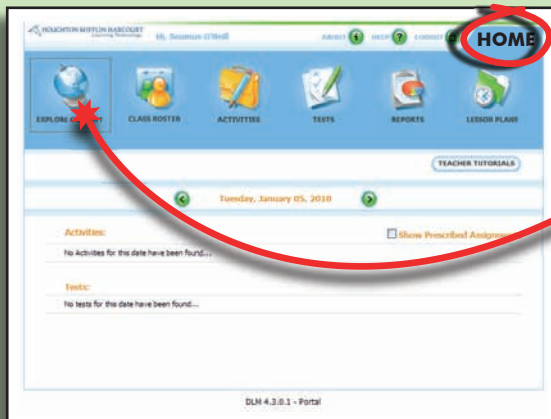
**Step 1. Login**



# 2

## Teacher's Home Page and Explore Content page

This is the **Teacher's Home Page**.



★ Click the **Explore Content** link.

This is the **Explore Content** page.



**Step 2. Launch the Course**

★ Click **Mastering Skills & Concepts: Course 1**.

# 3

## Main menu

This is the main menu of **Course 1**.  
Course 1 has four modules.



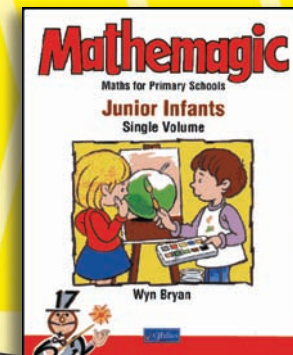
↑ This exit icon brings you back to the **Explore Content** page.

**Step 3. Choose a Module**

★ Click **Module 1: Number** (the train icon)

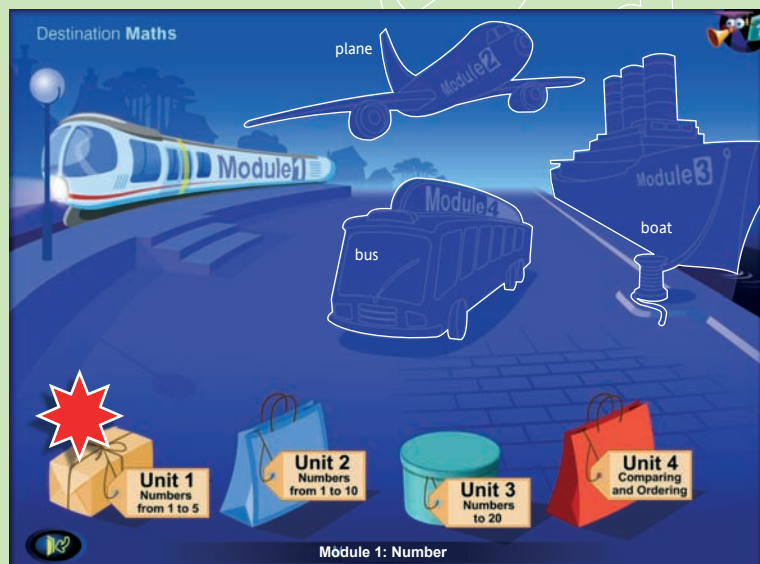


# ... and how to link it with **Mathemagic**



## 4 Module menu

This is the menu page of **Module 1** and the train icon is selected.  
Module 1 - Number has four labelled units.



↑ This door exit icon brings you back to the Explore Content page.

### Step 4. Choose a Unit



★ Click **Unit 1** (the parcel icon)

## 5 Unit menu

This is the menu page of **Unit 1: Numbers from 1 to 5** which has three sessions (or lessons).



↑ The opened parcel exit icon brings you back to the Module 1 menu.

### Step 5. Choose a Session



★ Click **Session 1** (the red wallet icon)  
**NB. You must click the picture on the left side**



You have begun **Lesson 1: Counting from 1 to 5.**

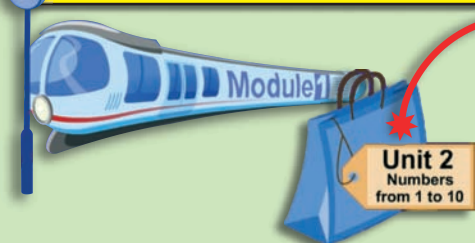
This lesson supports pages 22 - 26 of **Mathemagic** for Junior Infants.

The Quick Start Guide continues next page with navigation essentials.

Follow the five steps to explore the other two sessions in **Unit 1: Numbers from 1 to 5.**

# How to navigate a lesson in Destination Maths

## Navigation essentials



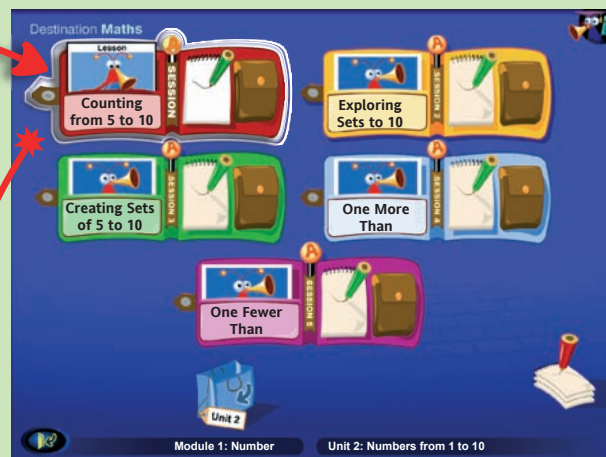
- ★ Click the **blue bag icon** on the menu page of **Module 1** to open **Unit 2: Numbers from 1 to 10**. This unit has five sessions (or lessons)



- ★ Click the **picture** on the left side of the red wallet icon to begin the lesson - **Counting from 5 to 10**.

The session number is shown in the spine of the wallet - if you click the *spine*, a page of **learning objectives** opens. If you click the *notepad* and not the picture, you will go to **practice** activities and clicking the *pouch* will bring you to a **workout** section. You must click the left side (*picture area* of the wallet) to open the actual lesson.

## Unit 2: Numbers from 1 to 10



You have begun **Lesson 1: Counting from 5 to 10**



back one step  
back to start of lesson  
back to module menu  
continue button

## Our Friend



Click my icon in the top right corner of each screen. I'm here to help.

## Lesson Structure

Each lesson moves through a series of steps offering a high level of interactivity. Many lessons are divided into two parts or *screens*. Following the lesson there are *practice* and *workout* activities based on the tutorial objectives. It is also possible to go directly to the practice and workout sessions using the *navigation panel*.

## The Navigation Panel

Click the **blue button with the double arrow** to open or close the navigation panel. Each small orange-coloured box in the navigation panel represents a transitional step in the lesson. The lesson step you are currently on is always highlighted in yellow. Pressing the *continue button* when asked to do so during the lesson, moves the current step to the next box.



