

1

At the office



I work in a big office block. I need to use the lift. I use the telephone. I also need to use the photocopier and the fax machine. For all these I need to use numbers.

Sometimes I have to do the filing and put everything in the right order.

I help to look after the stationery too: paper, pens, pencils, paper clips, all sorts. The offices use reams of paper every day. I have to make sure that the offices don't run out of paper.

Talk about it

- Have you ever been into an office?
- Have you ever been into a school or college office?
- Do you use a telephone?
- Do you have a telephone number?

These are the skills you will practise in this unit.

Which are the most useful for you? Tick the boxes.

- ☐ Reading and writing numbers up to 10
- ☐ Ordering and comparing numbers up to 10
- ☐ Adding single-digit numbers with totals up to 10
- ☐ Subtracting single-digit numbers from numbers up to 10
- ☐ Understanding and using +, – and = signs
- ☐ Using a calculator to check calculations

Skill code

- N1/E1.2
- N1/E1.3
- N1/E1.4
- N1/E1.5
- N1/E1.6
- N1/E1.7

Words and numbers

At the office numbers are sometimes written in words and sometimes in figures.

Activity 1

Where have you seen numbers written in words or in figures?

Do you ever need to write down a house or flat number or a telephone number?

Have you seen numbers on buses, taxis, signs, notices, adverts or posters?

Here are the numbers I often have to use at the office.

0	1	2	3	4	5	6	7	8	9	10
zero	one	two	three	four	five	six	seven	eight	nine	ten

The office telephone extensions all have four-digit numbers.

When someone leaves a message and says, "Ring me back on extension two three eight five", I need to know that they mean the number 2385.



 Practise writing these telephone extension numbers in figures.

e.g. three eight one nine 3 8 1 9

1 four one two six 4

2 five eight three nine

3 seven six two five

4 four nine three zero

5 two four six eight


Activity 2


Do you ever use a telephone or mobile phone?

Which telephone numbers are important to you?

Have you used a telephone with a keypad?

Have a look at different telephones or mobile phones. Are the keypads all the same? Is the telephone keypad like a calculator keypad?

 Use a calculator to practise keying in different numbers. Work with another person. One can key in a number and the other can check the calculator display. Take it in turns.

Remember to clear the display after each telephone number. You do this by pressing the key marked .

- | | |
|------------|------------|
| 1 490 2351 | 2 268 4129 |
| 3 847 3628 | 4 543 9121 |
| 5 266 4589 | 6 392 4167 |
| 7 974 1212 | 8 403 8665 |



Activity 3

In one of the lifts at the office the numbers look quite different. They are Roman numerals. Have you come across these before?

Perhaps you've seen them on a clock, or on the volumes of books.











Roman numeral	I	II	III	IV	V	VI	VII	VIII	IX	X
Arabic numbers	1	2	3	4	5	6	7	8	9	10
Ordinal	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth

When someone asks for a floor they say 'first', 'second', 'third' and so on.

If I want the fifth floor, I push the button marked V.

For the tenth floor I push the button marked X.

Match the Roman numerals in the lift with the floor numbers. Draw a line to link each pair, I to 1, II to 2 and so on.

									
9	6	4	8	5	2	3	7	10	1

Note: A blue line is drawn from the 'I' button to the number '1'.



Review

Do you need more practice in working with numbers up to 10?

Yes ☐

No ☐

For more work on this, go to H1 and H2 (page 13).

Ten floors



Beside the lift there is a notice to tell you what is on each floor.

0	RECEPTION
1	SECURITY
2	GENERAL OFFICE
3	PHOTOCOPYING
4	ADVERTISING
5	PERSONNEL
6	FINANCE
7	NURSERY
8	RESTAURANT
9	DIRECTORS
10	CONFERENCE SUITE



Activity 4

Find the correct floor and fill in the missing words.

e.g. The directors are on the ninth floor.

- Advertising is on the floor.
- The nursery is on the floor.
- Security is on the floor.
- Finance is on the floor.
- The restaurant is on the floor.



Activity 5

Ring the correct button for the lift.

e.g. I want the **third** floor.

