

DUAL LANGUAGE PROGRAMME

MATHEMATICS

YEAR 1

TEXTBOOK

PART I

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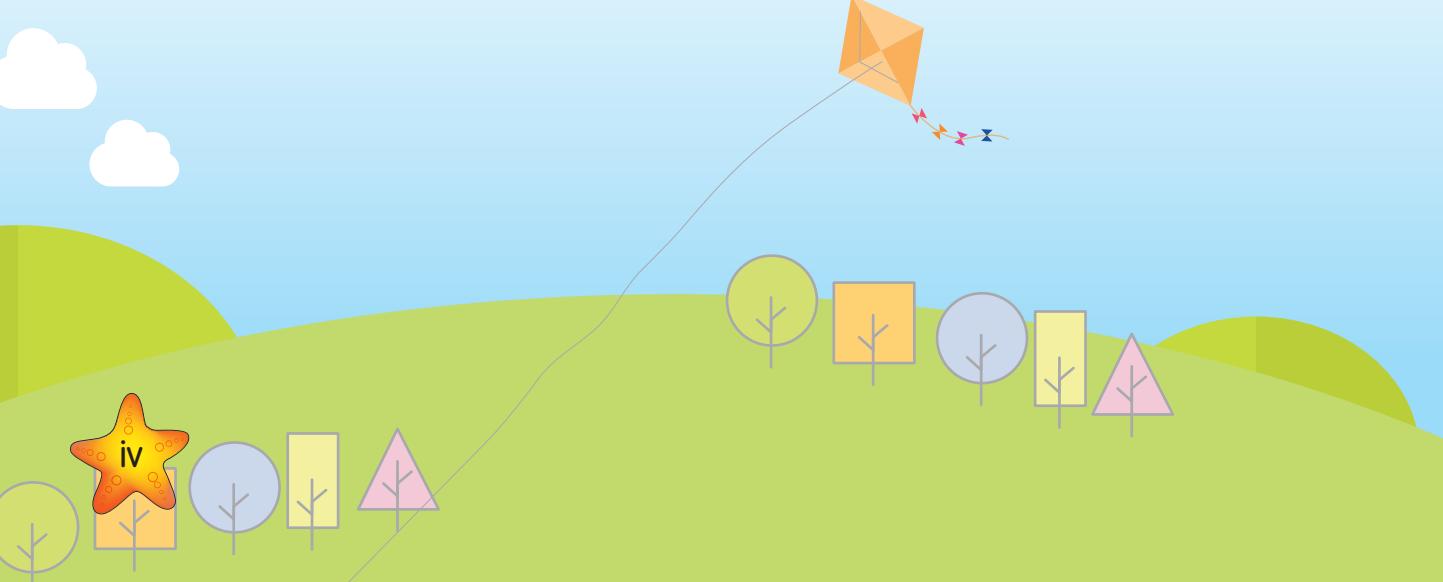
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2 ADDITION AND SUBTRACTION

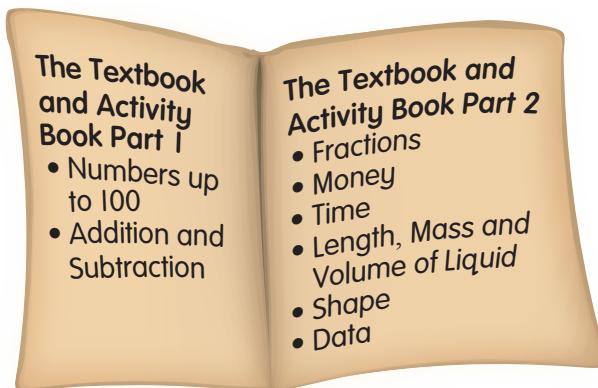
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PREFACE

Mathematics Year 1 textbook package is written in accordance to the Standard-Based Curriculum for Primary School (KSSR) in line with the implementation of the revised curriculum starting in 2017. The writing of this textbook is tailored to meet the needs of the pupils to understand basic mathematical skills from the easiest to the most abstract level. This textbook package is published to develop pupils' abilities to apply mathematical knowledge and skills, effectively and responsibly in their daily lives.

The textbook package consists of two components, namely textbooks and activity books which further divided into two parts. The topics contained in each part of the book are as follows:



The textbooks focus on the goals of mathematics learning consisting of basic mathematical concepts and skills. The presentation of these books is tailored by incorporating related reasoning questions so that pupils can communicate as well as to promote them to think critically and creatively. Each lesson is enhanced with formative exercises to be carried out either orally or in writing, as well as further activities proposed in the Teacher's Notes. In addition, the recreational elements in the lesson are also infused via My Project and Smart Fun to create active and fun learning lessons. Besides that, moral values are instilled indirectly through the learning activities and pictures.

The activity books provide reinforcement, remedial and enrichment activities to strengthen and enhance pupils' understanding on what they have learned in the textbooks. Teachers are encouraged to prepare extra activities and exercises according to pupils' needs and abilities.

This textbook package is hoped to provide meaningful and fun learning lessons as well as to increase pupils' interest in mathematics. To use this textbook, teachers can refer to the following explanation.





Subtopic refers to the Learning Standard.

Stimulus page encourages pupils to communicate.

Pupil-centred activities.

Questions of Higher-Order Thinking skills (HOTs).

Formative exercises to assess understanding of learned skills.

2-D SHAPES

2-D shapes exist on the flat faces of 3-D shapes.

1 Square 2 Circle

3 Triangle 4 Rectangle

SHARPEN YOUR MIND

What is the 2-D shape shown on the screen?

SELF-TEST

Name these 2-D shapes.

WORKSHEET

• Trace around one flat face of a 3-D shape to get a 2-D shape.

• Explain the meaning of 2-D shapes by comparing it with 3-D shapes.

• Provide more questions in the form of worksheets or question cards.

AB page 72

2 What is one over four?

I out of 4 equal parts.

Quarter

Each part is one over four or a quarter.

One

One over four

One over four

Fold a paper Draw lines Colour one part Write the fraction

Chocolate cake Fruit cake Layered cake

Adi eats one over four of a cake. Which cake is it? Discuss.

• Conduct activities to understand one over two and one over four using fraction kits or fraction cards. Show the pupils that each quarter when combined will form one whole (original shape).

• Surf <http://www.kidnumbers.com/fractions.php>

3.1.1

AB pages 1-5

3

Content Standard and Learning Standard number as in the Standard-Based Curriculum and Assessment Document.

Mathematical terms and important words for pupils' understanding.

Recreational activities to foster pupils' interest in mathematics.

Mascot stimulates critical and creative thinking to generate ideas.

Teacher's guide to carry out teaching and learning activities.

SMART FUN

Materials

Shape cards Fraction chart Coloured paper Glue Coloured pencils

Method

1 Colour one, two or three parts.

2 Paste the shapes on a fraction chart.

FRACTIONS

One over two One over four Two over four Three over four

3.1.1

• Prepare materials and shapes that have been divided into equal parts for each group.

• Guide the pupils to carry out activities to reinforce the concept of fractions.

AB pages 6-10

Links to the pages in the activity book.

Reinforcement activities to enhance skills proficiency.

Remedial activities to assess understanding of basic skills.

Enrichment activities to test critical and creative thinking.

SELF-ASSESSMENT

Calculate. Write the letter that match

Activity 3 Complete these.

January February April August October

MIND TEASER

Let's find the treasure. Look at the fraction diagrams. Colour the words of fractions that you come across.

3.1.1

10

• Writers •



NUMBERS UP TO 100



1.1.1



- Ask the pupils to talk about the picture.
- Guide the pupils to define the groups of more and less objects.
- Ask the pupils to talk about the objects around them. Relate it with “more” or “less”.





MANY AND FEW

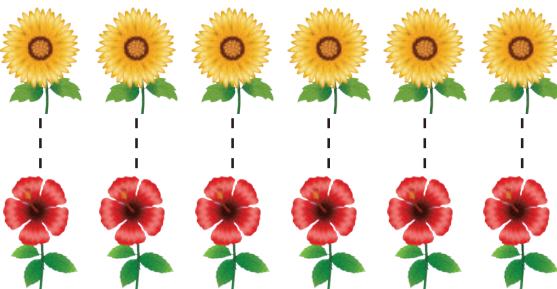


a Compare the flowers and butterflies.

Many flowers. A few butterflies.
The flowers and the butterflies are **not equal**.

b Compare and .

Match one-to-one.



Yellow flowers are as many as red flowers.



- Explain that comparison is to find the similarities and differences between objects.
- Guide the pupils to identify the groups of more and less objects.
- Ask the pupils to give examples of things around them of the same amount.



2

Compare the



less

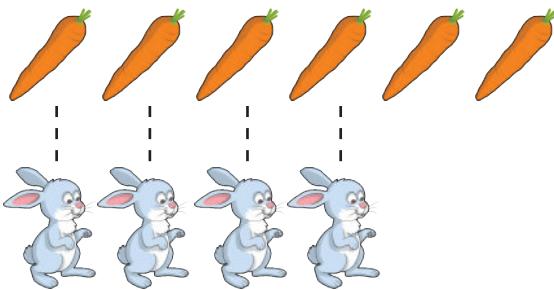
and are not equal.
is less. is more.



more

3

Compare the carrots and rabbits.



more.



SHARPEN
YOUR
MIND



Are there enough fruits for the birds?
Explain.

I.I.I
I.2.1(iii)



AB pages 3 - 5

- Guide the pupils to identify the groups of more and less objects. Use the pairing objects such as chair and table, cup and saucer, fork and spoon, bottle and cap and so on.
- Ask the pupils to give examples of objects which are not the same in numbers around them.





SELF-TEST

Look at the picture. Answer these questions.



1 Which is more, or ?

2 Which is less, or ?

3 Compare the children and butterflies.
Are their numbers equal or not equal?

4 Choose more or less.

is (more, less). is (more, less).

I.I.I
I.2.I(iii)

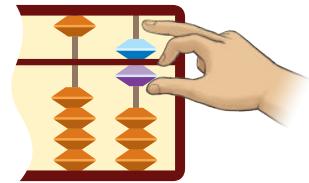
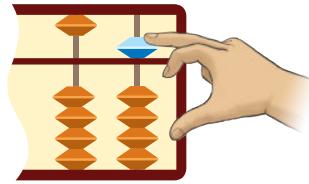
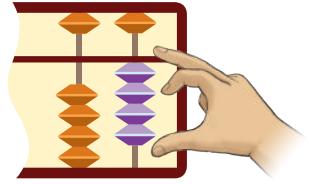
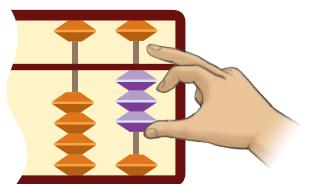
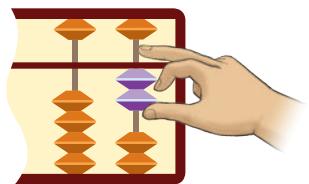
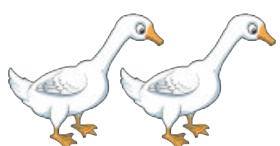
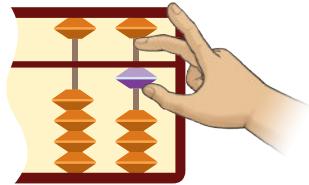


- Carry out activities to determine the groups of more and less.
- Provide more questions in the form of worksheets or question cards.



RECOGNISE 1 TO 10

Count and say the numbers.

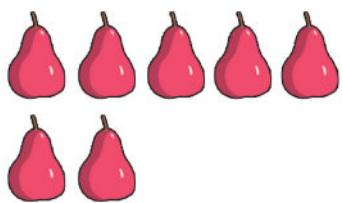


I.2.1(i)
I.2.1(ii)
I.2.2(i)
I.2.2(ii)

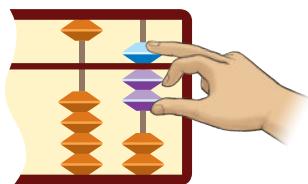


- Explain that number is an amount of objects. Numeral is a symbol that represents the number of objects.
- Guide the pupils to count objects and say the correct number of the counted objects.
- Avoid pupils counting by memorising.

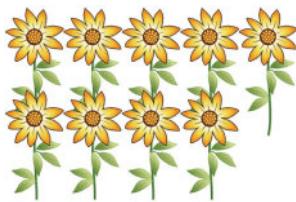
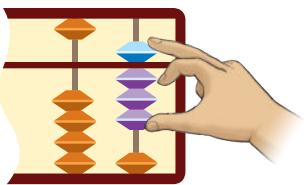




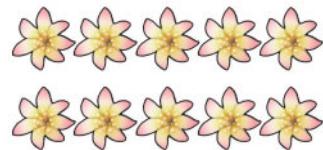
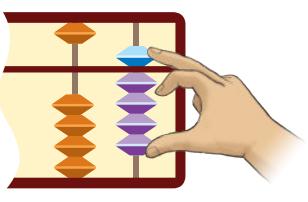
7
seven



8
eight



9
nine

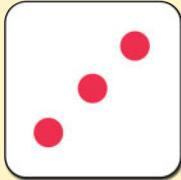


10
ten

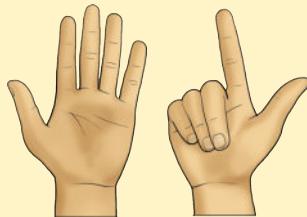


Say the numbers.

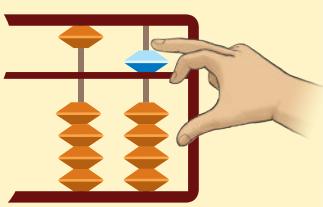
a



b



c



I.2.1(i)
I.2.1(ii)
I.2.2(i)
I.2.2(ii)



- Use the abacus or number cards to show a particular number, then ask the pupils to match the number with the same counters to represent the number shown.
- Provide more questions in the form of worksheets or question cards.



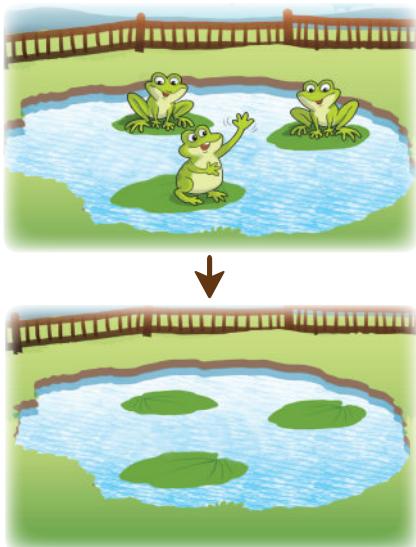
AB pages 6 - 8



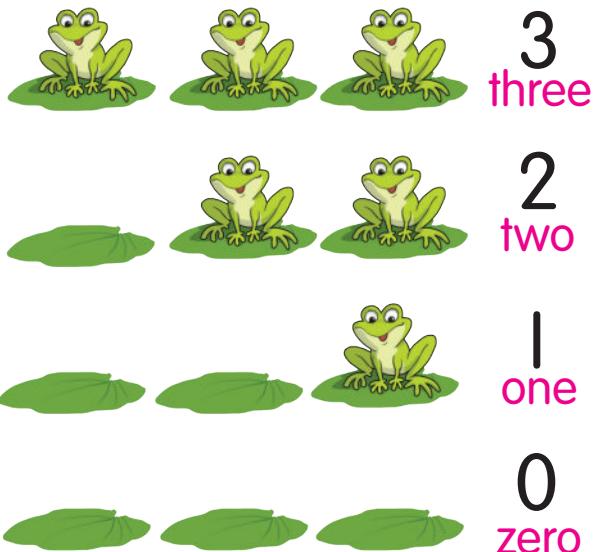
RECOGNISE ZERO

All the frogs on the leaves jump into the pond.
How many frogs are left on the leaves?

There are 3 frogs
on the leaves.



No frogs on the leaves.



The number of frogs on
the leaves is **zero**.



SELF-TEST

Which container holds zero object?

a



b



- 1.2.1(i)
- 1.2.1(ii)
- 1.2.2(i)
- 1.2.2(ii)

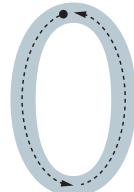


- Guide the pupils to understand the concept of zero. Explain the meaning of zero is no object.
- Put some counters in one hand, grasp both hands and ask pupils which hand has zero counter.
- Provide more questions in the form of worksheets or question cards.





WRITE 0 TO 10



zero

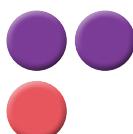
Count the objects.
Write the numbers in numerals and words.



one



two



three



four

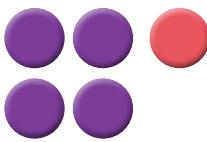
I.2.2(i)
I.2.2(ii)
I.3.1



- Explain that numeral is the symbol for the number or amount of objects.
- Guide the pupils to write numbers in numerals and words with the correct technique.
- Show the pupils some counters and ask them to write the numbers and its words to represent the number of counters.

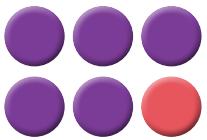


AB pages 10 - 14



5

five



6

six



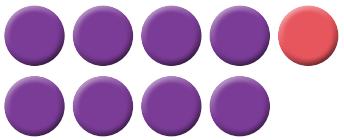
7

seven



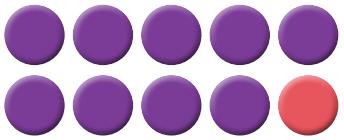
8

eight



9

nine



10

ten

I.2.2(i)
I.2.2(ii)
I.3.1



- Ask a pupil to write a number on the back of another pupil. The pupil will write back the number on paper or writing-board. This method is called “tactile sense” which can help the pupils in their writing skills.

AB pages 15 - 20





SELF-TEST

Count the objects. Say the numbers.
Write the numbers in numerals and words.



a



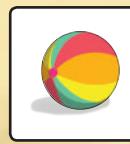
b



c



d



e



f



g



h



I.2.2(i)
I.2.2(ii)
I.3.1



- Ask the pupils to say the number of objects in the picture aloud. Ask them to write the numbers in numerals and words.
- Provide more questions in the form of worksheets or question cards.





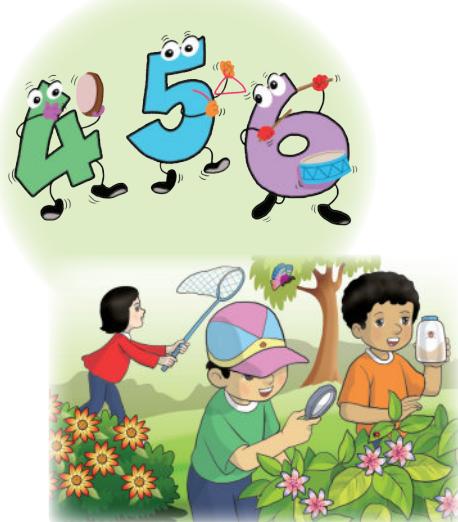
Smart with Numbers

Let's sing.

One one one I love my dear mother
Two two two I love my dear father
Three three three let us sing together
One two three I love them all my dear



Four four four I respect my teachers
Five five five let's write, read and count
Six six six let's learn happily
Four five six our life will be easier



Seven seven seven let's study hard
Eight eight eight for our bright future
Nine nine nine let's help our friends
Seven eight nine let's practise them all



1.2.1

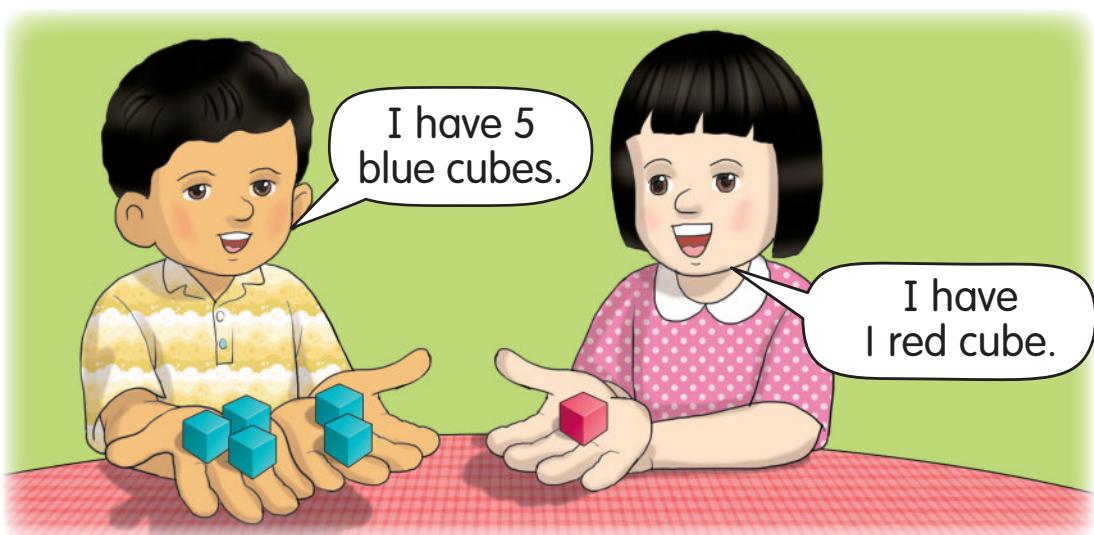


- Hold a number card and sing with actions and rhythm of the song "Sayang Ibu".

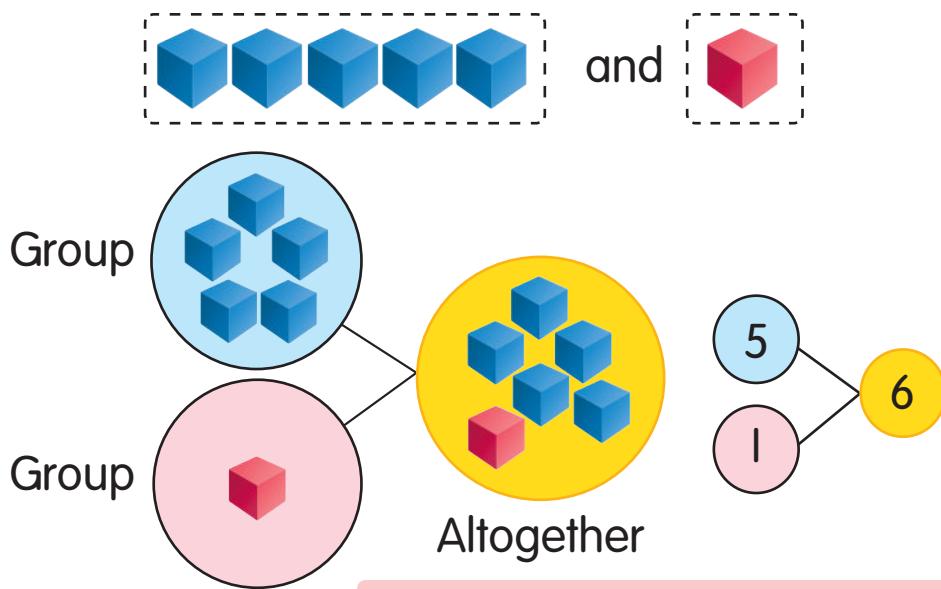




COMBINATION OF NUMBERS



How many cubes are there in each group?



There are 6 cubes altogether.

1.4.1

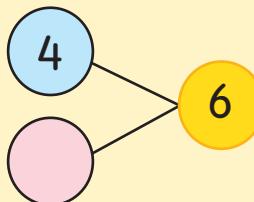


- Show 2 groups of cubes, which are 1 and 5. Ask the pupils to count them all. Relate their counting with how they count to get 6 cubes. Help the pupils to see the relationship between 1 and 5 to make 6.
- Explain that combination of numbers is two values of numbers to make a single number.

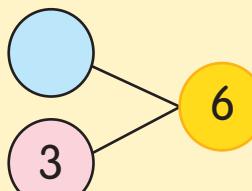
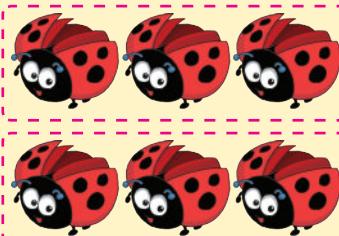




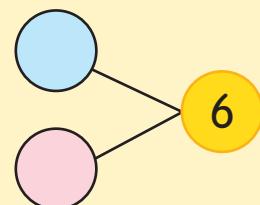
What are other combinations of 6?



4 and make 6.



 and 3 make 6.



 and make 6.