See this lesson expanded on page 18

In this teachers' manual we have labelled the boxes **a, b, c, d** etc. to identify each transitional step. You can click a box to jump immediately to that lesson step. See opposite page.



# ... and use the Navigation Panel to link-in **Mathemagic**

A session (lesson) in **Destination Maths** can cover several strand units of the Irish Revised Primary Maths Curriculum. Most sessions span the content of several pages of **Mathemagic** and sometimes a session will straddle the unit objectives of two class levels.

In preparing their Lesson Plans, teachers will want to break sessions into shorter teaching units to link-in pages of the text book with **Destination Maths**. Teachers can use the navigation panel to do this. In this manual each step is identified by a letter so that it is possible to say where to begin and end a lesson. On-screen these are small orange-coloured boxes. The teacher clicks a box to go directly to that point in the lesson.

The sample navigation panel shown here has sixteen transitional steps labelled **a** to **p** (across two screens labelled S1 and S2). Steps **a** to **i** are relevant to Junior Infants as they are within the number range 0 to 5 and introduce the concept of the number zero. Steps **j** to **p** are in keeping with the Senior Infant programme as they are within the number range 5 to 10. They teach counting *one fewer than...* the previous number.

**Example:**  
Course 1  
Module 1  
Unit 2  
Session 5



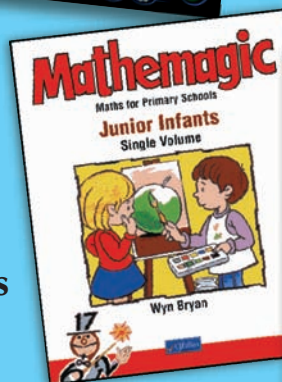
See page 18 of the online manual. See page 22 of the online manual.

**step a**



There are 5 musicians in a park band-stand to begin. Then one by one they leave the scene until there are no musicians left.

**step i**



**Junior Infants**

p. 47



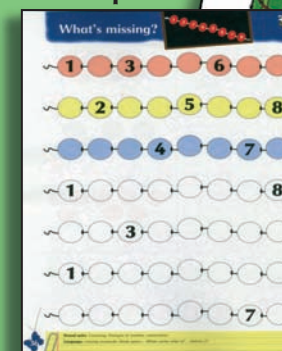
**step j**



Our Friend has 10 balloons to start and through a series of events, the balloons burst one at a time until there are only 5 balloons left.

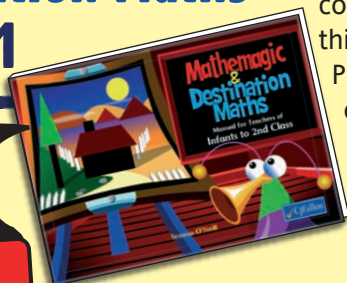
**step p**

p. 36

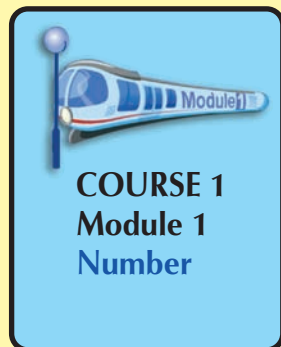


**Senior Infants**

# Overview of Destination Maths Course 1



Download the full 65-page manual online at [www.cjfallon.ie](http://www.cjfallon.ie)




Destination Maths Course 1 covers many areas of the curriculum from Junior Infants to Second Class.

Course 1 has four modules: 1. Number 2. Addition & Subtraction 3. Geometry & Measurement and 4. Algebra. The four modules are comprised of 9 units - a total of 25 sessions and 330 lesson steps. The colour scheme of the sessions corresponds to the colour pattern of the wallet icons which are used to gain access to each session. As well as giving a general overview of Course 1, this table shows how the sessions and lesson steps are distributed across class levels in the context of supporting the Irish Revised Primary Maths Curriculum. The page numbers under each class heading, refer to pages in the full users' manual which is available online at [www.cjfallon.ie](http://www.cjfallon.ie). Copies can be requested by telephone by calling 01-6166490.



|                                    |           |              |             |             |     | Lesson Themes |                                  |  |
|------------------------------------|-----------|--------------|-------------|-------------|-----|---------------|----------------------------------|--|
|                                    |           | Lesson steps | J Inf       | S Inf       | 1st | 2nd           |                                  |  |
| <br>Unit 1<br>Number to 5          | Session 1 | a - p        | page 14     |             |     |               | Counting from 1 to 5             | Morning time    Firefighters    Food     |
|                                    | Session 2 | a - g        | 14          |             |     |               | Exploring sets to 5              | Freezing in the snow                     |
|                                    | Session 3 | a - k        | 16          |             |     |               | Creating sets of 1 to 5          | Toy factory                              |
| <br>Unit 2<br>Number to 10         | Session 1 | a - l        |             | 18          |     |               | Counting 5 to 10                 | Construction site                        |
|                                    | Session 2 | a - f        |             | 20          |     |               | Exploring sets to 10             | Cooking soup                             |
|                                    | Session 3 | a - g        |             | 20          |     |               | Creating sets of 5 to 10         | Chicken coop                             |
|                                    | Session 4 | a - j        | 16<br>a - f | 22<br>g - j |     |               | One more than                    | Circus Act I    Circus Act II            |
|                                    | Session 5 | a - p        | 18<br>a - i | 22<br>j - p |     |               | One fewer than and zero          | Concert in the park    Bursting balloons |
| <br>Unit 3<br>Number to 20         | Session 1 | a - m        |             |             | 40  |               | Counting from 10 to 20           | Finding pearls    Underwater treasure    |
|                                    | Session 2 | a - q        |             |             | 40  |               | Counting from 20 to 50           | Suitcases    Air passengers              |
| <br>Unit 4<br>Comparing & Ordering | Session 1 | a - g        |             | 24          |     |               | More than, less than or the same | Tropical rain                            |




**COURSE 1**  
**Module 2**  
**Addition & Subtraction**




Unit 1  
Addition

- Session 1** a - i
- Session 2** a - i
- Session 3** a - p
- Session 4** a - k



Unit 2  
Subtraction

- Session 1** a - j




**COURSE 1**  
**Module 3**  
**Geometry & Measurement**



Unit 1  
Measurement


- Session 1** a - e
- Session 2** a - l
- Session 3** \* a - t
- Session 4** a - u




Unit 2  
Geometry

- Session 1** a - y
- Session 2** a - q

\* Lesson Steps of Session 3 are spread over pages 26, 28, 30 and 46 of the manual.