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

- I want the **second** floor.
- I want the **third** floor.
- I want the **tenth** floor.
- I want the **fifth** floor.



Activity 6






Sometimes at the office I help with the filing. I have to put the files back in the right place on the shelf. The files are numbered from 1 to 10.








Why is order important?






What things have you noticed that are numbered in order?






Put the files back in the right order. Use an arrow ↓ to show where you would put the file.






e.g.     

↓

1     

2     

3     

4     



Activity 7



Have a look at the stock of paper in the office. Work together with your teacher to compare how much paper there is of each colour. Use the words **more**, **less** or **equal**. For example, there is more green than yellow paper.

Remember

- 5 is *more than* 2.
- 5 is *less than* 10.
- 5 is *equal to* 5.
- 6 is *more than* 3.
- 6 is *less than* 8.
- 6 is *equal to* 6.



Review

Do you need more practice in ordering and comparing numbers?

Yes ☐

No ☐

For more work on this, go to H1, H2 and H3 (page 13) or E1, E2 and E3 (page 15).

This work links to mini-projects M1 and M2 (page 16).

How many reams?



Activity 8

When do you have to add up?

What different words can you use to talk about adding?

You can use counters or a number line to help you find the **total**.

The + sign is used for adding up. It is called a **plus** sign.

$$5 + 4 = 9$$



Adding up the blue paper, there are
$$\begin{array}{r} 5 \\ + 4 \\ \hline 9 \end{array}$$
 or you can write the sum $5 + 4 = 9$.
reams

The sign = means **equals** or **is equal to** or **is the same as**.

If you add 0 to a number the number stays the same: $5 + 0 = 5$

Add up how many reams of paper there are for each colour.



1 Green paper reams

2 Yellow paper reams

3 White paper reams

4 Pink paper reams

5 Cream paper reams

6 Red paper reams

Paper comes in packets called reams. There are five reams of paper in a box. It comes in different colours too. I have to **add** up to see how many reams there are of each colour.



Activity 9

Have you noticed that when you add numbers there are different ways of getting the same total?

Think about adding to make the number 5. Use some counters or pennies to help.

Remember the + sign means 'plus' or 'add'. The = sign means 'equals' or 'is **equal** to' or 'is the **same** as'.



1 + 4 = 5 is the **same** as



3 + 2 = 5.

1 Choose another number and think about all the ways you can add to make that number.

2 Work with another person. Your teacher will give you some fact cards.

3 Look at the cards and match up the pairs with the same totals. Use counters or a number line to help you check the answers to the sums.

$$4 + 3$$

$$2 + 5$$

$$1 + 6$$

4 Mix the cards up. Lay them face down on the table. Take turns to turn over two cards. If you turn over a pair with the same total, keep the cards. If the totals are not the same, turn the cards face down again, and it's the other person's turn. Keep going until you have found all the pairs. Get your teacher to check your work.



Activity 10

Draw a line to link the sums that have the same totals. You can use counters or pennies to help you check the totals.

$$3 + 1$$

$$2 + 3$$

$$2 + 4$$

$$5 + 2$$

$$2 + 8$$

$$3 + 6$$

$$4 + 4$$

$$4 + 3$$

$$6 + 2$$

$$2 + 2$$

$$4 + 5$$

$$7 + 3$$

$$4 + 1$$

$$3 + 3$$

Remember

- The **plus sign** (+) is used for addition.
- Addition is the same as finding the sum or the total.
- The **equals sign** (=) is used before the answer.
- If you add zero (0) to a number, the number stays the same.



Activity 11

- 1 Think of all the ways you can add two numbers to make 10.

What different words can you use? There's 5 plus 5, and 9 add 1.
What else?

You could say 3 add 7
 or the sum of 6 and 4
 or 6 plus 4.

Make a list on a piece of paper.

- 2 Work as a group. Match the facts. Draw lines to link three different ways of saying the same thing.

