

Catalogue 2020

Ma Maths

Sc Science

vector
maths & science



**Sharp Minds,
Bright Futures**

Welcome!

Vector Maths & Science Publishing, a subsidiary of MM Educational Group, is a vibrant, new company founded in 2017. Comprehending the needs of the times, MM Educational Group decided to extend its activities through this new company, which specialises in the production of materials for Maths and Science. These subjects play a key role in our lives today and a good grasp of them can help learners understand crucial concepts and processes of everyday life.

The materials of **Vector Maths & Science Publishing** aim at specific age groups and include a variety of components for teachers and students such as full-colour workbooks, CD-ROMs, Teacher's Resources and tests in electronic form. The company's mission is to provide quality materials with an emphasis on creativity as well as analysis. Vector materials encourage users to dive deep into the subject matter and guide them in the process of discovering and understanding facts and phenomena.

The slogan '**Sharp Minds, Bright Futures**' emphasises the objective of the company.

And which is this objective? The answer is simple.

To challenge the minds of young people and encourage them to achieve what they believe is unachievable.

The Vector team



Vector Maths & Science, the newest member of MM Educational Group, highlights our ongoing pursuit of knowledge, skills and abilities, and sets our primary goal - to sharpen our students' minds and shape their path towards educational excellence.

Put on your white coats, get your calculators and let's start an exciting journey!

To learn more visit: **www.vectormsint.com**

vector
maths & science





At Vector Maths & Science, we offer more than theories and procedures.

- > We build a strong understanding of the fundamentals in Maths and Science.
- > We equip students with practical skills necessary not only for a successful academic development but also in everyday life.
- > We develop materials that correspond to the needs of the 21st century, preparing our students to excel in the modern world.

The significant experience of MM Educational Group in education, from preschool to university, over the last 45 years, is our long-time companion in the dawn of a new era.

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Key to icons



Student's Book



Workbook



Teacher's Book



Workbook
Teacher's Edition



Teacher's Resource
CD-ROM



What do our Maths books offer?

They promote the development of thinking skills that are linked to the mental strategies used when we process information, make decisions, solve problems, etc.

And we achieve this, using innovative, creative and practical materials!



Maths



Our Science course offers a chance to experience an exciting adventure into the mysteries of nature. The students need only to be persistent, open minded and use their critical thinking. It is our responsibility to equip them with the resources, materials and skills necessary to succeed.



Science

Domains



Numbers



Geometry



Measurement



Data



Problem Solving

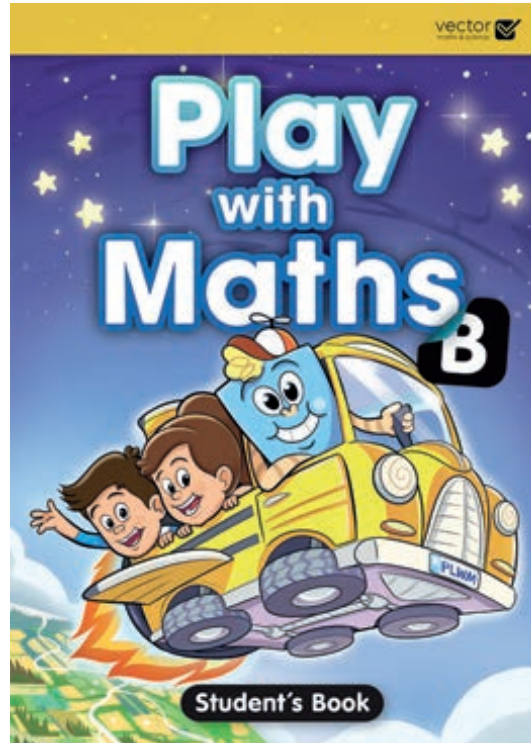
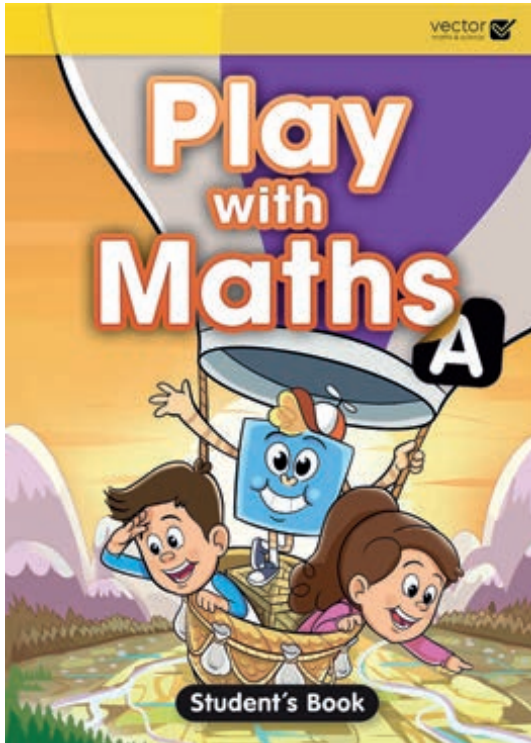


Maths





CEFR		A1		A2	
LEVELS		A1.1	A1.2	A2.1	A2.2
Play with Maths	p. 8				
Let's Start! Maths	p. 14				
Maths	p. 20				



Designed for very young learners, 'Play with Maths' series, which consists of two books, is sure to thrill children. The purpose of the series is to bring children into contact with Mathematics in a fun and entertaining way, through an abundance of interactive activities.