**COURSE 1**  
**Module 4**  
**Algebra**



Unit 1  
Extending Patterns

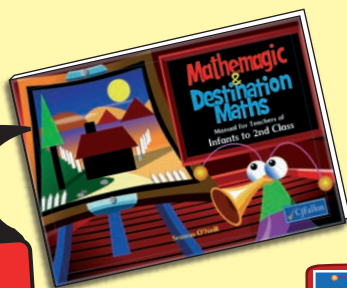
- Session 1** q - m
- Session 2** a - w
- Session 3** a - q

Lesson steps

| J Inf | S Inf                         | 1st           | 2nd | Lesson Themes                        |  |
|-------|-------------------------------|---------------|-----|--------------------------------------|--|
|       | 24                            |               |     | Combining and joining within 10      | Baby turtles and crocs                           |
|       | 26                            |               |     | Comparing within 10                  | Happy Birthday                                   |
|       |                               | 42            |     | Sums within 20 with 10 as one addend | Dinosaur teeth and bones                         |
|       |                               | 42            |     | Sums within 20                       | Recycling bottles and cans                       |
|       |                               |               |     |                                      |  |
|       |                               | 44            |     | Differences within 10                | Game of bowling                                  |
|       |                               |               |     |                                      |  |
|       | 30                            | 44<br>workout |     | Length                               | Long and short straws    Measuring in footprints |
|       | 32                            |               |     | Weight                               | Weighing packages    Pan scales                  |
|       | 26-28-30<br>a - c n - p d - m | 46<br>q - t   |     | Time                                 | Space mission    Order    Days of the week       |
|       | 32<br>a - o                   | 46<br>p - u   |     | Money                                | Money bags    Coins                              |
|       |                               |               |     |                                      |  |
|       |                               | 48            |     | Two-dimensional Shapes               | Street map - Triangles, Rectangles and Squares   |
|       |                               |               |     | Three-dimensional Shapes             | Candle shapes    Nets of boxes                   |
|       |                               |               |     |                                      |  |
|       | 28<br>a - e                   | 48<br>f - m   |     | Shapes                               | Tiling    Shapes and colours                     |
|       |                               | 50            |     | Number Patterns                      | Mystery castle    Missing numbers                |
|       |                               | 50            |     | Representing and Interpreting Data   | Jelly bean factory    Pictograms & Bar Graphs    |

# Overview of Destination Maths Course 2

For greater detail, use the full 65-page online manual.

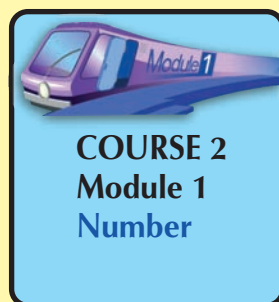


Destination Maths Course 2 consists of four modules:

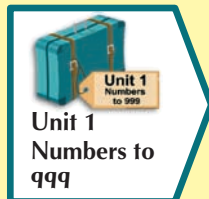
1. Number 2. Addition & Subtraction 3. Geometry & Measurement and 4. Algebra.

The four modules are comprised of 6 units, 13 sessions and 190 lesson steps.

The table shows the sessions and lesson steps of Course 2 and how they are distributed across 1st and 2nd classes. There are some sessions whose teaching objectives extend beyond the 2nd class curriculum and these are indicated by the arrow shapes in the 3rd class column.



COURSE 2  
Module 1  
Number



Unit 1  
Numbers to  
999

- Session 1
- Session 2
- Session 3
- Session 4
- Session 5

Lesson steps

- a - k
- a - k
- a - k
- a - h
- a - s

| 1st     | 2nd         | 3rd | 4th | 5th | 6th | Lesson Themes                       |                        |
|---------|-------------|-----|-----|-----|-----|-------------------------------------|------------------------|
| 52      |             |     |     |     |     | Counting by Grouping (to 99)        | Picking apples         |
| 52      |             |     |     |     |     | Place Value: Tens and Ones (to 99)  | Bats in a cave         |
|         | 58<br>a - e | →   |     |     |     | Place Value: H T & O (to 999)       | Counting salmon        |
|         | 58<br>a - d | →   |     |     |     | Expanded form of H T & O (max 699)  | Scoring game points    |
|         | 60<br>a - g | →   |     |     |     | Comparing numbers (max 599)         | Fish and Reptile teeth |
|         |             |     |     |     |     |                                     |                        |
| 54      |             |     |     |     |     | Sums less than 100                  | In the Rainforest      |
|         | 60          |     |     |     |     | Subtraction with regrouping (to 99) | Night owls             |
|         |             |     |     |     |     |                                     |                        |
| 54<br>a | →           | →   |     |     |     | Fractions: of a Whole, of a Group   | Garden party           |





Unit 2 Measurement

Session 1  $a - q$

Session 2  $a - r$

The diagram illustrates the structure of Unit 2 Measurement. It features a wooden chest icon labeled 'Unit 2 Measurement'. A large curly bracket to the right of the chest indicates that the unit branches into two sessions: 'Session 1' with the expression  $a - q$ , and 'Session 2' with the expression  $a - r$ .

# Unit 1 Patterns and Properties

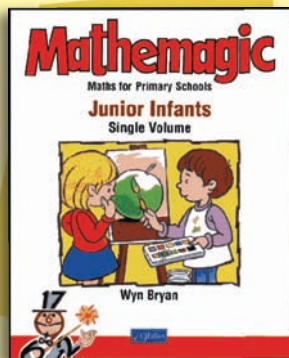
## Session 1

$a - 1$

| 1st         | 2nd  | 3rd  | 4th | 5th | 6th | Lesson Themes          |  |
|-------------|--|--|-----|-----|-----|------------------------|--|
|             | 62<br>a - j  |  |     |     |     | Area                   | Painting and decorating                |
| 56<br>a - e |  |  |     |     |     |                        | Capacity & Volume                      |
|             |  |  |     |     |     |                        |  |
|             | 62<br>a - d  |  |     |     |     | Time                   | Air traffic control                    |
| 56<br>a - d | 64<br>e - j  |  |     |     |     |                        | Money: 1, 5, 10, 20, 50c and Eurocoins |
|             |  |  |     |     |     |                        |  |
|             | 64   |  |     |     |     | Properties of Addition | Hardware store                         |
|             |  |  |     |     |     |                        |  |



# Junior Infants



Here is a summary of the Number strand units for Junior Infants:

## Counting:

- count the number of objects in a set, 1 to 10

## Comparing & Ordering:

- compare equivalent and non-equivalent sets 1 - 5 by matching without using symbols
- order sets of objects by number, 1 - 5
- use the language of ordinal number: first, last

## Analysis of Number:

### Combining:

- explore the components of number, 1 - 5
- combine sets of objects, totals to 5

### Partitioning:

- partition sets of objects, 1 - 5

### Numeration:

- develop an understanding of the conservation of number, 1 - 5
- read, write and order numerals, 1 - 5
- identify the empty set and the numeral zero
- tell at a glance the number of objects in a set, 1 - 5
- solve simple oral problems, 0 - 5

## COURSE 1: Module 1: Number

### Unit 1: Numbers from 1 to 5

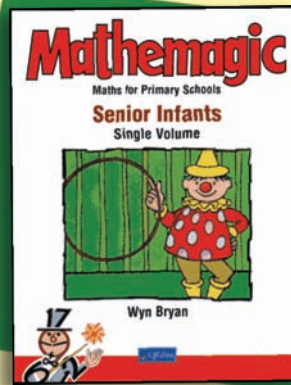
All the lesson objectives of Unit 1 correspond to the Number strand of the Junior Infant programme.