1.4.1

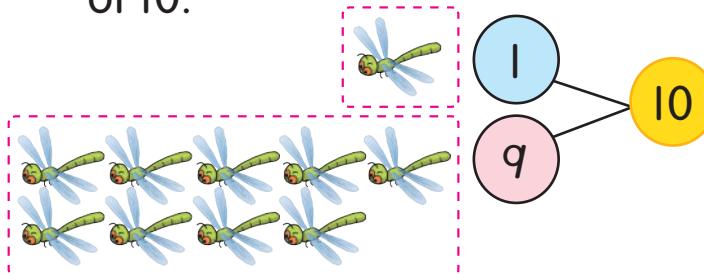


- Guide the pupils to see the relationship between the groups and altogether. The combination of two groups will result as altogether. This combination is defined as the combination of numbers.

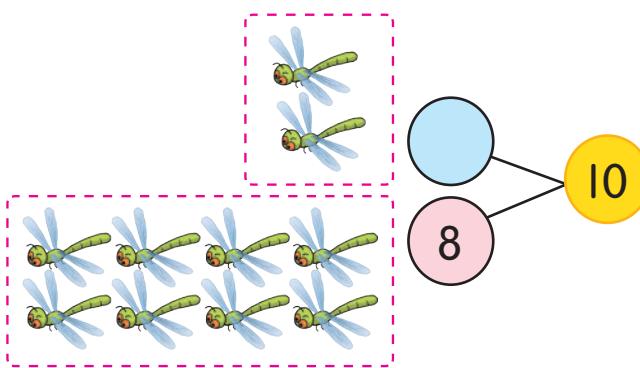




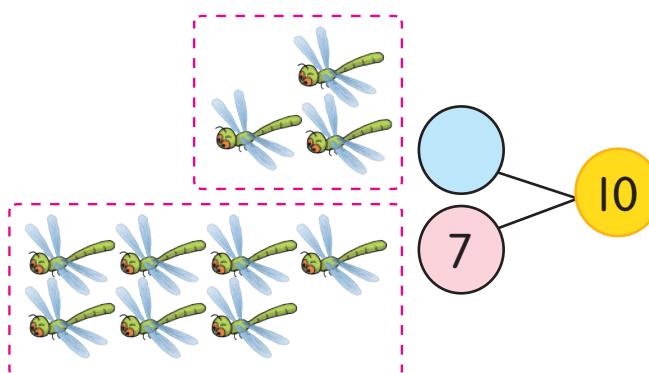
2 Let's learn the combinations of 10.



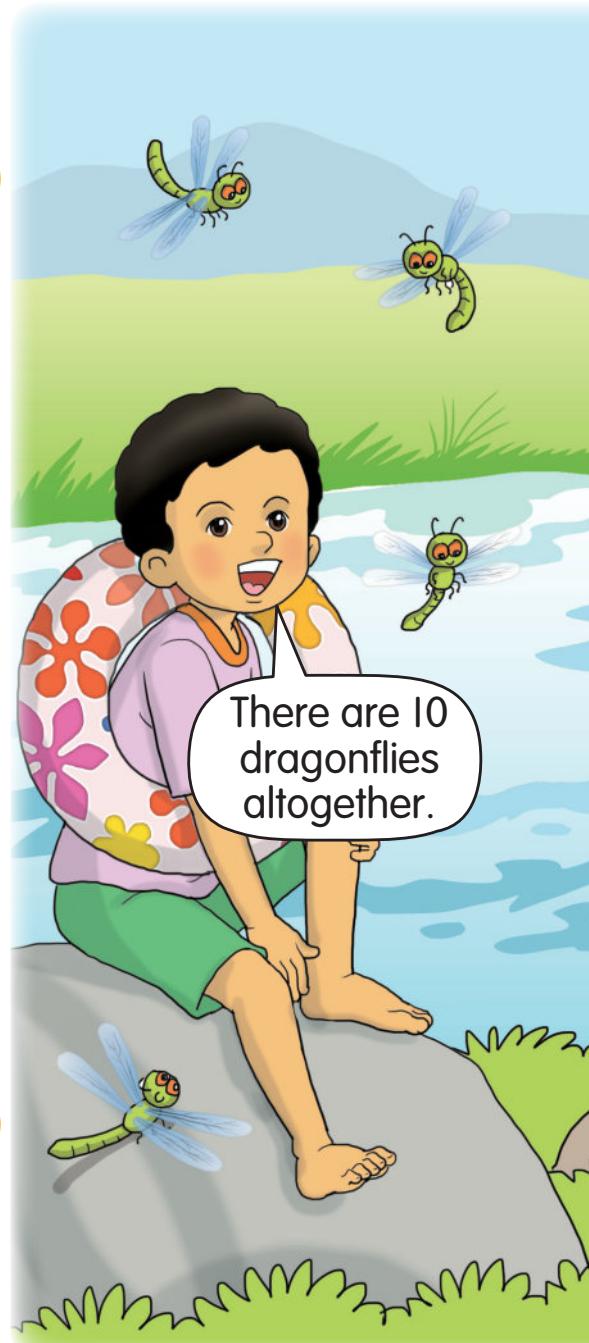
1 and 9 is 10.



2 and 8 is 10.



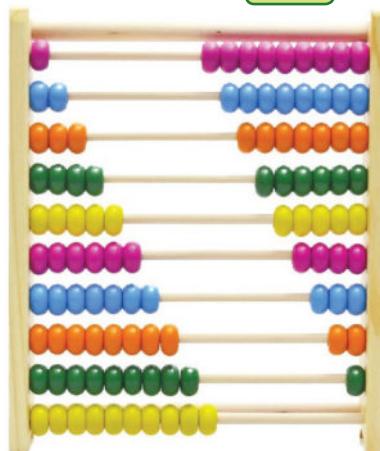
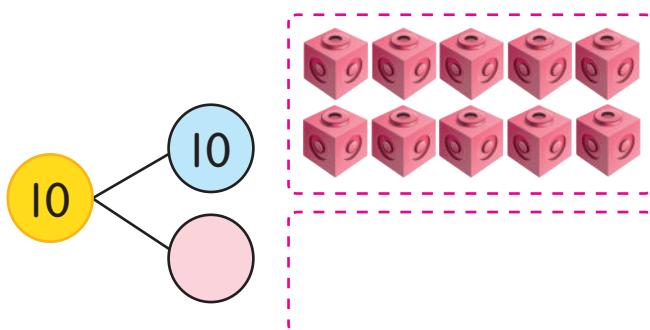
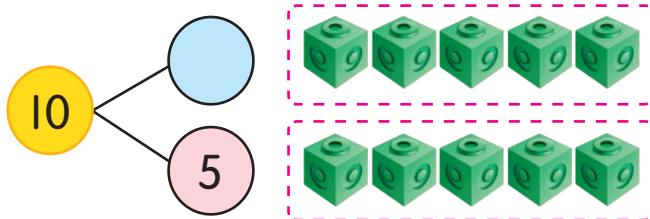
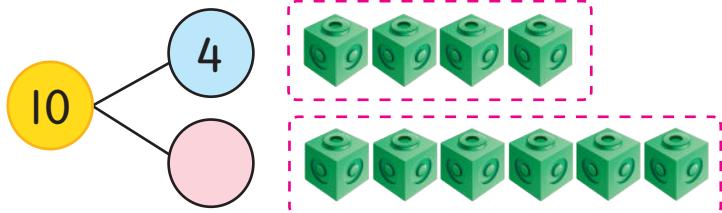
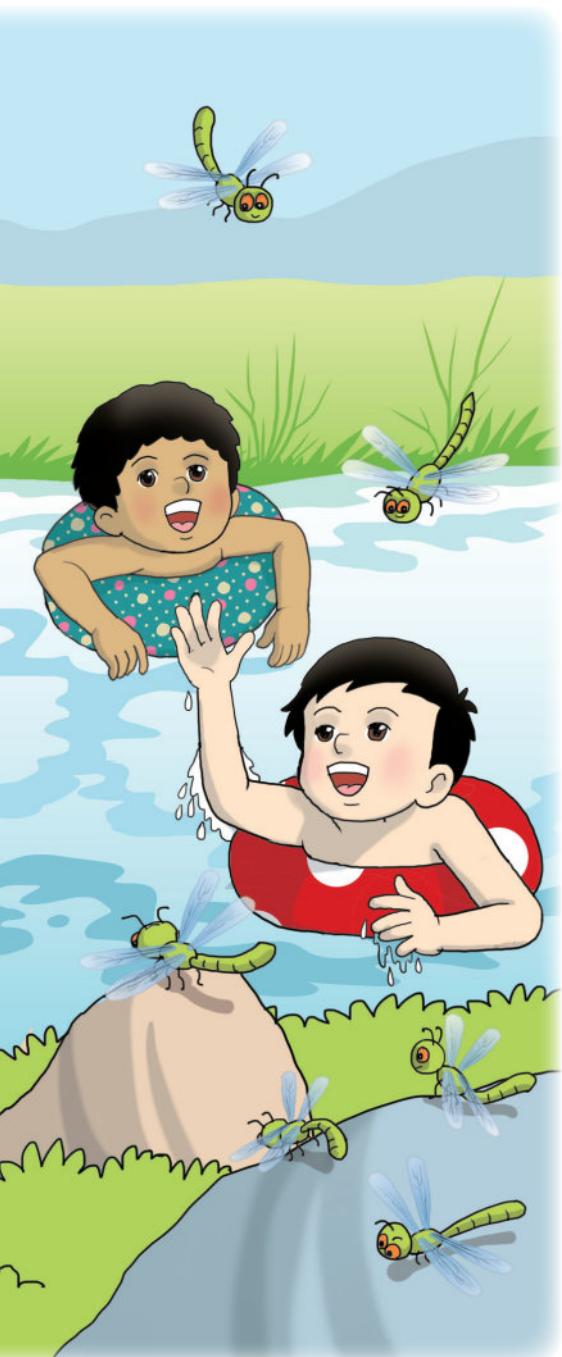
3 and 7 is 10.



1.4.1



- Explain that 9 and 1 is 10 which is equal to 1 and 9 is 10.



Are these combinations of 10? Say it.



1.4.1



- Carry out activities in pairs. Ask a pupil to say one number plus one number between 0 and 10, and his/her partner says the combination of that numbers. Exchange roles for other combination of numbers. Use the counters to help pupils understand it quickly.

AB pages 22 - 24



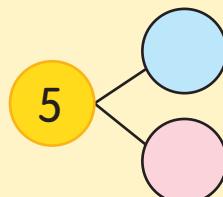
SELF-TEST

1 Separate into two groups.

a How many are there in each group?

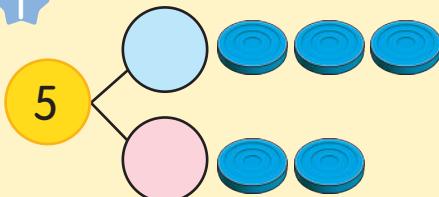


5 is and .

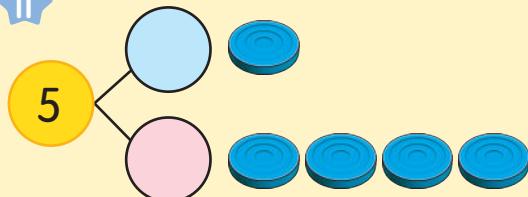


b What are other combinations of 5?

i



ii

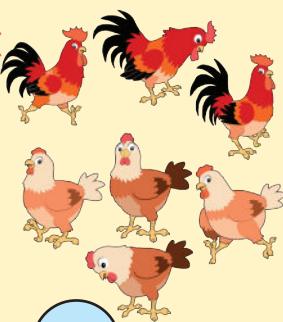


2 Complete these.

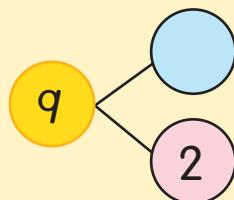
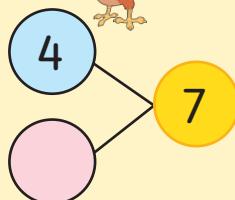
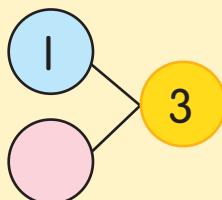
a



b



c



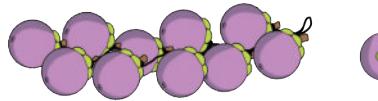
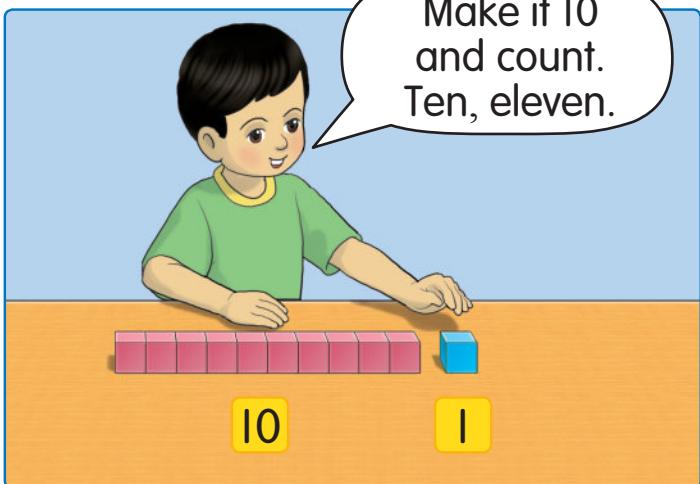
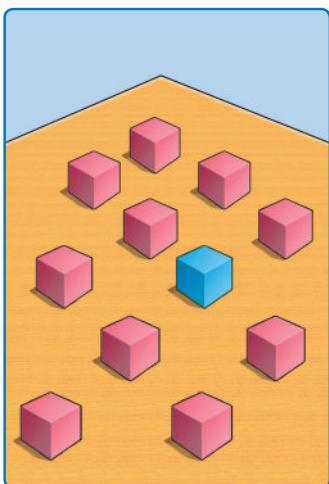
1.4.1



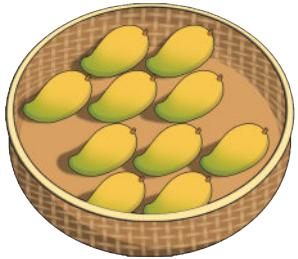
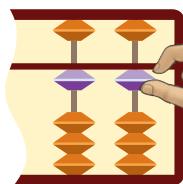
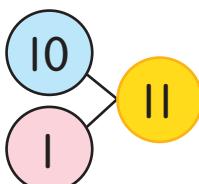
- Diversify the activities using marbles or other counters. Show some counters and hide some others in a container. Ask the pupils to guess the number of counters in the container and write the appropriate combination of numbers.
- Provide more questions in the form of worksheets or question cards.



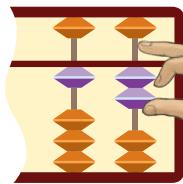
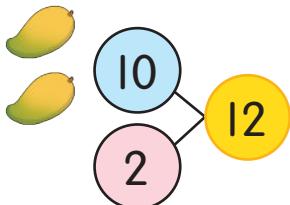
RECOGNISE 11 TO 20



10 and 1 is 11



10 and 2 is 12

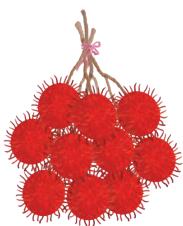


I.2.1 (i)
I.2.1 (ii)
I.2.2(i)
I.2.2 (ii)

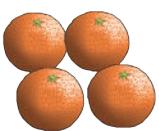
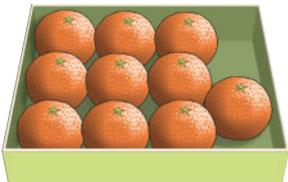
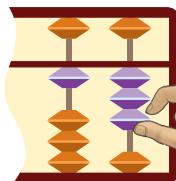
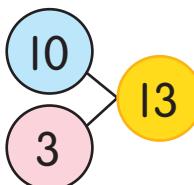


- Ask the pupils to count aloud using counters and stop when the number is 10, and show that there are some counters which have not been counted.
- Explain that we can count by forming the group of 10 first.

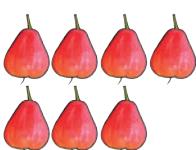
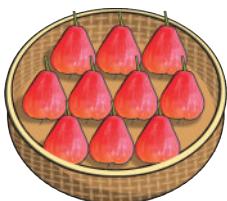
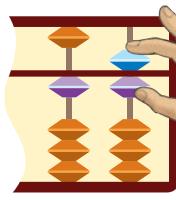
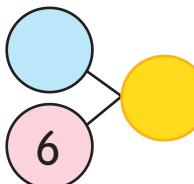
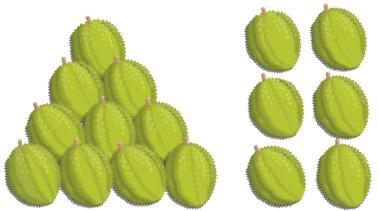
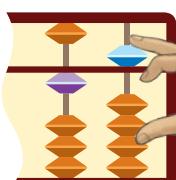
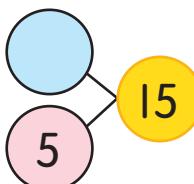
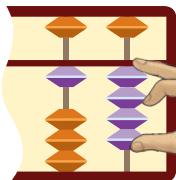
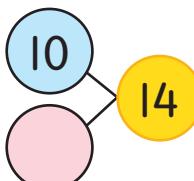




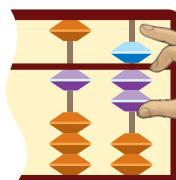
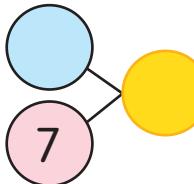
10 and 3 is 13



10 and is 14



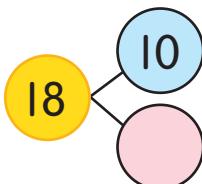
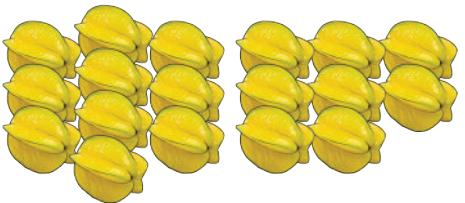
and 7 is



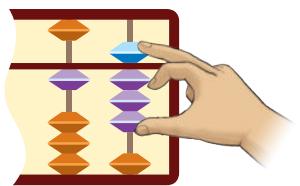
I.2.1 (i)
I.2.1 (ii)
I.2.2(i)
I.2.2 (ii)



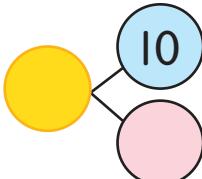
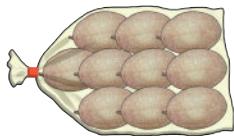
- Show to the pupils how to form a group of 10. Ask the pupils to say clearly the combination of 10 and count the next number. For example, 10 and 3 is 13.
- Emphasise that the numbers of 11 to 20 have two digits. 10 is also a two-digit number.



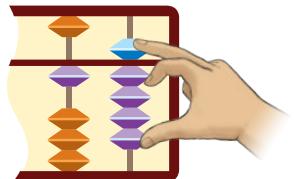
18
eighteen



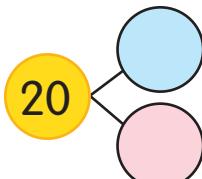
18 is and



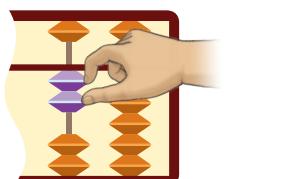
19
nineteen



is 10 and



20
twenty



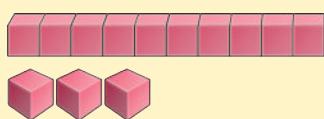
20 is and



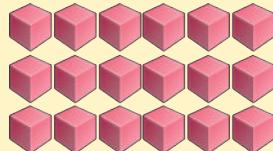
SELF-TEST

How many objects? Say the combination.

a



b



- I.2.1 (i)
- I.2.1 (ii)
- I.2.2(i)
- I.2.2 (ii)



- Discuss with the pupils the objects around them with quantities of more than 10. Ask them to list out and write the number of objects.
- Provide more questions in the form of worksheets or question cards.

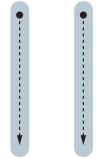
AB pages 25 -27





WRITE 11 TO 20

I write eleven.



eleven



twelve



thirteen



fourteen



fifteen



sixteen



seventeen



eighteen



nineteen



twenty

I.2.2(i)
I.3.1



- Guide the pupils to write 11 to 20 in numerals and words correctly. Carry out writing activity in pairs. Ask a pupil to say a number and another pupil writes the number in numeral and word.

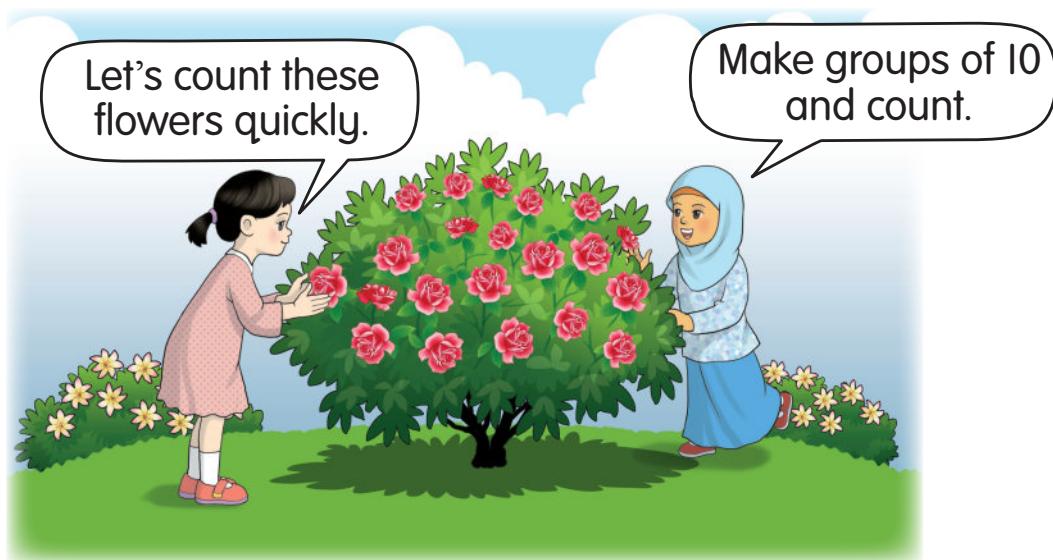


AB pages 28 - 37



RECOGNISE 21 TO 100

1 Let's count 🌸.



Group of 10



Group of 10



20 and 1 is 21.



We count 10, 20, 21.



Altogether is 21 🌸.

I.2.1(i)
I.2.1(ii)
I.2.2(i)



- Guide the pupils to count in groups of 10 to specify the number of 21 to 100.
- Carry out an activity of saying numbers based on the flash cards.





2 Count and say the numbers.



Try to complete this.



I.2.1(i)
I.2.1(ii)
I.2.2(i)
I.2.2(ii)



- Carry out an activity of representing numbers using counters, abacus and so on.





3 Say the number of objects.

There are thirty-four altogether.

d



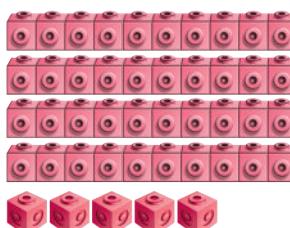
30 31 32 33 34

30 and 4 is 34.

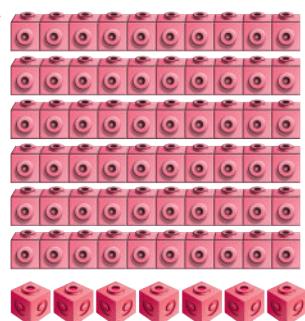


b

Forty-five.



c

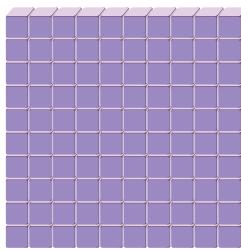
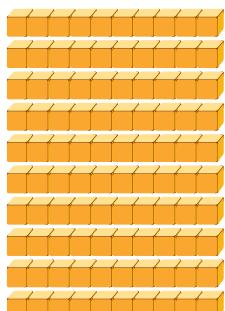


40 and [] is [].

[] and [] is [].



4



I hundred

10 tens

10 tens is equal to one hundred.



1.2.1(i)
1.2.1(ii)
1.2.2(i)
1.2.2(ii)



- Guide the pupils to show the numbers of 30 to 100 using base ten blocks. Carry out activities such as matching counters with their numbers or showing counters and writing numbers of 21 to 100 in numerals and words.



