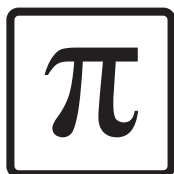


Milestone Maths B1
by
Kathy Gonzalez



Milestone

For Joshua

My youngest son and the inspiration for this series.

Milestone Maths B1

First Edition (2024)

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Cover photo by Benjamin Sow on Unsplash

Cover design by Christopher Gonzalez

Interior design and illustrations by Kathy Gonzalez and Daniel Gonzalez

Milestone Maths

Gin Gin, QLD

Australia

PARENT'S INTRODUCTION

Welcome to Milestone Maths, the mathematics curriculum designed especially for Australian home schoolers. This course has been developed with Australian home schoolers particularly in mind but will also be useful for after school study with or without a tutor. The series follows the Australian Curriculum (v 9.0). Level B corresponds to year 1 and this book is intended for term one, with four lessons per week for 10 weeks.

The course is gradual, systematic and thorough. Mathematics is a sequential subject where one concept is built upon another and thorough mastery of each step is essential for true understanding of the whole. This is reflected in Milestone Maths by presenting new topics sequentially and in a manner that builds from the known to the unknown. Review is built into the program and the needs of students with different abilities are catered for by pacing guidelines and supplementary practice activities.

RESOURCES

Besides the student books, the only essential resource for this curriculum is a set of Sumstix (also known as Cuisenaire rods). These may be purchased from the place where you obtained this book. Visit the following link for details:

www.milestonemaths.com.au/what-are-sumstix/

Occasional lessons will require simple resources that you should already have around the house. It would be a good idea at the beginning of each week to have a quick look over the lessons for the week to see if any additional resources need to be prepared. This will usually be the only preparation required on your part.

PLACEMENT AND PROGRESS

To begin at level B a child should be able to count to 10 and recognise the written numbers 1-10. They should also be fairly confident at counting out a given number of objects from a larger collection, although this will be reviewed and reinforced. They do not need to be able to write the numbers.

While it is impossible to make one fixed series of lessons to meet the needs of all students, this series is designed to be flexible enough to fulfill the needs of the majority of students. With this in mind, please note that you do not need to finish the entire “B” series in exactly one school year. If your child is finding the concepts easy, you may consider doing two lessons in one day and conversely, if the subject matter is more challenging, break the lesson up across two or more days. Lessons or activities marked with a graduation cap icon are advanced and are included to challenge the more motivated/talented students. Advanced material will usually become ‘mainstream’ at some point later in the course.



IMPORTANCE OF PRACTICE AND DRILLS

The importance of the drills cannot be overstated. In my tutoring practice I have seen several students who began to struggle in mathematics from year 5 transformed into “A” students in high school after only one to two years of intensive drilling on the times tables. If the habit of daily practice on the basic facts of numbers is established early, a plethora of problems and struggles will be avoided later on. In this level the drills form a part of each lesson from lesson 41 (Student Book B2) and are labeled with an hour glass icon.

If you or your child prefer a more interactive and social approach to achieve the same goal, consider using flashcard drills. Most children will benefit from doing both written drills and flashcard drills. I recommend using flashcards as a warm up activity. This will leave some 'space' between the flashcard and written drills. This type of "spaced repetition" is an excellent way to efficiently learn a new skill or to memorise information.



What are Milestones and Checkpoints?

A Milestone corresponds to a chapter or unit of work. In the student book, the start of each Milestone is marked with a picture of a milestone and the milestone title. Checkpoints are end of chapter reviews and are essentially lessons dedicated to review and practice of the key concepts and skills introduced in the Milestone. If your child has particular difficulty completing a checkpoint, it is recommended that you spend some time reviewing the concepts taught in the Milestone before moving on. If they have difficulty with only one or two activities, review the concept immediately and make a note to practise those skills often during the introductory phase of subsequent lessons until the skill is mastered.

The child should be able to complete each activity in a checkpoint lesson independently, or with minimal help, after you have read the instructions. At this level the child may use Sumstix as much as they need to while completing checkpoints, lessons and drills, although they should be encouraged to transition to completing the drills without assistance.

ADAPTATIONS FOR CHILDREN WITH SPECIAL NEEDS

If your child has special learning needs, there are a number of adaptations possible.

For older yet illiterate students: you should read all instructions to the student just as you would to a young child that is still learning to read.

For children who have difficulty writing: you may act as scribe and have the child tell you what to write. When numbers or equations are required, have the child "build" the answers using the number and game flashcards. Also, use the number bond flashcards for drills instead of the written drills until writing is easy. Unless the child has a physical handicap that makes writing difficult or impossible, I would suggest that you gently encourage them to do more and more writing on their own every day. Begin by taking turns with the pencil - you write one number then the child writes one, etc and slowly increase the amount of writing that your child does until they achieve independence.

For children who need a slower pace: some lessons could consist entirely of warm up/review activities or the student book activities could be assigned over two or more days.

Extra writing practice can be done on a reusable drawing board (eg whiteboard, LCD tablet, etc.), on scrap paper or in a separate exercise book.

For children who need a faster pace: If your child is finding the lessons very easy and is learning the concepts quickly, you may consider doing two lessons a day and completing the Review and Practice section of only one of the lessons. Special care needs to be taken that the child is mastering the drills at this pace as well. Over learning is always a good thing, however, a particularly bright child will need to be challenged to maintain motivation.

QUESTIONS OR COMMENTS?

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

Parent Notes for Book 1

Milestone Maths B1 lays the essential foundation for all future learning in mathematics. The following concepts are introduced:

- Writing the numbers from 0-10.
- Counting backwards from 10 to 0.
- The number line.
- Counting on from a number.
- The idea that a number (or group) which we call a total can be broken into two smaller numbers (groups) which we call the parts.
- How we use number bonds to represent addition facts.
- How we use Sumstix to represent the numbers.
- How we can use Sumstix to solve simple 2 digit addition problems with a total of 10 or less.
- How to use Sumstix to solve simple addition equations where one of the addends is unknown.

Milestones 1, 2, and 3 collectively form a single comprehensive unit of work. However, instead of presenting it as a single Milestone, it has been divided into three separate Milestones. This deliberate division allows your child additional time to grasp the information thoroughly and become familiar with checkpoints from the outset of this course.

A NOTE ON NUMBER REVERSALS

In children of this age group, it is quite common to reverse certain numbers while learning to write them. Specifically, they tend to confuse the direction of digits like 2, 3, and 5. This phenomenon occurs because our writing system imposes a constraint that contradicts the child's intuitive understanding of the visual world.

From a very young age, their brains learn to recognise their mother's face regardless of its orientation. Through numerous observations, they develop the idea that all objects exhibit the same pattern. For instance, a triangle remains a triangle whether it appears pointing up or down.

Numbers (and letters) contradict this pattern by imposing the constraint of fixed orientation. For many children this is a concept that takes a long time to learn. It is also very common for a child to write their numbers perfectly one day and then reverse random digits the next. Please do not become frustrated or scold your child for reversing their numbers. Children of this age group are usually trying their very best to please you so scolding them for an unconscious error will do much more harm than good to both the child and your relationship with them. Simply point out the error, erase the number and gently help them (guiding their hand if necessary) to write the number the correct way. With consistent and patient effort, number reversals will eventually disappear.

The best way to minimise number reversals is to spend much time practising number formation and stressing the correct formation of each of the digits. For example, insist that zeros be written in a counter clock-wise direction and that fives begin with a down stroke. Attention to detail from the outset will smooth the entire journey.

NUMBER RECOGNITION, WRITING AND SEQUENCING ACTIVITY SUGGESTIONS

Counting is the true foundation of all mathematics so it is suggested that at least one activity from each of the groups below be practised often, preferably daily, during the six to twelve months of learning mathematics. The activities should be adapted and extended to include the entire range of numbers that has been taught.

DIGIT RECOGNITION

Flashcard drill of the numbers: Shuffle number flashcards and have the child name the number on each card.

Match numbers to objects: Hand out a single set of 0-10 digit flashcards, shuffled. Have the place the cards in ascending order on the table then line up the corresponding number of counters (any small object) under/above/on top of each card.

Label groups with numbers: Place groups of 0-10 objects on the table and ask the child to label each one with the correct number card.

Match numbers to Sumstix: As above but replace the counters with Sumstix. One rod of the appropriate colour and length should be placed on each card. I.e. a white cube should be placed on the 1 card, a red rod should be placed on the 2 card etc. This can be extended to larger numbers once they are taught.