Children will be familiarised with basic mathematical concepts such as numbers, patterns, tables etc., that will help them enter the world of Mathematics in their school life more easily.

Components



Student's Book



Teacher's Book



Teacher's Resource CD-ROM

Course features

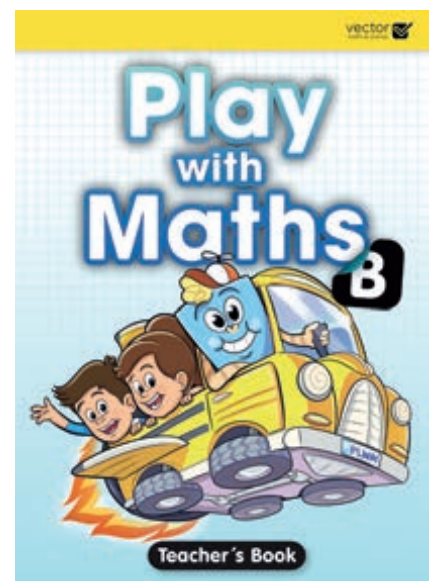
FOR STUDENTS:

- > visual problem-solving strategies that help learners understand the relationship between numbers and quantities
- > extra activities and games to recycle and consolidate learning
- > various activities that activate the mathematical thinking of young learners in a fun way
- > illustrated cover pages that trigger the interest of young learners
- > examples in every unit that help the learners understand the concept taught
- > colour-in pages



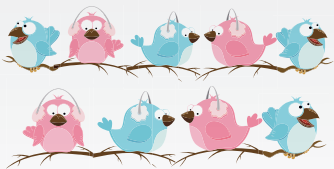
FOR TEACHERS:

- > the main learning objectives presented at the beginning of each unit
- > suggested vocabulary that can be used throughout the unit
- > list of the corresponding flashcards to every activity
- > a section with students' common difficulties also presented at the beginning of every unit
- > extra material (activities, games, flashcards etc.) that will help the teacher conduct the lesson
- > a pictorial tool (Bar Model Method) used to organise and visualise relationships between known and unknown quantities in word problems
- > a key to all activities
- > a brief list of everything learners were taught at the end of each unit
- > a glossary to support the use of mathematical terms

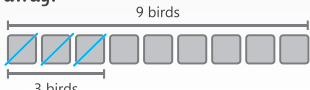


3 Subtraction to 10

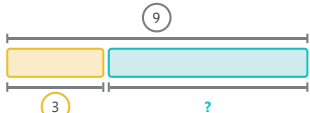
example 2 There are 9 birds in a tree. Suddenly 3 of them fly away. How many birds are there left?



step 1 Cross out the squares to show the birds that fly away.



step 2 Complete the numbers on the bar model.



step 3 Write the number sentence.

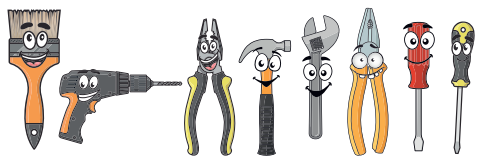
$9 - 3 = 6$

Answer There are 6 birds left.

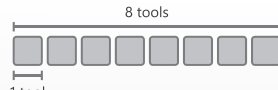
26

Subtraction to 10 **3**

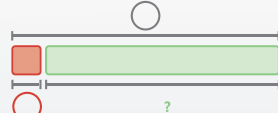
activity 2a Ben has 8 tools. He loses 1 tool. How many tools does he have left?



step 1 Cross out the squares to show the tools he loses.



step 2 Complete the numbers on the bar model.



step 3 Write the number sentence.

$8 - 1 = 7$

Answer He has 7 tools left.

27

example pages to facilitate teaching

Play with Maths A, Student's Book

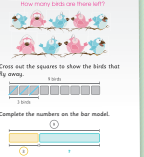
important concepts taught in the unit

extra games

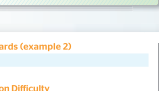
a 'Common Difficulty' section

3. Subtraction to 10


example 2 There are 9 birds in a tree. Suddenly 3 of them fly away. How many birds are there left?



step 1 Cross out the squares to show the birds that fly away.



step 2 Complete the numbers on the bar model.



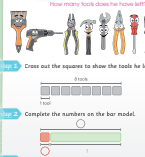
step 3 Write the number sentence.

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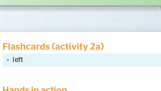
Answer There are 6 birds left.

26

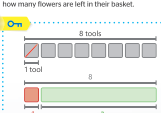
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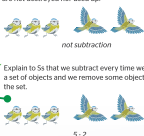
Answer He has 7 tools left.

