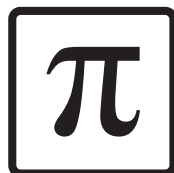


Milestone Maths
by
Kathy Gonzalez

Student Book
Level B2



Milestone

Introduction

Welcome to the second book in Milestone Maths level B. To get the most from this book, you should consult Teacher Book B before your child commences each milestone. This book contains 40 lessons and is intended to be used by an average student in term two of year 1 in an Australian school year. To complete the book in one term your child should do one lesson per day, four days per week. If your child has special needs, please see the teacher book for advice on how to structure and pace lessons.

Lessons marked with a book icon  have special instructions or extra teaching tips in the teacher manual.

There are many games and additional practice activities suggested in the teacher book. These are optional but they will make learning more fun, and often easier, for many children. When a concept is particularly difficult for a child to grasp, I find a game will often provide the breakthrough required to unlock the child's understanding.

If you have any questions whatsoever about any aspect of this course's implementation, or if you need help understanding any maths related concept, please do not hesitate to contact the author at author@milestonemaths.com.au

I hope you continue to enjoy learning and teaching maths one Milestone at a time.



Hi! Emmy Echinda is back and ready for another term of Milestone Maths.

We've got lots more fun things to learn about the numbers 0 to 10 this term. We'll also learn about taking away stuff as well as finding one half of something. And finally we're going to learn to count to 20 and write the numbers 11 to 20.

So put your thinking cap on and let's go do some maths!

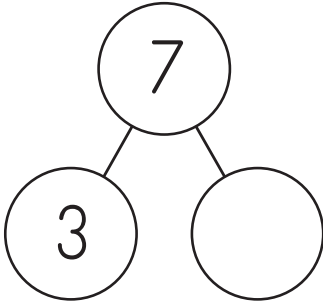
Lesson 41

The Concept of Subtraction




In the last milestone we looked at how to solve addition equations where one of the parts are missing. This will come in very handy as we learn about subtraction so let's remind ourselves how this works.

$3 + \underline{\quad} = 7$




A diagram showing three circles. The top circle contains the number 7. Two lines connect it to two circles below. The left circle contains the number 3, and the right circle is empty.


This blank is the number we want to find.



We can use our Sumstix to fill in the missing number.



A horizontal bar divided into two sections. The top section is black and the bottom section is green. The green section is shorter than the black section, leaving a gap.



The sumstix that fits into this gap represents the number we want to find.

Fill in the missing numbers:

$3 + \underline{\quad} = 7$

$6 + \underline{\quad} = 10$

$\underline{\quad} + 0 = 6$

$2 + \underline{\quad} = 9$

$\underline{\quad} + 8 = 10$

$\underline{\quad} + 3 = 5$

$\underline{\quad} + 1 = 10$

$4 + \underline{\quad} = 7$

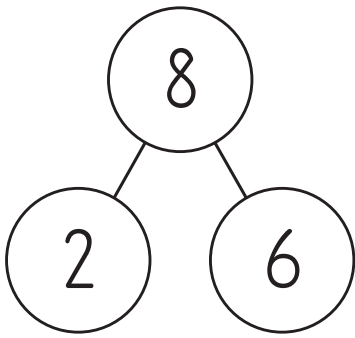
$5 + \underline{\quad} = 10$

$4 + \underline{\quad} = 8$

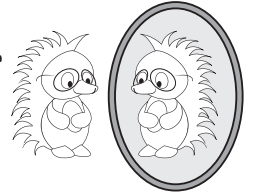
$\underline{\quad} + 5 = 8$

$\underline{\quad} + 3 = 6$

It is also useful for us to remember that we can flip equations around so that one number bond can represent two addition equations. Write the two addition equations represented by the number bond:



Remember
that we call
these
mirror
sums.



Review and Practice

Fill in the missing numbers:



0



This icon marks drills. Timing is optional. The suggested time limit is one minute.

$2 + 3 = \underline{\quad}$

$3 + 1 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$1 + 4 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

Lesson 47

Problems in real life don't always come in nice organised sets. You might have to add one minute and then subtract (take away) the next. Try solving these mixed up problems. You will have to watch the signs closely.