Look for opportunities to reinforce counting and number recognition skills: Outside of formal lesson time look for any and every opportunity to put counting and number to practice. Look for numbers on road signs or number plates. Have the child count out cutlery to set the table. Count family members, pets or toys etc.

NUMBER SEQUENCE

Learn and practice counting songs or rhymes like “One, two buckle my shoe.” Search online for more.

Have the child sort a deck of number cards from smallest to largest.

Place number cards on the table in sequence but leave one out. For example, lay out the cards, “1, 2, 4, 5”. Ask the child to tell you which one is missing.

Select a number at random and have the child count on from that number to 10, 20 or 100 (to their level).

Select and shuffle 5-10 number cards at random and have the child place them on the table in ascending or descending order.

Have the child make a large number line by pegging number cards to clothesline or s string suspended between chairs.

NUMBER WRITING

Have the child practice writing numbers from dictation in various media. Ideas to try: whiteboard, chalkboard, magnetic or LCD drawing board, using a finger in a baking tray filled with a thin layer of rice, polenta, flour or dry, raw ingredient, on concrete with chalk, in sand at the beach or in dirt with a stick.

MIXED ACTIVITIES

You can mix any of the above. For example:

- Shuffle a deck of number flashcards and use them to decide what number the child should write.
- Have the child choose a card from a hand that you present fanned out but facing you. Let the child write that number or count out that number of objects from a larger group.
- Select a random card or choose a number and have the child write that number and all the rest of the numbers in sequence to the next multiple of 10.
- Arrange toys in groups in a sandpit or on the beach and have the child write the number of toys in each group with a stick or their fingers.

Milestone 1

MILESTONE GOALS

By the end of this milestone, your child should be able to:

- Write the digits 1-7 from dictation in any order without a model
- Write the sequence of numbers 1-7 without a model
- Recognise basic shapes: circle, triangle, square, rectangle
- Recognise which number the Sumstix from white to black represent. At this stage, this goal may still be developing and it is OK if your child needs to sort the rods and then count to find which number a particular rod represents.

SPECIAL TEACHING DIRECTIONS

Please ensure that you perform at least one activity daily from the section titled Number Recognition, Writing and Sequencing Activity Suggestions. Placing the shuffled cards in proper sequence is also an excellent daily activity at this stage.

Even if the child is able to "rattle off" the numbers to ten or beyond, this does not mean that they have truly mastered the sequence or that they have a concept of what the numbers actually mean so please do not dismiss these early lessons as unnecessary unless you are certain that they have mastered these skills.

length as the train they have just made. Finally, they can fill in the number bond and write the total on the line provided for the final answer.

Milestone 5

MILESTONE GOALS

By the end of this milestone, your child should:

- Recognise and be able to write a basic addition equation.
- Understand the principle of commutativity of addition ($A+B=B+A$). They do not need to know the term "commutativity".
- Be able to use Sumstix to solve an addition equation with a total of 10 or less.
- Be on the way towards memorising the addition facts to a sum of 5.

SPECIAL TEACHING DIRECTIONS

With the foundation laid down in the previous Milestone, the lessons in this Milestone are fairly straightforward. The introduction of zero in addition is delayed until the end of the Milestone because it is a concept that can confuse children if introduced too early.

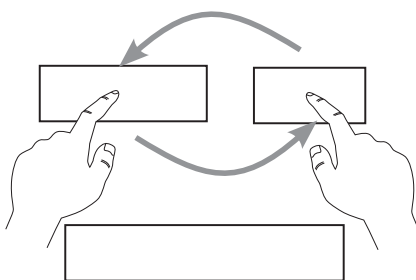
LESSON 31

The aim in this lesson is to have the child break up each group of shapes into two groups and then represent this using an addition equation. They can (and should) break up the shapes in any way that works. As an introduction you could do this with concrete materials (counters, buttons, coins, small toys etc) and a whiteboard. Take five counters and divide them into a group of 2 and a group of 3 then draw five shapes on the whiteboard and draw circles to group the shapes the same way as you did the counters. Finally write, " $2+3=5$ " on the whiteboard. Repeat but this time break the group of five into groups of 1 and 4. Then swap the groups around to make the sum $4+1$ and write this down.

LESSON 33

This lesson introduces the concept of commutativity of addition, that is the idea that $A+B = B+A$ (we can add in any order). It is best illustrated with Sumstix which make the concept intuitive. Make up a Sumstix pattern that represents an addition equation. Then swap the order of the two shorter Sumstix and show the child that the train is still the same length. Tell the child that we will call the two equations they created "mirror sums" because they are similar but different. Some children like to say that the sums are "flipped."

$$3 + 2 = 5$$



$$2 + 3 = 5$$



Hi! I'm Emmy Echidna and I'm here to help you learn maths.

Watch for me and I'll give you some hints and tips along the way.

And sometimes... I'll just be there to "hang out" with you!...

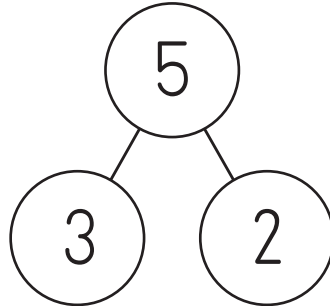
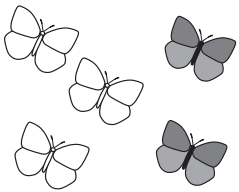
So, let's do some maths!



Lesson 29

INTRODUCING ADDITION WITHIN TEN

We have seen a few different ways to describe two groups and a total:

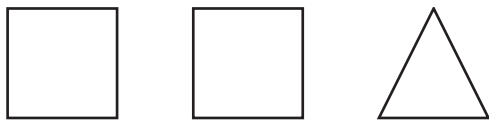
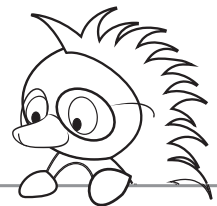


Today, we learn that we can use mathematical symbols to write an equation like this:

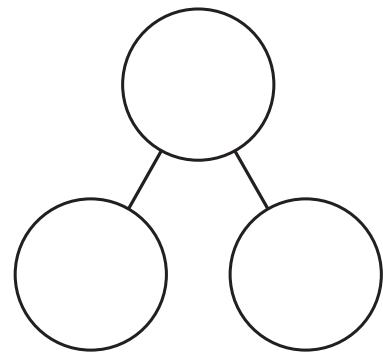
$$3 + 2 = 5$$

And we read the equation as "three plus two equals five" or "three and two make five".

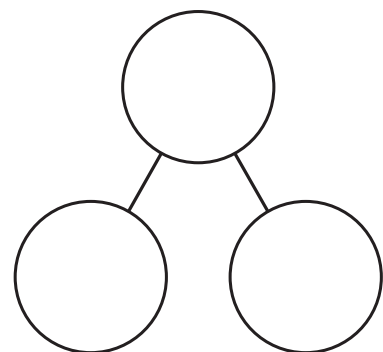
Fill in the number bond and write equations for each of the pictures below. You may also tell a story to an adult about the pictures.



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

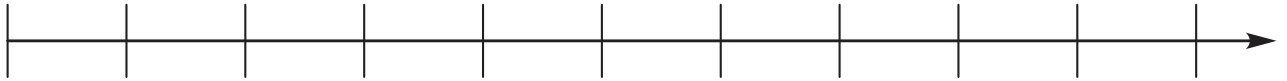


$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

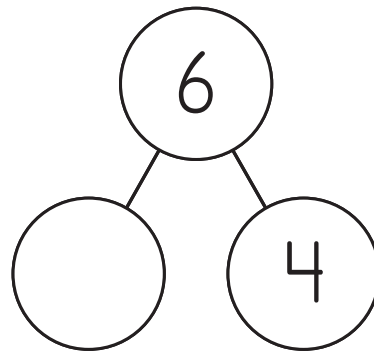
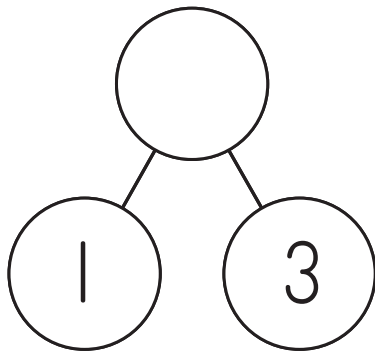
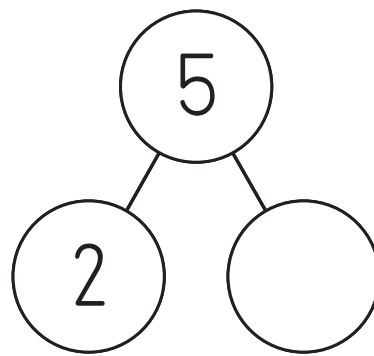
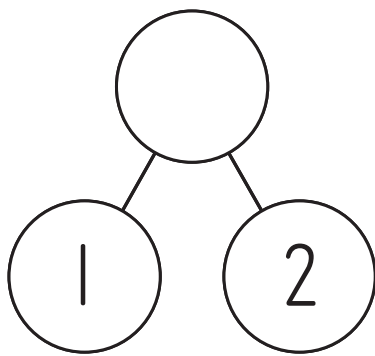