27

Flashcards (example 2)

Common Difficulty

X Ss may think that removing or taking away objects from a set does not mean subtracting them, as they are not destroyed nor used up.



not subtraction

✓ Explain to Ss that we subtract every time we have a set of objects and we remove some objects from the set.


$5 - 2 = 3$

18

Flashcards (activity 2a)

Hands in action

Divide Ss into groups. Ask each group to draw up to 9 flowers and a basket. Ask Ss in each group to cut them out and place the flowers in the basket. Ask two Ss in each group to take turns to take some flowers out of the basket and have the other Ss in the group count how many flowers are left in their basket.



8 tools

1 tool

$8 - 1 = 7$

He has 7 tools left.

21


3. Subtraction to 10

Students have learnt to:

- ✓ subtract objects from a group to find out how many are left.
- ✓ calculate subtractions that equal to 10.
- ✓ complete bar models for subtraction.
- ✓ find out the number of objects in a group that are remaining after some are taken away.

Game Time!

- Divide Ss into pairs.
- Ask one S in each pair to draw and cut out 5 to 10 fish (e.g. 7 fish).
- Ask the other S in each pair to draw a fish net and write a number up to 5 on it (e.g. 4).
- Ask the first S in each pair to put the number of fish shown on the net in it (e.g. 4).
- Say to Ss 'The pair that has 3 fish left wins a point!'
- Ask pairs to count whether they have 3 fish left to win a point.
- Repeat the activity by having Ss write another number on the net and by saying the number of fish left that a pair should have in order to win a point.
- Have pairs count the points they won.
- The pair with the most points wins.



21

Play with Maths A, Teacher's Book

activities for practise

5 Patterns

example 2 This is a pattern.
What comes next?

step 1 Circle the group that repeats.

step 2 Draw what comes next.

Answer A giraffe comes next.

52

Patterns 5

activity 2a This is a pattern.
What comes next?

step 1 Circle the group that repeats.

step 2 Draw what comes next.

Answer A _____ comes next.

53

Play with Maths A, Student's Book

key to extra activities provided

Extra Activities

3

Activity 2 Colour in the balloons.

Accept all possible answers. Suggested answers:
 Three balloons are green and the rest are orange.

Two balloons are blue and the rest are yellow.

One balloon is brown and the rest are purple.

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flashcards

next

pattern

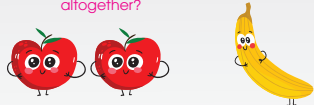
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Play with Maths A, Teacher's Resource CD-ROM

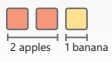


2 Addition to 10


example 2 Lilly has 2 apples.
Her friend has 1 banana.
How many fruits do they have altogether?



step 1 Colour in the squares to show the fruits each girl has.



step 2 Complete the numbers on the bar model.



step 3 Write the number sentence.


$2 + 1 = 3$

Answer They have 3 fruits altogether.


16

2 Addition to 10


activity 2a Ben has 5 carrots.
His friend has 2 onions.
How many vegetables do they have altogether?



step 1 Colour in the squares to show the vegetables each boy has.



step 2 Complete the numbers on the bar model.



step 3 Write the number sentence.

$5 + 2 = 7$

Answer They have 7 vegetables altogether.

17

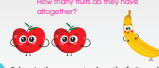
detailed instructions to facilitate teaching

Play with Maths A, Student's Book


clear activity keys

2. Addition to 10


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step 3 Write the number sentence.

$5 + 2 = 7$

Answer They have 7 vegetables altogether.


17

Flashcards (example 2)

- altogether


Common Difficulty

✗ Ss may think that we can only add identical objects.



not possible

✓ Explain to Ss that we may add different types of objects, if they belong to the same category.



5 fruits

Flashcards (activity 2a)

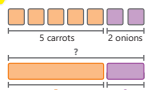
- altogether

Hands in action

Provide Ss with Cut-out 2. Ask Ss to colour all the fruits in yellow, all the vegetables in green and all the sweets in blue. Then ask Ss to cut out the cards and place them in groups of the same category. Finally ask Ss to count how many fruits/vegetables/sweets there are altogether.

TB: Cut-out 2, p. 44

On



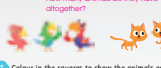
5 carrots 2 onions

$5 + 2 = 7$


They have 7 vegetables altogether.

2 Addition to 10


activity 2b Lily has 3 parrots.
Her friend has 2 cats.
How many animals do they have altogether?



step 1 Colour in the squares to show the animals each boy has.



step 2 Complete the numbers on the bar model.



step 3 Write the number sentence.


$3 + 2 = 5$

Answer They have 5 animals altogether.


18

2 Addition to 10


example 3 Ben has 2 umbrellas.
His friend has as many umbrellas as Ben.
How many umbrellas do they have altogether?



step 1 Colour in the squares to show the umbrellas each boy has.



step 2 Complete the numbers on the bar model.



step 3 Write the number sentence.