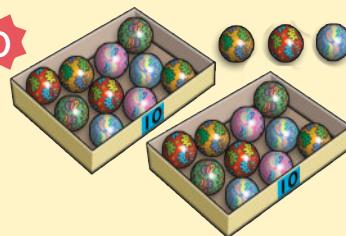
SELF-TEST

1 Say the number of counters or number represented.

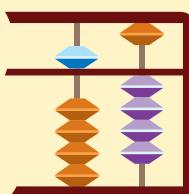
a



b



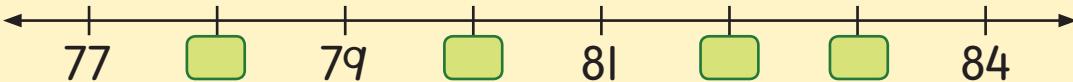
c



2 What are the missing numbers? Write the numbers in numerals and words.

1	2	3	4	5	6	7	8	9	10
11	12		14	15	16	17	18		20
21	22	23	24	25	26	27	28	29	30
31	32	33	34		36	37		39	40
41	42	43	44	45	46	47	48	49	50
51	52	53		55	56	57	58	59	
61	62	63	64	65	66		68	69	70
71		73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88		90
	92	93	94	95		97	98	99	

3 Complete the number line.



I.2.I(i)
I.2.I(ii)
I.3.I

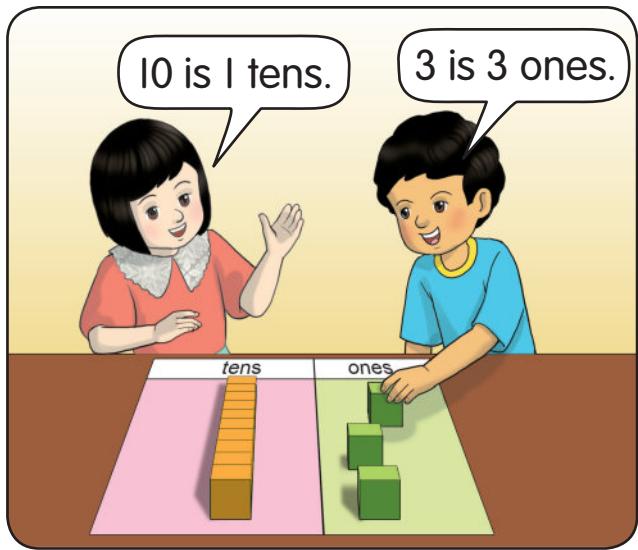
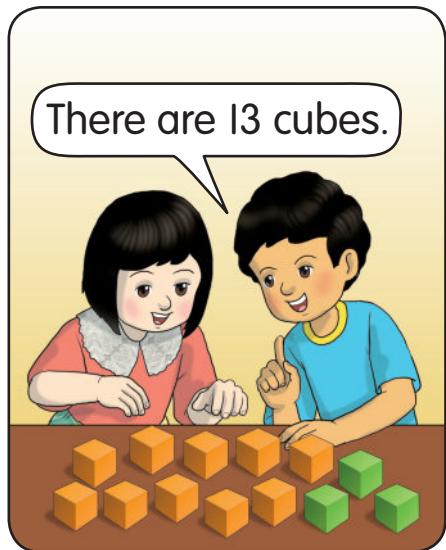


- Help the pupils to recognise numbers in numerals and words.
- Surf <https://www.ictgames.com>
- Provide more questions in the form of worksheets or question cards.





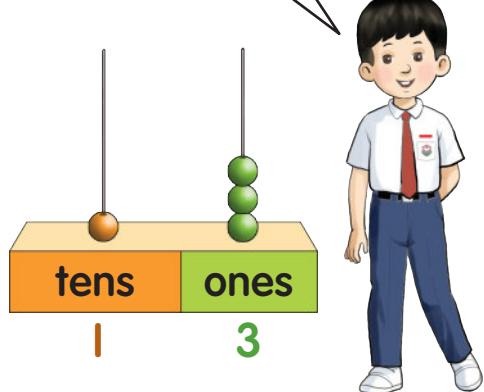
RECOGNISE PLACE VALUE AND DIGIT VALUE



1 tens and 3 ones are 13.

tens	ones
1	3

Number 13 has digit 1 and digit 3.



Place value for 1 is tens.

Place value for 3 is ones.

Digit value for 1 is 10.

Digit value for 3 is 3.

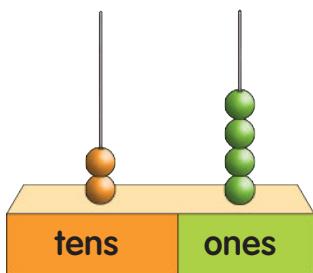
1.6.1



- Guide the pupils to understand the place value of a number by putting the tens and ones correctly.
- Emphasise the difference between place value and digit value.
- Explain that digit is numbers from 0 to 9 which can form another number.



2



24 is 2 tens and 4 ones.



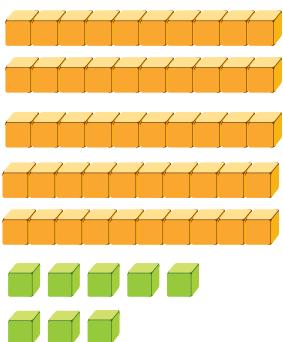
Place value for 2 is tens.

Digit value for 2 is 20.

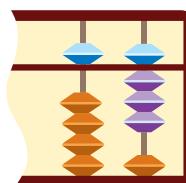
Place value for 4 is ones.

Digit value for 4 is 4.

3



58 is 5 tens and 8 ones.



Place value for 5 is 50.

Digit value for 5 is 5.

Place value for 8 is 8.

Digit value for 8 is 8.

67

76

Look at the numbers.
What are the similarities?
What are the differences? Discuss.



1.6.1



- Guide the pupils to show the place value using abacus.
- Surf <http://www.sheppardsoftware.com/mathgames/placevalue/value.htm>



AB pages 44 - 45



SELF-TEST

1 Say the place value for the underlined digits.

a 14

b 68

c 90

d 100

2 What is the digit value for the red-coloured digits?

a 17

b 26

c 52

d 70

3 Complete the table.

Number	Place value	Digit value
a 49	4	4
	q	q
b 80	8	8
	0	0

SHARPEN
YOUR
MIND



Forty-five.

What is the digit for each place value for the numbers said?

hundreds	tens	ones

Sixteen.



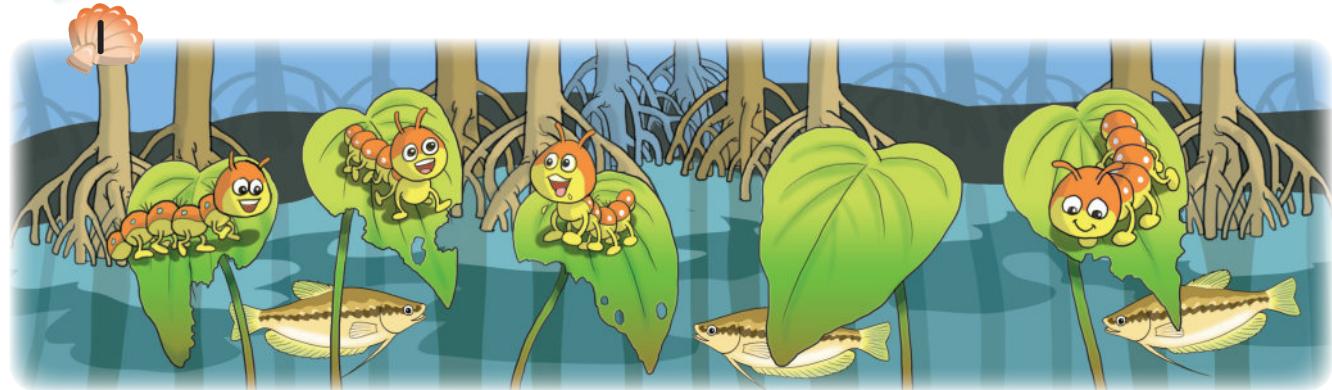
1.6.1



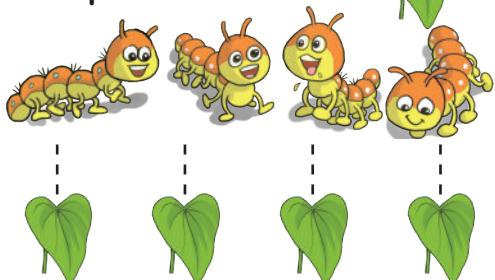
- Surf <https://www.pinterest.com/explore/place-value-worksheets/>
- Provide more questions in the form of worksheets or question cards.



MORE OR LESS



Compare and .



less

is less.
 is more.

more



is more than
 is less than
 is more than
 is less than

Compare the number of fish and the number of caterpillars.

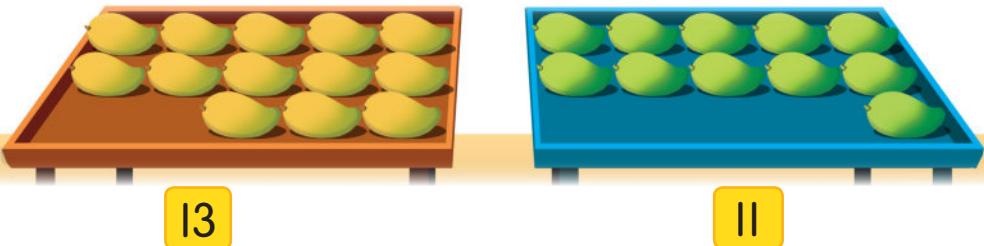


1.2.1(iii)
1.2.2(iii)



- Explain that “more than” and “less than” are used to compare the number of objects and numbers.

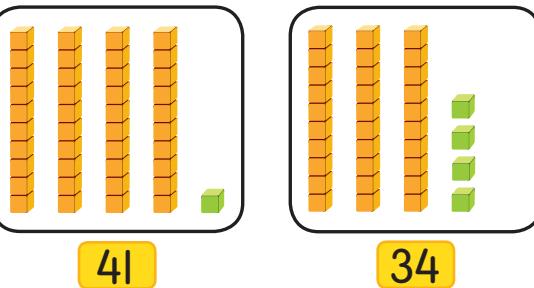
2 Compare the number of  and .



I	2	3	4	5	6	7	8	9	10	II	12	13
I	2	3	4	5	6	7	8	9	10	II		

I3 is  more than II.
II is  less than I3.
I3 is more than II.
II is less than I3.

3 Which is more, 41 or 34?



41 is 7 more than 34.
41 is more than 34.

I.2.1(iii)
I.2.2(iii)



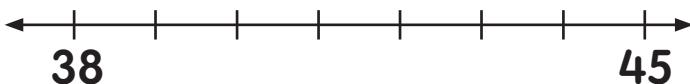
- Emphasise that counting skill is an important step for comparing skill.
- Use counters or base ten blocks when comparing any number to enhance pupils' understanding.



4

Which is less, 38 or 45?

Method 1



38 is 7 steps left to 45.
So, 38 is less.



Method 2

tens	ones
3 	8
4 	5

Compare the digit of tens.

3 tens
is less than
4 tens.

So, 38 is less.

38 is **less** than 45.
38 is **less** than 45.



Compare any two numbers from the number line. Talk about it.



I.2.1(iii)
I.2.2(iii)



- Guide the pupils to make a comparison between two numbers using place value to compare the tens and ones values.



SHARPEN YOUR MIND

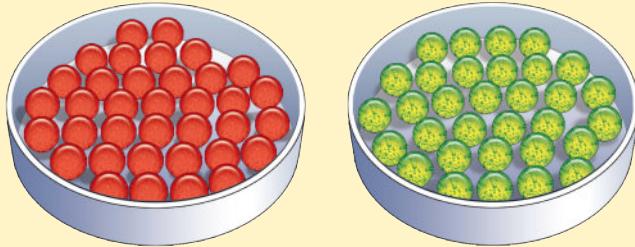


List the numbers from 70 to 80.
State the numbers that has the digit
of tens less than the digit of ones.



SELF-TEST

- 1 Compare the number of red marbles and the number of green marbles.



36

32

● is □ more than ●.

● is □ less than ●.



- 2 Compare the two numbers below. Which number is more?

a 57 and 53

b 74 and 69

c 88 and 90

I.2.1(iii)
I.2.2(iii)



- Surf <https://www.pinterest.com/pstohrhu/comparing-numbers/>
- Provide more questions in the form of worksheets or question cards.

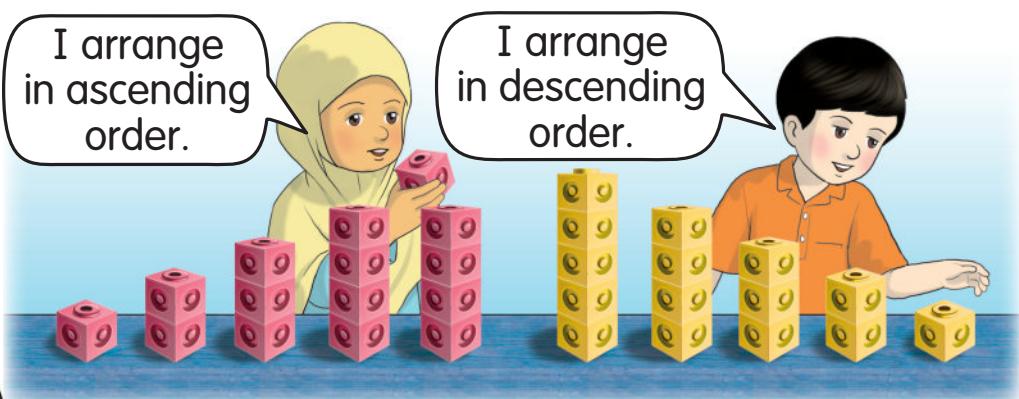


NUMBER ARRANGEMENTS



I arrange
in ascending
order.

I arrange
in descending
order.

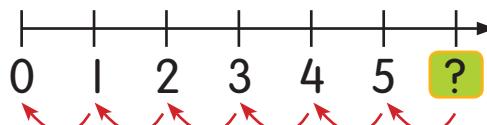


The number is arranged
to a bigger value.



Ascending order

Descending
order



Count back.
5, 4, 3, 2, 1, 0.



Number 2 is between
number 1 and 3.

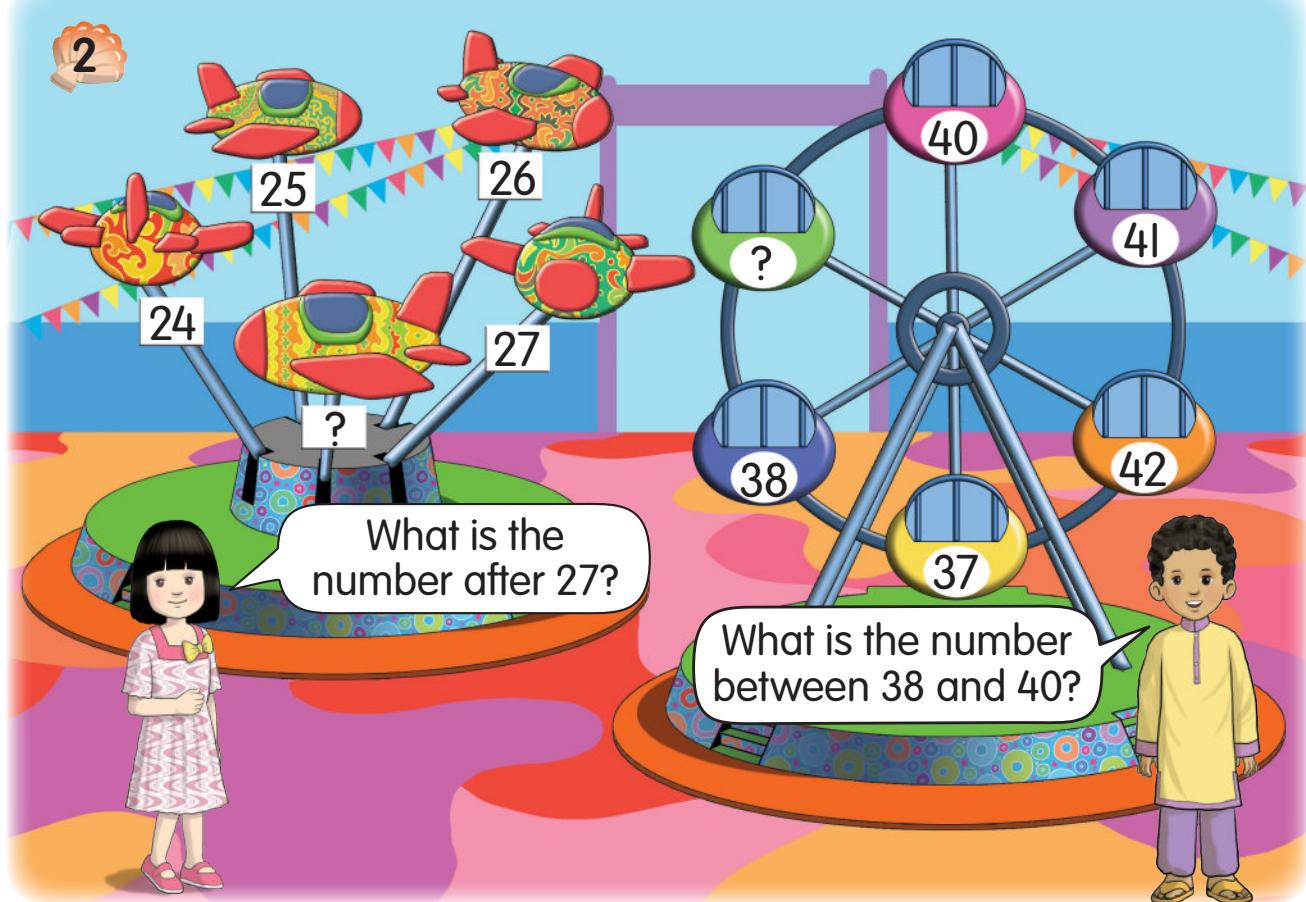


After number 5 is 6.
So, the number 5
is before 6.

1.2.2(iv)
1.5.1
1.5.2

TEACHER'S
NOTES

- Carry out an activity of arranging numbers and birth dates of pupils in ascending and descending orders.



a

24	25	26	27	?
----	----	----	----	---

Count on in ones.
24, 25, 26, 27, **28**.

The number after 27 is **28**.



b

37	38	?	40	41	42
----	----	---	----	----	----

I more than 38 is **40**.

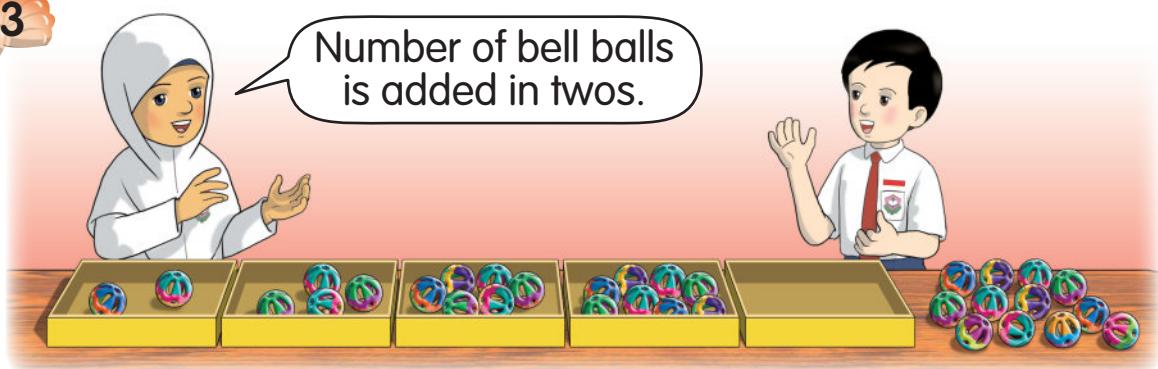
The number between 38 and 40 is **39**.

1.2.2(iv)
1.5.1
1.5.2

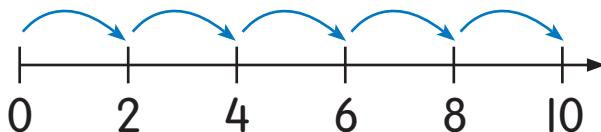


- Guide the pupils to relate the concept of “I more than” with counting on in ones. For example, counting on in ones from 27 gets 28.
- Carry out activities to identify the number before, after and in between any numbers using the 100-square grid.

3



How many bell balls will be put in the fifth box?



Count on in twos.
2, 4, 6, 8, 10.



Number of bell balls
in the fifth box is 10.

4



Mei Ling counts back in twos from 28.
What is the missing number?

The number 16 is missing.
16 is 2 less than 18.

I.2.2(iv)
1.5.1
1.5.2



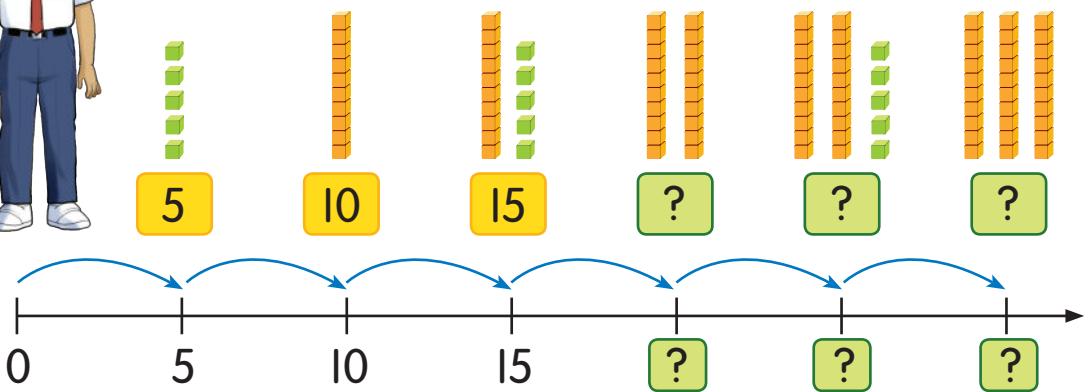
- Guide the pupils to count in twos. Use body parts such as feet, hands, eyes and ears to help them master this skill.



5 Count on in fives. Say the next numbers.

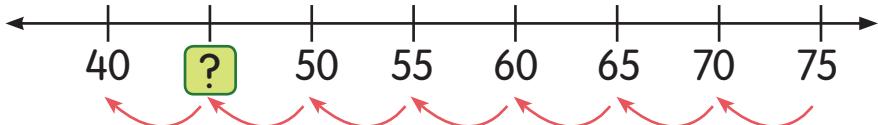


Each number has **5 more** than the number before.

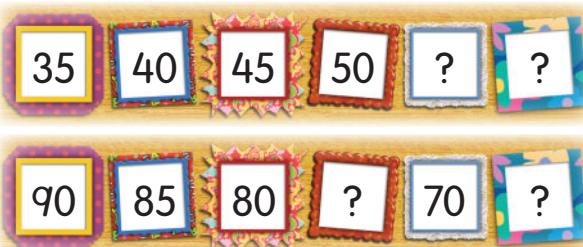


The next numbers are [] , [] and [].

6 Count back in fives from 75 to 40. What is the missing number?



The number [] is missing, 5 less than 50.



Complete these numbers arrangements.



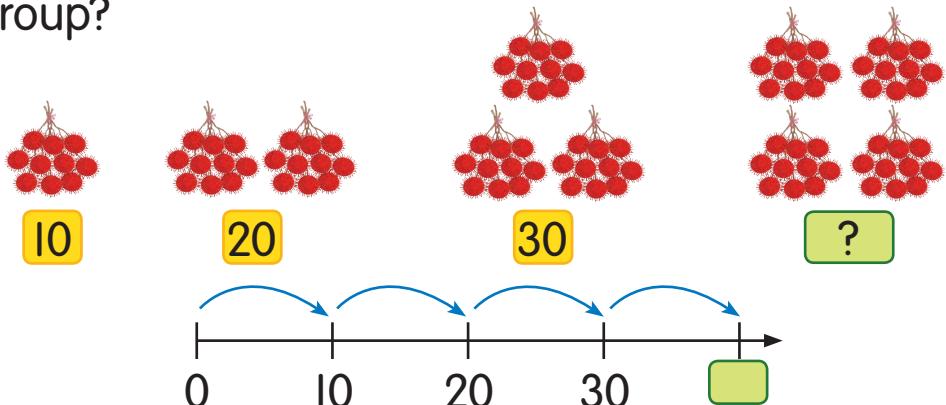
1.2.2(iv)
1.5.1
1.5.2



- Guide the pupils to count in fives.
- Use 100-square grid to help pupils count in fives starting from any numbers.