REVIEW AND PRACTICE

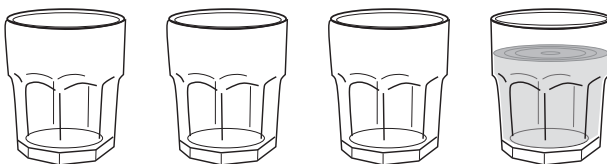
Fill in the numbers on the number line starting at 0.



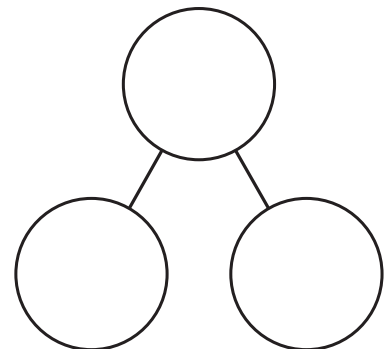
Write the missing number.



Fill in the number bond and write an equation for the picture.



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

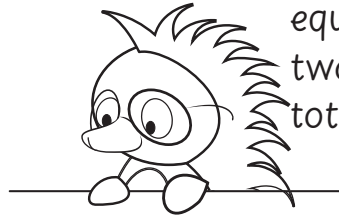
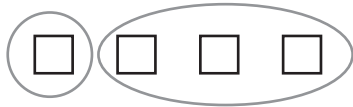


Lesson 30

Practise writing plus and equals signs:



$$1 + 3 = 4$$



The addition equation represents two parts and a total.

Break up the group of shapes (total) into two smaller groups (parts) to match the equations.

$$4 + 1 = 5$$



$$2 + 2 = 4$$



$$2 + 3 = 5$$



$$1 + 3 = 4$$



$$3 + 1 = 4$$



$$1 + 2 = 3$$



REVIEW AND PRACTICE

Count on from each of the numbers below.

7 _____

2 _____

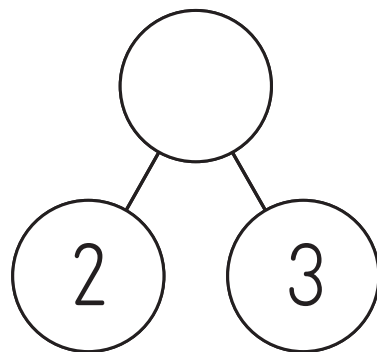
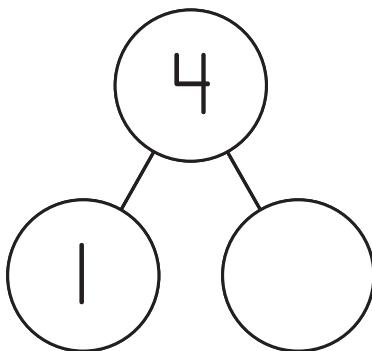
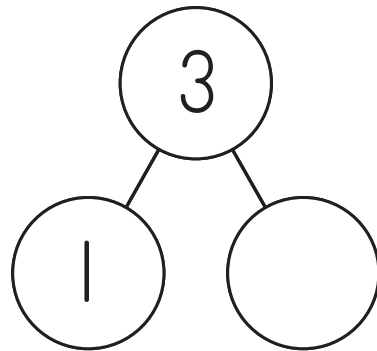
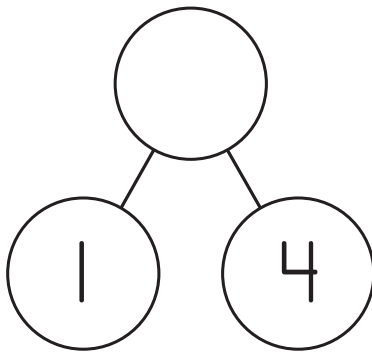
1 _____

3 _____

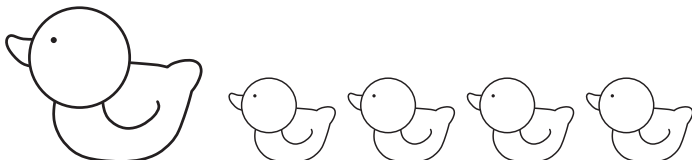
4 _____

0 _____

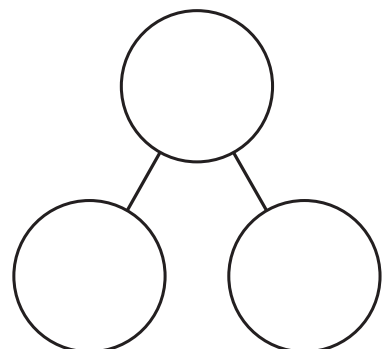
Write the missing number.



Fill in the number bond and write an equation for the picture.



_____ + _____ = _____



Lesson 31

Break the group of shapes into two parts and write an addition equation.
You will be able to do this in many different ways.



REVIEW AND PRACTICE

Write the numbers that come before and after the number given.

_____ 2 _____

_____ 6 _____

_____ 4 _____

_____ 7 _____

_____ 3 _____

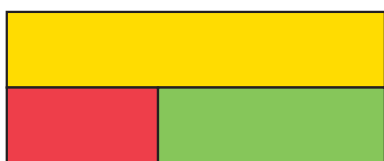
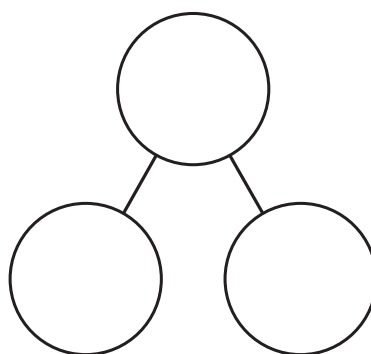
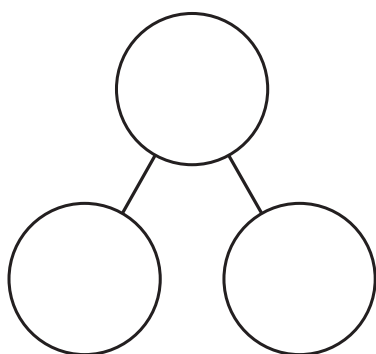
_____ 5 _____

_____ 8 _____

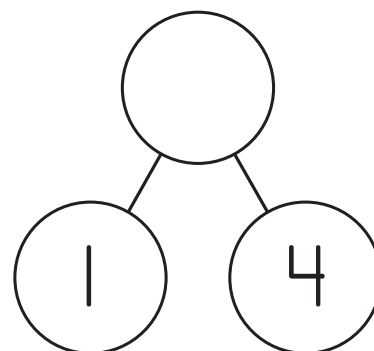
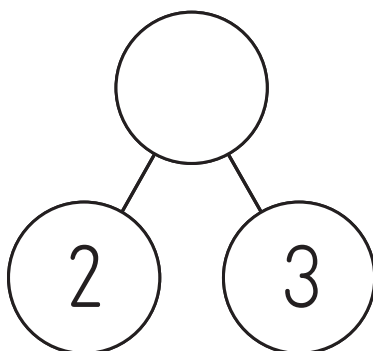
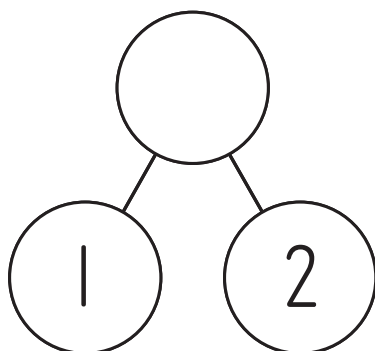
_____ 9 _____

_____ 1 _____

Fill in the number bonds to match the Sumstix patterns.