The *concept of zero* and *adding one more* are covered in Unit 2 session 4 and session 5.

Apart from Number, there are also *classifying* activities which Junior Infants will enjoy and teachers may find useful. These can be found in the Workout exercises and are referenced on the Quick Reference page 12.



# Senior Infants



Here is a summary of the Number strand units for Senior Infants:

## Counting:

- count the number of objects in a set, 0 to 20

## Comparing & Ordering:

- compare equivalent and non-equivalent sets 0 - 10 by matching
- order sets of objects by number, 0 - 10
- use the language of ordinal number: first, second, third, last

## Analysis of Number:

### Combining:

- explore the components of number, 1 - 10
- combine sets of objects, totals to 10

### Partitioning:

- partition sets of objects, 0 - 10
- use the symbols + and = to construct word sentences involving addition

### Numeration:

- develop an understanding of the conservation of number, 0 - 10
- read, write and order numerals, 0 - 10
- identify the empty set and the numeral zero
- estimate the number of objects in a set, 2 - 10

## COURSE 1: Module 1: Number

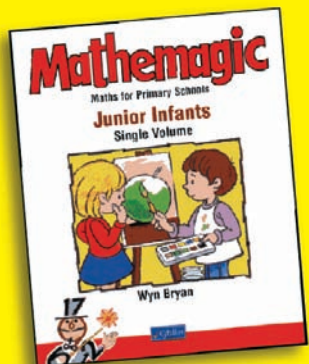
### Unit 2: Numbers from 1 to 10

Unit 2 supports the aims of the Number strand of the Curriculum as covered in the **Mathemagic** textbook for Senior Infants. Use the Quick Reference as a starting point to link pages of the textbook with the sessions of Destination Maths.



# Quick Reference page for Junior Infant Teachers

The Quick Reference pages are designed to facilitate teachers who wish to follow the precise page-by-page order of work as set out in the **Mathemagic** textbook. Hence the **textbook pages are in sequence**. In the table, the pages of the full online manual and their related DM activities take their order from the textbook and otherwise follow no particular sequence. Textbook revision pages and pages that don't have matching DM interactivities are not included in the table.



## Junior Infants Number

pages in full manual  
online at [www.cjfallon.ie](http://www.cjfallon.ie)

## Destination Maths Course I

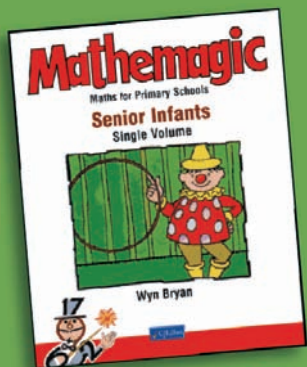
textbook pages: Strand units

pages:

location of the interactivity in Modules 1 or 2

|           |   |    |  |
|-----------|---|----|--|
| 4 - 6     | Classifying: similar objects                            | 15 | Module 1: Unit 1: Session 1 - Workout exercises (See Note 1 page 14)     |
| 4 - 6     | Classifying: similar objects                            | 19 | Module 1: Unit 2: Session 1 - Workout exercises (See blue box page 15)   |
| 11 - 13   | Classifying: one attribute (colour)                     | 17 | Module 1: Unit 2: Session 3 - Workout exercises (See blue box page 15)   |
| 22 - 26   | Counting; Analysis of number - numbers 1 and 2          | 14 | Module 1: Unit 1: Session 1 - lesson steps a to g                        |
| 37 - 39   | Counting; Analysis of number - numbers 1, 2 and 3       | 14 | Module 1: Unit 1: Session 1 - lesson steps h to i                        |
| 43 - 47   | Counting; Analysis of number - numbers 1, 2, 3 and 4    | 14 | Module 1: Unit 1: Session 1 - lesson steps j to l                        |
| 70        | Analysis of number - combining numbers up to 3          | 14 | Module 1: Unit 1: Session 2 - lesson steps a to d                        |
| 71        | Analysis of number - combining numbers up to 4          | 14 | Module 1: Unit 1: Session 2 - lesson steps e to g                        |
| 79 - 82   | Counting; Analysis of number - numbers 1, 2, 3, 4 and 5 | 14 | Module 1: Unit 1: Session 1 - lesson steps m to p                        |
| 84 - 87   | Counting; comparing - consolidation work                | 14 | Module 1: Unit 1: Session 1 - Practice and Workout exercises             |
| 88 - 89   | Number: Comparing, ordering- numbers 1 to 5             | 16 | Module 1: Unit 1: Session 3 - lesson steps a to g                        |
| 90 - 94   | Analysis of number - combining (one more)               | 16 | Module 1: Unit 2: Session 4 - lesson steps a to f (See blue box page 17) |
| 97 - 101  | Analysis of number - concept of zero                    | 18 | Module 1: Unit 2: Session 5 - lesson steps a to i                        |
| 104 - 105 | Analysis of number - ordering - numbers 1 to 5          | 16 | Module 1: Unit 1: Session 3 - lesson steps h to k                        |

# Quick Reference page for Senior Infant Teachers



## Senior Infants Number

pages in full manual  
online at [www.cjfallon.ie](http://www.cjfallon.ie)