5 add 5	4 add 6	the sum of 2 and 8
6 plus 4	the sum of 3 and 7	9 + 1
the sum of 9 and 1	5 plus 5	the sum of 6 and 4
8 + 2	1 add 9	the sum of 5 and 5
7 plus 3	2 plus 8	7 add 3

Diagram showing connections between equivalent addition facts:

- 5 add 5 is connected to 6 plus 4.
- 6 plus 4 is connected to 4 add 6.
- 4 add 6 is connected to the sum of 6 and 4.



Activity 12

Work with another person in your group. Make up a sum, for example $3 + 4$. Ask your partner to write the sum in a different way such as '4 plus 3' or 'the sum of 3 and 4' or '4 add 3'.

Take turns. Ask your teacher to check your work.



Review

Do you need more practice in addition?

Yes ☐

No ☐

For more work on this, go to H4 and H5 (page 14) or E4 (page 15).

This work links to mini-projects M3 and M4 (page 16).

Calculator sums

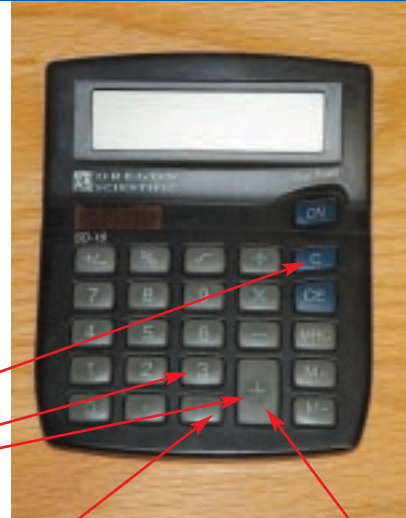


Activity 13

Have a look at the different keys on your calculator. Where is the $+$ sign? Where is the $=$ sign?

Before you start a new sum, you must always **clear the display** by pressing the **C** (clear) key.

So, to check the sum 3 add 5, press **3** then **+** then **5** then **=** and you will get the answer 8. Try it for yourself.



This is the $=$ sign.

This is the $+$ sign.



Use your calculator to check which totals are right and which are wrong. Tick the box and record the right answers for any additions that are wrong.

- | | | | | |
|---|--------------|--------------------------------|--------------------------------|-------|
| 1 | $2 + 3 = 5$ | right <input type="checkbox"/> | wrong <input type="checkbox"/> | |
| 2 | $5 + 4 = 10$ | right <input type="checkbox"/> | wrong <input type="checkbox"/> | |
| 3 | $3 + 7 = 10$ | right <input type="checkbox"/> | wrong <input type="checkbox"/> | |
| 4 | $4 + 4 = 8$ | right <input type="checkbox"/> | wrong <input type="checkbox"/> | |
| 5 | $6 + 3 = 9$ | right <input type="checkbox"/> | wrong <input type="checkbox"/> | |
| 6 | $4 + 5 = 9$ | right <input type="checkbox"/> | wrong <input type="checkbox"/> | |
| 7 | $3 + 5 = 7$ | right <input type="checkbox"/> | wrong <input type="checkbox"/> | |
| 8 | $4 + 2 = 6$ | right <input type="checkbox"/> | wrong <input type="checkbox"/> | |



Activity 14

If you have access to a computer, compare the on-screen calculator with your hand-held calculator.

Use the on-screen calculator to check some additions such as the stocks of paper in Activity 9.

Tip

Calculator keys

Press the **C** to clear the display before each new calculation.

- To add numbers, press the **+**.
- To get the answer to a calculation, press the **=**.



Review

Do you need more practice adding with a calculator?

Yes ☐

No ☐

For more work on this, go to H5 (page 14).

Take them away

Activity 15

What other words do you use for subtraction?

Here are four pens.

If I take one away, how many are left?

We use - sign for subtraction. It is called a **minus** sign.

$4 - 1 = 3$ 4 pens **take away** 1 pen leaves 3 pens.

4 pens **minus** 1 pen leaves 3 pens.

The **difference** between 4 and 1 is 3.

To find the difference we take away.

You can use counters or pennies to help with subtraction.



How many are left?

e.g.



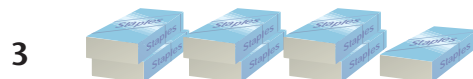
Take away 2. There are 3 left.



Take away 3. There are left.



Minus 4. There are left.