$2 + 2 = 4$

Answer They have 4 umbrellas altogether.

19


Flashcards (activity 2b)

- altogether

Hands in action

Ask Ss to draw up to 5 toys choosing from two different categories (e.g. dolls or cars). Ask Ss to make pairs. Explain to Ss that each pair must have toys of both categories (e.g. dolls or cars). Then ask Ss in each pair to count how many toys they have altogether.

On



3 parrots 2 cats

$3 + 2 = 5$


They have 5 animals altogether.

Flashcards (example 3)

- altogether
- as many as


Common Difficulty

✗ Ss may not understand the meaning of the phrase 'as many as'.



3 and 3

✓ Explain to Ss that 'as many as' means 'the same number of'.




as many as


Play with Maths A, Teacher's Book

4 Addition and subtraction to 20


activity 1a Ben has 12 peaches.
He buys 4 more peaches.
How many peaches does he have now?



step 1 Count the squares that show the peaches he has and the peaches he buys.



step 2 Complete the numbers on the bar model.



step 3 Write the number sentence.

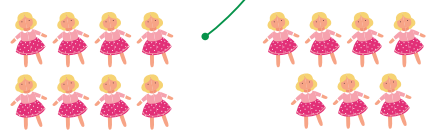
$\bigcirc + \bigcirc = \bigcirc$

Answer He has _____ peaches now.


34

4 Addition and subtraction to 20

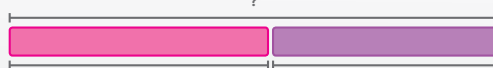
activity 1b Lilly has 8 dolls.
She finds 7 more dolls in a box.
How many dolls does she have now?



step 1 Count the squares that show the dolls she has and the dolls she finds.



step 2 Complete the numbers on the bar model.



step 3 Write the number sentence.

$\bigcirc + \bigcirc = \bigcirc$

Answer She has _____ dolls now.

35

attractive illustrations

Play with Maths B, Student's Book

extra activities provided

4 Extra activities

Activity 2 Which girl has 3 balloons more than the boy?
Circle A or B.



A B

flashcards

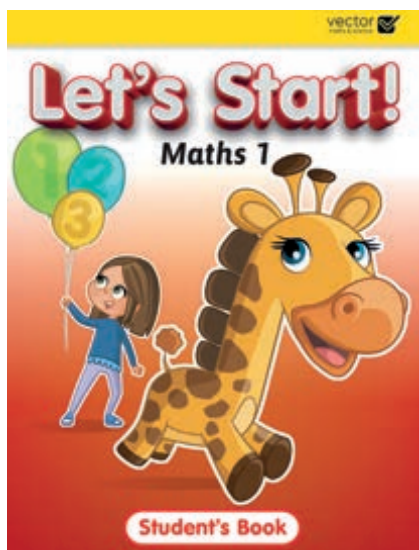


altogether



as many as

Play with Maths B, Teacher's Resource CD-ROM



Let's Start! Maths is a robust series, which uses effective learning and teaching methodologies in order to smoothly ease primary learners into the exciting world of maths. Aimed at the development of problem-solving skills in young learners, the series introduces a variety of word problems to challenge them. The main goal of the series is the improvement of students' deductive skills in order to help them achieve mathematical proficiency.

The six-level curriculum of Let's Start! Maths follows internationally recognised standards in mathematics. The series adopts the Bar Model method, which encourages students to develop a wide range of problem-solving strategies. It also aims to enhance thinking skills such as sequencing, comparing, classifying, and analysing. Each lesson is carefully designed to enable students to gain a deep understanding of core mathematical ideas.

Components



Student's Book



Workbook



Teacher's Book

Course features

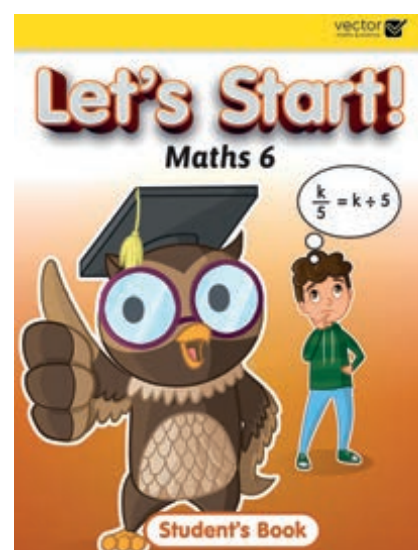
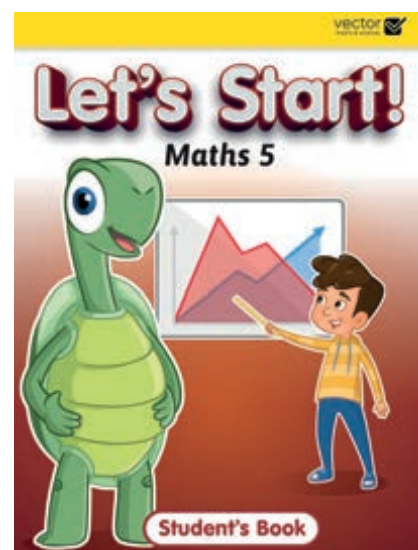
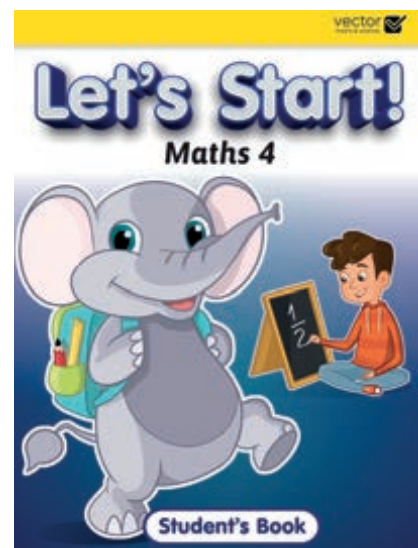
FOR STUDENTS:

- > cover pages with high-quality illustrations to attract the interest of primary students
- > visual and pictorial representations that facilitate learning
- > colour-defined frames with detailed theory
- > graded activities to enable students to comprehend core mathematical concepts and processes and to ensure the gradual development of mathematical knowledge
- > a 'Solve the problems' section that aims to help students strengthen essential problem-solving skills in context, with the help of model drawings
- > numerous activities to reinforce students' understanding of mathematical concepts and processes, and develop their problem-solving skills
- > a glossary with visual representations, age-appropriate definitions and examples that ensure the gradual development of students' vocabulary
- > supplementary theory frames assisting students to further understand and complete activities



FOR TEACHERS:

- > a detailed map of the Student's Book, Workbook and Teacher's Book that helps the teacher understand the structure of each book
- > a cover page with a list of the learning objectives, thinking skills, key concepts and warm-up questions in each unit
- > step-by-step lesson plans for each unit
- > thought-provoking questions that promote exploration of mathematical concepts and processes
- > a Mid-Year and a Final-Year test with activities to assess students' attainment of knowledge and skills
- > revision activities to monitor students' progress
- > the key to all Student's Book and Workbook activities
- > a pictorial tool (Bar Model Method) to organise and visualise relationships between known and unknown quantities in word problems is introduced in the second level
- > consistency of the mathematical content throughout the series




theory section


various activities for practise

Order numbers


Michael has 11 strawberries.



Jenny has 15 strawberries.



James has 12 strawberries.



Jenny has the **greatest** number of strawberries.
Michael has the **smallest** number of strawberries.

15 → is the greatest number.
11 → is the smallest number.

We arrange the numbers from the smallest to the greatest.

11	12	15
smallest		greatest

50

4

- 8 Look at the numbers and answer the questions.



a. Which number is the smallest?

b. Which number is the greatest?

c. Arrange the numbers from the smallest to the greatest.

<input type="text"/>	<input type="text"/>	<input type="text"/>
smallest		

- 9 Write the missing numbers and answer the questions.



Which number is the greatest?

Which number is the smallest?



Which number is the smallest?

Which number is the greatest?

51

Let's Start! Maths 1, Student's Book

a 'Solve the problems' section

Solve the problems

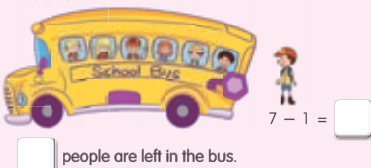
- a. There are 9 birds in the tree. 3 birds fly away. How many birds are left in the tree now?



$$9 - 3 = \square$$

There are birds left in the tree now.

- b. There are 7 people sitting in the bus. 1 person gets off the bus. How many people are left in the bus?



$$7 - 1 = \square$$

people are left in the bus.

34

3

- c. ① There are 10 cakes. There are 6 girls. How many more cakes than girls are there?



$$\square - \square = \square$$

There are more cakes than girls.

- d. ① There are 9 bowls and 5 cats. How many more bowls than cats are there?



$$\square - \square = \square$$

There are more bowls than cats.

35

Let's Start! Maths 1, Student's Book



extra
activities
for
practise
in the
Workbook

11 Complete with the words in the box.

greater smaller

a. 17 is _____ than 13. b. 12 is _____ than 14.
c. 20 is _____ than 18. d. 16 is _____ than 19.
e. 19 is _____ than 20. f. 19 is _____ than 11.
g. 15 is _____ than 17. h. 18 is _____ than 16.

12 Put < or > in the boxes to compare.

a. 19 20 b. 18 17
c. 19 16 d. 17 19
e. 11 10 f. 14 18

13 Circle the correct numbers.

a. greater than 15 17 12 16 15 20
b. smaller than 13 18 11 15 12 10
c. smaller than 19 18 20 15 16 10
d. greater than 18 17 12 20 13 19

34

Revision

1 Count and write the numbers.

a.

b.