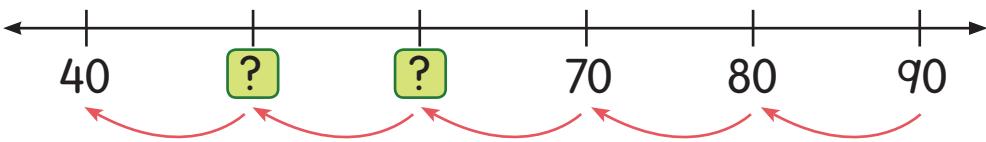
7 Count on in tens. What is the number for the fourth group?



The fourth group has **?** rambutans.



8 Count back in tens from 90 to 40. What are the missing numbers?



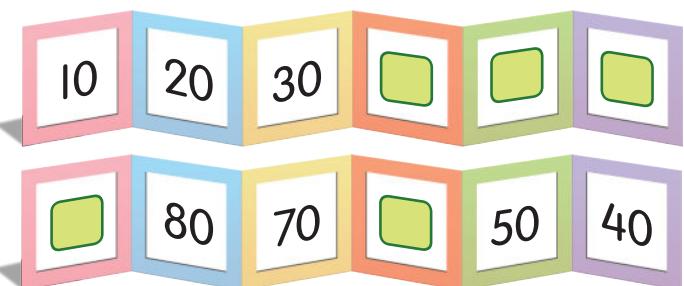
Reduce the number by tens.
90, 80, 70, **60**, **50**, 40.



The missing numbers are **60** and **50**.



Say the missing numbers.



I.2.2(iv)
1.5.1
1.5.2



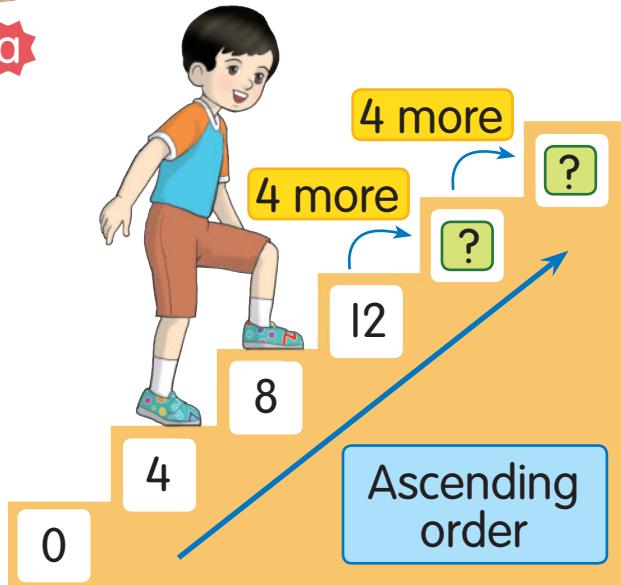
- Carry out activities in pairs on counting in tens starting from any numbers. For example, the first pupil says, "Count on in tens from 40". The second pupil answers, "40, 50, 60, 70, 80, 90, 100".



q

Count on in fours. What are the missing numbers?

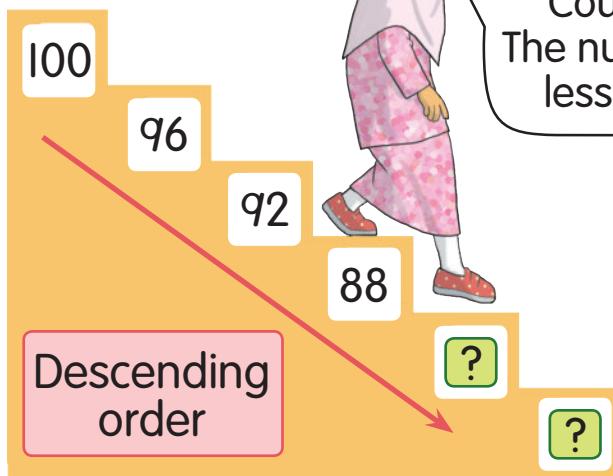
a



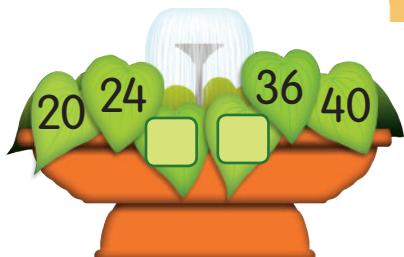
Each number is 4 more than the number before.



b



Count back.
The numbers are less in fours.



How do you get the
two numbers between
24 and 36?



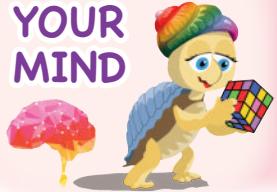
1.2.2(iv)
1.5.1
1.5.2



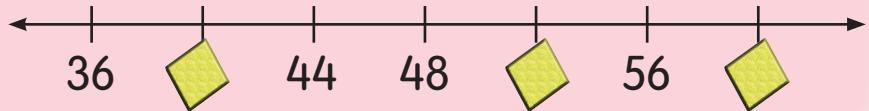
- Guide the pupils to count in fours using a calculator. Discuss the changes in the ones place value when counting in fours.

AB page 56

SHARPEN YOUR MIND



Complete it.



SELF-TEST

1 What is the number after, number before and number in between?

- a b c
- d e f

2 Complete it.

- a
- b
- c
- d

3

Arrange the number cards in:

a ascending order. b descending order.

1.2.2(iv)
1.5.1
1.5.2



- Surf <https://www.urbrainy.com/get.l402/extend-number-sequences-8329>
- Provide more questions in the form of worksheets or question cards.



NUMBER PATTERNS

I arrange the 2 red beads and 1 blue bead repeatedly.



What is the number pattern below?



The number pattern is 3, 8, 3, 8, 3, 8, 3, 8.

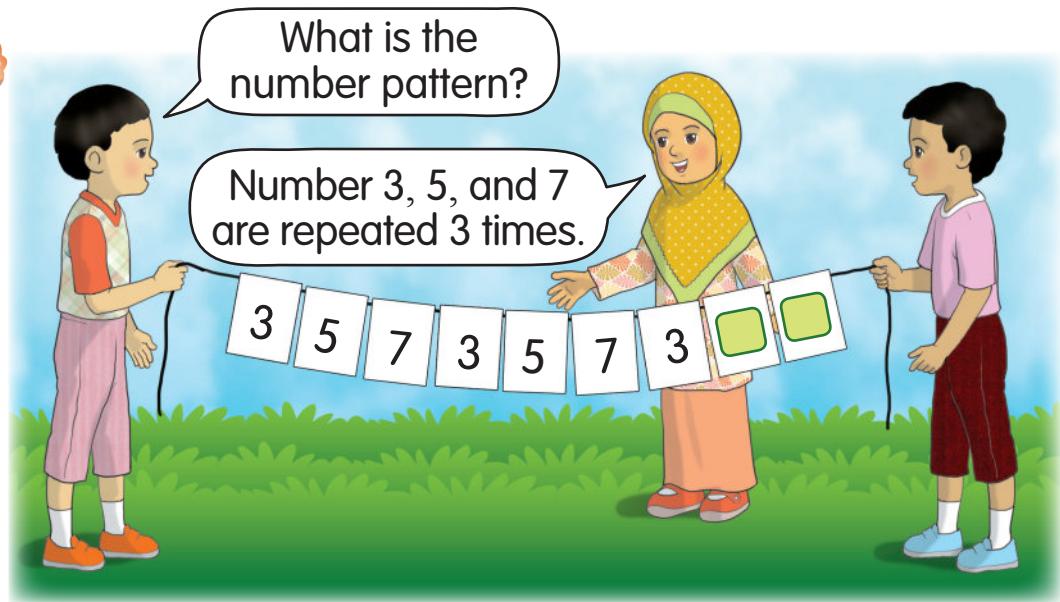
1.9.1
1.9.2



- Guide the pupils to identify number patterns and explain about it.
- Start with a simple number pattern and when pupils have understood, ask them to form their own number patterns.
- Explain that number pattern is a particular number arrangement.



3



3, 5, 7, 3, 5, 7, 3, 5, 7.

4

What is the next number in the number pattern below?



Number 6 and 1 are arranged repeatedly. The next number is 1.

6, 1, 6, 1, 6, 1.



Complete it. Explain the pattern.



1.9.1
1.9.2



- Guide the pupils to identify number patterns using picture cards and complete the number patterns.

5

What are the coloured number patterns?

I coloured the numbers alternately.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

I coloured it in tens.

Pattern 1

2 4 6 8 10

The number pattern is counting on in twos.

I arrange the numbers from 100 to 50 in tens.

Pattern 2

100 90 80 70 60 50

The number pattern is counting back in tens.

1.9.1
1.9.2



- Surf <http://prek-8.com/math/patterns/easyNumberPatterns.php>
- Recall the order of numbers in ascending and descending orders. Relate the skills with the number patterns.





6 Identify the house numbers. Complete the patterns.



SELF-TEST

Identify the number patterns. Complete these.

a

1	2	1	2	1	2	1	2
---	---	---	---	---	---	---	---

b

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

c

8	10	12			18	
---	----	----	--	--	----	--

d

90	80	70		50		
----	----	----	--	----	--	--

1.9.1
1.9.2



- Guide the pupils to identify number patterns using picture cards and complete the number patterns. Help them to explain the identified number patterns.
- Provide more questions in the form of worksheets or question cards.

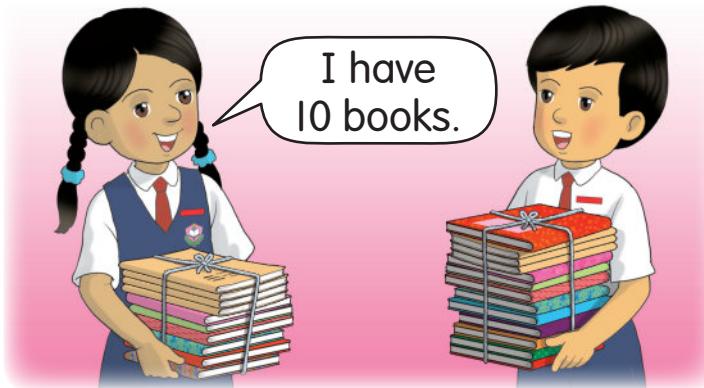




RECOGNISE ESTIMATION



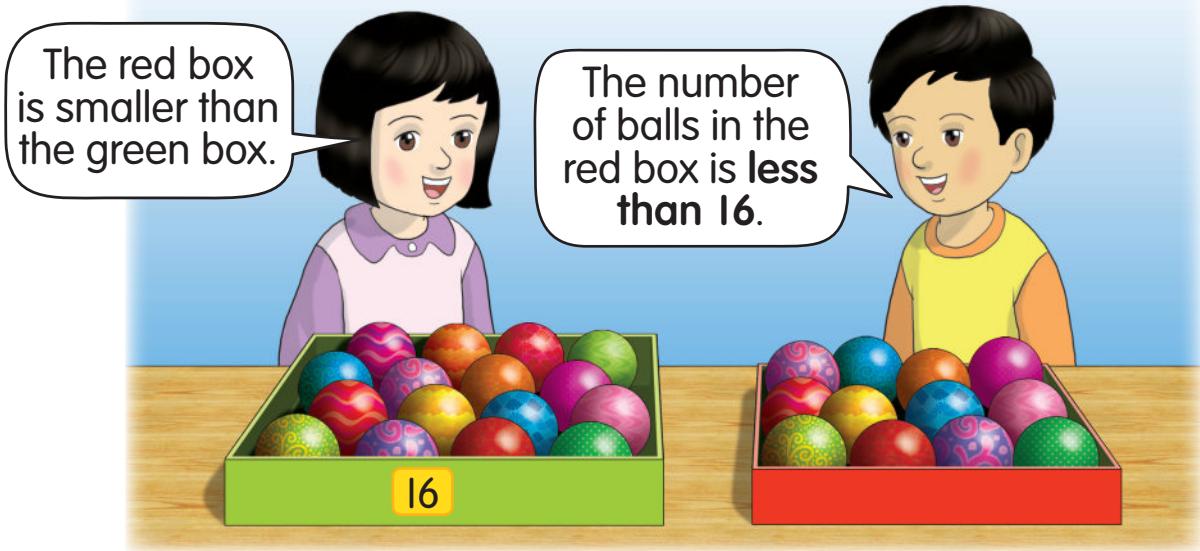
1 Estimate the number of books that Faris has.



The number of books that Faris has is more than 10.



2 Estimate the number of balls in the red box.



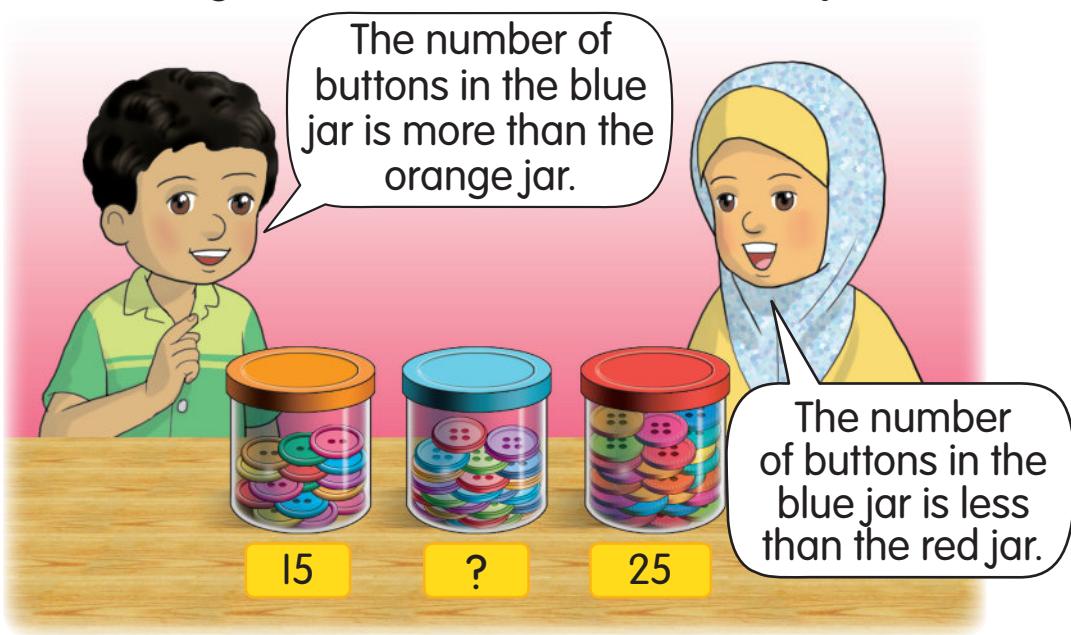
1.7.1



- Explain that estimation is a process to get the nearest value or quantity.
- Guide the pupils to make reasonable estimation and not by guessing.
- Explain that estimation is the value or the rough number.

3

How many buttons are there in the blue jar?



The buttons in the blue jar is about 20.

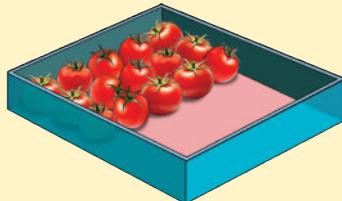
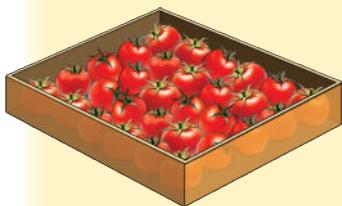


SELF-TEST

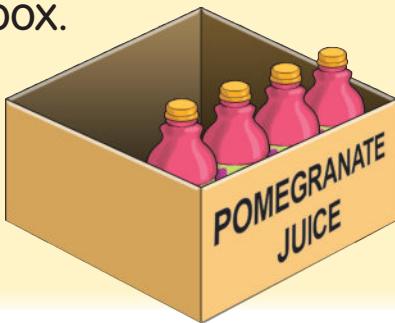
1 Estimate the number of tomatoes in the blue box.

30

?



2 Estimate the number of bottles of pomegranate juice that can fit into the box.



1.7.1

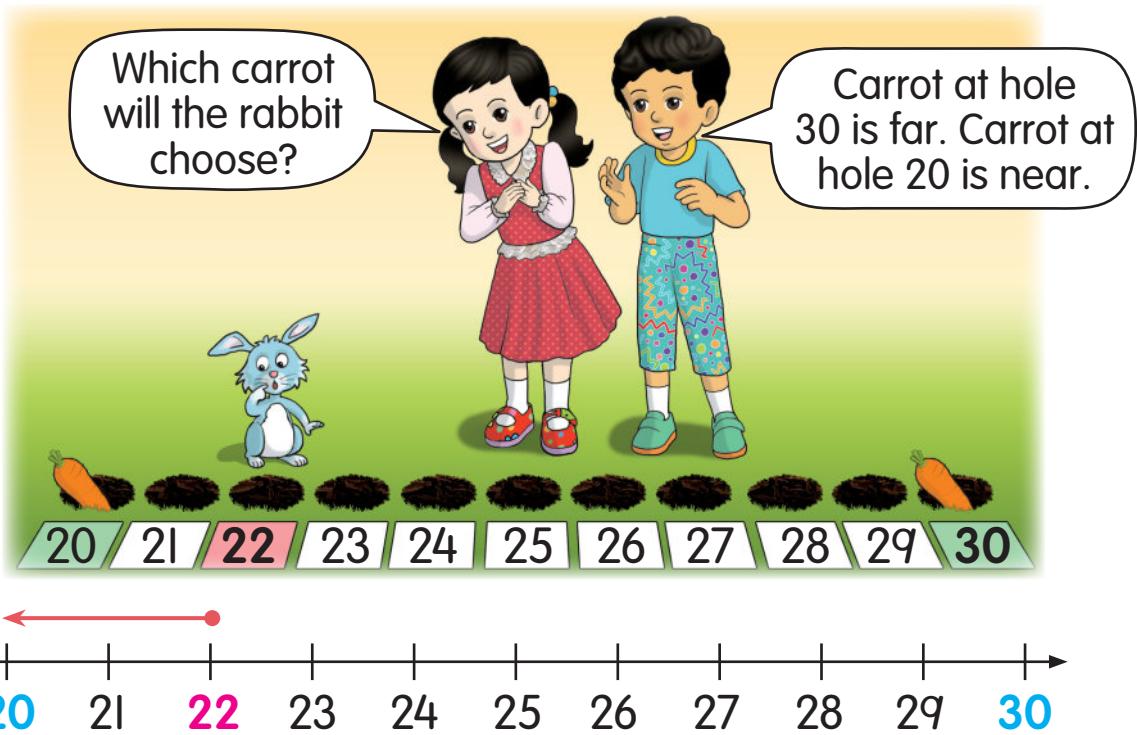


- Explain to pupils that the words “about”, “approximate”, “more than” and “less than” must be used when making estimation.
- Carry out a competition to estimate the number of candies in a container.
- Provide more questions in the form of worksheets or question cards.



RECOGNISE ROUND OFF

I Help the rabbit to get the carrot. Round off 22 to the nearest ten.



22 is nearer to **20** than **30**.
22 when rounded off to the **nearest ten** becomes **20**.

Rabbit gets carrot at hole **20**.

What will happen if the rabbit is at hole 28?

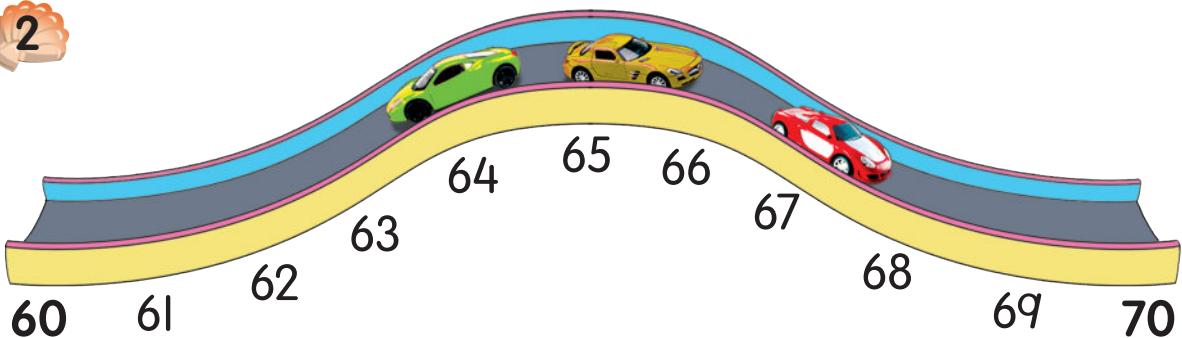


1.8.1

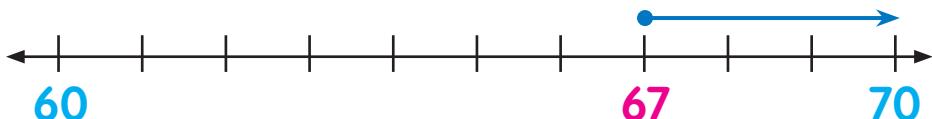


- Explain that round off is a process of determining number to the nearest place value.

2



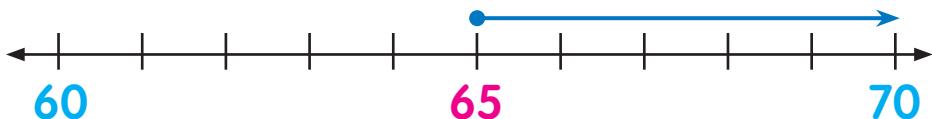
a Round off 67 to the nearest ten.



67 is nearer to 70.

67 when rounded off to the nearest ten becomes 70.

b Round off 65 to the nearest ten.



65 is in the middle of 60 and 70.

65 when rounded off to the nearest ten becomes 70.

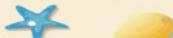


Round off 74, 85 and 98 to the nearest ten.

I.8.1

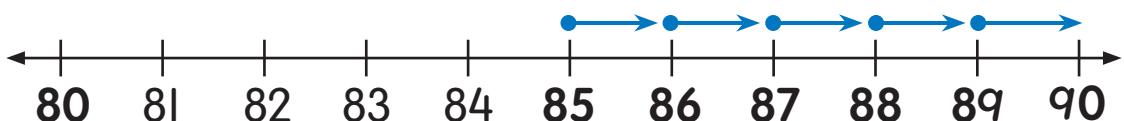
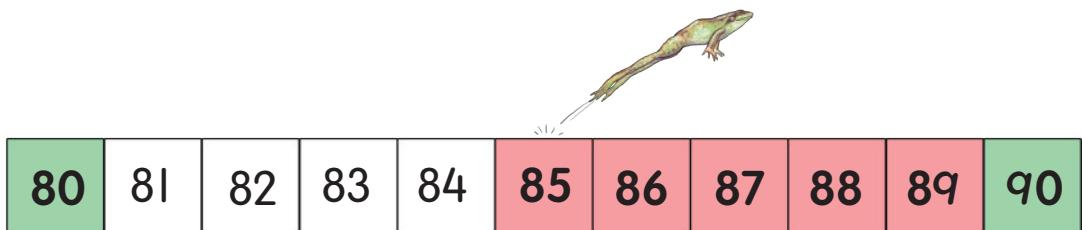


- Emphasise to the pupils that the number in the middle of two consecutive tens are rounded off to the larger ten.





3 Which of the numbers below will become 90 when they are rounded off to the nearest ten?



85, 86, 87, 88 and 89 are near to **90**.
85, 86, 87, 88 and 89 become **90** when they are rounded off to the nearest ten.

Can 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 be rounded off to the nearest ten? Discuss.



SHARPEN YOUR MIND



Select the number cards which become 60 when rounded off to the nearest ten.



1.8.1



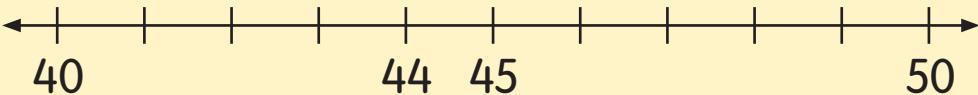
- Emphasise that round off is a way of getting a quantity or an estimated value.

AB pages 60 - 62



SELF-TEST

- 1 Round off the numbers to the nearest ten.



a 44 44 is rounded off to

b 45 45 is rounded off to

- 2 Round off the numbers to the nearest ten.

a 6

b 79

c 25

d 84

- 3 Choose the numbers that become 10 when they are rounded off to the nearest ten.