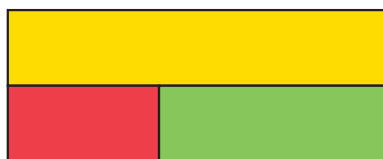


Write the missing number.



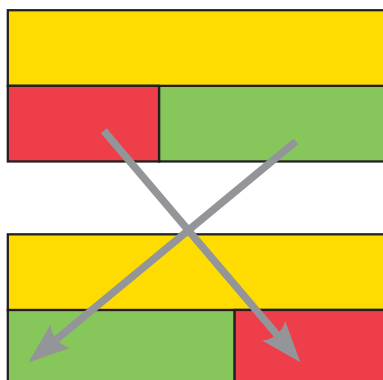
Lesson 32

Sumstix trains can be used to represent addition equations:



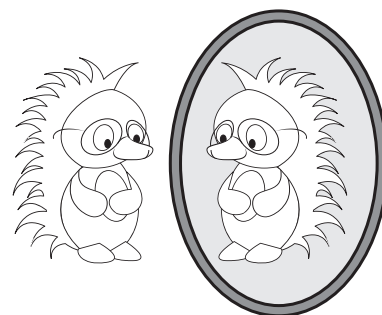
$$3 + 2 = 5$$

But what happens when we "flip" a Sumstix train around?



$$3 + 2 = 5$$

$$2 + 3 = 5$$



Both trains are the same length! The only thing that changes is the order of the shorter Sumstix. This means that the equations above are almost the same. We will call them "mirror sums."

Find the mirror sum to each of the following equations. You may use Sumstix to help.

$$1 + 2 = 3$$

$$3 + 1 = 4$$

$$4 + 2 = 6$$

$$2 + 5 = 7$$

REVIEW AND PRACTICE

Write the number that comes between the numbers given.

2 _____ 4

6 _____ 8

4 _____ 6

7 _____ 9

3 _____ 5

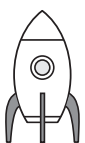
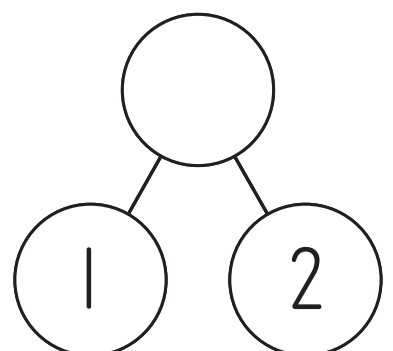
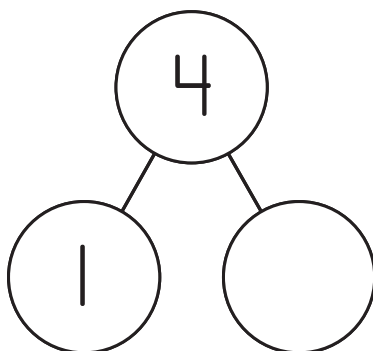
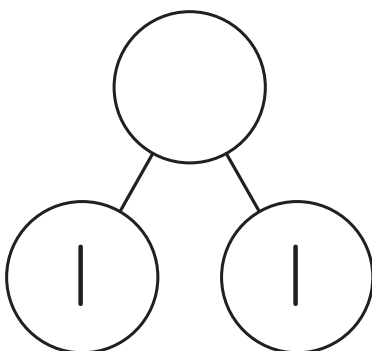
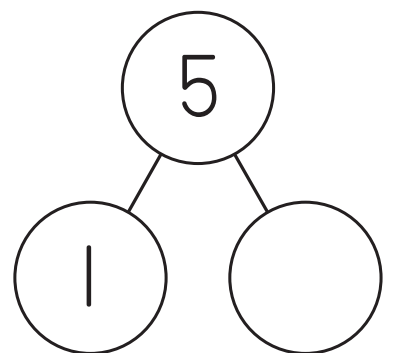
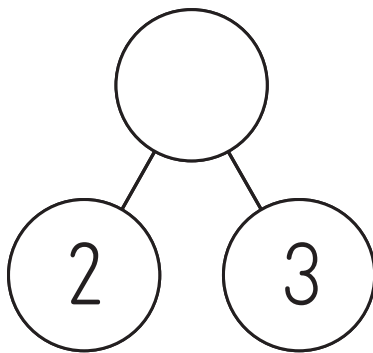
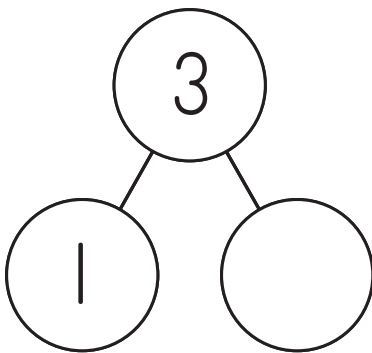
5 _____ 7

8 _____ 10

0 _____ 2

1 _____ 3

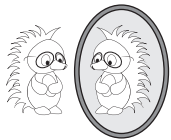
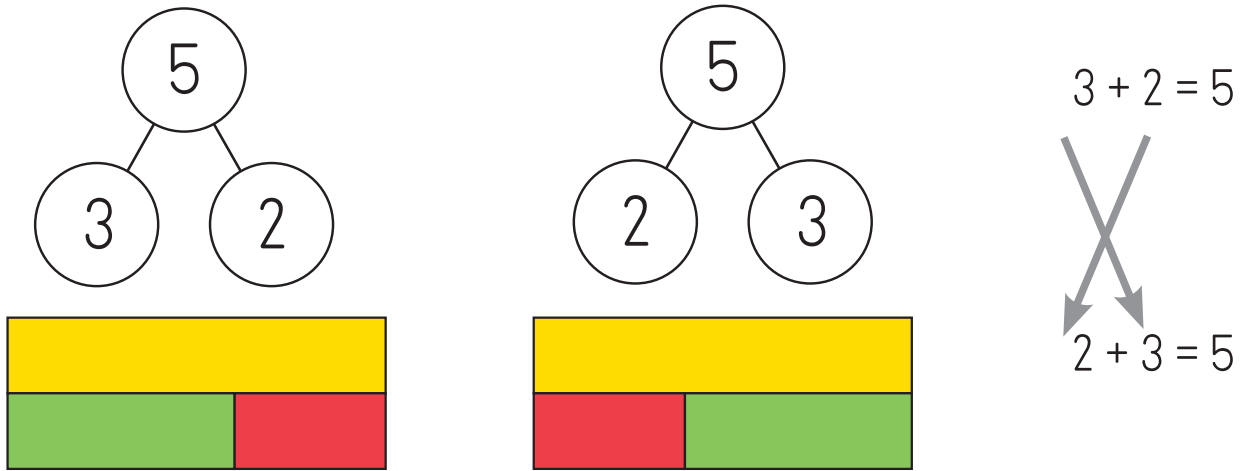
Write the missing number.