Subtract 3. There are left.



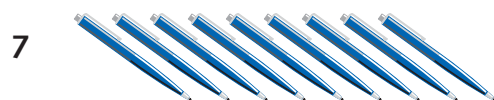
Take 4 away. There are left.



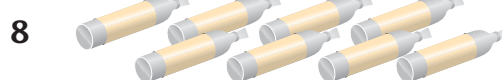
Minus 3. There are left.



Take 5 away. There are left.



Take 7 away. There are left.



Subtract 5. There are left.

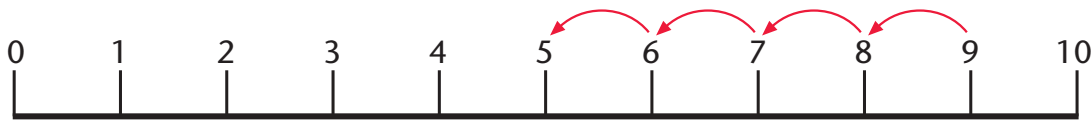
I often have to sort out a stationery order for one of the offices and calculate how much stock is left, so I have to be good at subtraction.



Activity 16

A number line can be used for subtraction.

The number line below shows $9 - 4 = 5$.



What happens if you subtract 0 from a number?

The number stays the same. $9 - 0 = 9$

Use the number lines to find the answers to these subtractions. Use a pen to record the moves along the number lines.

1 $5 - 2 = \dots\dots\dots$



2 $7 - 3 = \dots\dots\dots$



3 $8 - 4 = \dots\dots\dots$



4 $7 - 5 = \dots\dots\dots$



5 $9 - 3 = \dots\dots\dots$



6 $10 - 6 = \dots\dots\dots$



Subtractions can be checked by adding back.

For example, $10 - 6 = 4$. Check by adding back $6 + 4 = 10$.



Activity 17

Write down the subtractions from 10 with their answers. Then write down how you would check your answers by adding back.

Subtractions	Adding back
1 $10 - 0 = 10$	$0 + 10 = 10$
2 $10 - 1 = 9$	$1 + 9 = \dots\dots\dots$
3 $10 - \underline{\quad} = 8$	$\dots\dots\dots$
4 $10 - \dots\dots\dots$	$\dots\dots\dots$
5 $10 - \dots\dots\dots$	$\dots\dots\dots$
6 $10 - \dots\dots\dots$	$\dots\dots\dots$
7 $10 - \dots\dots\dots$	$\dots\dots\dots$
8 $10 - \dots\dots\dots$	$\dots\dots\dots$
9 $10 - \dots\dots\dots$	$\dots\dots\dots$
10 $10 - 9 = 1$	$9 + 1 = 10$



Activity 18

Find the minus sign on your calculator.

Check these with your calculator. Tick the box for right or wrong.
Write down the correct answers for those you find are wrong.

- | | | | |
|---------------|--------------------------------|--------------------------------|-------------------|
| 1 $8 - 3 = 5$ | right <input type="checkbox"/> | wrong <input type="checkbox"/> | $\dots\dots\dots$ |
| 2 $5 - 4 = 2$ | right <input type="checkbox"/> | wrong <input type="checkbox"/> | $\dots\dots\dots$ |
| 3 $7 - 5 = 2$ | right <input type="checkbox"/> | wrong <input type="checkbox"/> | $\dots\dots\dots$ |
| 4 $9 - 6 = 4$ | right <input type="checkbox"/> | wrong <input type="checkbox"/> | $\dots\dots\dots$ |
| 5 $6 - 3 = 3$ | right <input type="checkbox"/> | wrong <input type="checkbox"/> | $\dots\dots\dots$ |

Remember

- Clear the display before each new calculation.



Review

Do you need more practice in subtraction?

Yes ☐

No ☐

For more work on this, go to H6 (page 14) or E4 (page 15).

This work links to mini-project M4 (page 17).



Help



Activity H1

Write down all the numbers in order from 0 to 10.

0, 1, , , , , , , , ,

Now write them down again, but this time start from 10 and work back to 0.