## Destination Maths Course I

textbook pages: Strand units

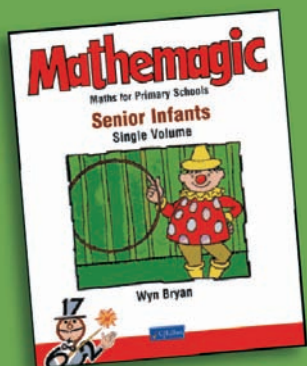
pages:

location of the interactivity in Modules 1, 2 or 3

| more pages | For non-number Strand units (Senior Infants) see pages | 27 - 32 | Module 3: Length, Weight, Time and Money      Module 4: Extending Patterns                      |
|------------|--|---------|---|
| 8 - 9      | Analysis of number - combining (within 5)              | 24      | Module 2: Unit 1: Session 1 - lesson steps a to c   |
| 14 - 16    | Counting; Analysis of number - numbers 1 to 6          | 18      | Module 1: Unit 2: Session 1 - lesson steps a to c   |
| 19 - 20    | Analysis of number - combining (the story of 6)        | 26      | Module 2: Unit 1: Session 2 - lesson steps g to i - <a href="#">The Six Spinner</a> page 27     |
| 21 - 23    | Counting; Analysis of number - numbers 1 to 7          | 18      | Module 1: Unit 2: Session 1 - lesson steps d to f   |
| 25         | Analysis of number - combining - count on (add one)    | 22      | Module 1: Unit 2: Session 4 - lesson steps g to j (See information in blue box page 17)         |
| 28 - 29    | Analysis of number - combining (the story of 7)        | 26      | Module 2: Unit 1: Session 2 - lesson steps a and b - <a href="#">The Number Spinner</a> page 25 |
| 30 - 31    | Comparing and ordering - more than, less than (max. 7) | 24      | Module 1: Unit 4: Session 1 - lesson steps a to g   |
| 33 - 35    | Counting; Analysis of number - numbers 1 to 8          | 18      | Module 1: Unit 2: Session 1 - lesson steps d to g   |
| 36         | Counting; Analysis of number - one fewer               | 22      | Module 1: Unit 2: Session 5 - lesson steps j to p (See information in blue box page 17)         |
| 41 - 42    | Analysis of number - combining (the story of 8)        | 26      | Module 2: Unit 1: Session 2 - lesson steps c to f - <a href="#">The Eight Spinner</a> page 27   |
| 46 - 47    | Ordering - first, second, third ...                    | 26      | Module 3: Unit 1: Session 3 - lesson steps a to c   |
| 60 - 62    | Counting; Analysis of number - numbers 1 to 9          | 18      | Module 1: Unit 2: Session 1 - lesson steps h and i  |
| 63 - 65    | Counting; Analysis of number - numbers 1 to 10         | 18      | Module 1: Unit 2: Session 1 - lesson steps j to l inc. Practice and Workout exercises           |
| 65         | Consolidation activities (a) - numbers up to 10        | 20      | Module 1: Unit 2: Session 2 - lesson steps a to f inc. Practice and Workout exercises           |
| 65         | Consolidation activities (b) - numbers up to 10        | 20      | Module 1: Unit 2: Session 3 - lesson steps a to g inc. Practice and Workout exercises           |
| 74 - 75    | Analysis of number - combining (numbers up to 9)       | 24      | Module 2: Unit 1: Session 1 - lesson steps d to f   |
| 81 - 82    | Analysis of number - combining (numbers up to 10)      | 24      | Module 2: Unit 1: Session 1 - lesson steps g to i inc. Practice and Workout exercises           |
| 94 - 97    | Comparing and ordering - more than, less than (to 10)  | 24      | Module 1: Unit 4: Session 1 - Practice and Workout exercises                                    |

# Quick Reference page for non-number Strand units

## Senior Infant Teachers



### Senior Infants

pages in full manual  
online at [www.cjfallon.ie](http://www.cjfallon.ie)

### Destination Maths Course I contd.

textbook pages: Strand units

pages:

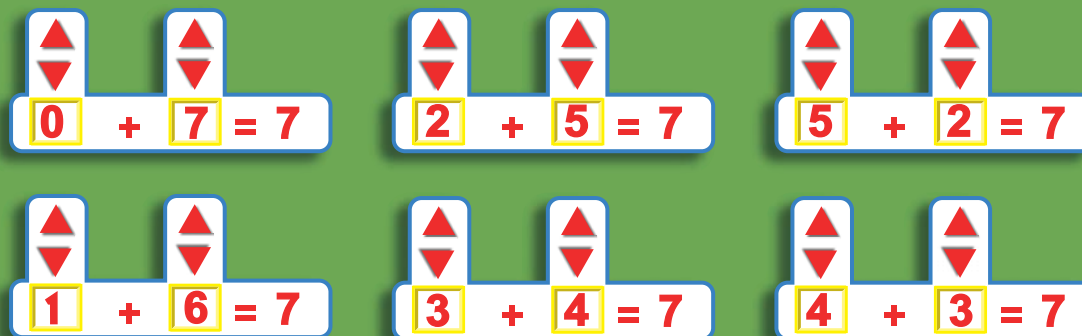
location of the interactivity in Modules 3 or 4

|           |                          |    |  |
|-----------|--------------------------|----|--|
| 12 - 13   | Extending patterns       | 28 | Module 4: Unit 1: Session 1                      |
| 85 - 86   | Time: one hour intervals | 28 | Module 3: Unit 1 : Session 3 lesson steps n to p |
| 87        | Time: days of the week   | 30 | Module 3: Unit 1 : Session 3 lesson steps d to m |
| 99 - 100  | Length                   | 30 | Module 3: Unit 1 : Session 1                     |
| 101 - 106 | Weight                   | 32 | Module 3: Unit 1: Session 2                      |
| 115 - 121 | Money                    | 32 | Module 3: Unit 1: Session 4                      |

### Interactive Number Spinners

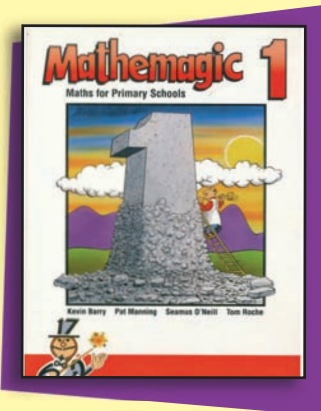


Spin the UP and DOWN arrows.  
How many frogs and ducks are in the water at each spin?



The maximum sum on this Number Spinner is 10. It can be used to consolidate the story of any number up to and including 10. It is an ideal interactive device to help the children develop an understanding of patterns in their grasp of the addition facts. It will be useful at any stage of the Senior Infant course. There are several spinners used throughout Destination Maths.