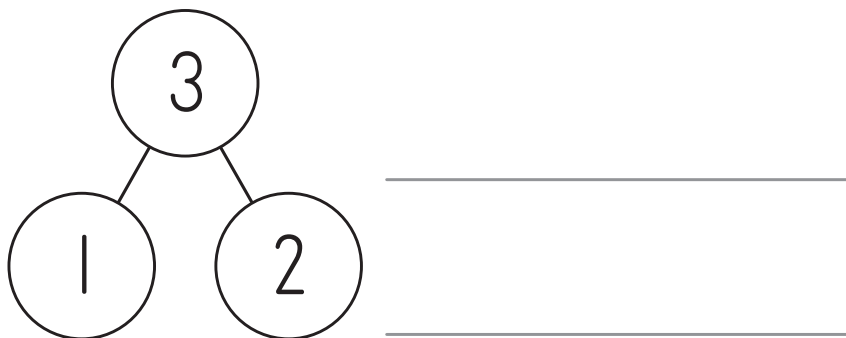
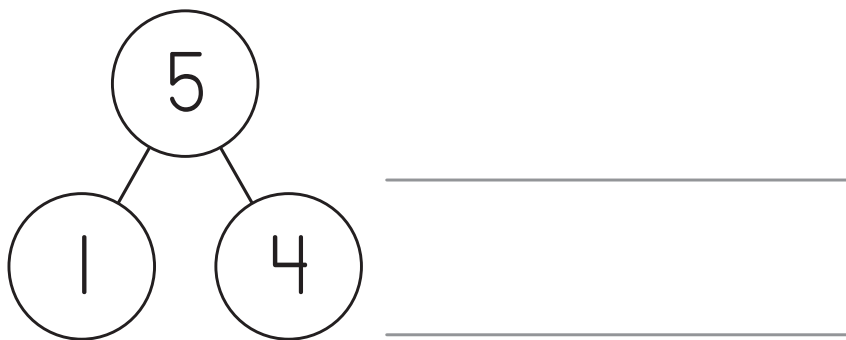
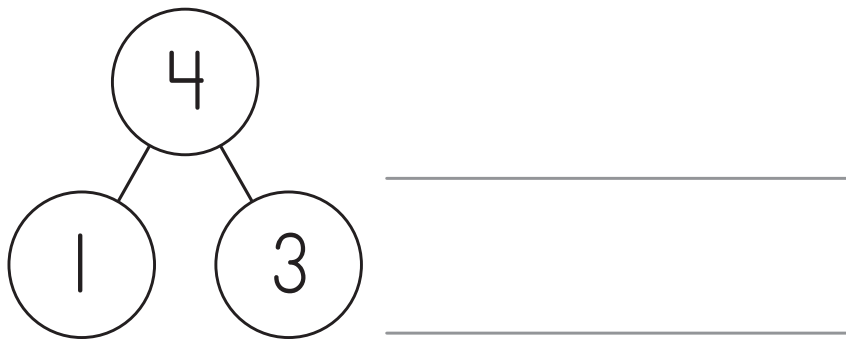
Write a countdown from 10 to 0.

Lesson 33

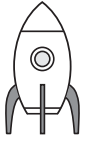
Notice that we can flip a number bond around just like we did with the Sumstix train. So we can use one number bond to write two mirror sums.



Write two addition equations for each of the number bonds below.



REVIEW AND PRACTICE



Count BACK from the following numbers

4 _____

8 _____

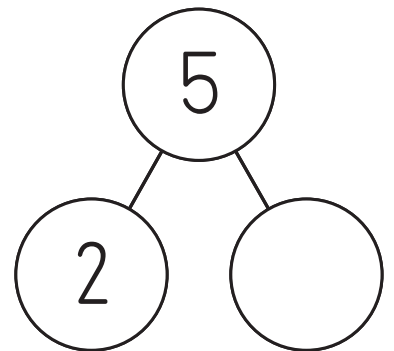
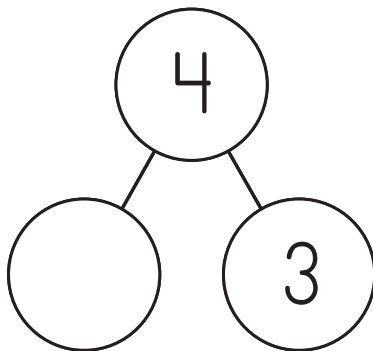
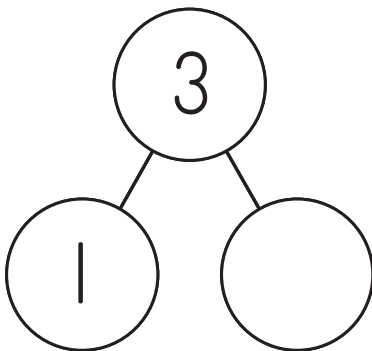
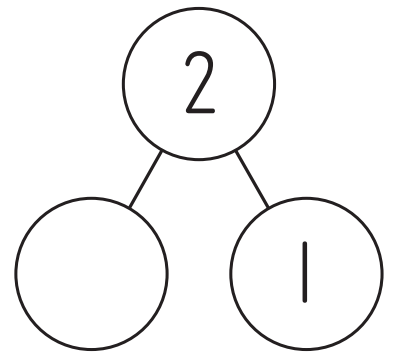
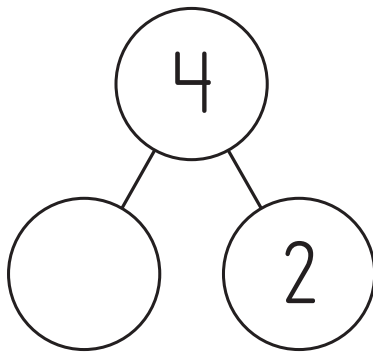
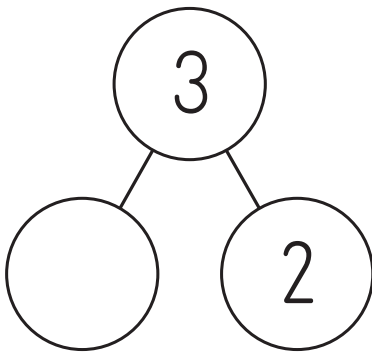
3 _____

2 _____

5 _____

6 _____

Write the missing number.



Write the the answer to the sums below. You may use Sumstix.

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

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

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

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

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

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

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

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

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

Lesson 34

Write the addition problem represented by each Sumstix train. Then use your Sumstix to find the answer. Finally, write the answer down.







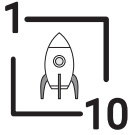








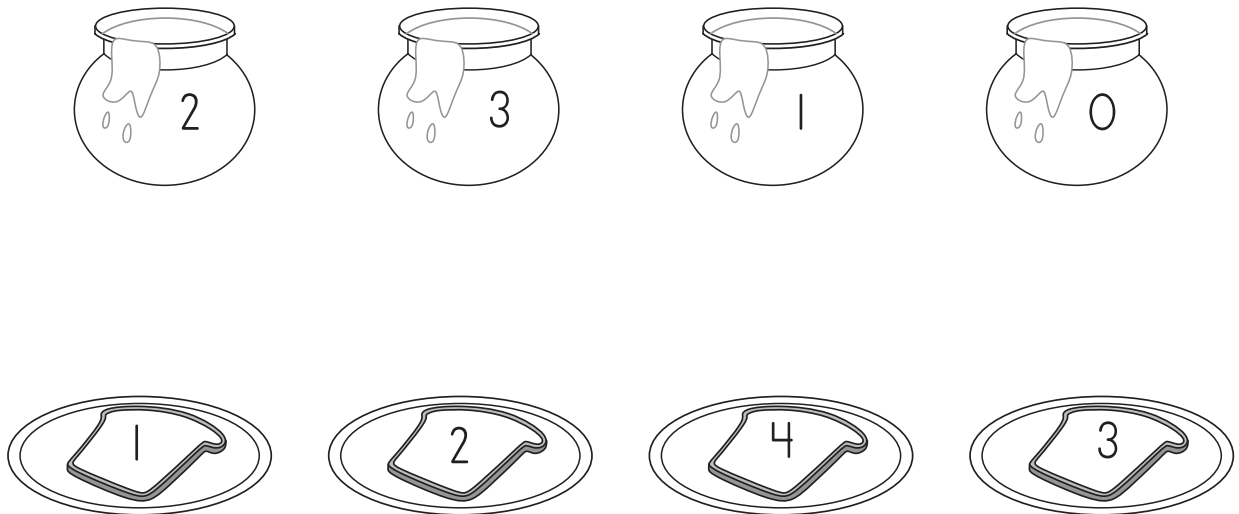
REVIEW AND PRACTICE



Sort the numbers in each box from biggest to smallest.

2	10	8	1	9	7
_____	_____	_____	_____	_____	_____
6	3	5	10	4	9
_____	_____	_____	_____	_____	_____

Join the honey to the bread so that the numbers add to four.



Write the the answer to the sums below. You may use Sumstix.

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

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

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

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

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

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

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

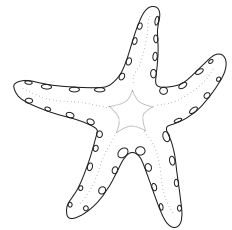
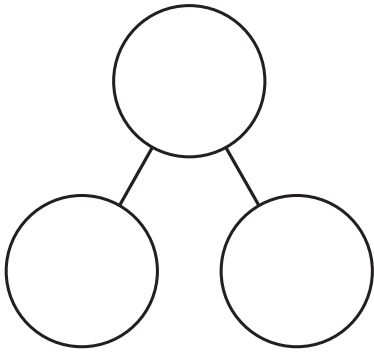
$3 + 1 = \underline{\quad}$

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

Lesson 35

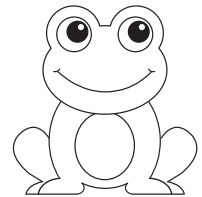
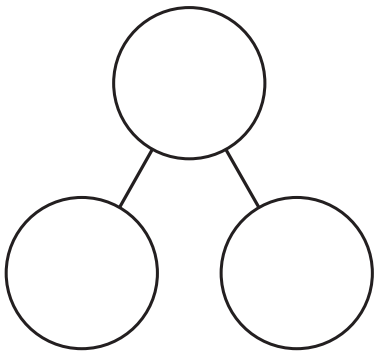
Solve the story problems:

Jane was at an aquarium. She saw three starfish in one tank and two starfish in another tank. How many starfish did she see all together?