2 Circle the correct number.

a. the greatest number
10 6 11 5

b. the smallest number
0 6 11 14

63

revision,
mid-year
and final-
year tests
included
in the
Workbook

Let's Start! Maths 1, Workbook

Mid-Year Test

1 Write the missing numbers.

a. 0 2 5

b. 10 8 7

c. 7 6 3

d. 19 18 15

e. 8 9 11

f. 2 3 6

g. 8 10 13

h. 19 18 15

69

Final-Year Test

1 Count and write the numbers.

a.

b.

c.

d.

110

Let's Start! Maths 1, Workbook



a brief introduction of the unit

Subtraction 3

3 Subtraction

LEARNING OBJECTIVES

- Perceive subtraction as the act of taking away.
- Perceive subtraction as the act of counting backwards.
- Subtract by counting backwards starting from the greater number.
- Use the subtraction (-) and equals (=) signs to denote subtraction in number sentences.
- Respond to questions such as 'How many more?'
- Use number pairs to complete subtraction facts.
- Model a subtraction word problem using pictorial representations or everyday objects.
- Use known strategies to calculate easily and justify the reasoning behind the process.

KEY CONCEPTS

In this Unit Ss will learn how to:

- Subtract by taking away objects from sets.
- Subtract using number pairs for numbers up to 10.
- Subtract by counting backwards.
- Subtract using a number line.

THINKING SKILLS

- Classifying
- Analysing parts and a whole

WARM UP QUESTIONS

- How many fish are there in the pond now?
- How many ants are on the tree now?
- How many birds are left on the tree now?
- How many ducks are left in the lake now?

21

key to the activities of the Student's Book

Let's Start! Maths 1, Teacher's Book

step-by-step guidelines for the lesson are provided

4 Numbers 11 to 20

3 Draw, count and write the numbers.

a. and make

b. and make

c. and make

Place value

4

10 and 3 make 13. $10 + 3 = 13$

1 ten and 3 ones is the same as 13.

1 ten 3 ones

10 + 3 = 13

1 ten 3 ones

4 How many tens and ones? Write the numbers.

a. 17 = ten and ones

b. 14 = ten and ones

c. 19 = ten and ones

5 Write the numbers.

a. 10 and is 11.

b. 10 and is 16.

c. 10 and is 12.

6 How many tens and ones? Complete the place value tables.

a. 18

Tens	Ones
1	8

b. 12

Tens	Ones
1	2

Activity 3

a. A group of 10 apples and 6 more should be drawn. 10 and 6 make 16.

b. A group of 10 cubes and 9 more should be drawn. 10 and 9 make 19.

c. A group of 10 bottles and 7 more should be drawn. 10 and 7 make 17.

Place value

- Draw Ss' attention to the theory section.
- Draw Ss' attention to the picture.
- Explain to Ss that we can see a group of 10 dolls and 3 more dolls. We know that 10 and 3 make 13.
- Explain to Ss that we call each object one and each group of ten objects a ten.
- Write '10 + 3 = 13' on the board.

Activity 4

a. 17 = 1 ten and 7 ones

b. 14 = 1 ten and 4 ones

c. 19 = 1 ten and 9 ones

Activity 5

a. 10 and 1 is 11.

b. 10 and 6 is 16.

c. 10 and 2 is 12.

Activity 6

a.

Tens	Ones
1	8

b.

Tens	Ones
1	2

Compare numbers up to 20

4

Set A: Set B:

Set A has 13 red apples. Set B has 15 green apples.

How to read?

15 is greater than 13. 13 is smaller than 15.

15 > 13. 13 < 15.

15 is more than 13. 13 is less than 15.

There are more green apples than red apples. There are fewer red apples than green apples.

Activity 3

a. A group of 10 apples and 6 more should be drawn. 10 and 6 make 16.

b. A group of 10 cubes and 9 more should be drawn. 10 and 9 make 19.

c. A group of 10 bottles and 7 more should be drawn. 10 and 7 make 17.

Place value

- Draw Ss' attention to the theory section.
- Draw Ss' attention to the picture.
- Explain to Ss that we can see a group of 10 dolls and 3 more dolls. We know that 10 and 3 make 13.
- Explain to Ss that we call each object one and each group of ten objects a ten.
- Write '10 + 3 = 13' on the board.

Activity 4

a. 17 = 1 ten and 7 ones

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Activity 6

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Tens	Ones
1	8

b.

Tens	Ones
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Compare numbers up to 20

4

Set A: Set B:

Set A has 13 red apples. Set B has 15 green apples.

How to read?

15 is greater than 13. 13 is smaller than 15.

15 > 13. 13 < 15.

15 is more than 13. 13 is less than 15.

There are more green apples than red apples. There are fewer red apples than green apples.

Let's Start! Maths 1, Teacher's Book



theory section

Number patterns (2)

1150 1200 1250 ? 1350

+50 +50 +50 +50

1150 1200 1250 1300 1350

We add 50 to get the next number.

6000 7000 8000 9000 ?

+1000 +1000 +1000 +1000

6000 7000 8000 9000 10 000

We add 1000 to get the next number.

18

1

7800 7700 7600 7500 ?