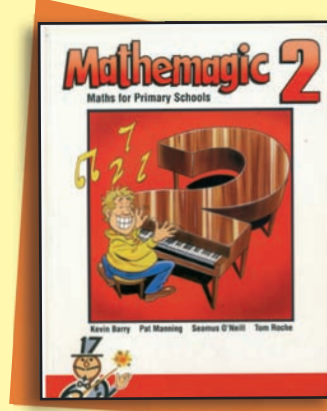
# 1st Class



Number strand units for **First class**:

- **Count** the number of objects in a set up to and beyond **20**
- read, write and order numerals **0 - 99**
- estimate the number of objects in a set **0 - 20**
- equivalent and non-equivalent sets **0 - 20** using words: *more, less, by how much*
- order sets of objects by number
- ordinal numbers *first* to *tenth*
- **Place Value**: explore, identify and record from **0 - 99**
- **Addition**: combining or partitioning sets **0 - 20**
- commutative, associative and zero properties of addition
- mental strategies for addition facts within **20**
- construct number sentences and number stories; solve problems involving addition within **20**
- add numbers without and with renaming within **99**
- repeated addition and group counting
- **Subtraction**: develop an understanding of subtraction as deducting  
as complementing and  
as difference **0 - 20**
- develop and/or recall mental strategies for subtraction **0 - 20**
- construct number sentences and number stories; solve problems involving subtraction **0 - 20**  
estimate differences within **99**  
subtract numbers *without* renaming within **99**  
use the symbols **+**, **-**, **=**
- solve one-step problems involving addition or subtraction.  
**Fractions**: *half* of sets to **20**
- **Algebra**: recognise pattern, including odd and even numbers
- explore and use patterns in addition facts
- understand the use of a frame to show the presence of an unknown number

# 2nd Class



Number strand units for **Second class**:

- **Count** the number of objects in a set **beyond 20**
- read, write and order numerals **0 - 199**
- estimate the number of objects in a set **0 - 20**
- equivalent and non-equivalent sets **0 - 20** using symbols **<**, **>** and **=**
- order sets of objects by number
- ordinal numbers *first* to *tenth*
- **Place Value**: explore, identify and record from **0 - 199**
- **Addition**: combining or partitioning sets **0 - 20**
- commutative, associative and zero properties of addition
- mental strategies for addition facts within **99**
- construct number sentences and number stories; solve problems involving addition within **20**  
add numbers without and with renaming within **99**
- repeated addition and group counting
- **Subtraction**: develop an understanding of subtraction as deducting  
as complementing and  
as difference **0 - 20**
- develop and/or recall mental strategies for subtraction
- construct number sentences and number stories; solve problems involving subtraction **0 - 20**  
estimate differences within **99**  
subtract numbers *without* and *with* renaming within **99**  
use the symbols **+**, **-**, **=**, **<**, **>**
- solve one-step and two-step problems involving addition or subtraction.
- **Fractions**: *halves* and *quarters* of sets to **20**
- **Algebra**: recognise patterns and predict subsequent numbers
- explore and use patterns in addition facts
- understand the use of a frame to show the presence of an unknown number





## Quick Reference page for First Class Teachers

pages in full manual  
online at [www.cjfallon.ie](http://www.cjfallon.ie)

## Destination Maths Course I

textbook pages: Strand units

pages:

location of the interactivity in Modules 1 to 4

|         |   |    |  |
|---------|---|----|--|
| 8       | Counting and numeration: sets 11, 12                    | 40 | <b>Course 1:</b> Module 1: Unit 3 : Session 1 - lesson steps a to c ( also see Practice Ex. 1) |
| 9 - 10  | Addition: combining sets to 12                          | 42 | <b>Course 1:</b> Module 2: Unit 1 : Session 4  |
| 11 - 12 | Ordering: first, second, third ...                      | 26 | <b>Course 1:</b> Module 3: Unit 1: Session 3 - lesson steps a to c                             |
| 17      | Counting and numeration: sets 13, 14                    | 40 | <b>Course 1:</b> Module 1: Unit 3 : Session 1 - lesson steps d to e ( Practice Ex. 1, 2 and 3) |
| 18, 19  | Addition: combining sets 13, 14                         | 40 | <b>Course 1:</b> Module 2: Unit 1 : Session 4  |
| 20      | Time: Sequencing: Days of the week                      | 30 | <b>Course 1:</b> Module 3: Unit 1: Session 3 - lesson steps d to m                             |
| 24      | Counting and numeration: sets 15, 16                    | 40 | <b>Course 1:</b> Module 1: Unit 3 : Session 1 - lesson steps f to g ( also see Workout)        |
| 25      | Addition: combining sets 15, 16                         | 42 | <b>Course 1:</b> Module 2: Unit 1 : Session 4  |
| 26 - 27 | Place value: Tens and Units counting to 20              | 42 | <b>Course 1:</b> Module 2: Unit 1 : Session 3  |
| 29      | 2-D Shapes: Sort and describe basic shapes              | 48 | <b>Course 1:</b> Module 3: Unit 2 : Session 1  |
| 30      | Counting and numeration: sets 17, 18                    | 40 | <b>Course 1:</b> Module 1: Unit 3 : Session 1 - lesson steps h to j ( Practice Ex. 5 and 6)    |
| 31      | Addition: combining sets 17, 18                         | 42 | <b>Course 1:</b> Module 2: Unit 1 : Session 4 - <b>addition Number Fact spinners</b> page 43   |
| 32 - 33 | Representing & interpreting Data                        | 50 | <b>Course 1:</b> Module 4: Unit 1 : Session 3 - lesson steps a to d                            |
| 34      | Counting and numeration: sets 19, 20                    | 40 | <b>Course 1:</b> Module 1: Unit 3 : Session 1 - lesson steps k to m and Practice Ex. 4         |
| 35      | Addition: counting on from 10                           | 40 | <b>Course 1:</b> Module 2: Unit 1 : Session 3 - lesson steps a to e                            |
| 40 - 45 | Addition: combining with 10 (up to a total of 20)       | 40 | <b>Course 1:</b> Module 2: Unit 1 : Session 3 - lesson steps f to p                            |
| 47 - 50 | Length: non-standard units , concept of standard unit   | 44 | <b>Course 1:</b> Module 3: Unit 1: Session 1 - lesson steps d and e and Workout                |
| 53 - 57 | Subtraction: deducting within 10                        | 44 | <b>Course 1:</b> Module 2: Unit 2 : Session 1 - <b>the Minus spinner</b> page 45               |
| 60 - 61 | Addition - problem solving (add by counting on )        | 42 | <b>Course 1:</b> Module 2: Unit 1 : Session 4 - Practice and Workout sessions                  |
| 67 - 68 | Pattern: patterns in 2 - including odd and even numbers | 50 | <b>Course 1:</b> Module 4: Unit 1 : Session 2 - lesson steps a to e                            |
| 71 - 73 | Subtraction: difference within 10                       | 44 | <b>Course 1:</b> Module 2: Unit 2 : Session 1  |
| 74 - 77 | Place value: Tens and Units counting to 50              | 40 | <b>Course 1:</b> Module 1: Unit 3 : Session 2  |



## Quick Reference page for First Class Teachers

pages in full manual  
online at [www.cjfallon.ie](http://www.cjfallon.ie)