- 4 What are the numbers that become 30 when they are rounded off to the nearest ten?



1.8.1



- Surf <https://www.superteacherworksheets.com/rounding/rounding-rockets-10s-TZQWQ.pdf>
- Provide more questions in the form of worksheets or question cards.





SOLVE THE PROBLEMS



Asma wants to form two-digit numbers using the number cards. How many numbers can be formed?



Method Draw a table.

Write the digit of tens.

Then, write the digit of ones.

Number begins with 7	Number begins with 5	Number begins with 2
75	57	27
72	52	25

There are **6 numbers** altogether.

What is the largest number?
What is the smallest number?



1.10.1



- Guide the pupils to build numbers from different number cards. Encourage them to determine their own form of tables such as how many columns, rows and labels that need to be made.





2 Ali has 45 marbles.
He has 5 more
marbles than Kumar.
How many marbles
does Kumar have?



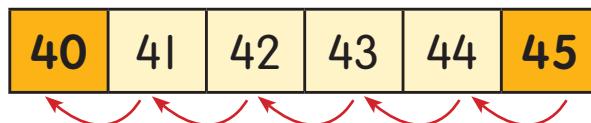
Method Draw a diagram.



Kumar's marbles are 5 less than 45.



Count back 5 steps from 45.



Kumar has 40 marbles.

1.10.1



- Help the pupils to understand the information in the question. Emphasise to the pupils that they only need to draw a diagram that has important information to solve the problem.



3

Ramesh and Maya are talking.

Ramesh, my body mass is 30 kg.

Maya, my body mass is more. If I rounded off my body mass, it is also 30 kg.

What is Ramesh's possible body mass?

Method

Guess and check.

Test 1

31

→ 31 is rounded off to 30.

Test 2

32

→ 32 is rounded off to 30.

Test 3

33

→ 33 is rounded off to 30.

Test 4

34

→ 34 is rounded off to 30.

Test 5

35

→ 35 is rounded off to 40.

Ramesh's possible body mass is
31 kg, 32 kg, 33 kg, or 34 kg.

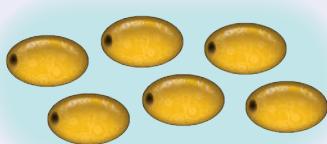
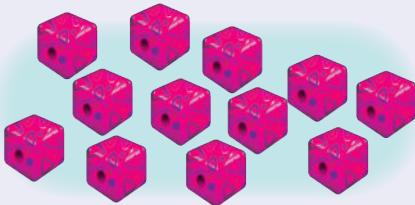
1.10.1



- Guide the pupils to round off the numbers based on the information given in the questions so that they do not make random guesses.

4

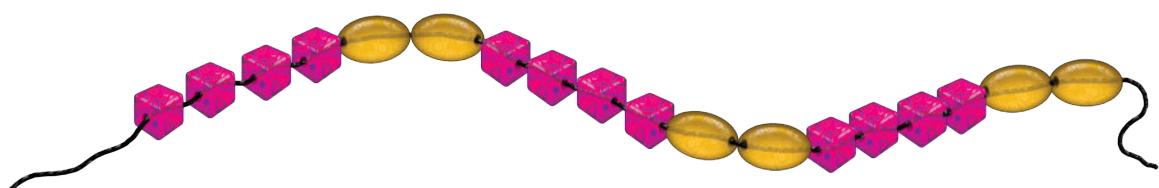
Mei Lin wants to make a bracelet. She uses the beads as below.



What is the pattern of Mei Lin's bracelet?

Method

Mei Lin arranges 4 and 2 repeatedly.



The pattern of Mei Lin's bracelet is 4, 2, 4, 2, 4, 2.

Make your own bracelet.
Talk about the pattern.



SELF-TEST

I have a number. The digit value of tens is between 70 and 90. The digit value of ones is 4 more than 5. What is my number?

1.10.1

- Teachers need to emphasise the steps to solve the problem.
- Provide more questions in the form of worksheets or question cards.



AB pages 63 - 66



MY PROJECT

Numbers expert

Participants In pairs.

Materials Task table and pencils.

Method

- 1 Write a two-digit number in numerals and words.
- 2 Complete the task table.



Number	<input type="text"/>
1. How many tens?	
2. What is the digit value of tens?	
3. What is the digit value of ones?	
4. Write a number that is larger than the number formed.	
5. Write a number that is smaller than the number formed.	
6. What is a number that is 10 less than the number formed?	
7. Round off the number to the nearest ten.	

- 3 Exchange the task table with your partner.

I.2.2(iii)
I.3.1
I.6.1
I.8.1



- Prepare sufficient task tables for all pupils.
- Ask the pupils to check their friend's answers.
- Use the example above to create another task.





Whose number is larger?

Rules

- 1 Distribute the number cards randomly to each player.



- 2 Create the largest number of two digits.



- 3 The player who creates the larger number will get higher marks.



- 4 Jot down the marks.

Round	Name	Marks
1	Devi	15
	Isma	10
	Kumar	5
2		
3		

- 5 Repeat steps 1 to 4 until all the cards are finished.

1.2.2(iii)



- Provide sufficient number cards. Assign the referee to give them to the players and collect the number cards used.
- Instil moral values such as trust and cooperation while carrying out the activity.
- Give 15, 10 and 5 marks for the correct arrangement of numbers. 0 mark if wrong.



2

ADDITION AND SUBTRACTION



2.1

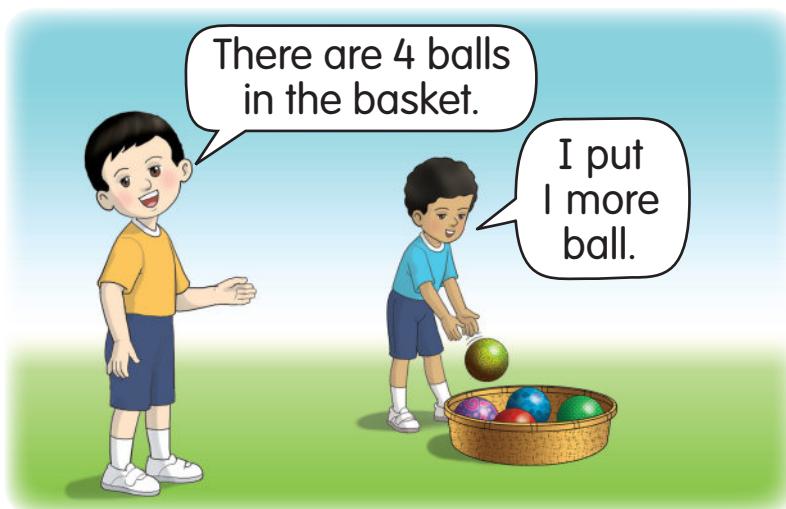


- Guide the pupils to determine the number of objects in the stimulus picture. Relate the number of objects with addition and subtraction operations. For example, the number of girls and boys, number of toy cars which are not in the container and so on.

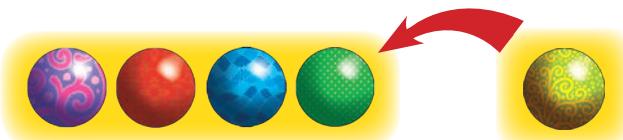


RECOGNISE ADDITION

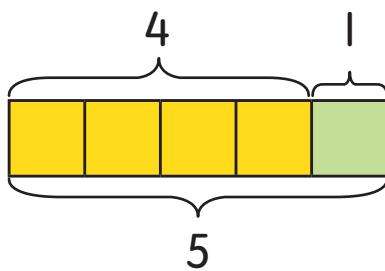
I



How many balls altogether?



4 balls and 1 ball make 5 balls altogether.



4 add 1 make 5.

There are 5 balls altogether.

2.1.1



- Guide the pupils to understand the concept of addition using simulation and vocabulary related to the concept of addition such as combine, group, altogether, total and so on.
- Explain that addition is the sum of any two numbers.

2

How many cats are there altogether?



3 cats are playing.
2 more cats are joining them.

3 and 2 make 5.
3 add 2 is equal to 5.

When we add, the number
will be more.



Number sentence

$$3 + 2 = 5$$

add

+

=

is equal to

There are 5 cats altogether.

- 2.I.1
- 2.I.2
- 2.I.3



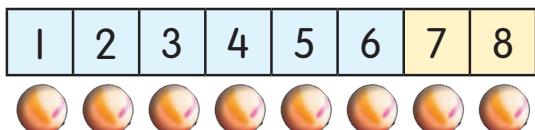
- Emphasise to the pupils the meaning of the symbols for “addition” and “is equal to”.
- Carry out the activities using concrete materials and relate it with pupils’ real life to enhance their understanding.
- Explain that number sentence is the sentence written in numerals and symbols.

3 Amir has 6 marbles. Lau gives another 2 marbles.
How many marbles does Amir have altogether?

$$6 + 2 = \boxed{}$$

Method 1

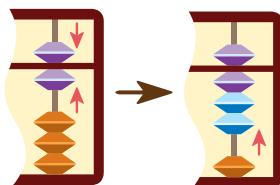
Count all.
1, 2, 3, 4, 5, 6, 7, 8.



$$6 + 2 = \boxed{8}$$



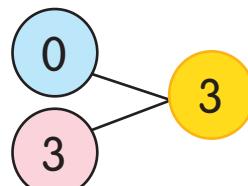
Method 2



Amir has 8 marbles altogether.

4 What is the total number of ?

$$0 + 3 = \boxed{}$$



$$0 + 3 = \boxed{3}$$

The total number of is 3.

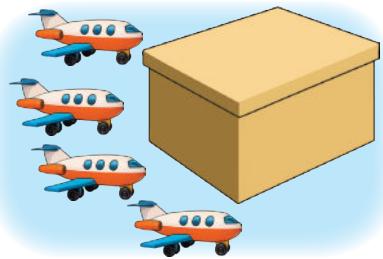
2.2.1



- Expose the pupils to various methods to solve addition operation. Use picture cards to help them in mastering the skills of addition.
- Guide the pupils to use combination of numbers for addition.
- Explain that when 0 is added to a number, the answer is the number itself.

5

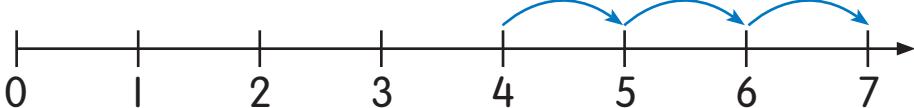
There are 4  outside the box.
The total of  is 7. How many
 are there inside the box?



$$4 + \boxed{ } = 7$$



Count on from 4.
5, 6, 7. Get 3 steps.



$$4 + \boxed{3} = 7$$

There are 3  inside the box.



SELF-TEST

1 Find the total.

a



b



2 Add.

a

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

b

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

c

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

d

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

e

$$9 + 9 = \boxed{\quad}$$

f

$$5 + \boxed{\quad} = 12$$



2.2.1



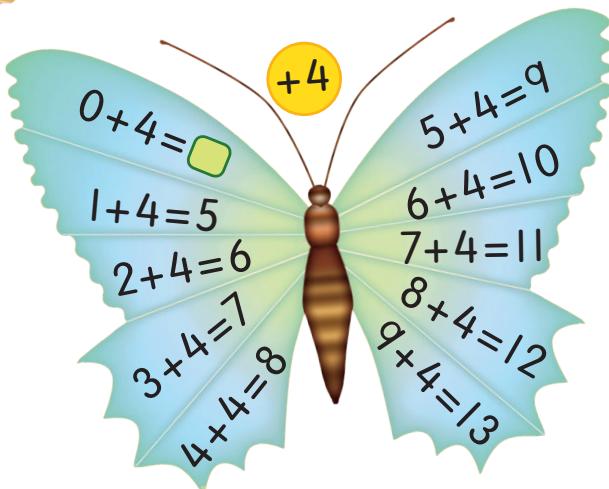
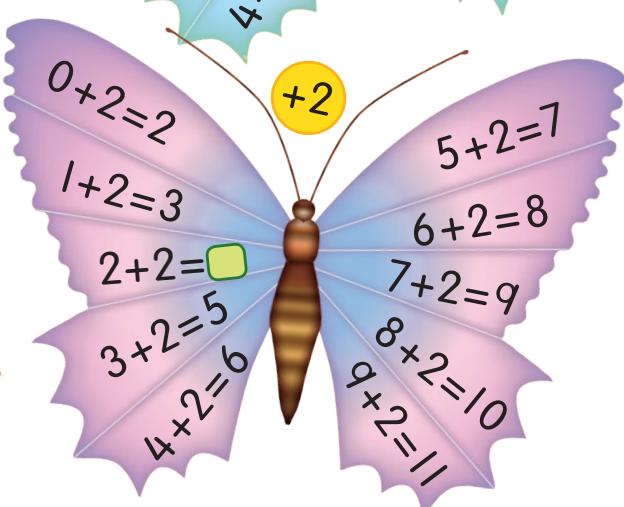
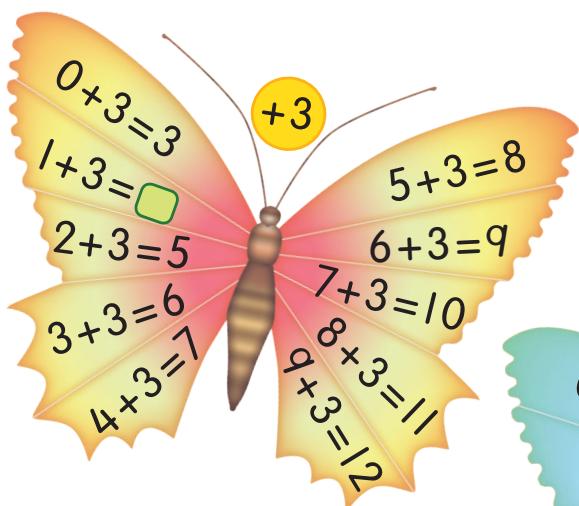
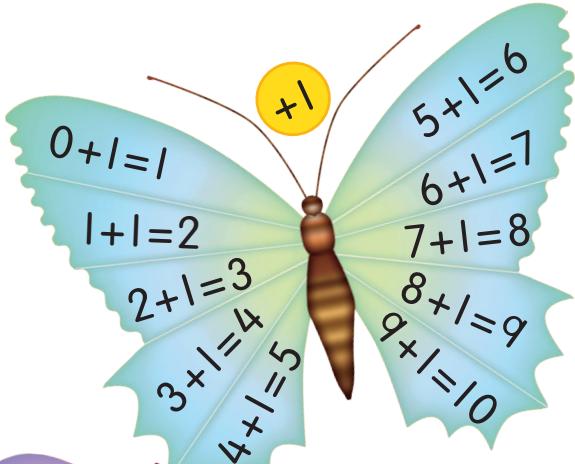
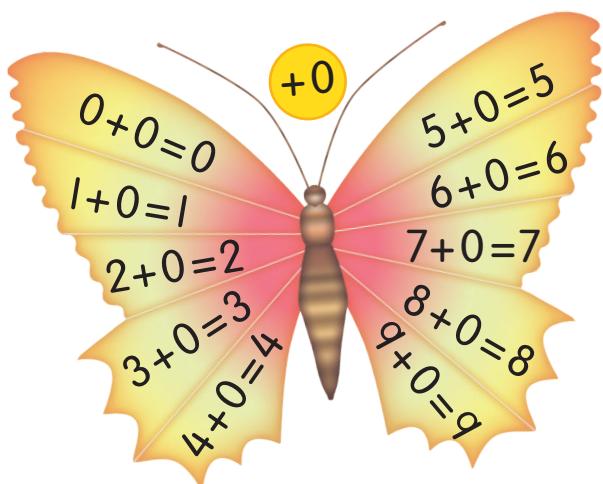
- Emphasise to the pupils that when adding two quantities, the quantities increase and the value becomes larger.
- Provide more questions in the form of worksheets or question cards.

AB pages 72 - 74

59



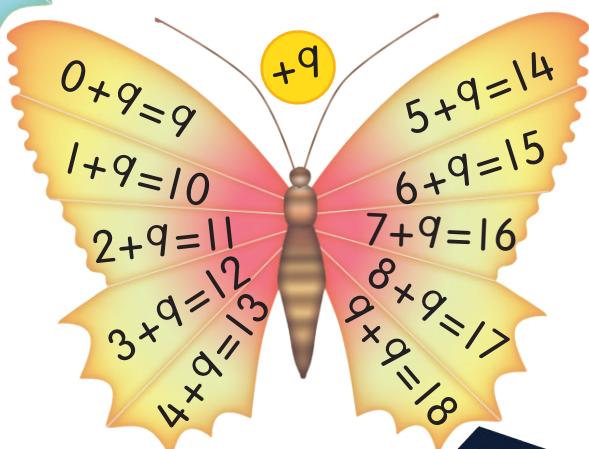
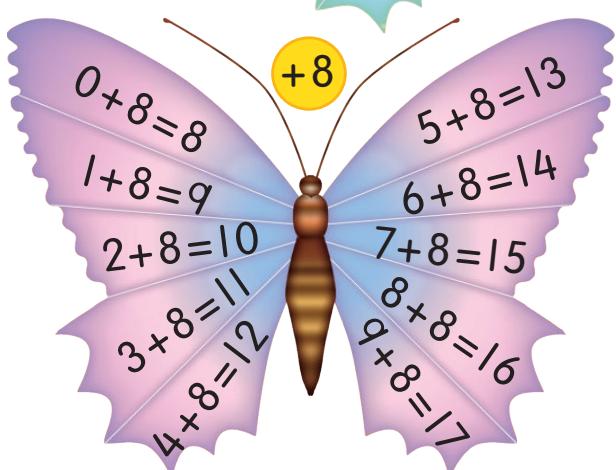
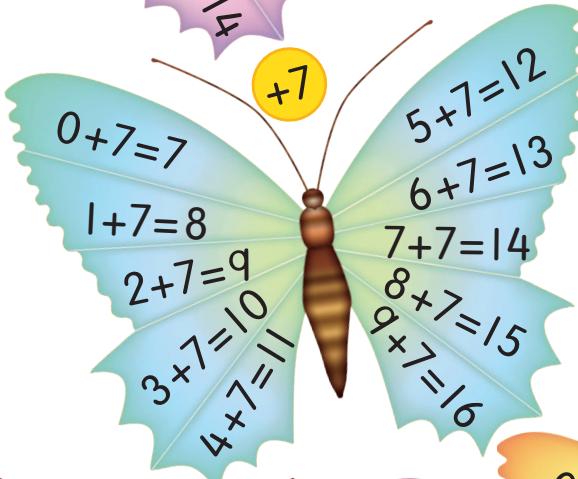
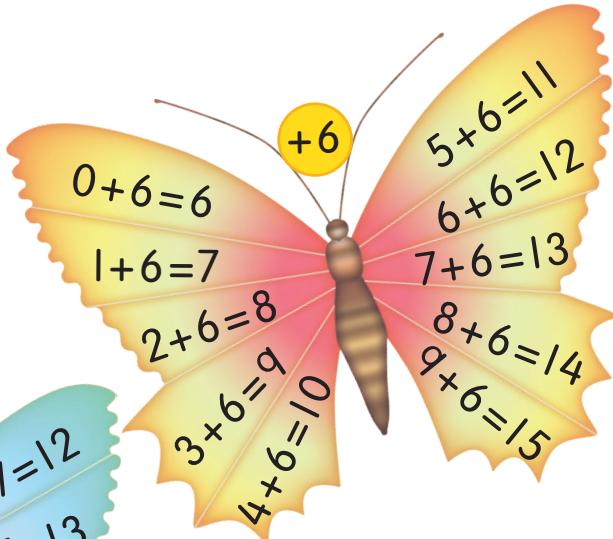
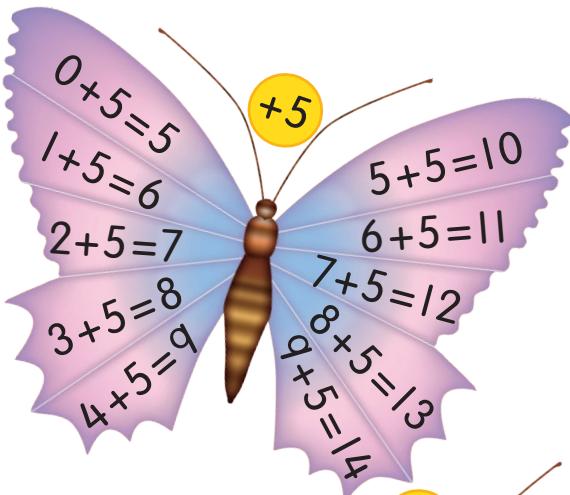
QUICK ADDITION



2.2.1



- Introduce the basic facts of addition. Guide the pupils to complete the number sentences.
- Carry out a quiz on basic facts and get the pupils to answer spontaneously.
- Discuss the similarities and differences between $3+4=7$ and $4+3=7$.



List out the number sentences for the sum of 4.



2.2.1



- Relate the combination of numbers to strengthen pupils' understanding.
- Carry out the activity of saying number sentences that give the same total amount spontaneously.

AB pages 75 - 77





MY PROJECT

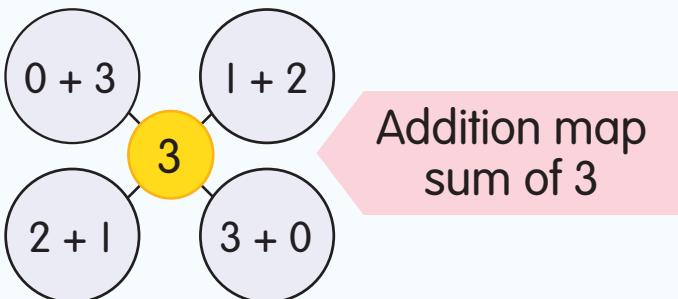
Addition Maps

Participants 5 pupils in a group.

Materials Papers and coloured pens.

Method

- 1 Create addition maps for the sum of 1 to 18.
For example:



- 2 Decorate the maps.
- 3 Display your maps.



SELF-TEST

Match.

$8 + 3$

$7 + 9$

$8 + 8$

$3 + 2$

$4 + 6$

16

11

5

8

10

$2 + 9$

$1 + 4$

$6 + 2$

$7 + 3$

$0 + 8$

2.2.1



- Guide the pupils to carry out activities to construct addition maps for the sum of 1 to 18.
- Provide more questions in the form of worksheets or question cards.



EASY ADDITION

I Add 25 and 3.

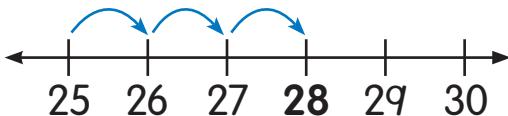
$$25 + 3 = \boxed{}$$

25

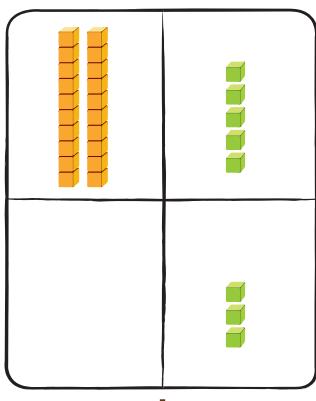


Method 1

Count on 3 steps from 25.



Method 2



tens	ones
2	5
+	3
<hr/>	
8	

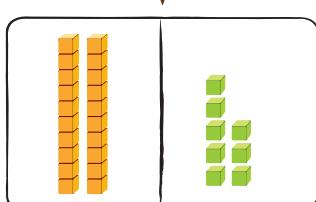
Add ones.

$$5 \text{ ones} + 3 \text{ ones} = 8 \text{ ones}$$

tens	ones
2	5
+	3
<hr/>	
2	8

Add tens.

$$2 \text{ tens} + 0 \text{ tens} = 2 \text{ tens}$$



$$\begin{array}{r}
 & 2 & 5 \\
 & + & 3 \\
 \hline
 & 2 & 8
 \end{array}$$

$$25 + 3 = \boxed{28}$$

2.2.2



- Guide the pupils to count on in ones from a larger number. Familiarise the pupils with addition using counters and abacus.
- Guide the pupils to put the digit of ones and tens correctly in the standard written method.

AB pages 78 -79

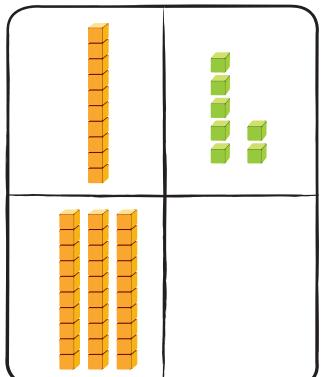


2 Find the total of 17 and 30.

$$17 + 30 = \boxed{ }$$



Method 1



Add ones.