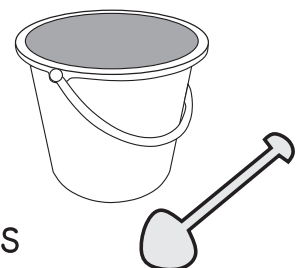
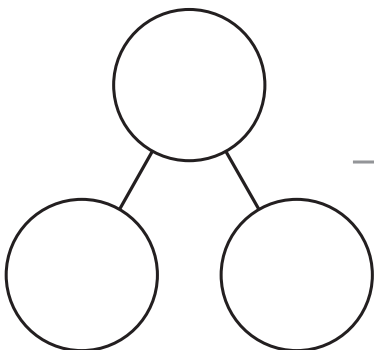
_____ starfish

Froggy hopped over three lilipads and stopped to eat a fly. Then he hopped over three more lilipads to reach the bank of the pond. How many lilipads did Froggy jump over?



_____ lilipads

Zach was playing at the beach. He put two scoops of dry sand and one scoop of wet sand in his bucket. How many scoops of sand did he put in his bucket?



_____ scoops

REVIEW AND PRACTICE

Write the number that comes between the numbers given.

$5 \underline{\hspace{1cm}} 7$

$0 \underline{\hspace{1cm}} 2$

$6 \underline{\hspace{1cm}} 8$

$2 \underline{\hspace{1cm}} 4$

$1 \underline{\hspace{1cm}} 3$

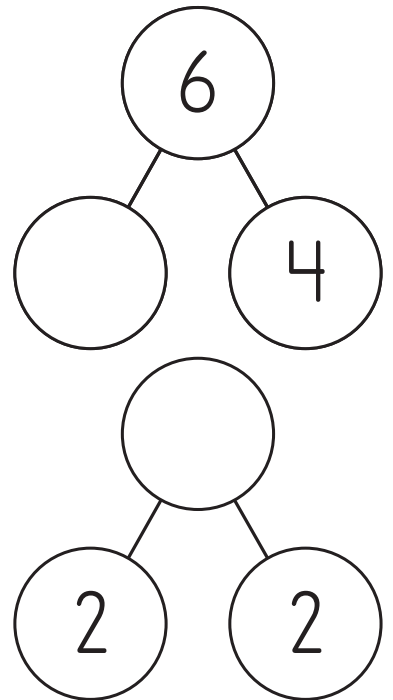
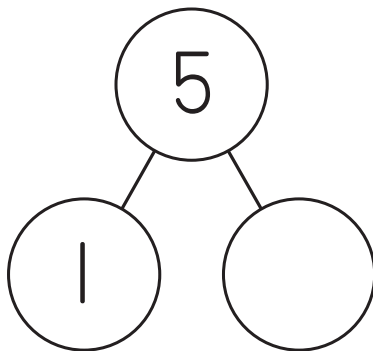
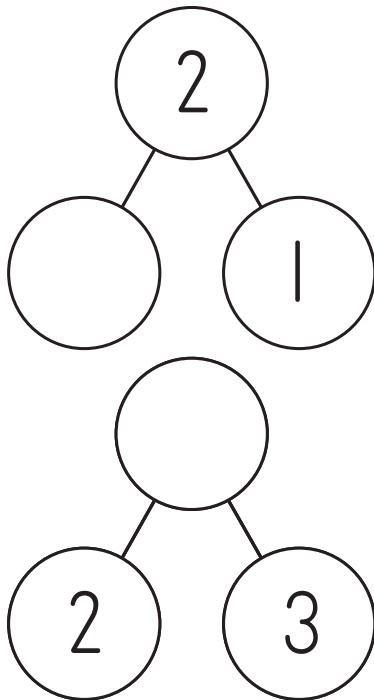
$4 \underline{\hspace{1cm}} 6$

$8 \underline{\hspace{1cm}} 10$

$3 \underline{\hspace{1cm}} 5$

$7 \underline{\hspace{1cm}} 9$

Write the missing number.



Write the the answer to the sums below. You may use Sumstix.

$1 + 1 = \underline{\hspace{1cm}}$

$2 + 3 = \underline{\hspace{1cm}}$

$3 + 1 = \underline{\hspace{1cm}}$

$1 + 2 = \underline{\hspace{1cm}}$

$1 + 4 = \underline{\hspace{1cm}}$

$3 + 2 = \underline{\hspace{1cm}}$

$2 + 2 = \underline{\hspace{1cm}}$

$4 + 1 = \underline{\hspace{1cm}}$

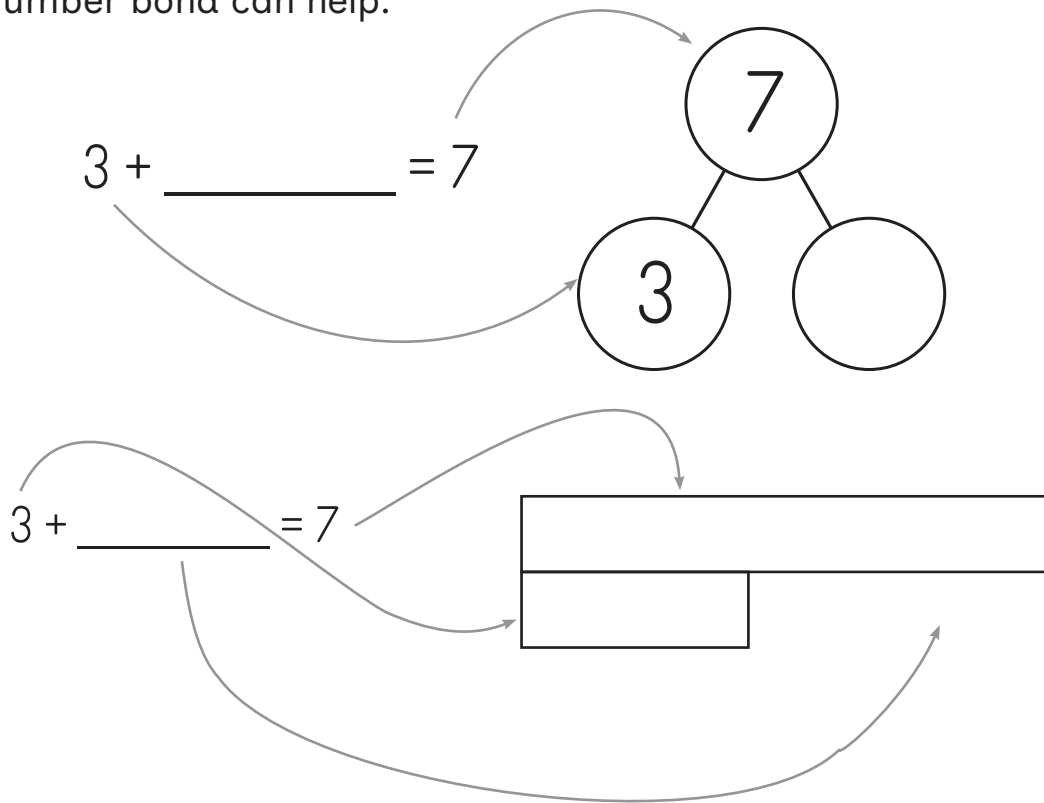
$2 + 1 = \underline{\hspace{1cm}}$

Lesson 36

Missing number problems are very common in mathematics.

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

To solve this we can use Sumstix, but if you're not sure which pattern you need, a number bond can help:



Fill in the missing number in each of the following addition equations. You may use Sumstix to help. If you need extra help, draw a number bond on a scrap of paper or a white board .

$$2 + \underline{\quad\quad\quad} = 4$$

$$4 + \underline{\quad\quad\quad} = 9$$

$$1 + \underline{\quad\quad\quad} = 9$$

$$2 + \underline{\quad\quad\quad} = 7$$

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

$$2 + \underline{\quad\quad\quad} = 8$$

REVIEW AND PRACTICE

Write the the answer to the sums below. You may use Sumstix.