$9 - 2 = \underline{\quad}$

$9 - 3 = \underline{\quad}$

$4 + 4 = \underline{\quad}$

$4 - 3 = \underline{\quad}$

$3 + \underline{\quad} = 4$

$\underline{\quad} + 3 = 4$

$1 + 8 = \underline{\quad}$

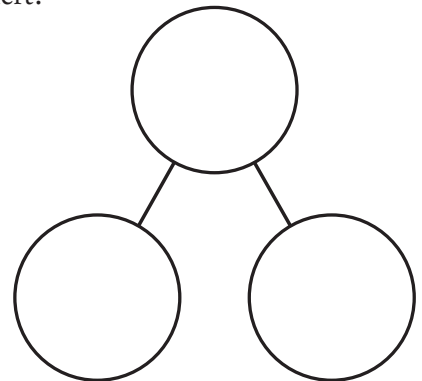
$1 + 2 = \underline{\quad}$

Think carefully!



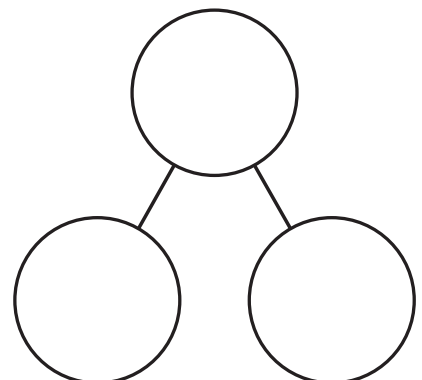
The shop manager put ten bananas in the "fruit for kids box" at the shop. When he came to check the box later in the day, he found that six of them had been taken. How many were left?

_____ bananas

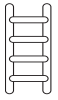


There were five glasses on the bench. Three had juice in them and the rest had water in them. How many glasses had water in them?

_____ glasses



Review and Practice



0 _____

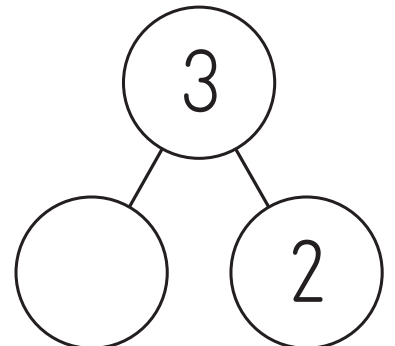
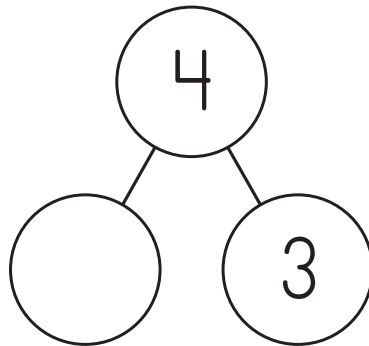
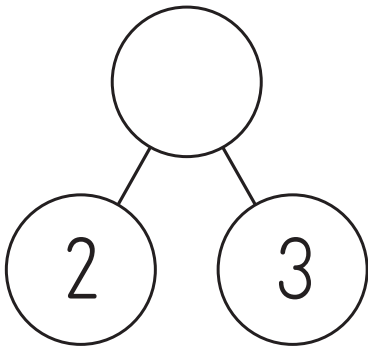
7 _____

8 _____

4 _____

5 _____

3 _____



$2 + 0 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$3 + 0 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$1 + 4 = \underline{\quad}$

$1 + 3 = \underline{\quad}$

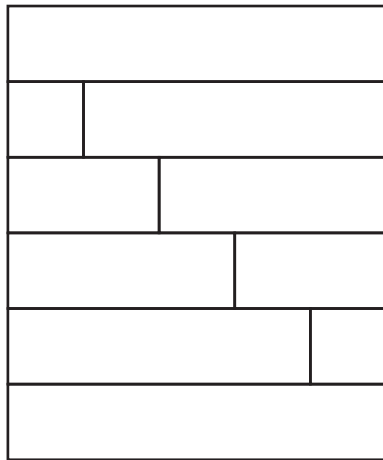
$3 + 1 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$2 + 3 = \underline{\quad}$