10, 9, , , , , , , , ,



Activity H2

Match each number to the correct word. Use the list in the box at the bottom of page 3 to help you. Then match the numbers to the Roman numerals.

4 seven X
 6 zero III
 1 two IV
 10 eight VI
 5 four V
 2 six IX
 9 one I
 3 three VIII
 7 five 0
 0 nine II
 8 ten VII



Activity H3

Here are some numbers in order.

Fill in the missing numbers before and after the number shown.

1

3	4	5
---	---	---

2

	2	
--	---	--

3

	7	
--	---	--

4

	5	
--	---	--

5

	3	
--	---	--

6

	9	
--	---	--

7

	6	
--	---	--

8

	8	
--	---	--















Activity H4

Use 10 pennies. Arrange them into two groups. Write down the number in each group as a sum. For example $8 + 2 = 10$. See how many different sums you can find.

Now choose a different number of pennies, say nine pennies. See how many different sums you can find to add up to 9.

Activity H5

Add the pennies.

1		+		$3 + 2 = \dots\dots\dots$
2		+		$5 + 1 = \dots\dots\dots$
3		+		$4 + 2 = \dots\dots\dots$
4		+		$6 + 3 = \dots\dots\dots$
5		+		$9 + 1 = \dots\dots\dots$
6		+		$7 + 2 = \dots\dots\dots$









Use a calculator to check your work.



Activity H6

How many are left? Cross out the number of counters you have to take away and count how many counters are left.

1		$5 - 2 = \dots\dots\dots$
2		$7 - 3 = \dots\dots\dots$
3		$10 - 4 = \dots\dots\dots$
4		$6 - 5 = \dots\dots\dots$
5		$8 - 4 = \dots\dots\dots$
6		$9 - 5 = \dots\dots\dots$



Use a calculator to check your answers.

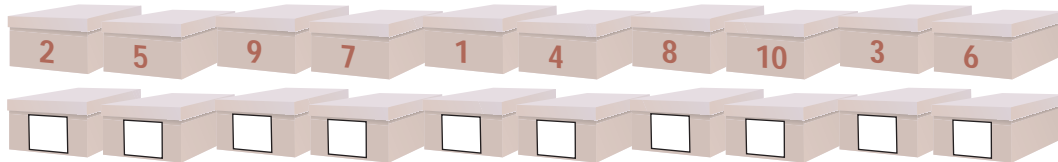


Extension



Activity E1

The files are all jumbled up. Put them back in the right order.



Activity E2



Ask your teacher for four sets of number cards: 1 to 10, one to ten, I to X and first to tenth.

Match them up, starting with the cards showing 1, **one**, I and **first**. Next find 2, **two**, II and **second**, and so on.

Ask your teacher to check your work.



Activity E3



Use a pack of playing cards. Sort out all the aces, then all the twos, then all the threes and so on until you have sorted the whole pack.

Ask your teacher to check your work.



Activity E4

Use a set of dominoes. Add the numbers on the two halves of each domino. Record the sums on a piece of paper. $3 + 3 = 6$

Ask your teacher to check your work.

Now use the dominoes again. This time subtract the two numbers. Write down the larger number first. Write down all your calculations on a piece of paper. $5 - 2 = 3$

Ask your teacher to check your work.





Mini-projects



Activity M1

Write down some of the numbers that you use.

The number of a bus you often use

The number of your flat or house or room

Your post code

Your telephone number

A friend's telephone number

Your doctor's telephone number

The telephone number of a local taxi company

The first few page numbers in this book



Activity M2

Work with another person. Play a game of dominoes.



Activity M3

For each of the sets of three numbers, make up two calculations, one addition and one subtraction.

For example, using the numbers 3, 5 and 8 you could write $3 + 5 = 8$ and $8 - 5 = 3$.

	Addition	Subtraction
1 1, 4 and 5
2 4, 2 and 6
3 9, 1 and 10
4 3, 7 and 10



Activity M4

If you have access to a computer, see if it has a calculator. Try clicking on Start, Programs, Accessories, Calculator or ask your teacher to help you to find it. Use the calculator to check some of your work, such as the calculations on pages 9 and 10.