-100 -100 -100 -100

7800 7700 7600 7500 7400

We subtract 100 to get the next number.

15 Complete the number patterns.

- 4000, 5000, 6000, 7000,
- 2120, 2220, , 2420, 2520
- 6855, 6755, 6655, , 6455
- 3021, , 5021, 6021, 7021
- 7060, 7050, 7040, , 7020

19

Let's Start! Maths 3, Student's Book

From decimal to percentage

How can we write 0.12 as a percentage?

Method 1 We multiply the decimal by 100%.

$$0.12 \times 100\% = 12\%$$

Method 2

Step 1 Change the decimal to a fraction with a denominator of 100.

Step 2 Write the fraction as a percentage.

$$0.12 = \frac{12}{100} = 12\%$$

Example 1 Write 0.4 as a percentage.

$$0.4 \times 100\% = 40\%$$

OR

$$0.4 = \frac{40}{100} = 40\%$$

Example 2 Write 0.07 as a percentage.

$$0.07 \times 100\% = 7\%$$

OR

$$0.07 = \frac{7}{100} = 7\%$$

118

9

5 Write the decimals as percentages.

a. 0.5 = b. 0.9 = c. 0.1 =

d. 0.23 = e. 0.28 = f. 0.37 =

g. 0.01 = h. 0.02 = i. 0.06 =

6 Put <, = or > in the boxes to compare.

a. 37% 0.37 b. 0.03 30%

c. 0.68 66% d. 0.8 8%

e. 12% 0.12 f. 0.1 10%

g. 9% 0.09 h. $\frac{3}{4}$ 95%

7 Complete the table.

Percentage	Fraction	Simplest Form
20%		
45%		
5%		
25%		

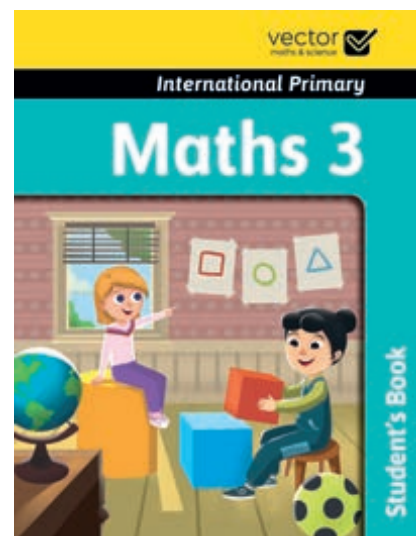
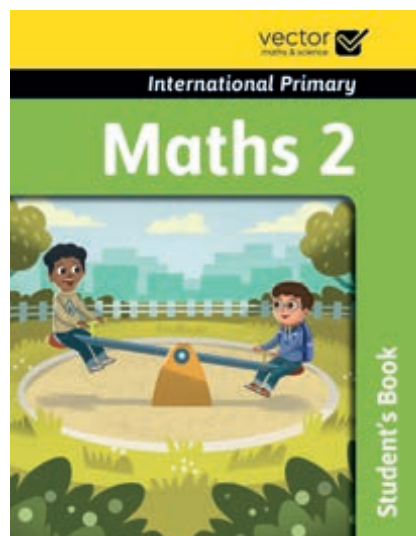
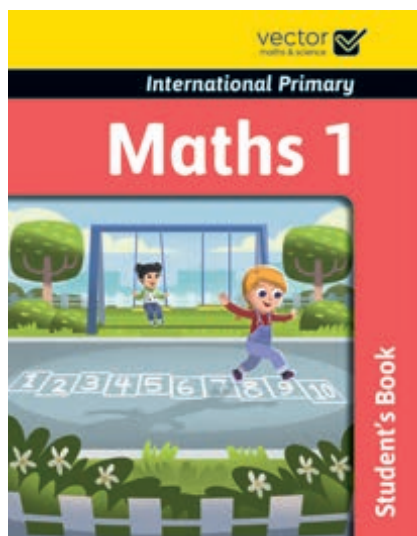
119

various activities for practise

Let's Start! Maths 5, Student's Book



19



Vector IPM* is a pioneering series based on the modern principles of maths teaching, which introduces students to the exciting world of maths. The series aims to captivate students' interest, motivate mathematical investigation and assist students in developing and mastering the skills necessary for success.

Vector IPM* is a contemporary six-level series for primary students. Responding to the needs of the 21st century, the course aims to reinforce skills such as critical thinking, problem solving and logical reasoning through a balanced and progressive development of learning objectives. The syllabus is structured in a spiral form to promote a holistic view of maths and to enhance the interconnection between different domains. Each lesson is carefully designed to enable students to gain a deep understanding of core mathematical ideas.