Lesson 50

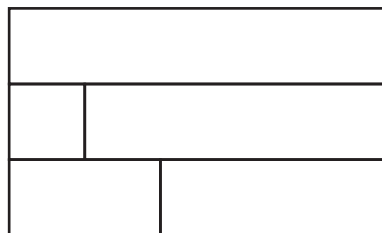
We'll use Sumstix and number bonds to help us learn all the sums and take aways that involve a total of five. Build the following pattern (which we will call a Sumstix sandwich) and then (if you like) colour the picture to match:



We call this a Sumstix sandwich. Can you see why?



Since the bottom half of the sandwich is just a flip of the top half, we'll toss it and work with only the top half. Each row of the pattern represents a number bond but the important thing for us to learn are the numbers in the bond so we are going to practise the following trios. Read them a few times to someone.



5:0:5

5:1:4

5:2:3

Fill in the missing number in the following trios:

5:0:_____

5:2:_____

5:_____:5

5:1:_____

_____:1:4

5:1:_____

5:_____:3

5:_____:5

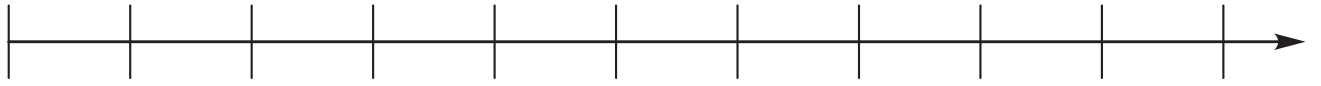
5:_____:3

5:_____:4

_____:2:3

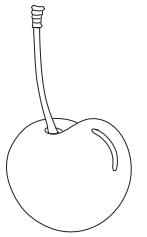
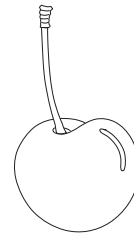
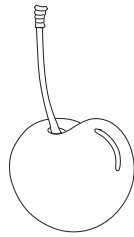
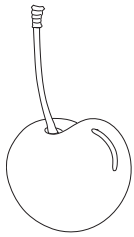
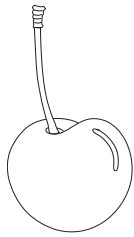
5:0:_____

Review and Practice



0

-4



—



=



$1 + 3 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$3 + 1 = \underline{\quad}$

$1 + 0 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$2 + 3 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$5 + 0 = \underline{\quad}$

$1 + 4 = \underline{\quad}$

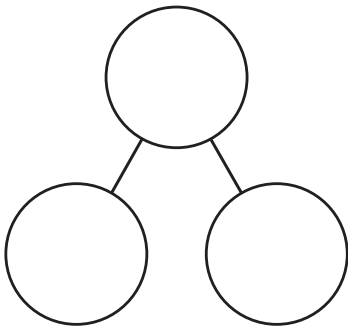
$1 + 2 = \underline{\quad}$

Lesson 53

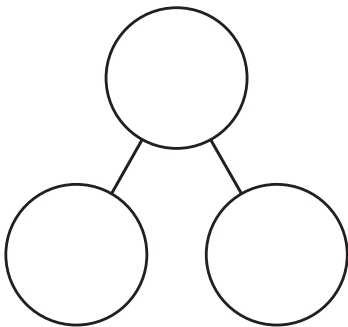
We've now seen all the tools we can use to help us learn and remember the number trios for five. We will spend the rest of this milestone practising until (hopefully) we know them all off by heart. Since they will all be practice and revision, most of the remaining exercises this milestone will not have any instructions.

Complete each trio before filling in the number bond and writing the equations represented by the bond.