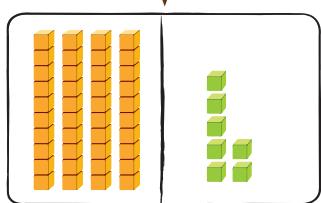
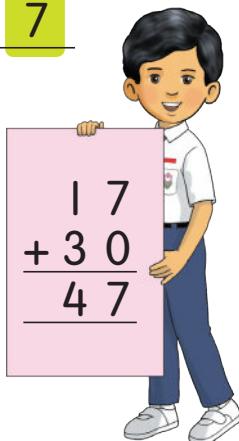
tens ones

$$\begin{array}{r} | & 7 \\ + 3 & \\ \hline & 7 \end{array}$$

Add tens

tens ones

$$\begin{array}{r} | & 7 \\ + 3 & 0 \\ \hline 4 & 7 \end{array}$$



Method 2

Start with 17. Count on 3 steps in tens.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

+ 10
+ 10
+ 10



$$17 + 30 = \boxed{47}$$

2.2.2



- Guide the pupils using 100-square grid to solve addition operation.
- Help the pupils to see the pattern appeared in the 100-square grid. For example, the number on the right side is larger than the number on the left side.



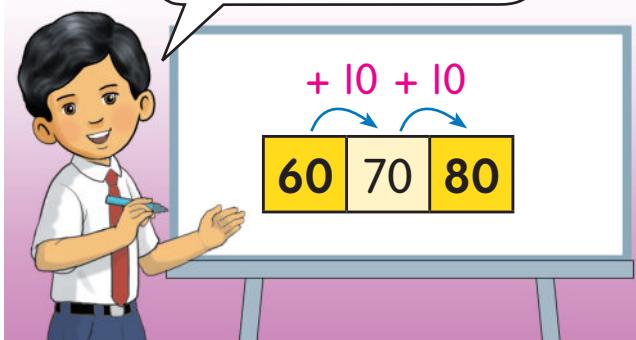
AB page 80

3 Add 2 tens and 6 tens.

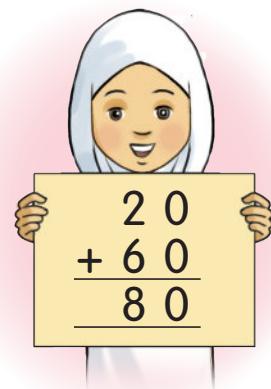
$$20 + 60 = \boxed{}$$

Method 1

Count on from the larger number, 60.



Method 2



$$20 + 60 = \boxed{80}$$

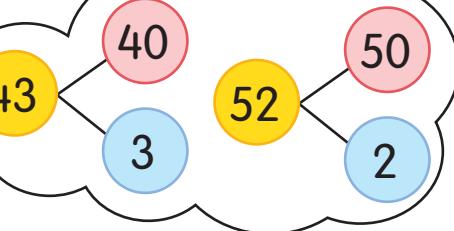
4 $43 + 52 = \boxed{}$

Method 1

$$\begin{array}{r} 4\ 3 \\ + 5\ 2 \\ \hline 9\ 5 \end{array}$$

$$43 + 52 = \boxed{95}$$

Method 2



$$40 + 50 = \boxed{90}$$

$$3 + 2 = \boxed{5}$$

$$43 + 52 = \boxed{95}$$

2.2.2



- Help the pupils to count in tens. Relate it with addition involving multiples of 10.
 - Emphasise the correct steps to add using the standard written method.
- Use manipulative and concrete materials to enhance the pupils' understanding.





5 How many should be added to 56 to make 79?

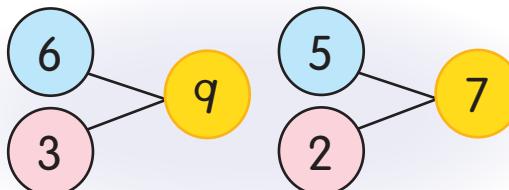


$$56 + \boxed{\quad} = 79$$

Method 1

Use combination of numbers.

$$\begin{array}{r} & 5 & 6 \\ & \boxed{2} & \boxed{3} \\ + & & \\ \hline & 7 & q \end{array}$$



Method 2



Count on in tens from 56 to 76.
Get 20.

41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90

Then, count in ones
from 76 to 79. Get 3.
20 and 3 is 23.



$$56 + \boxed{23} = 79$$

2.2.2

- Guide the pupils to add involving an unknown using base ten blocks to enhance their understanding.



SHARPEN YOUR MIND



Use $8 + 2 = 10$ to calculate $12 + 8 = \boxed{}$.
Discuss.



SELF-TEST

1 Complete these.

a
$$\begin{array}{r} 20 \\ + 8 \\ \hline \end{array}$$

b
$$\begin{array}{r} 51 \\ + 7 \\ \hline \end{array}$$

c
$$\begin{array}{r} 40 \\ + 30 \\ \hline \end{array}$$

d
$$\begin{array}{r} 24 \\ + 63 \\ \hline \end{array}$$

e
$$\begin{array}{r} 85 \\ + 14 \\ \hline \end{array}$$

f
$$\begin{array}{r} 35 \\ + 6 \quad \boxed{q} \\ \hline \end{array}$$

2 Show two methods of adding.

a $45 + 3 = \boxed{}$ b $22 + 70 = \boxed{}$ c $11 + 36 = \boxed{}$

3 Solve these.

a $32 + 6 = \boxed{}$ b $59 + \boxed{} = 89$ c $77 + \boxed{} = 99$



2.2.2



- Surf <http://math.about.com/od/addingsubtracting/ss/2digaddnr.htm>
- Provide more questions in the form of worksheets or question cards.



MORE ADDITION

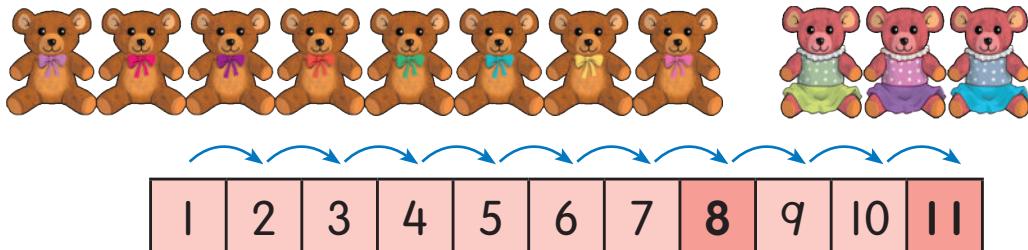


Lisa's sister arranges 8 dolls.
Lisa arranges 3 more dolls.
How many dolls are there altogether?

$$8 + 3 = \boxed{}$$



Method 1 Count all.



Method 2



I count on from 8.
9, 10, 11.

8	9	10	11
---	---	----	----



- Guide the pupils to relate addition with counting process learnt in Unit I.

2.2.2



Method 3



10 and 1

$$8 + 3 = ?$$

2 3
↓ ↓
 1

$$8 + 2 = 10$$

$$\downarrow$$

$$10 + 1 = 11$$



$$8 + 3 = 11$$

There are 11 dolls altogether.

2.2.2



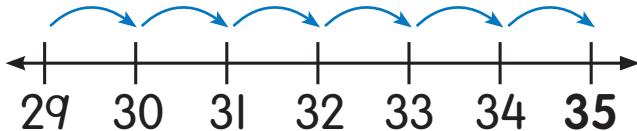
- Guide the pupils to understand the method shown. Carry out exercises to make 10 using concrete materials and combination of 10.
- Use *i*-Think map to visualise the combinations of 10.



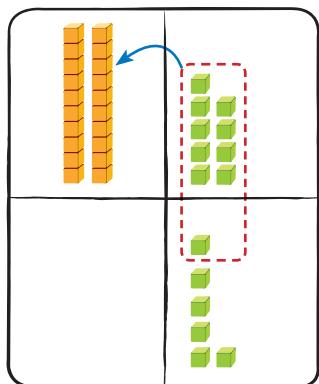
2 Add 29 and 6.

$$29 + 6 = \boxed{ }$$

Method 1



Method 2

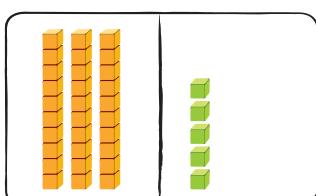


tens	ones
2	9
+	6
<hr/>	
1 5	

Add ones.

$$9 \text{ ones} + 6 \text{ ones} = 15 \text{ ones}$$

Convert 15 ones to 1 tens and 5 ones.



tens	ones
2	9
+	6
<hr/>	
3	5

Add tens.

$$2 \text{ tens} + 0 \text{ tens} + 1 \text{ tens} = 3 \text{ tens}$$



tens	ones
2	9
+	6
<hr/>	
3	5

$$29 + 6 = \boxed{35}$$

2.2.2



- Emphasise that the largest digit in the place value is 9. If it is 10, do regrouping.
- Use manipulative and concrete materials to enhance pupils' understanding.

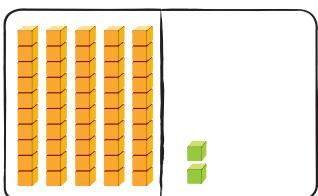
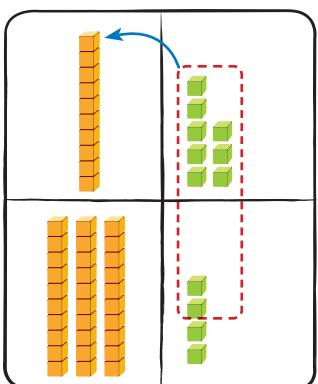
AB pages 83 - 84





$$3 \quad 18 + 34 = \boxed{}$$

Method 1



tens	ones
1	8
+	4
<hr/>	
12	

Add ones.

$$8 \text{ ones} + 4 \text{ ones} = 12 \text{ ones}$$

tens	ones
1	8
+	4
<hr/>	
5	2

Add tens.

$$1 \text{ tens} + 3 \text{ tens} + 1 \text{ tens} = 5 \text{ tens}$$

1	8
+	4
<hr/>	
5	2

Method 2



$$18 + 34 = \boxed{}$$

Diagram showing the decomposition of 18 into 20 - 2 and 34 into 32 + 2. The 2 is highlighted in yellow, and the 32 is highlighted in pink. An arrow points from the 2 to the equation $20 + 32 = 52$.

$$18 + 34 = \boxed{52}$$

2.2.2

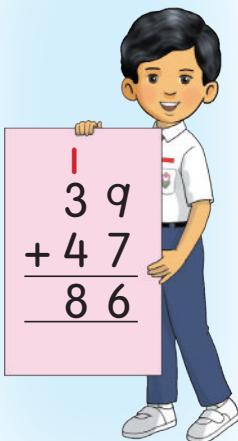
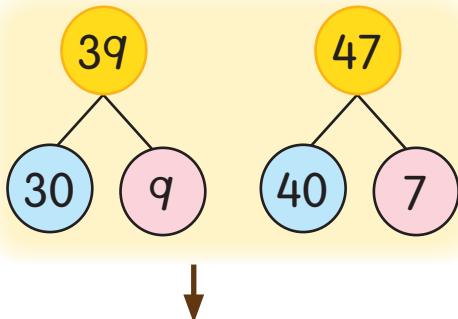


- Guide the pupils to add by regrouping using tens complement and 100-square grid such as in page 66.
- Surf http://www.softschools.com/math/addition/2_digit_addition/2_digit_addition_with_regrouping/



4

$$39 + 47 = \boxed{\quad}$$

Method 1**Method 2**

Add tens:

$$30 + 40 = 70$$

Add ones:

$$9 + 7 = 16$$

$$\begin{array}{r} 70 \\ + 16 \\ \hline 86 \end{array}$$

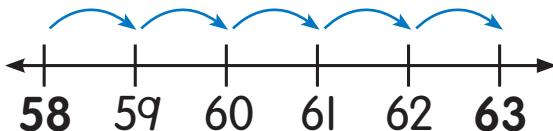
$$39 + 47 = \boxed{86}$$

5

What number should be added to 58 to make 63?



$$58 + \boxed{\quad} = 63$$



Count on from
58 to 63.
Get 5 steps.



$$58 + \boxed{5} = 63$$

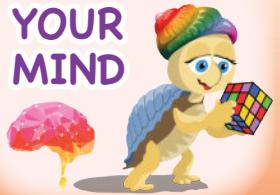
2.2.2



- Guide the pupils to add using the standard written method. Emphasise the steps on adding correctly.



SHARPEN YOUR MIND



Which answer is correct? Why?

$$\begin{array}{r} 15 \\ + q \\ \hline 114 \end{array}$$

$$\begin{array}{r} 15 \\ + q \\ \hline 24 \end{array}$$



SELF-TEST



1 Complete these.

a $\begin{array}{r} 8 & 6 \\ + & 5 \\ \hline \end{array}$

b $\begin{array}{r} 4 & 7 \\ + & 3 & 8 \\ \hline \end{array}$

c $\begin{array}{r} 5 & 1 \\ + & 2 & q \\ \hline \end{array}$

d $9 + 6 =$

e $5 + 7 =$

f $4 + 8 =$

2 Add.

a $66 + 8 =$

b $54 + 19 =$

c $32 + 68 =$

d $= 26 + 74$



e $+ 9 = 16$



f $17 +$ $= 84$

2.2.2



- Guide the pupils to write addition operation in the standard written method correctly.
- Discuss the mistakes that will occur when pupils do not write and add correctly.
- Provide more questions in the form of worksheets or question cards.



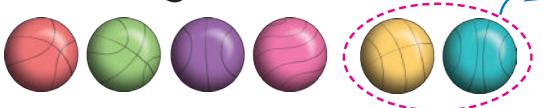
RECOGNISE SUBTRACTION



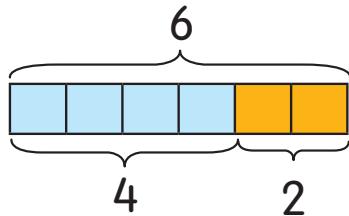
There are 6 balls. Nik takes out 2 balls.



a How many balls are left?



Take away 2 from 6.
4 left.

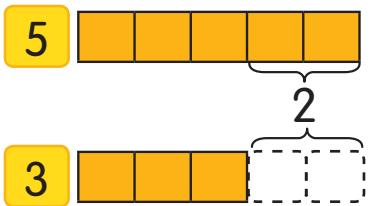


There are 4 balls left.

b Count the difference of red loops and blue loops.



Red loops are 2 more.
Blue loops are 2 less.



The difference of 5 and 3 is 2.

The difference of red loops and blue loops is 2.

2.1.1



- Guide the pupils to understand the concept of subtraction by applying simulation and using vocabulary related to the concept of subtraction.
- Explain that difference is the values between two groups.



2



a Calculate the balance of the sandwiches.

12 less 3 is 9.
12 minus 3 is equal to 9.

$$12 - 3 = 9$$

Number sentence

minus

-

=

is equal to

The balance of the sandwiches is 9.

b What is the difference in numbers between  and ?

The difference of 9 and 7 is 2.
9 minus 7 is equal to 2.

$$9 - 7 = 2$$

The difference in numbers between  and  is 2.

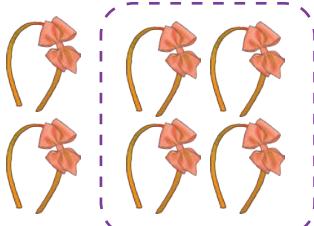
- 2.I.1
- 2.I.2
- 2.I.3



- Emphasise the meaning of symbols for “subtraction” and “is equal to”.
- Carry out an activity using concrete materials and relate it to our daily life to enhance pupils’ understanding.
- Explain that balance is the value left when the original value is reduced.

3 Dina's mother buys 6 . She gives 4  to her nieces. Find the balance of ?

$$6 - 4 = \boxed{}$$



Count back 4 steps from 6.

1	2	3	4	5	6
---	---	---	---	---	---



$$6 - 4 = \boxed{2}$$

The balance of  is 2.

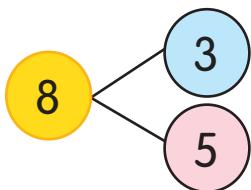
4



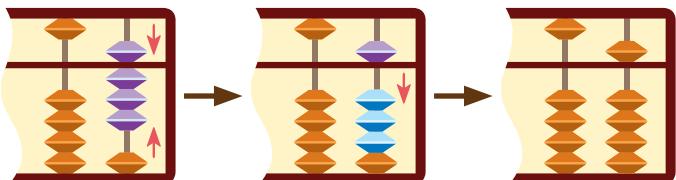
How many  are not broken?

$$8 - 3 = \boxed{}$$

Method 1



Method 2



$$8 - 3 = \boxed{5}$$

 are not broken.

2.3.1

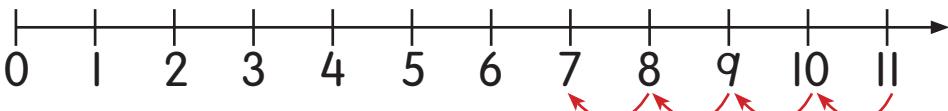


- Guide the pupils to carry out simulations and use representations to enhance their subtraction skills.
- Relate pupils' understanding in addition with subtraction.

5 What is the difference in numbers between  and ?



$$11 - 4 = \boxed{ }$$



$$11 - 4 = \boxed{7}$$

The difference in numbers between  and  is 7.

6





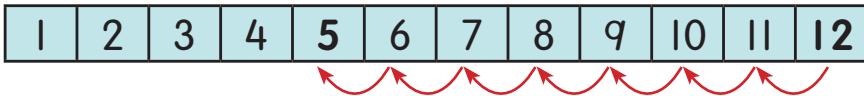
12 pieces



5 pieces

How many tarts has Mary taken out?

$$12 - \boxed{ } = 5$$



$$12 - \boxed{7} = 5$$

Mary has taken out 7 tarts.

2.3.1



- Guide the pupils to solve the problems involving unknown using various methods that are suitable.
- Guide the pupils to use combination of numbers to solve subtraction.

AB pages 92 - 93

Complete these.

SHARPEN YOUR MIND



a

8	-		=	7
		=		-
0		4		
=		-		=
	-		=	5

b

	-		=	6
-		=		
8				
=		-		=
	-	1	=	6

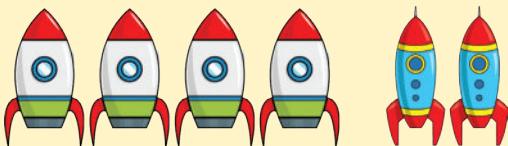
SELF-TEST

1 How many are left?



$$\boxed{ } - \boxed{ } = \boxed{ }$$

2 Find the difference in number of and .



$$\boxed{ } - \boxed{ } = \boxed{ }$$

3 Solve these.

d $9 - 2 = \boxed{}$

b $10 - 8 = \boxed{}$

c $14 - 7 = \boxed{}$

d $\boxed{} = 15 - 6$

e $\boxed{} = 17 - 9$

f $13 - \boxed{} = 8$



2.3.1



- Surf <https://www.superteacherworksheets.com/subtraction-basic.html>
- Provide more questions in the form of worksheets or question cards.



MY PROJECT

Knowing me

Talk about yourself.

Method

Write the number sentences of addition or subtraction.
The answers are related to yourself.

Examples:

- ① Date of birth: 8. Write $6 + 2 = 8$.
- ② Age: 7 years old. Write $10 - 3 = 7$.

Date of birth

$$6 + 2 = 8$$

Age

$$10 - 3 = 7$$

Month of birth

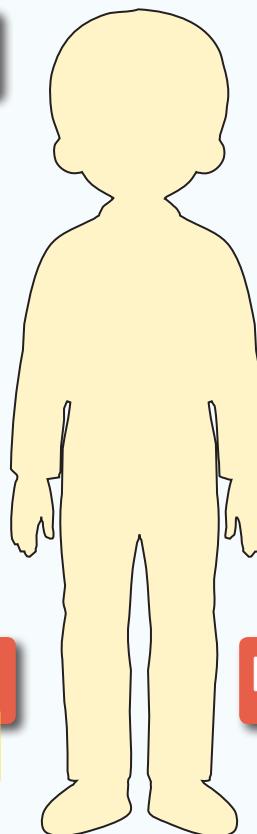
Shoe size

Mother's age

Father's age

Number of sisters

Number of brothers



2.2
2.3
2.5
2.6



- Adapt the information as needed while carrying out the activity.
- Ask the pupils to exchange information among themselves.





QUICK SUBTRACTION

- 3
$3 - 3 = 0$
<input type="text"/>
$5 - 3 = 2$
$6 - 3 = 3$
$7 - 3 = 4$
$8 - 3 = 5$
$9 - 3 = 6$
$10 - 3 = 7$
$11 - 3 = 8$
<input type="text"/>



- 4
$4 - 4 = 0$
$5 - 4 = 1$
$6 - 4 = 2$
<input type="text"/>
$8 - 4 = 4$
$9 - 4 = 5$
$10 - 4 = 6$
<input type="text"/>
$12 - 4 = 8$
$13 - 4 = 9$

- Guide the pupils to use concrete materials and flash cards to strengthen their understanding.

2.3.1



- 0
$0 - 0 = 0$
$1 - 0 = 1$
$2 - 0 = 2$
$3 - 0 = 3$
$4 - 0 = 4$
$5 - 0 = 5$
<input type="text"/>
$7 - 0 = 7$
$8 - 0 = 8$
<input type="text"/>
$10 - 0 = 10$
$11 - 0 = 11$

- 1
$1 - 1 = 0$
<input type="text"/>
$3 - 1 = 2$
$4 - 1 = 3$
$5 - 1 = 4$
$6 - 1 = 5$
$7 - 1 = 6$
$8 - 1 = 7$
<input type="text"/>
$10 - 1 = 9$
$11 - 1 = 10$

- 2
$2 - 2 = 0$
$3 - 2 = 1$
<input type="text"/>
$5 - 2 = 3$
$6 - 2 = 4$
<input type="text"/>
$8 - 2 = 6$
$9 - 2 = 7$
$10 - 2 = 8$
$11 - 2 = 9$

- 6
$6 - 6 = 0$
$7 - 6 = 1$
$8 - 6 = 2$
$9 - 6 = 3$
<input type="text"/>
$11 - 6 = 5$
<input type="text"/>
$13 - 6 = 7$
$14 - 6 = 8$
$15 - 6 = 9$



- 7
$7 - 7 = 0$
$8 - 7 = 1$
$9 - 7 = 2$
<input type="text"/>
$10 - 7 = 3$
<input type="text"/>
$11 - 7 = 4$
<input type="text"/>
$12 - 7 = 5$
<input type="text"/>
$13 - 7 = 6$
$14 - 7 = 7$
$15 - 7 = 8$
$16 - 7 = 9$

- 8
$8 - 8 = 0$
$9 - 8 = 1$
$10 - 8 = 2$
<input type="text"/>
$11 - 8 = 3$
<input type="text"/>
$12 - 8 = 4$
<input type="text"/>
$13 - 8 = 5$
<input type="text"/>
$14 - 8 = 6$
$15 - 8 = 7$
$16 - 8 = 8$
$17 - 8 = 9$

- 9
$9 - 9 = 0$
$10 - 9 = 1$
<input type="text"/>
$11 - 9 = 2$
<input type="text"/>
$12 - 9 = 3$
$13 - 9 = 4$
$14 - 9 = 5$
$15 - 9 = 6$
$16 - 9 = 7$
<input type="text"/>
$17 - 9 = 8$

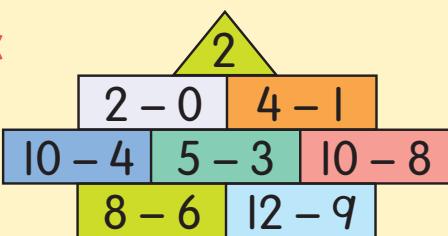
SELF-TEST

Try to complete these subtraction tables.