## Destination Maths Courses 1 and 2

textbook pages: Strand units

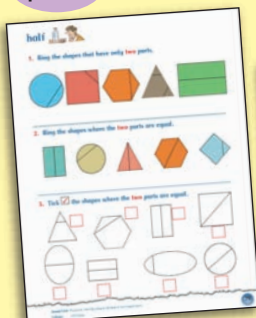
pages:

location of the interactivity in Modules 1 to 4

|           |  |    |  |
|-----------|--|----|--|
| 79 - 80   | Fractions: Half of a whole shape                     | 54 | Course 2: Module 2 : Unit 2 : Session 1 - lesson step a                                  |
| 81 - 82   | Addition of Tens & Units without renaming            | 54 | Course 2: Module 2 : Unit 1 : Session 1 - lesson steps a to f                            |
| 92 - 94   | Time: Half past                                      | 46 | Course 1: Module 3: Unit 1: Session 3 - lesson steps q to t - Time spinners page 47      |
| 95 - 96   | Place value: Tens and Units counting to 99           | 52 | Course 2: Module 1 : Unit 1 : Session 1 - the 99 spinners page 53                        |
| 97 - 99   | Place value: Tens and Units numbers to 99            | 52 | Course 2: Module 1 : Unit 1 : Session 2  |
| 102 - 105 | Addition of Tens & Units with renaming               | 54 | Course 2: Module 2 : Unit 1 : Session 1 - lesson steps g to r - Addition spinner page 55 |
| 106 - 107 | Weight: Using non standard weights on a pan scales   | 41 | Course 1: Module 1: Unit 3: Session 2 - the Workout exercise                             |
| 110 - 113 | Money: Amounts to value of 10 cent and 20 cent coins | 46 | Course 1: Module 3: Unit 1: Session 4 - lesson steps p to u                              |
| 132       | Capacity: the litre                                  | 56 | Course 2: Module 3: Unit 1: Session 2 - lesson steps a to e                              |
| 136 - 138 | Money: the 50 cent coin                              | 56 | Course 2: Module 3: Unit 2: Session 2 - lesson steps a to d                              |

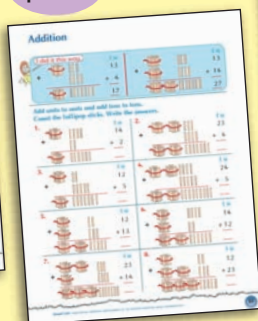
p.132

p.79



Course 2  
Module 2  
Unit 2  
Session 1  
Lesson step a

p.81



Course 2  
Module 2  
Unit 1  
Session 1  
Lesson steps a - f

p.93



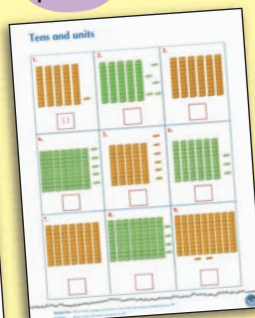
Course 1  
Module 3  
Unit 1  
Session 3  
Lesson steps q - t

p.95



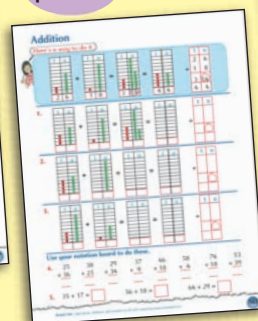
Course 2  
Module 1  
Unit 1  
Session 1

p.97



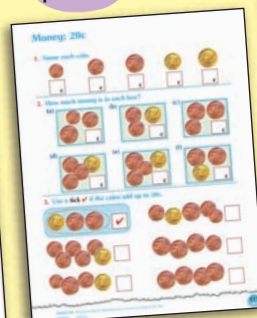
Course 2  
Module 1  
Unit 1  
Session 2

p.103

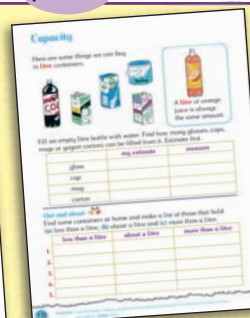


Course 2  
Module 2  
Unit 1  
Session 1  
Lesson steps g - r

p.113

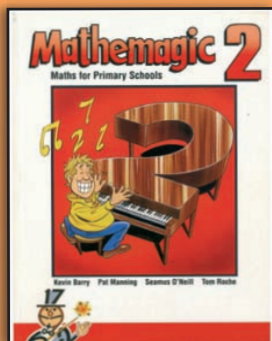


Course 1  
Module 3  
Unit 1  
Session 4



Course 2  
Module 3  
Unit 2  
Session 2  
Lesson steps a - d

# Quick Reference pages for Teachers of Second Class

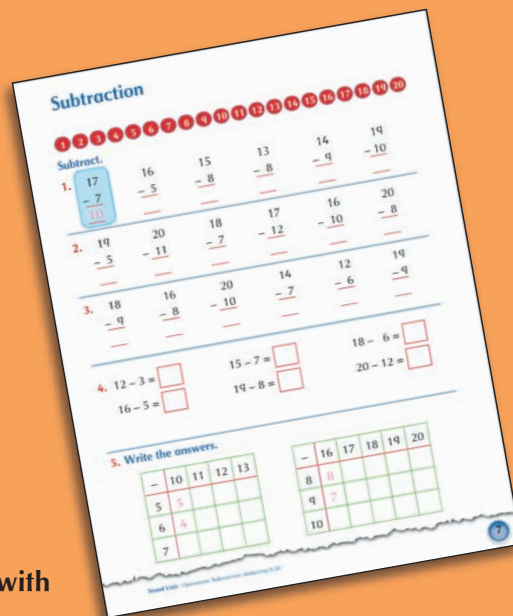


Pages 7 - 10:

## Subtraction 1

Subtracting a single-digit from a two-digit number max. 20 is not covered in Destination Maths Course 1 or Course 2

**Course 1:** Module 2: Unit 2: Session 1 introduces the concept of subtraction with differences within 10 (see page 44 of the full manual online)



Pages 87 - 88:

## Subtraction 2

Subtracting a single-digit from a two-digit number up to 99 with renaming (called 'regrouping' in Destination Maths), is covered in

**Course 2:**

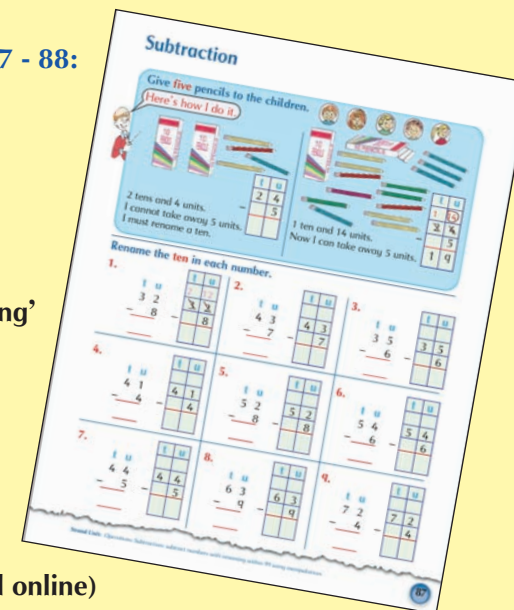
**Module 2:**

**Unit 1:**

**Session 2**

lesson steps **a - k**

(see page 60 of full manual online)