Check it



Activity C1

These numbers are in order. Fill in the missing numbers.

1 3 4 6 8 10



Activity C2

Circle the right word for the question number.

1 three one five

2 six ten two

3 seven three eight

4 five four one

5 five nine four

6 ten six two

7 eight seven three

8 four three eight

9 nine four five

10 two six ten



Activity C3

How many have we got?

1



+



2



+



3



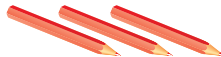
+



4



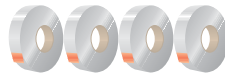
+



5



+





Activity C4

How many are left?

- 1  Take 2 away.
- 2  Subtract 4.
- 3  Take 3 away.
- 4  Minus 5.
- 5  Take 6 away.

Activity C5

Are the calculations right or wrong? Tick the box.

- 1 $4 + 2 = 6$ right ☐ wrong ☐
- 2 $5 + 5 = 9$ right ☐ wrong ☐
- 3 $3 + 4 = 7$ right ☐ wrong ☐
- 4 $6 - 2 = 4$ right ☐ wrong ☐
- 5 $8 - 4 = 6$ right ☐ wrong ☐

How am I doing?

Now look back at the skills listed on page 1.

Then complete the sentences below.

I am confident with

.....
.....

I need more practice with

.....

Date

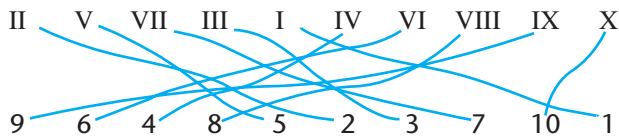
Activity 1

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

Activity 2

Check with your teacher.

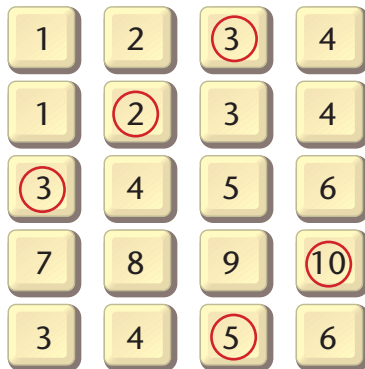
Activity 3



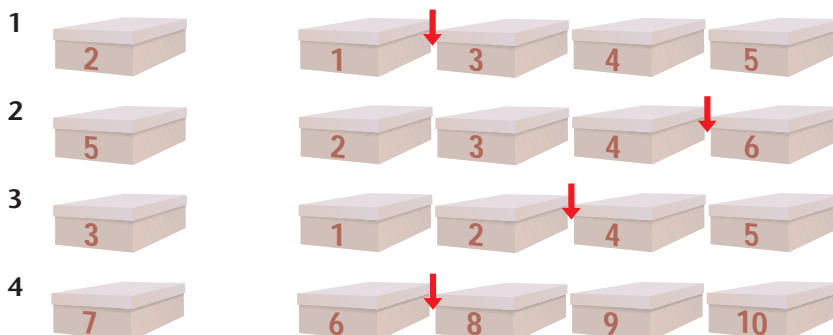
Activity 4

- fourth
- seventh
- first
- sixth
- eighth

Activity 5



Activity 6



Activity 7

Check with your teacher.

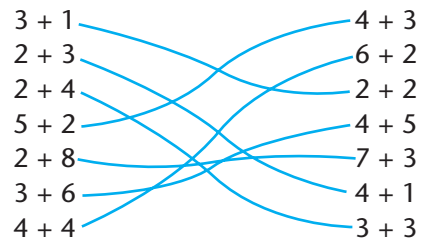
Activity 8

- | | | | |
|---------|-------------|----------|-------------|
| 1 Green | $5 + 2 = 7$ | 2 Yellow | $5 + 1 = 6$ |
| 3 White | $5 + 3 = 8$ | 4 Pink | $4 + 3 = 7$ |
| 5 Cream | $4 + 2 = 6$ | 6 Red | $3 + 3 = 6$ |