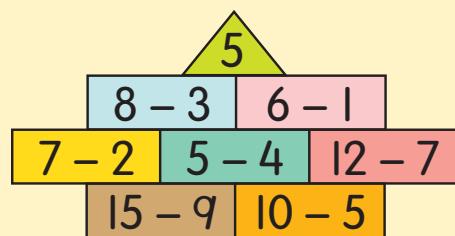


- 1 Select question cards for the answer in .

a



b



- 2 Write the numbers in the boxes. Create the correct number sentences.

a

4 3 7

$$\boxed{} - \boxed{} = \boxed{}$$

$$\boxed{} - \boxed{} = \boxed{}$$

b

11 5 6

$$\boxed{} - \boxed{} = \boxed{}$$

$$\boxed{} - \boxed{} = \boxed{}$$

c

q 17 8

$$\boxed{} - \boxed{} = \boxed{}$$

$$\boxed{} - \boxed{} = \boxed{}$$

2.3.1



- Help the pupils to understand the basic facts of subtraction and using it. Ask them to look at the pattern of basic facts of subtraction and relate it to the basic facts of addition.
- Provide more questions in the form of worksheets or question cards.

AB pages 94 - 96





EASY SUBTRACTION

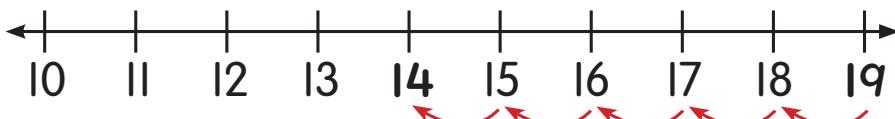
I There are 19 Seri Ayu cakes on the tray. Mother takes out 5 cakes. Calculate the number of cakes left on the tray.

$$19 - 5 = \boxed{ }$$



Method 1

Count back 5 steps from 19.



Method 2

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



Start at 19. Move 5 steps to the left. 18, 17, 16, 15, 14.

$$19 - 5 = \boxed{14}$$

The number of cakes left is 14.

2.3.2



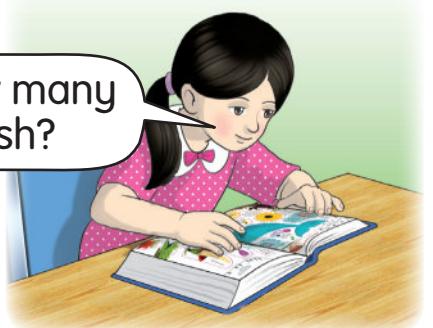
- Guide the pupils to count back from a larger number. Familiarise them to subtract using 100-square grid. Guide the pupils to look at the number pattern on the 100-square grid.

2

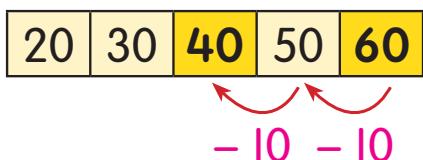
I read 20 from 60 pages. How many pages are left for me to finish?

Subtract 20 from 60.

$$60 - 20 = \boxed{ }$$



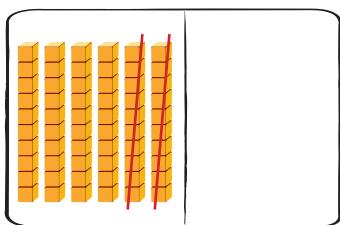
Method 1



Count back in tens from 60.



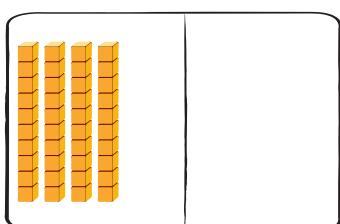
Method 2



tens	ones
6	0
- 2	0
<hr/>	
	0

Subtract ones.

$$0 \text{ ones} - 0 \text{ ones} = 0 \text{ ones}$$



tens	ones
6	0
- 2	0
<hr/>	
4	0

Subtract tens.

$$6 \text{ tens} - 2 \text{ tens} = 4 \text{ tens}$$

$$\begin{array}{r} 60 \\ - 20 \\ \hline 40 \end{array}$$

$$60 - 20 = \boxed{40}$$

There are 40 pages left.

2.3.2



- Help the pupils to recall the method of counting in tens. Relate it with addition involving counting in tens. Use concrete materials to assist them.

3



37



14

What is the difference in numbers between the green and blue buttons?

$$37 - 14 = \boxed{}$$

Method 1



Match 10 and 4. There are 23 more green buttons.

Method 2

tens ones

$$\begin{array}{r} 3 & 7 \\ - 1 & 4 \\ \hline 2 & 3 \end{array}$$

Subtract ones.

$$7 \text{ ones} - 4 \text{ ones} = 3 \text{ ones}$$

tens ones

$$\begin{array}{r} 3 & 7 \\ - 1 & 4 \\ \hline 2 & 3 \end{array}$$

Subtract tens.

$$3 \text{ tens} - 1 \text{ tens} = 2 \text{ tens}$$

$\begin{array}{r} 3 & 7 \\ - 1 & 4 \\ \hline 2 & 3 \end{array}$

$$37 - 14 = \boxed{23}$$

The difference in numbers between the green and blue buttons is **23**.

2.3.2



- Guide the pupils to subtract using the standard written method. Emphasise to them about the correct steps to do subtraction.
- Explain the method of finding differences using concrete materials such as base ten blocks, counters and others.



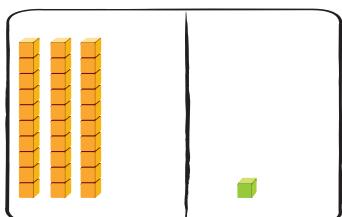
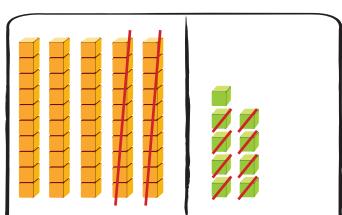


4 How much less is 28 from 59?

$$59 - 28 = \boxed{ }$$



Method 1



Subtract ones.

tens ones

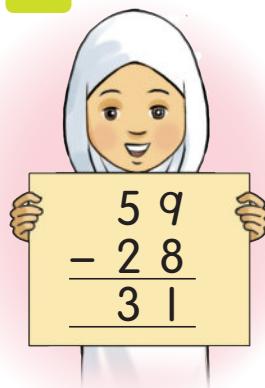
$$\begin{array}{r} 5 \quad q \\ - 2 \quad 8 \\ \hline \end{array}$$



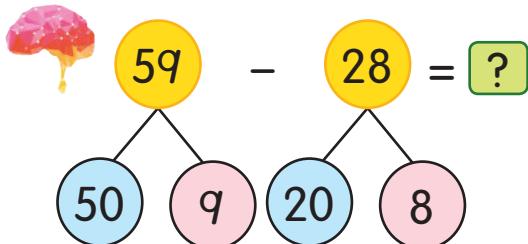
Subtract tens.

tens ones

$$\begin{array}{r} 5 \quad q \\ - 2 \quad 8 \\ \hline 3 \quad 1 \end{array}$$



Method 2



Subtract tens: $50 - 20 = 30$

Subtract ones: $9 - 8 = 1$

Answer: $30 + 1 = 31$

$$59 - 28 = \boxed{31}$$

2.3.2



- Guide the pupils to subtract using standard written method.
- Encourage the pupils to calculate quickly.





How many should be subtracted from 86 to make 53?



$$86 - \boxed{\quad} = 53$$

Method 1

41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90



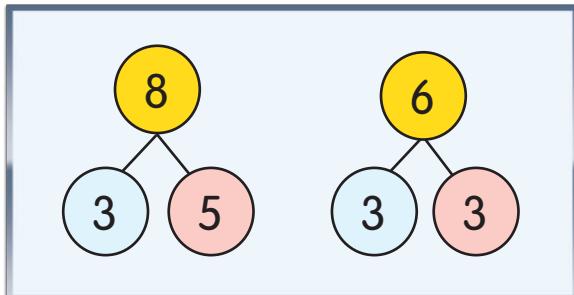
Count back in tens
from 86 to 56.
Get 30.



Then, count in ones
from 56 to 53. Get 3.
30 and 3 make 33.

Method 2

$$\begin{array}{r} 8 & 6 \\ - & \boxed{3} & \boxed{3} \\ \hline 5 & 3 \end{array}$$



$$86 - \boxed{33} = 53$$

2.3.2



- Guide the pupils to solve the problems involving unknown using 100-square grid and combination of numbers.
- Help them to see the pattern in the 100-square grid such as pattern in tens to help them doing quick calculation.



AB pages 97 - 101

SHARPEN YOUR MIND



Form subtraction number sentences using the given numbers. Each number can be used more than once.

2 3 4 5 6 8 9

List out the number sentences.



SELF-TEST

1 Complete these.

a $\begin{array}{r} 5 \ 7 \\ - \ 6 \\ \hline \end{array}$

b $\begin{array}{r} 6 \ 8 \\ - \ 5 \\ \hline \end{array}$

c $\begin{array}{r} 4 \ 5 \\ - \ 3 \ 0 \\ \hline \end{array}$

d $\begin{array}{r} 3 \ 1 \\ - \ 2 \ 0 \\ \hline \end{array}$

e $\begin{array}{r} 8 \ q \\ - \ 6 \ 2 \\ \hline \end{array}$

f $\begin{array}{r} 7 \ q \\ - \ 4 \ 3 \\ \hline \end{array}$

2 Solve these.

a $26 - 3 =$

b $\square = 55 - 14$

c $97 - \square = 62$



2.3.2



- Guide the pupils to write subtraction number sentences without regrouping in the Sharpen Your Mind activity.
- Provide more questions in the form of worksheets or question cards.



MORE SUBTRACTION



Akid has 15 tops.
He gives 8 tops to Amar.
How many tops does Akid have now?

$$15 - 8 = \boxed{ }$$

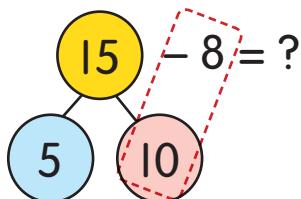


Method 1



Take away 8
from 15. 7 left.

Method 2



$$15 = 10 + 5$$



$$10 - 8 = 2$$

$$2 + 5 = 7$$

$$15 - 8 = \boxed{7}$$

Akid has 7 tops now.

2.3.2



- Carry out exercises on finding combination of two-digit numbers in tens and ones.
- Surf <https://www.education.com/worksheet/article/practice-subtraction-monkey/>

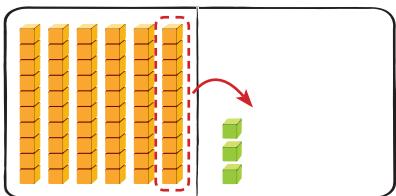




2 Subtract 7 from 63.

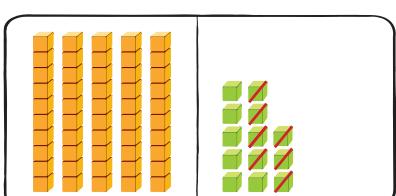
$$63 - 7 = \boxed{ }$$

Method 1



Convert 1 tens to 10 ones.

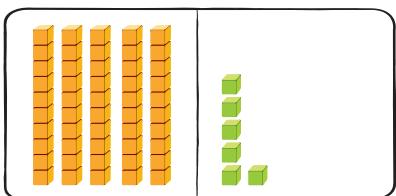
$$10 \text{ ones} + 3 \text{ ones} = 13 \text{ ones}$$



tens	ones
5 6	13 3
-	-
<hr/>	
	6

Subtract ones.

$$13 \text{ ones} - 7 \text{ ones} = 6 \text{ ones}$$



tens	ones
5 6	13 3
-	-
0	7
-	-
5	6

Subtract tens.

$$5 \text{ tens} - 0 \text{ tens} = 5 \text{ tens}$$

5 13	
6 3	
-	7
<hr/>	
5	6

Method 2

$$\begin{array}{r} 63 - 7 = ? \\ + 3 \downarrow \quad \downarrow + 3 \\ 66 - 10 = 56 \end{array}$$

Add 3 and 7 to make 10.
Add 3 to 63 too.



$$63 - 7 = \boxed{56}$$

2.3.2



- Guide the pupils to subtract by regrouping using counters.
- Emphasise to the pupils to write the digits in the correct place values.

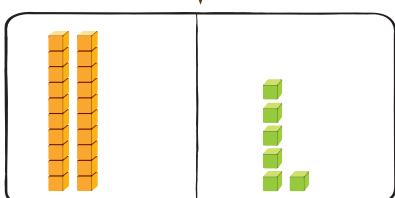
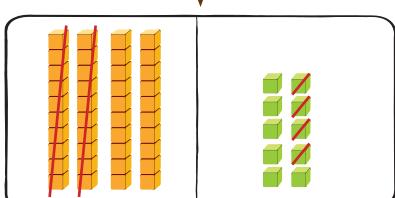
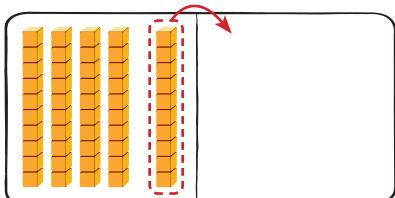
AB pages 102 - 103



3

$$50 - 24 =$$

Method 1



Convert 1 tens to 10 ones.
0 ones + 10 ones = 10 ones

Subtract ones.

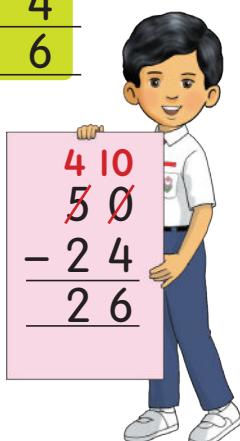
tens ones

$$\begin{array}{r} \cancel{4}5 \\ - 2 \\ \hline 2 \end{array} \quad \begin{array}{r} \cancel{1}0 \\ - 4 \\ \hline 6 \end{array}$$

Subtract tens.

tens ones

$$\begin{array}{r} \cancel{4}5 \\ - 2 \\ \hline 2 \end{array} \quad \begin{array}{r} \cancel{1}0 \\ - 4 \\ \hline 6 \end{array}$$



Method 2



Count back in tens.
Then, in ones.

11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

$$50 - 24 =$$

26

2.3.2



- Guide the pupils to write subtraction operation in the standard written method correctly.
- Guide the pupils to subtract using 100-square grid.



4

Calculate the difference of 28 and 42.

$$42 - 28 = \boxed{14}$$

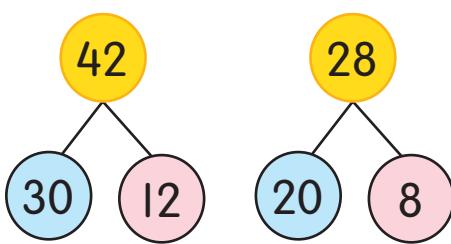
Method 1

tens	ones		tens	ones		tens	ones	
3 4	12 2		3 4	12 2		3 4	12 2	
-	2		-	2		-	2	
	8		8	1		8	4	
	4		4	4		4	4	

Method 2



I am using the combination of numbers.



Subtract: $(30) - (20) = 10$

$(12) - (8) = 4$

Answer: $10 + 4 = 14$

$$42 - 28 = \boxed{14}$$

2.3.2



- Guide the pupils to do quick calculation using combination of numbers.

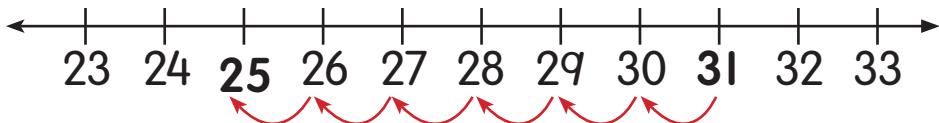




$$5 \quad 31 - \boxed{} = 25$$

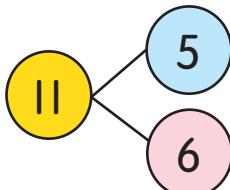


Method 1



Method 2

$$\begin{array}{r} 2 \\ 3 \\ - \\ \hline 2 \end{array} \quad \begin{array}{r} 11 \\ 6 \\ - \\ \hline 5 \end{array}$$



11 is 5 and 6.

$$31 - \boxed{6} = 25$$



SELF-TEST

1 Calculate the balance.

a $\begin{array}{r} 2 \ 3 \\ - \ 6 \\ \hline \boxed{} \ \boxed{} \end{array}$

b $\begin{array}{r} 5 \ 2 \\ - \ 7 \\ \hline \boxed{} \ \boxed{} \end{array}$

c $\begin{array}{r} 3 \ 1 \\ - \ 1 \ q \\ \hline \boxed{} \ \boxed{} \end{array}$

d $\begin{array}{r} 6 \ 0 \\ - \ 4 \ 4 \\ \hline \boxed{} \ \boxed{} \end{array}$

2 Solve these.

a $12 - 8 = \boxed{}$

b $61 - 5 = \boxed{}$

c $34 - 15 = \boxed{}$

d $95 - 88 = \boxed{}$

e $\boxed{} = 40 - 28$

f $26 - \boxed{} = 17$



2.3.2



- Surf <https://www.ixl.com/math/grade-1>
- Provide more questions in the form of worksheets or question cards.

AB pages I04 - I06





ADDITION AND SUBTRACTION STORIES

1

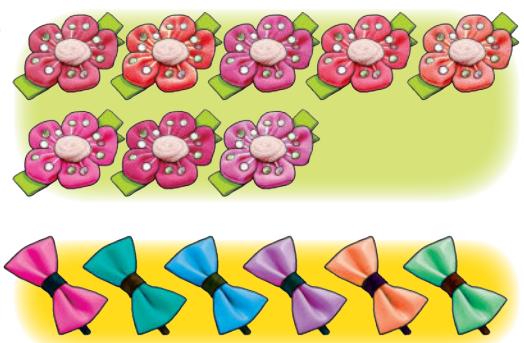


There are 5 .

There are 3 .

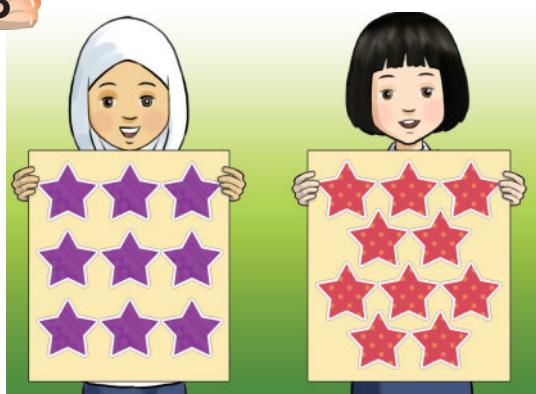
There are 8 toy cars altogether.

2



There are 8 flowered hair clips and ribboned hair clips. The total number of hair clips is .

3



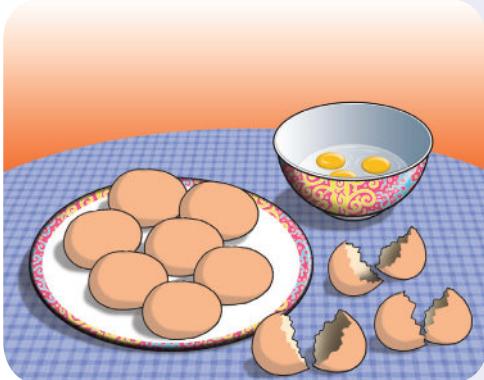
Mila has purple stickers.
Mei Li has red stickers.
Their total number of stickers is .

2.4.1



- Guide the pupils to create stories using their own words. Carry out the activity in pairs; one pupil shows a picture card and the other tells the story.

4



There are 10 eggs. 3 eggs are broken. 7 eggs are not broken.

5

Safi has 12 pet fishes.
 are goldfish.
The balance are guppy fish.



6



Maria makes purple flowers and yellow flowers. The difference in numbers between purple flowers and yellow flowers is .

2.4.1



- Guide the pupils to create stories using their own words. Carry out the activity in pairs; one pupil shows a picture card and the other tells the story.

7

$$30 + 34 = 64$$

Ravi reads 30 comics. Zul reads 34 comics more than Ravi. Zul reads 64 comics altogether.

8

$$45 + 50 = 95$$

Sara saves RM . Her mother gives another RM . The total amount of Sarah's money is RM .



9

$$37 - 16 = 21$$

Selvi has 37 beads. She gives 16 beads to Azi. Selvi has 21 beads left.

10

$$58 - 13 = 45$$



Sani's mother sells buns on Sunday. On Monday, she sells buns less. So, on Monday, she sells buns.

2.4.1



- Guide the pupils to create stories from the number sentences. Help them to use suitable words and phrases. Accept the stories based on mathematical logic.
- Provide more questions in the form of worksheets or question cards.

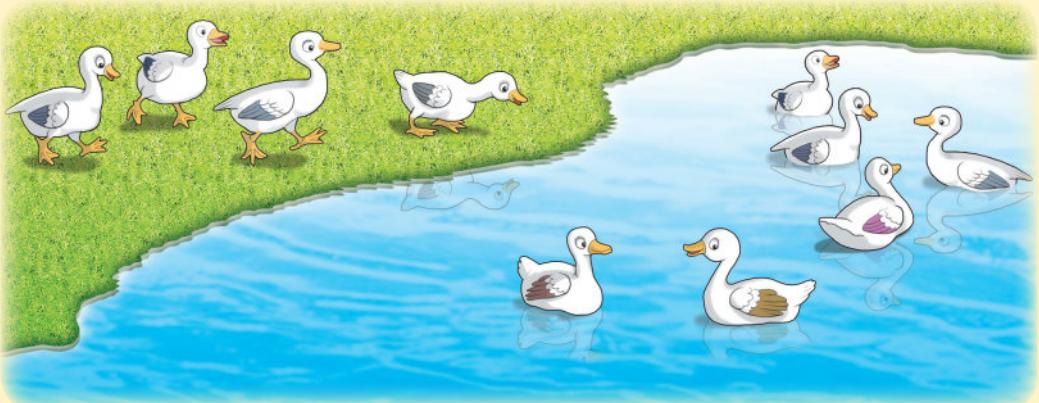




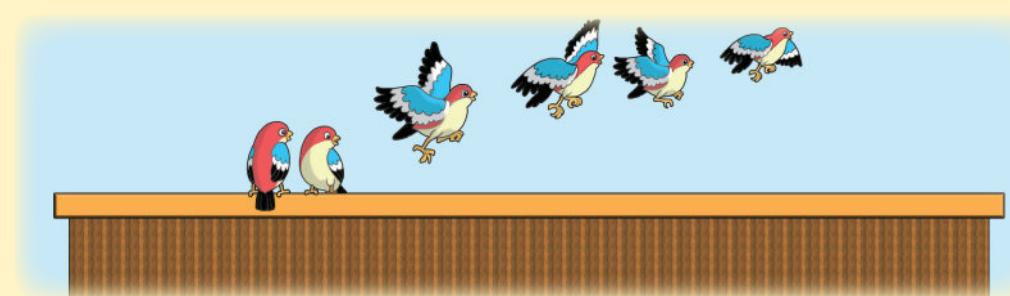
SELF-TEST

1 Look at the pictures. Create stories.

a



b



2 Create stories of addition for these number sentences.

a

$$18 + 7 = 25$$

b

$$36 + 64 = 100$$

3 Create stories of subtraction for the number sentences given.

a

$$18 - 10 = 8$$

b

$$75 - 32 = 43$$

2.4.1



- Guide the pupils to create a reasonable story based on pictures or number sentences.
- Encourage the pupils to exchange stories among themselves.
- Provide more questions in the form of worksheets or question cards.

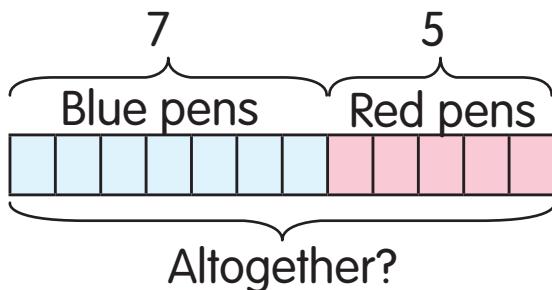
AB pages 107 - 110



SOLVE THE PROBLEMS



Encik Arif has 7 blue pens and 5 red pens. How many pens does he have altogether?



I draw
a diagram.

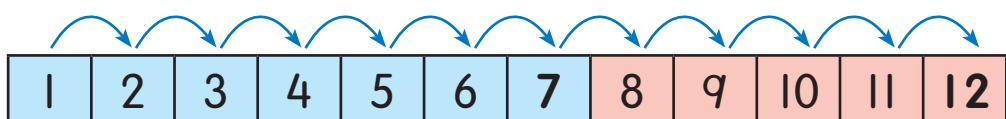


Number sentence

$$7 + 5 = \boxed{}$$

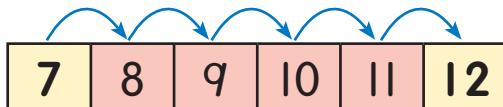
Method 1

Count all.