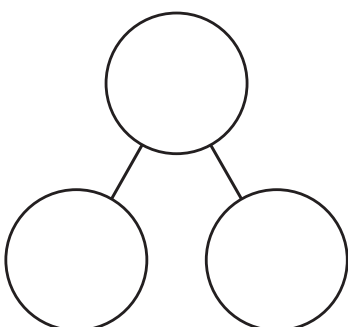
5:0: _____



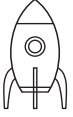
5:1: _____



5:2: _____

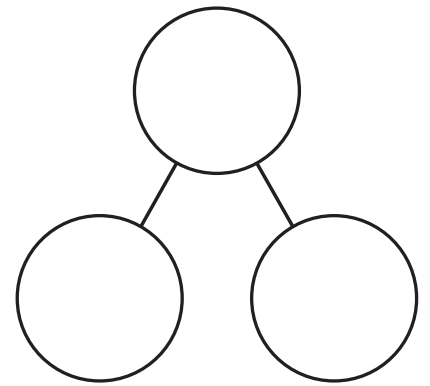


Review and Practice



10

John planted five seeds in the garden. Three of them sprouted. How many did not sprout?



_____ seeds didn't sprout



$3 + 1 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$1 + 2 = \underline{\quad}$

$1 + 3 = \underline{\quad}$

$1 + 0 = \underline{\quad}$

$5 + 0 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$1 + 1 = \underline{\quad}$

$2 + 3 = \underline{\quad}$

$1 + 4 = \underline{\quad}$

Lesson 60



Now that we've learned to count to twenty, let's try to count backwards!

Read the numbers below as many times as you think you need to, then try to count backwards from 20 without looking.

20 19 18 17 16 15 14 13 12 11

10 9 8 7 6 5 4 3 2 1 0

Write a countdown starting at 20.



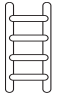
20



The number here tells us
to start at 20.

10

Review and Practice



$18 \quad \underline{\quad\quad}$

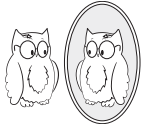
$17 \quad \underline{\quad\quad}$

$16 \quad \underline{\quad\quad}$

$14 \quad \underline{\quad\quad}$

$12 \quad \underline{\quad\quad}$

$9 \quad \underline{\quad\quad}$



$6 + 3 = 9$

$9 - 4 = 5$



$2 + 2 = \underline{\quad\quad}$

$1 + 3 = \underline{\quad\quad}$

$3 + 0 = \underline{\quad\quad}$

$5 + 0 = \underline{\quad\quad}$

$2 + 3 = \underline{\quad\quad}$

$4 + 1 = \underline{\quad\quad}$

$3 + 2 = \underline{\quad\quad}$

$2 + 0 = \underline{\quad\quad}$

$3 + 1 = \underline{\quad\quad}$

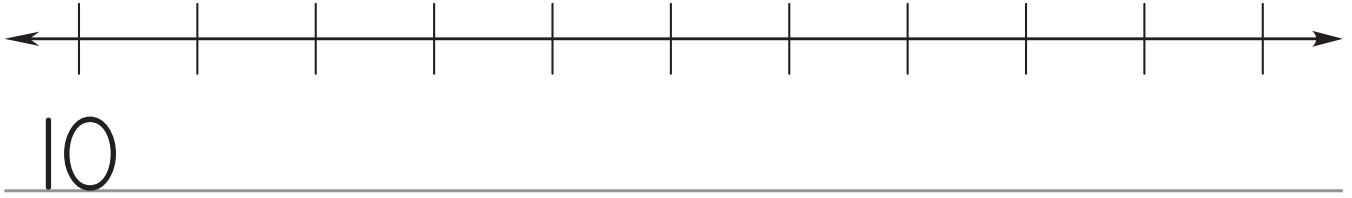
$1 + 1 = \underline{\quad\quad}$

$1 + 4 = \underline{\quad\quad}$

$1 + 2 = \underline{\quad\quad}$

Lesson 63

Write the numbers 10-20 in the correct places under the number line.



Write the number represented by each train.



Review and Practice



Count back from the number shown.