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

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

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

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

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

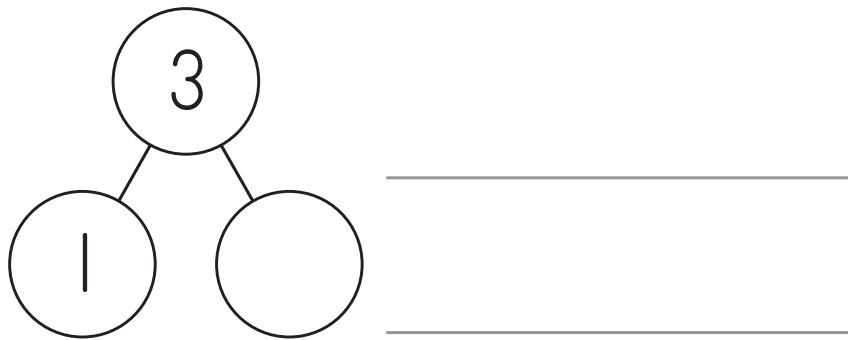
$4 + 1 = \underline{\quad}$

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

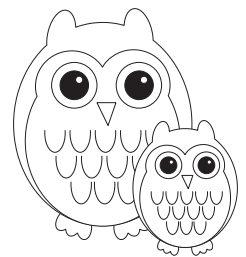
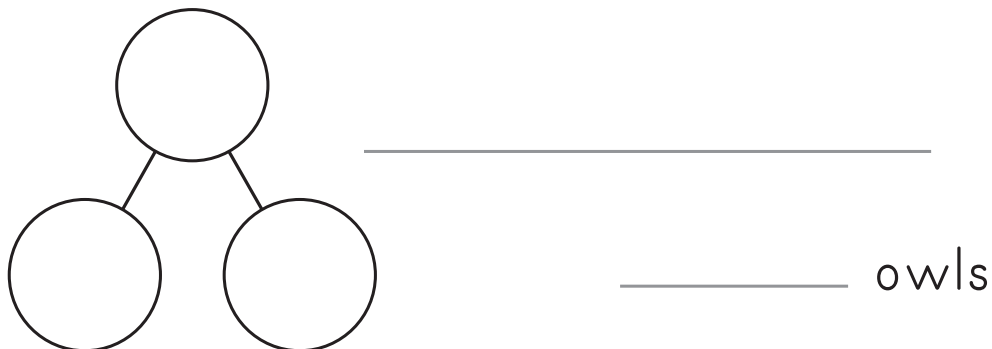
$2 + 2 = \underline{\quad}$

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

Fill in the missing number and then write the two sums represented by the number bond.



In the owl family there are two big owls and two little owls. How many owls are in the owl family?



Lesson 37

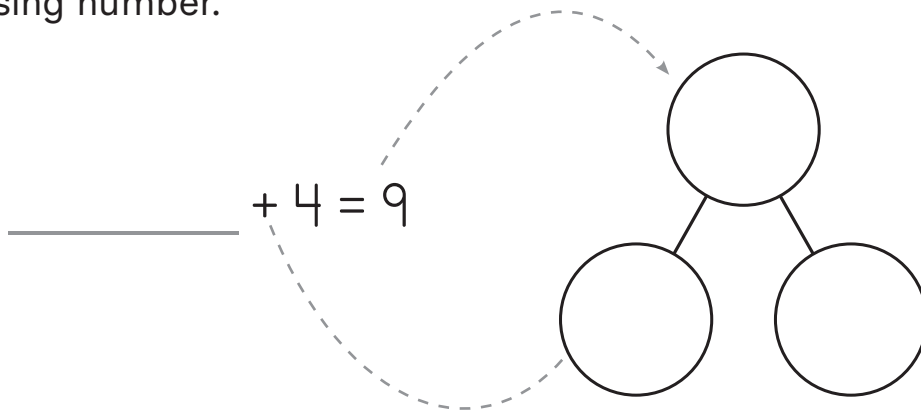
In the last lesson we learned how to find the missing number in the following equation. Go ahead and fill in the blank now. Use your Sumstix if you need to.

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

But what if the blank is at the start of the equation?

$$\underline{\quad\quad} + 4 = 9$$

The equation may look a bit weird, but the process is the same. Fill in the number bond below to match the equation. Then use your Sumstix to find the missing number.



Fill in the missing number in each of the following addition equations. You may use Sumstix to help. If you need extra help, draw a number bond on a scrap of paper or a white board .

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

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

$$\underline{\quad\quad} + 8 = 9$$

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

$$\underline{\quad\quad} + 5 = 7$$

$$\underline{\quad\quad} + 5 = 6$$

$$\underline{\quad\quad} + 2 = 5$$

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

REVIEW AND PRACTICE

Count on from each of the numbers below.

3 _____

2 _____

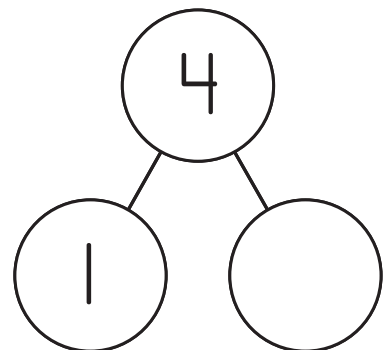
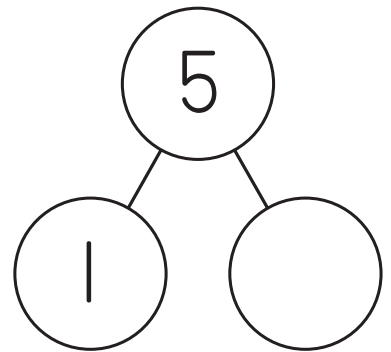
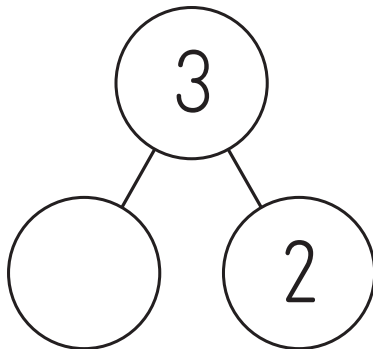
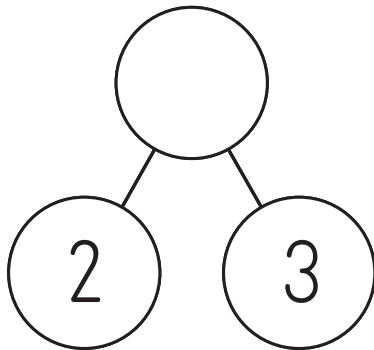
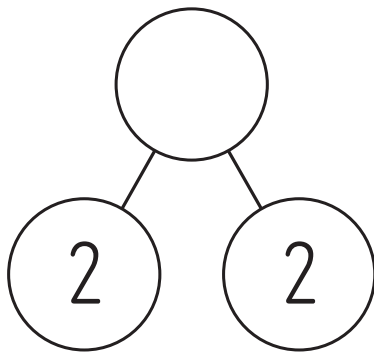
5 _____

6 _____

4 _____

8 _____

Write the missing number.



Write the the answer to the sums below. You may use Sumstix.

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

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

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

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

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

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

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

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

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

Lesson 38

Now that we know how to add numbers and solve addition equations, let's look at a very special number: 0. Can you work out the answer to this?

$$5 + 0 = \underline{\hspace{2cm}}$$

The answer is 5. If you worked this out AND know WHY the answer is 5, skip ahead to the practice activities opposite. Otherwise, read on.

Remember that when we say that we have zero of something, it means we have nothing. So the above equation simply means that I start with five things and add no more. I still have only five things. Not very exciting.

Let's look at what happens if we flip the equation around.

$$0 + 5 = \underline{\hspace{2cm}}$$

This time we're saying that we start with nothing and add five so now we have five things. That's a bit more interesting because it's always nicer to end up with more than you start with (especially if we're talking about something yummy...)

The important thing to remember is that if you start with 0 and you add anything, you end up with the anything. If you start with anything and add zero, you still end up with the anything. I'm going to try and trick you below, but if you remember these two ideas, you'll win!

Solve these addition equations. Some of them contain numbers or symbols that you probably don't know. Don't worry about them. Just remember our rule: zero plus anything is the anything. Anything plus zero is the anything you started with.