Method 2

Count on 5 steps from 7.



$$7 + 5 = \boxed{12}$$

Encik Arif has 12 pens altogether.

2.4.2

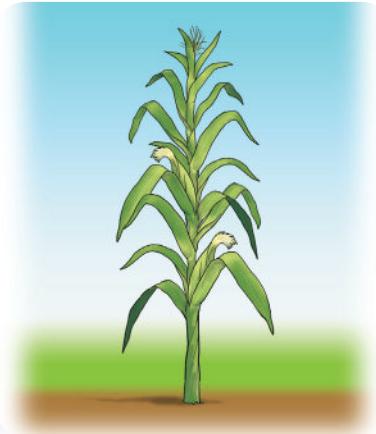


- Guide the pupils to find the given information correctly. Help them to solve the problems using suitable methods.

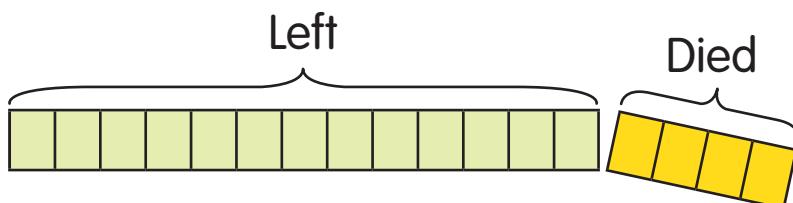


2

Lina's father grows 17 corn stalks.
4 corn stalks died. How many
corn stalks are left?



Draw a diagram.



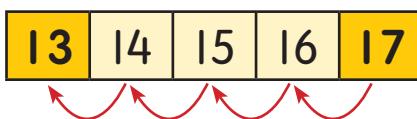
Number sentence $17 - 4 =$

Method 1

$$\begin{array}{r} 17 \\ - 4 \\ \hline 13 \end{array}$$

Method 2

Count back 4 steps from 17.



$$17 - 4 = \boxed{13}$$

13 corn stalks are left.

2.4.2



- Train the pupils to understand the problems by underlining important information.
- Emphasise the procedure to solve problems, such as collecting informations, writing number sentences, applying strategies and checking answers.

3

Ho has 10 oranges. He gives 6 oranges to Raju. How many oranges are left?

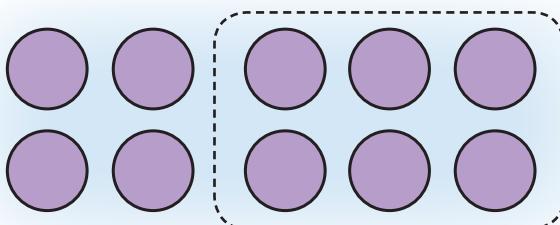


There are 10 oranges.

Give 6 oranges.

How many are left?

$$10 - 6 = \boxed{ }$$



Draw a diagram.

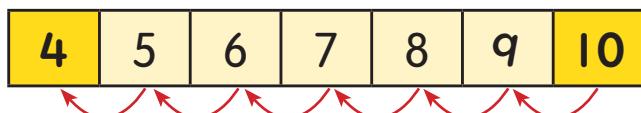


Method 1

$$\begin{array}{r} 10 \\ - 6 \\ \hline 4 \end{array}$$

Method 2

Count back 6 steps from 10.



$$10 - 6 = \boxed{4}$$

There are 4 oranges left.

2.4.2



- Guide the pupils to solve the problems by counting back and using model.





4 Agil brings 21 bananas. He and his friends eat 16 bananas. How many bananas are left?



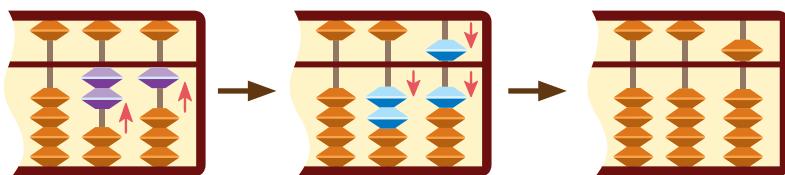
Total	21
Eaten	16
Left	?

$$21 - 16 = \boxed{5}$$

Method 1

$$\begin{array}{r} 1 \\ 2 \\ - 1 \\ \hline 1 \\ 6 \\ \hline 5 \end{array}$$

Method 2



$$21 - 16 = \boxed{5}$$

There are 5 bananas left.

2.4.2

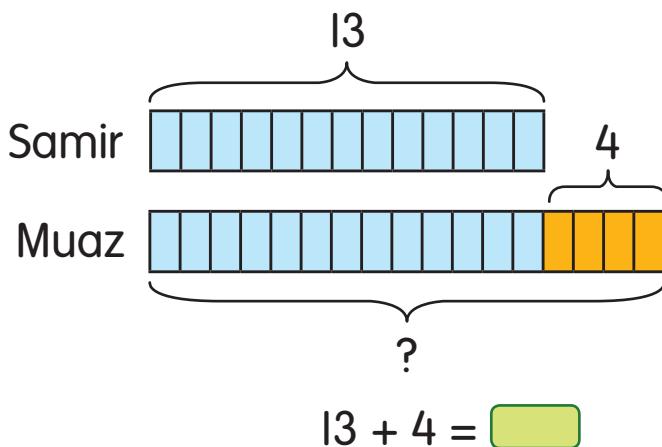
TEACHER'S
NOTES

- Guide the pupils to solve the problem using simple strategies based on their abilities.
- Train the pupils to construct a number sentence from the problem given.



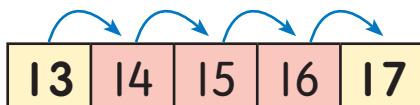


5 Samir collects 13 stamps.
Muaz collects 4 stamps more than Samir. Calculate the number of Muaz's stamps.

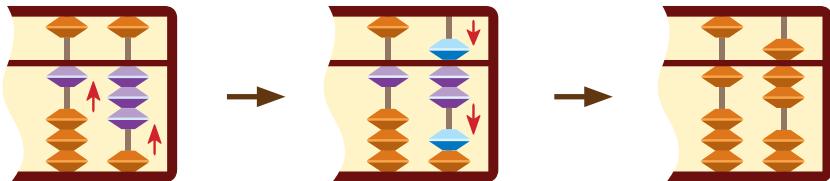


Method 1

Count on 4 steps from 13.



Method 2



$$13 + 4 = 17$$

The number of Muaz's stamps is 17.

2.4.2



- Guide the pupils to understand the problems and form the correct number sentences. Encourage them to check their answers.



6

Participants for Teacher's Day

Year	Number of pupils
2016	39

Look at the table. In 2017, the number of participants are 26 more than in 2016. What is the total number of participants in 2017?



More means add.
Add 39 and 26.

$$39 + 26 = \boxed{}$$

Method 1

$$\begin{array}{r}
 & | \\
 & 3 \ q \\
 + & 2 \ 6 \\
 \hline
 & 6 \ 5
 \end{array}$$

Remember!
 $9 + 6 = 15$



Method 2



$$\begin{array}{ccc}
 39 + 26 & = & \boxed{} \\
 \swarrow \quad \searrow & & \\
 1 \qquad 25 & &
 \end{array} \rightarrow \begin{array}{ccc}
 40 & + & 25 \\
 & & = \boxed{65}
 \end{array}$$

$$39 + 26 = \boxed{65}$$

The total number of participants in 2017 is **65**.

2.4.2



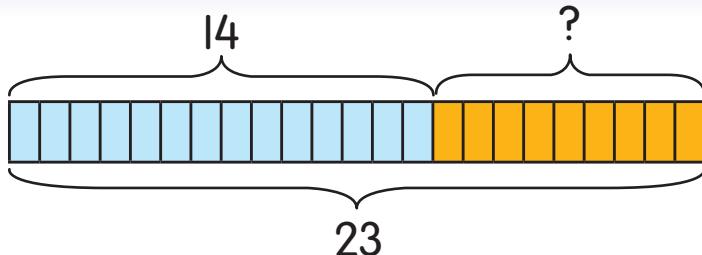
- Guide the pupils to find the information and keywords in the given problems.
- Emphasise to the pupils to master the basic facts of addition to help them to do quick calculation.





7 There are 14 coloured pencils.

Kumari adds some more coloured pencils. The total number of coloured pencils is 23. How many coloured pencils did she add?



$$14 + \boxed{?} = 23$$

Method 1

Count the blue blocks.

14

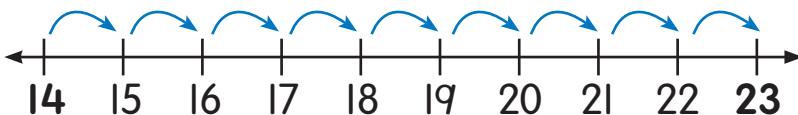


23



Method 2

Count on in ones from 14 to 23. Get 9 steps.



$$14 + \boxed{9} = 23$$



Kumari added 9 coloured pencils.

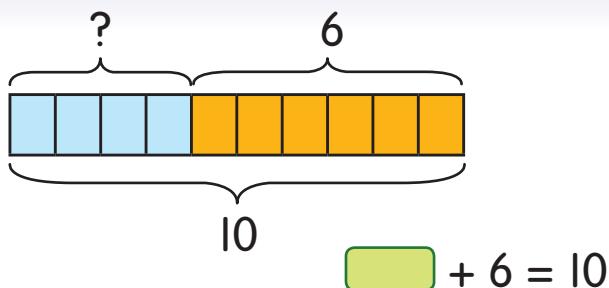
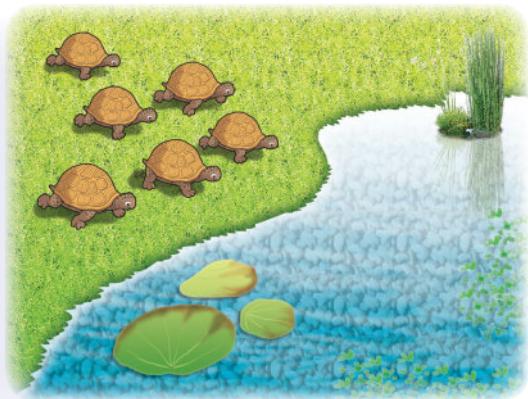
2.4.2



- Emphasise that the information must be sufficient to solve the problem.
- Train the pupils to find the value of unknown for the problem given.
- Construct questions involving unknown to enhance pupils' understanding.



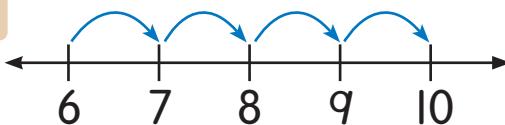
8 Some tortoises are inside the pond. 6 more tortoises entered the pond. The total becomes 10. Calculate the number of tortoises inside the pond at the beginning.



Method 1



Method 2



$$4 + 6 = 10$$

4 tortoises were inside the pond at the beginning.

2.4.2



- Guide the pupils to solve problems by simulation using pictures and diagrams as representatives.
- Surf <http://www.math-exercises-for-kids.com>



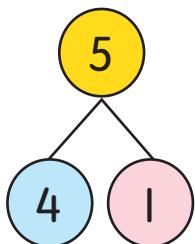
Zura prepared 58 sticks of ice cream. She sold some sticks of the ice cream. There are 12 sticks of ice cream left. How many sticks of ice cream were sold?



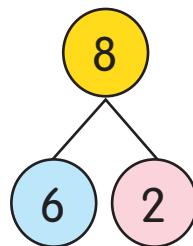
There are 58 sticks of ice cream.
Some are sold. 12 sticks of ice cream are left.
Calculate the number of sticks of ice cream sold.

$$58 - \boxed{ } = 12$$

Method



$$\begin{array}{r} 5 & 8 \\ - & \boxed{4} & \boxed{6} \\ \hline 1 & 2 \end{array}$$



$$58 - \boxed{46} = 12$$

Zura sold **46** sticks of ice cream.

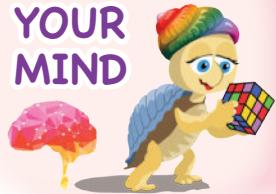
2.4.2



- Encourage the pupils to check the answers to avoid mistakes.
- Show various simple daily situations involving subtraction and finding unknown to enhance pupils' understanding.

AB pages III - II6

SHARPEN YOUR MIND



Create a number sentence. Discuss.

Akif has some balloons. 5 of them burst.
How many balloons are left?

SELF-TEST



Choose the suitable number sentence. Solve it.

a A bus is carrying 15 pupils. At a park, 7 other pupils board the bus. Calculate the total number of pupils.

i

$$15 = 7 + \square$$

ii

$$15 + 7 = \square$$

b Reetha and Dayang have a total number of 56 beads. Reetha has 38 beads. How many beads does Dayang have?

i

$$38 + 56 = \square$$

ii

$$38 + \square = 56$$

c Mother bought 48 eggs. She cooked 12 eggs. How many eggs are left?

i

$$48 - 12 = \square$$

ii

$$\square - 12 = 48$$

d Ah Meng's father breeds 52 chicks. 6 chicks are sick. Calculate the number of chicks which are not sick.

i

$$52 + 6 = \square$$

ii

$$52 - 6 = \square$$

2.4.2



- Create a story such as in the Sharpen Your Mind to train pupils to identify incomplete information in questions.
- Surf <http://www.education.com/worksheet/article/subtraction-practice-balloon/>

106



2 Solve the problems.

a There are 16 boys and 12 girls. How many pupils are there altogether?

b Faiz arranges 35 boxes of oranges. Ranjit arranges another 28 boxes.

Calculate the number of boxes of oranges altogether.



c In a class, there are 25 pupils. 9 of them are wearing spectacles. How many pupils are not wearing spectacles?

d Look at the table. The blue house score is not written.

i How many does the yellow house score more than the red house?

ii The difference in scores of blue house and red house is 10. What is the blue house score?

Sport House	Score
Yellow	91
Red	67
Blue	

2.4.2



- Help the pupils to solve problems using suitable methods.
- Encourage the pupils to talk on how they solve the problems.
- Provide more questions in the form of worksheets or question cards.



REPEATED ADDITION

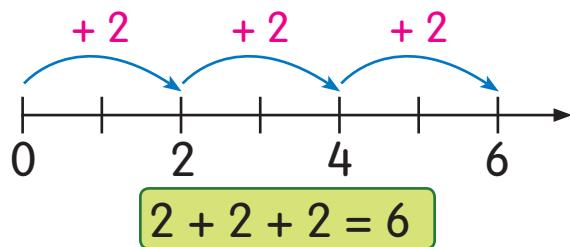


There are 3 pupils holding 2 postcards each.
What is the total number of postcards?



There are 3 groups of postcards.
Each group has 2 postcards.
So, there are **3 groups of twos**.

Total number
of postcards



3 groups of twos are 6.

The total number of postcards is **6**.

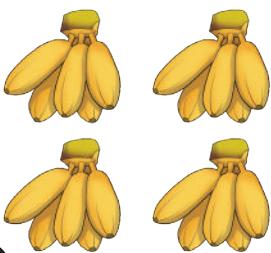
2.5.1



- Explain that repeated addition is a group of objects collected in an equal amount or totalling up two or more of the same numbers.
- Relate the counting on in twos with repeated addition.

2

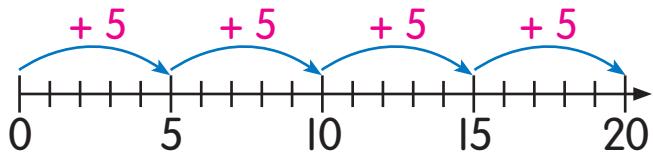
How many bananas are there altogether?



There are 4 groups of bananas.
Each group has 5 bananas.



Add in fives
4 times.



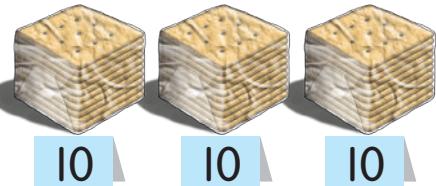
$$5 + 5 + 5 + 5 = 20$$

4 groups of fives are 20.

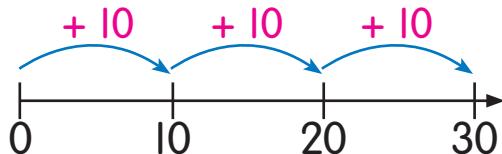
There are 20 bananas altogether.

3

How many biscuits are there altogether?



There are 3 groups
of tens.



$$10 + 10 + 10 = \boxed{ }$$

3 groups of tens are .

There are biscuits altogether.

2.5.1

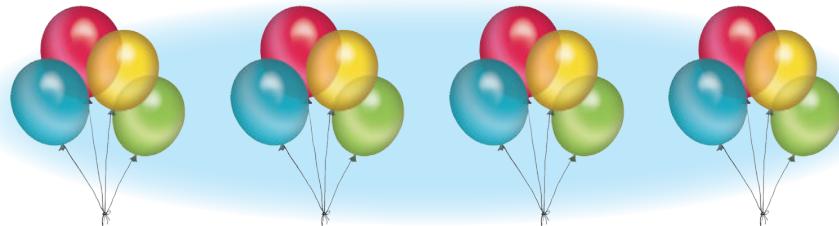


- Guide the pupils to carry out activities such as collecting, arranging and counting on objects in twos, fives, tens and fours using objects in their surroundings.
- Guide the pupils to write the repeated addition number sentences correctly.

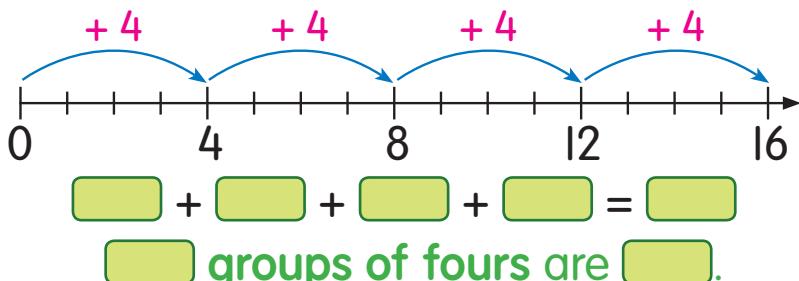


4

What is the total number of balloons?



There are groups of fours.



The total number of balloons is .



Tie up the balloons in twos. How many groups are there?

SHARPEN
YOUR
MIND



Group these 20 doughnuts in equal numbers. How many groups can you get? Explain.



SELF-TEST

a $2 + 2 + 2 + 2 = \boxed{}$

b $5 + 5 + 5 = \boxed{}$

c $10 + 10 + 10 + 10 = \boxed{}$

d $4 + 4 + 4 = \boxed{}$

2.5.1



- Guide the pupils to relate the counting on in twos with fours, and the counting on in fives with tens.
- Provide more questions in the form of worksheets or question cards.

AB pages 117 - 119

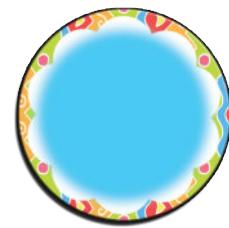
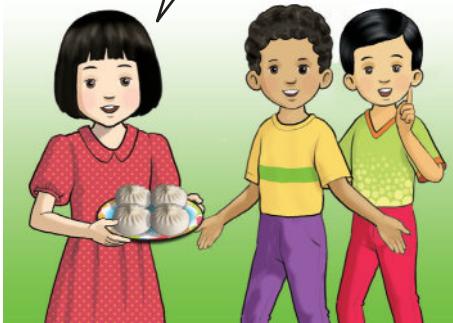




REPEATED SUBTRACTION



I have 4 pau.

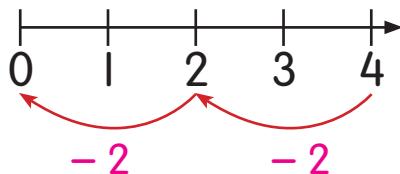


$$4 - 2 = 2$$

$$2 - 2 = 0$$

$$\begin{array}{r}
 4 \\
 - 2 \quad \leftarrow \text{1 time} \\
 \hline
 2 \\
 - 2 \quad \leftarrow \text{2 times} \\
 \hline
 0
 \end{array}$$

I subtract
two times.



$$4 - 2 - 2 = 0$$

2.6.1

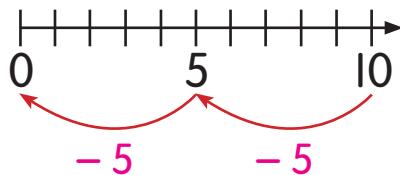


- Carry out simulation using suitable objects to explain about repeated subtraction which is subtracting the same quantity repeatedly.
- Emphasise to the pupils about original quantity, number of groups, and equal numbers in groups.



 2

Siva has 10 kebabs.
He gives an equal number
of kebabs to two of his
friends. How many kebabs
will each one get?



$$10 - 5 - 5 = 0$$

Each one gets 5 kebabs.

2.6.1

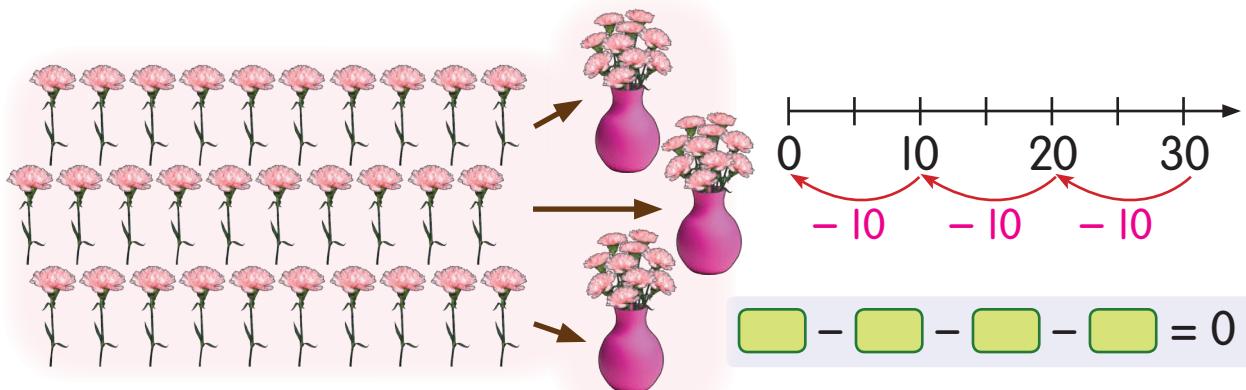


- Guide the pupils to do repeated subtraction in twos, fives, tens and fours using counters and base ten blocks.



3

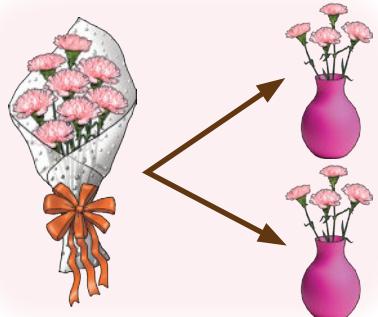
Shima has 30 stalks of flowers. She puts an equal number of flowers into 3 vases. How many flowers are there in each vase?



The number of flowers in each vase are [red box] stalks.

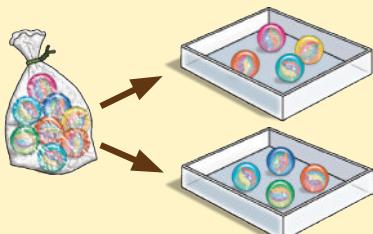


Write number sentence of repeated subtraction that represents this picture.



SELF-TEST

8 marbles are put inside the 2 boxes equally.



- a** Write the number sentence of repeated subtraction.
- b** How many marbles are there in each box?

2.6.1



- Train the pupils to subtract the same numbers repeatedly from a given number.
- Provide more questions in the form of worksheets or question cards.

AB pages 120 - 122



Move up and down

Participants 3 pupils in a group.

Materials Game board, paper, pencils, dice, markers and chips (3 colours).

q5	14	27	49
q1	38	81	35
q2	34	5	23
48	19	60	37
90	39	78	17

Rules

- 1 Throw the dice.
- 2 Move the marker based on the number shown on the dice.
- 3 Answer the question in the box.
- 4 Put the chip on the answer box.
- 5 Take turns. Repeat rules 1 until 4.
- 6 The first player who reaches the END is the winner.

2.2
2.3



- Ask the pupils to determine the turns before playing. When they reach at $8+9$ box, ask the player to move their marker backwards if the number on the dice is more than 1.
- Instil good values such as cooperation, honesty and others while playing.