Activity 9

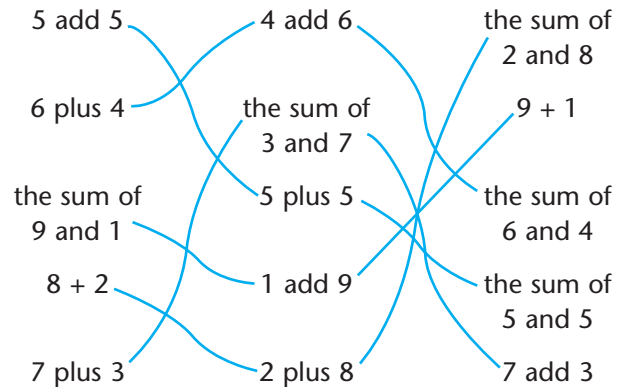
Check with your teacher.

Activity 10



Activity 11

- Check with your teacher.
-



Activity 12

Check with your teacher.



Activity 13

- 1 right
- 2 wrong $5 + 4 = 9$
- 3 right
- 4 right
- 5 right
- 6 right
- 7 wrong $3 + 5 = 8$
- 8 right

Activity 14

Check with your teacher.

Activity 15

- 1 3
- 2 4
- 3 4
- 4 2
- 5 2
- 6 5
- 7 2
- 8 3

Activity 16

- 1 $5 - 2 = 3$
- 2 $7 - 3 = 4$
- 3 $8 - 4 = 4$
- 4 $7 - 5 = 2$
- 5 $9 - 3 = 6$
- 6 $10 - 6 = 4$

Activity 17

Subtraction

- 1 $10 - 0 = 10$
- 2 $10 - 1 = 9$
- 3 $10 - 2 = 8$
- 4 $10 - 3 = 7$
- 5 $10 - 4 = 6$
- 6 $10 - 5 = 5$
- 7 $10 - 6 = 4$
- 8 $10 - 7 = 3$
- 9 $10 - 8 = 2$
- 10 $10 - 9 = 1$

Adding back

- $0 + 10 = 10$
- $1 + 9 = 10$
- $2 + 8 = 10$
- $3 + 7 = 10$
- $4 + 6 = 10$
- $5 + 5 = 10$
- $6 + 4 = 10$
- $7 + 3 = 10$
- $8 + 2 = 10$
- $9 + 1 = 10$

Activity 18

- 1 right
- 2 wrong $5 - 4 = 1$
- 3 right
- 4 wrong $9 - 6 = 3$
- 5 right

Help

Activity H1

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

Activity H2



Activity H3

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

Activity H4

Check with your teacher.

Activity H5

- | | |
|---------------|----------------|
| 1 $3 + 2 = 5$ | 4 $6 + 3 = 9$ |
| 2 $5 + 1 = 6$ | 5 $9 + 1 = 10$ |
| 3 $4 + 2 = 6$ | 6 $7 + 2 = 9$ |

Activity H6

- | | |
|----------------|---------------|
| 1 $5 - 2 = 3$ | 4 $6 - 5 = 1$ |
| 2 $7 - 3 = 4$ | 5 $8 - 4 = 4$ |
| 3 $10 - 4 = 6$ | 6 $9 - 5 = 4$ |



Extension

Activity E1



Activity E2

Check with your teacher.

Activity E3

Check with your teacher.

Activity E4

Check with your teacher.

Mini-projects

M1, M2, M3, M4

Check with your teacher.

Check it

Activity C1

1 2 3 4 5 6 7 8 9 10

Activity C2

- | | |
|---------|---------|
| 1 one | 2 two |
| 3 three | 4 four |
| 5 five | 6 six |
| 7 seven | 8 eight |
| 9 nine | 10 ten |

Activity C3

- 1 $4 + 4 = 8$
- 2 $6 + 3 = 9$
- 3 $2 + 5 = 7$
- 4 $7 + 3 = 10$
- 5 $5 + 4 = 9$

Activity C4

- 1 $6 - 2 = 4$
- 2 $5 - 4 = 1$
- 3 $8 - 3 = 5$
- 4 $7 - 5 = 2$
- 5 $9 - 6 = 3$

Activity C5

- 1 right
- 2 wrong (answer is 10)
- 3 right
- 4 right
- 5 wrong (answer is 2)