Example: zero plus banana equals banana.

$$2 + 0 = \underline{\hspace{2cm}}$$

$$0 + 9 = \underline{\hspace{2cm}}$$

$$1 + 0 = \underline{\hspace{2cm}}$$

$$0 + 4 = \underline{\hspace{2cm}}$$

$$0 + 3 = \underline{\hspace{2cm}}$$

$$4 + 0 = \underline{\hspace{2cm}}$$

$$0 + 6 = \underline{\hspace{2cm}}$$

$$42 + 0 = \underline{\hspace{2cm}}$$

$$0 + 74 = \underline{\hspace{2cm}}$$

$$0 + \img alt="apple icon" data-bbox="665 858 710 893"/> = \underline{\hspace{2cm}}$$

REVIEW AND PRACTICE

Find the missing numbers in the following equations.

$0 + \underline{\quad} = 10$

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

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

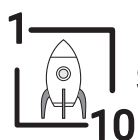
$\underline{\quad} + 3 = 3$

$4 + 0 = \underline{\quad}$

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

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

$\underline{\quad} + 0 = 8$



Sort the numbers in each box from biggest to smallest.

7

2

6

4

1

8

Write the the answer to the sums below. You may use Sumstix.

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

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

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

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

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

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

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

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

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

Lesson 39

Now we will mix things up and put everything together that we have learned. Fill in the missing number in each of the following addition equations. You may use Sumstix and/or number bonds to help.

$$\underline{\quad\quad} + 7 = 10$$

$$\underline{\quad\quad} + 2 = 4$$

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

$$\underline{\quad\quad} + 2 = 10$$

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

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

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

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

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

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

$$7 + 1 = \underline{\quad\quad}$$

$$\underline{\quad\quad} + 3 = 10$$

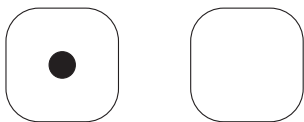
$$2 + 1 = \underline{\quad\quad}$$

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

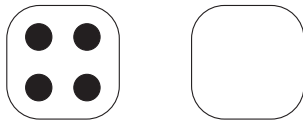
$$\underline{\quad\quad} + 0 = 1$$

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

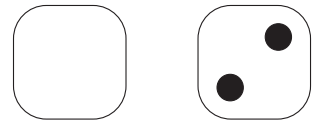
Draw dots on the second die to make five dots all together. Complete the equations.



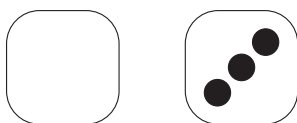
$$1 + \underline{\quad\quad} = 5$$



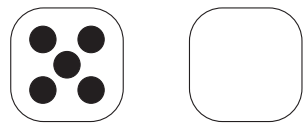
$$4 + \underline{\quad\quad} = 5$$



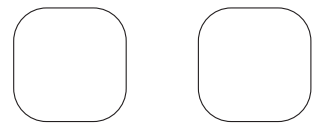
$$\underline{\quad\quad} + 2 = 5$$



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



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



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

REVIEW AND PRACTICE

Write the the answer to the sums below. You may use Sumstix.

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

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

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

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

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

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

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

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

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

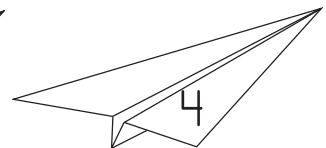
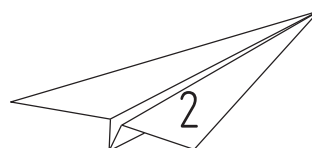
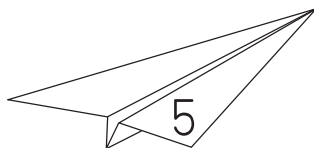
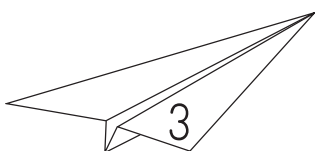
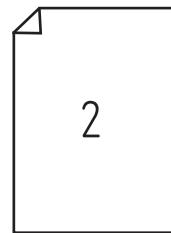
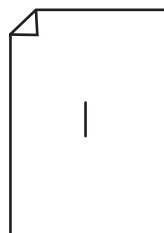
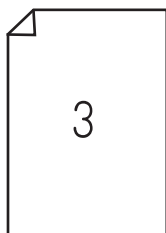
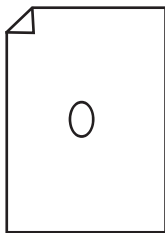


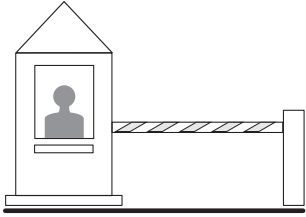
Write the mirror sums.

$2 + 4 = 6$

$1 + 3 = 4$

Join each sheet of paper with a paper plane so that the numbers on them add to 5.

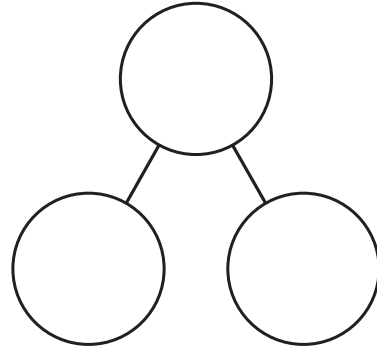
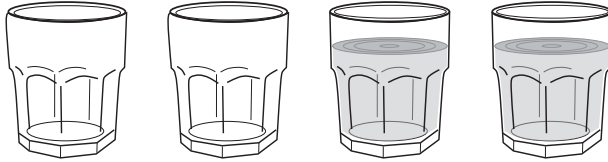




Lesson 40

CHECKPOINT 5

Fill in the number bond and write an addition equation to match the picture.



Draw circles around the squares to make two groups to match the addition equation.

$$2 + 4 = 6$$



Write the two mirror sums that are represented by the Sumstix patterns below.





Write the the answer to the sums below. You may use Sumstix.

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

$4 + 5 = \underline{\quad}$

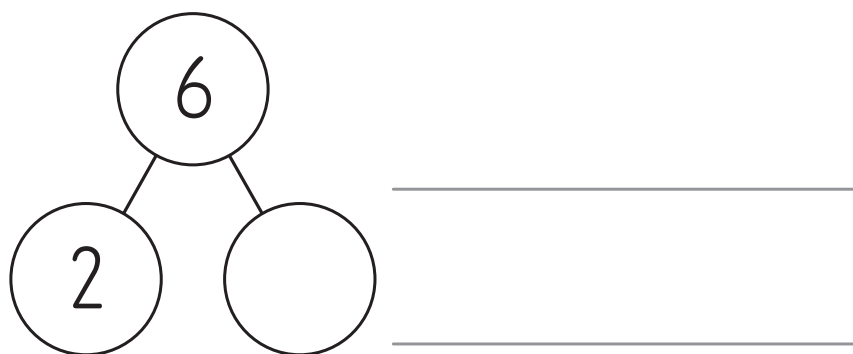
$1 + 8 = \underline{\quad}$

$2 + 5 = \underline{\quad}$

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

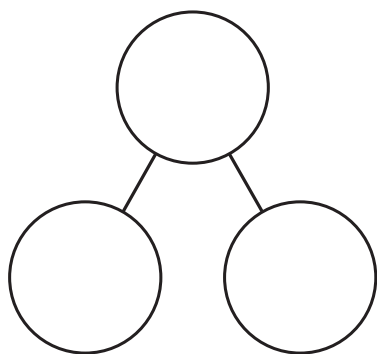
$2 + 6 = \underline{\quad}$

Use Sumstix to fill in the missing number in the number bond and then write the two mirror sums that can be represented by the number bond.



Solve the word problem.

A pod of dolphins was swimming around the Jones' boat. Kate counted four dolphins swimming around the bow and three dolphins jumping out of the water. How many dolphins did Kate count?



dolphins



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I hope you've had a chance to explore some of the lessons together.

Milestone Maths is designed as a pencil-and-paper program, and the full experience is available as a printed book with all lessons organised and ready to go.

If you'd like to continue, you can find the next level here:

www.milestonemaths.com.au

If you're not quite sure where to go next, or you'd like a hand getting started, feel free to reach out — I'm always happy to help.

A quick note...

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Rather than sharing this file, please feel free to share the website with friends so they can download their own copy and join in.

Thanks,

Kathy