20 _____

11 _____

14 _____

17 _____

12 _____

18 _____



$2 + 3 = \underline{\quad}$

$3 + 1 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$3 + 2 = \underline{\quad}$

$1 + 0 = \underline{\quad}$

$4 + 1 = \underline{\quad}$

$1 + 3 = \underline{\quad}$

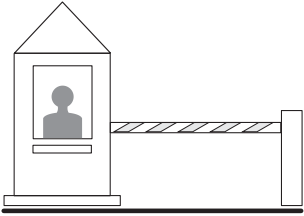
$1 + 1 = \underline{\quad}$

$5 + 0 = \underline{\quad}$

$1 + 4 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

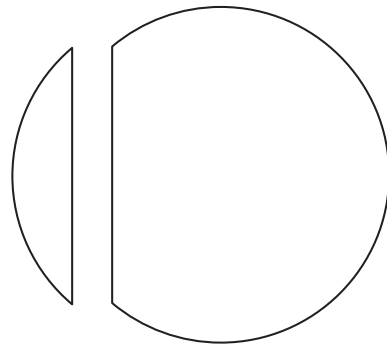
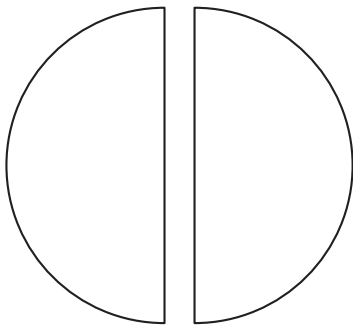
$1 + 2 = \underline{\quad}$



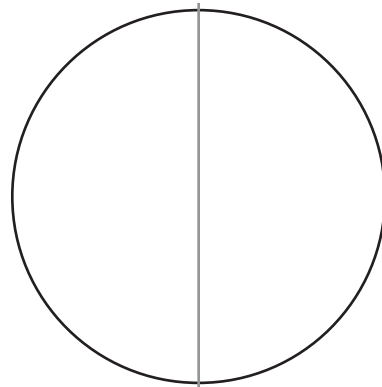
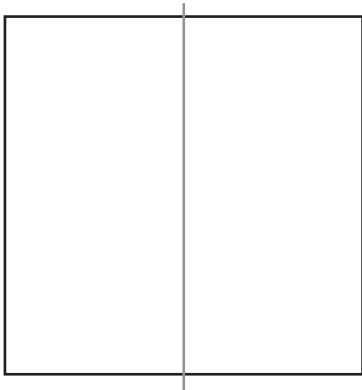
Lesson 80

Checkpoint 10

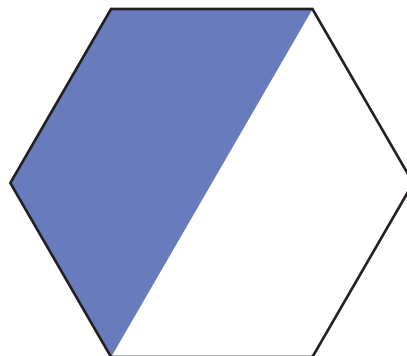
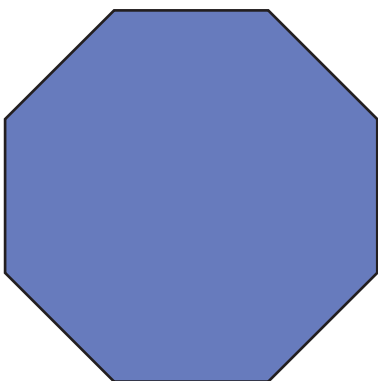
Circle the picture which shows one half.



Colour one half of each of the shapes below.



Write one or one half next to each shape to tell how much is shaded.



$_____ + 4 = 10$

$1 + _____ = 4$

$_____ + 6 = 10$

$5 + _____ = 10$

$_____ + 1 = 2$

$3 + _____ = 5$

$_____ + 2 = 3$

$8 + _____ = 10$

$7 + _____ = 10$

$_____ + 2 = 4$

$_____ + 8 = 10$

$1 + _____ = 10$

$2 + _____ = 5$

$_____ + 4 = 5$

$_____ + 7 = 10$



$3 + 2 = _____$

$4 + 1 = _____$

$6 + 4 = _____$

$1 + 9 = _____$

$3 + 7 = _____$

$2 + 2 = _____$

$1 + 3 = _____$

$1 + 1 = _____$

$2 + 8 = _____$

$4 + 6 = _____$

$7 + 3 = _____$

$2 + 3 = _____$

$1 + 2 = _____$

$5 + 5 = _____$

$8 + 2 = _____$