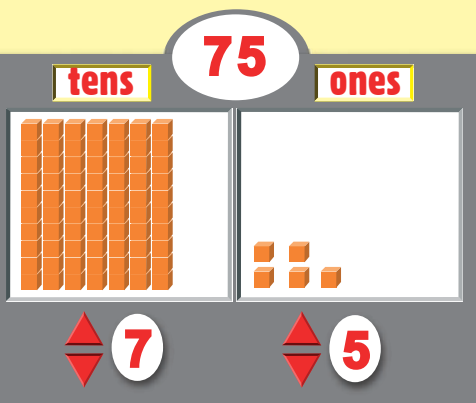
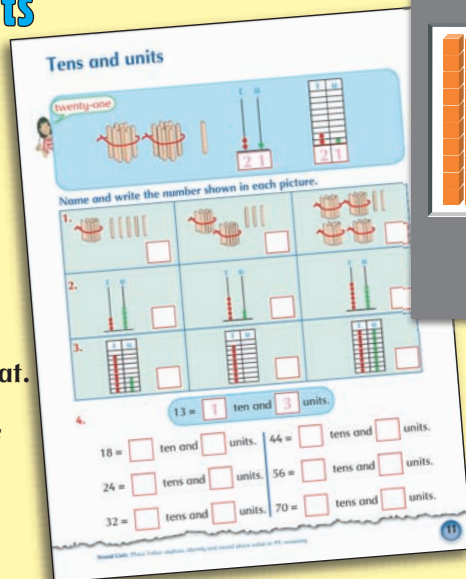
Page 11:

## Tens & units

Tens & units have been introduced in 1st class.

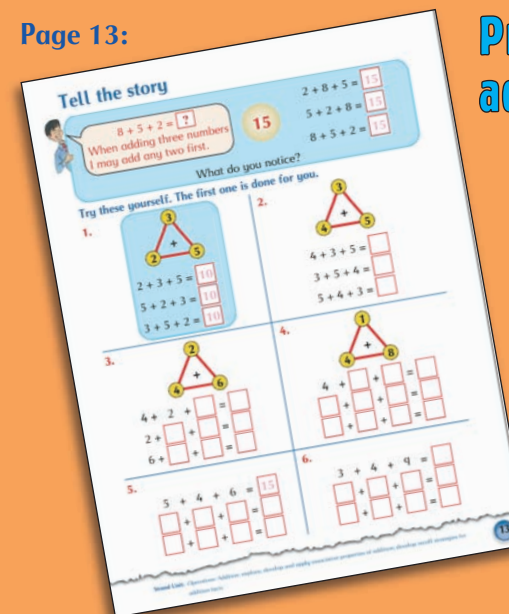
**Course 2:**  
**Module 1:**  
**Unit 1:**  
**Session 2**  
is worth a repeat.

(see page 52 of full manual online)



Lesson step j: the 99 spinner

Page 13:



## Properties of addition

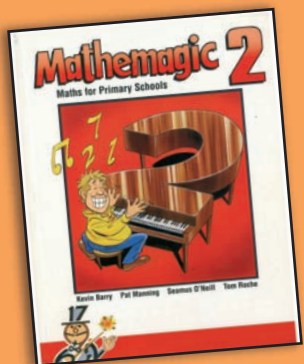
**Course 2:**  
**Module 4:**  
**Unit 1:**  
**Session 1**

This lesson includes some new concepts that are introduced later than page 13 of **Mathemagic 2**

(see full manual online p.64) - and the spinner page 65

- e.g. • the signs  $<$  and  $>$  are introduced at page 43  
• 'parentheses' are introduced at page 55  
• the standard weight Kg is introduced at page 82





## Quick Reference page for Teachers of Second Class

Pages in this Booklet

## Destination Maths Course 2

textbook pages: Strand units

pages:

location of the interactivity in Modules 1 to 4

|           |  |    |   |
|-----------|--|----|---|
| 11        | Place value: Tens & Units numbers to 99                | 52 | Course 2: Module 1: Unit 1: Session 2   |
| 13        | Addition: the associative property of addition         | 64 | Course 2: Module 4: Unit 1: Session 1   |
| 27 - 28   | Addition of Tens & Units with renaming                 | 54 | Course 2: Module 2: Unit 1: Session 1 - lesson steps g to r (revision)                        |
| 43 - 45   | Comparing and ordering using signs                     | 60 | Course 2: Module 1: Unit 1: Session 5 - lesson steps a to g - <a href="#">spinner</a> page 61 |
| 48 - 53   | Place value: Tens & Units numbers to 199               | 58 | Course 2: Module 1: Unit 1: Session 3   |
| 63 - 66   | Comparing 2-digit numbers                              | 60 | Course 2: Module 1: Unit 1: Session 5 - lesson steps a to g                                   |
| 74        | Money: coins up to 50c                                 | 56 | Course 2: Module 3: Unit 2: Session 2 - lesson steps a to d                                   |
| 75 - 76   | Money: the euro coin                                   | 64 | Course 2: Module 3: Unit 2: Session 2 - lesson steps e to k                                   |
| 85 - 86   | Place value: Renaming 2-digit numbers                  | 58 | Course 2: Module 1: Unit 1: Session 4 - lesson steps a to d                                   |
| 87 - 88   | Subtraction with renaming: single from 2-digit number  | 60 | Course 2: Module 2: Unit 1: Session 2 - lesson steps a to k (see note opposite re p 87)       |
| 89 - 94   | Subtraction with renaming: 2-digit from 2-digit number | 60 | Course 2: Module 2: Unit 1: Session 2 - lesson steps l to u                                   |
| 105 - 109 | Time: hours, half-hours on the 12-hour clock           | 62 | Course 2: Module 3: Unit 2: Session 1 - lesson steps a to d                                   |
| 127       | Number: Counting in 5s                                 | 62 | Course 2: Module 3: Unit 2: Session 1 - see Note (Counting in Fives)                          |
| 132       | Capacity: the <i>litre</i>                             | 56 | Course 2: Module 3: Unit 1: Session 2 - lesson steps a to e (revision)                        |
| 135 - 138 | Area: measuring surface area using non-standard units  | 62 | Course 2: Module 3: Unit 1: Session 1   |
| 141 - 142 | Money: decimal form; change out of €1                  | 64 | Course 2: Module 3: Unit 2: Session 2   |