Course features

FOR STUDENTS:

- > age-appropriate mathematical learning objectives
- > gradual and spiral development of mathematical knowledge
- > lessons based on the teaching model of Engage, Explore, Explain, Elaborate and Evaluate (5E Model)
- > simple and comprehensible vocabulary to support EAL (English as an Additional Language) students
- > gradual development of mathematical terminology and literacy
- > visuals and pictorial representations that facilitate learning
- > stimulating activities that enhance the consolidation of knowledge and reinforce critical thinking and mathematical reasoning skills
- > special emphasis on the development of problem solving skills
- > enjoyable games, puzzles, riddles and cross-curricular activities that enhance a positive attitude towards mathematics
- > review pages at the end of each unit
- > workbook/supplementary activities for individual practice
- > resource sheets to support understanding of mathematical concepts and processes (provided at the back of the Workbook)
- > glossary with visual representations, age appropriate definitions and comprehensible examples
- > modern, student-friendly layout with high-quality illustrations
- > extension of mathematical concepts in real life context



Components



Student's Book



Workbook



Teacher's Book

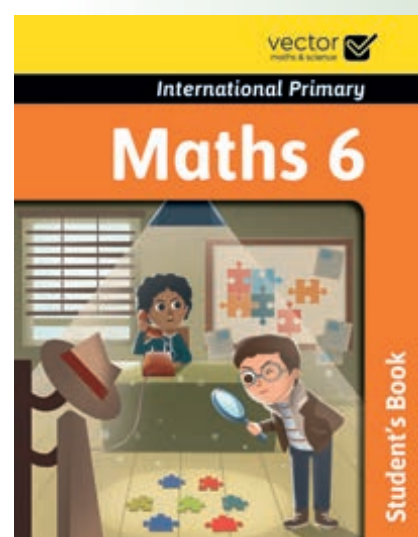
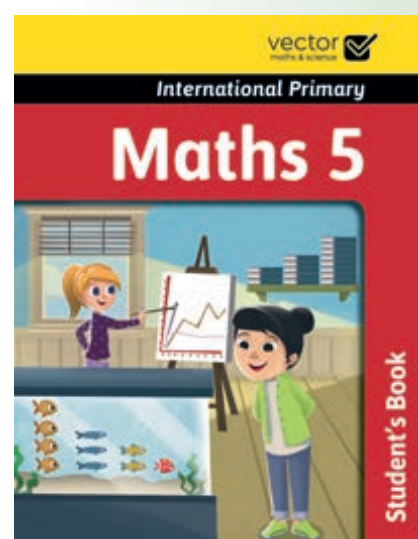
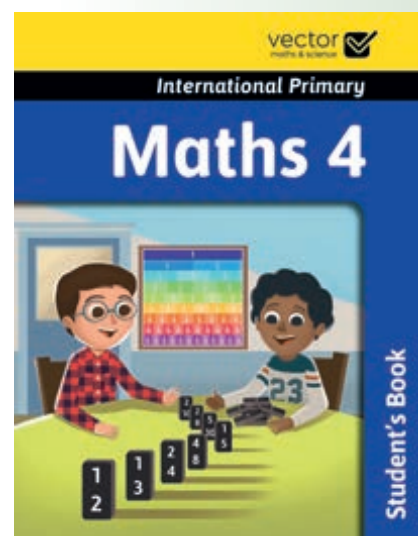


Workbook Teacher's Edition



Teacher's Resource CD-ROM

COMING SOON



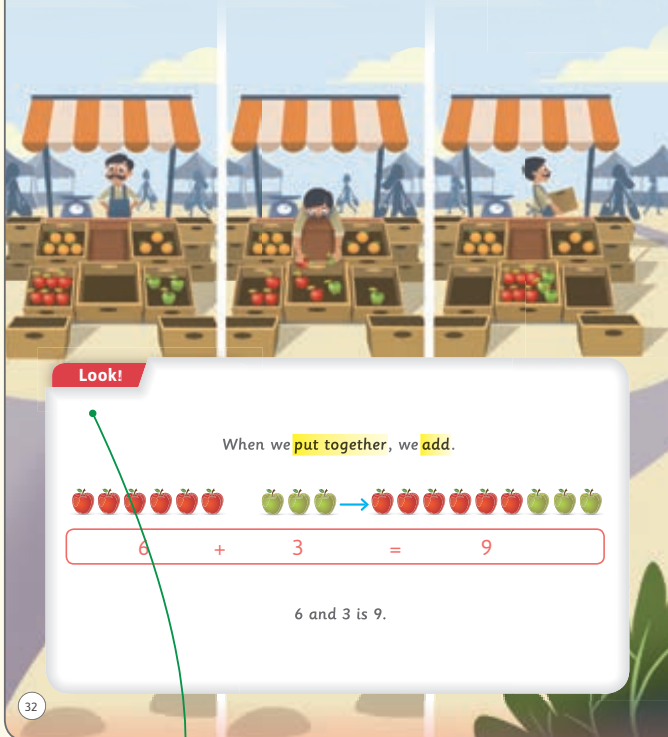
FOR TEACHERS:

- > specific learning objectives for each lesson
- > consistency of the mathematical content throughout the series
- > unit maps at the beginning of each unit that provide well-organised information about the mathematical content of each lesson as well as students' prior knowledge
- > list of possible common student preconceptions
- > cross-curriculum links
- > extensive step-by-step lesson plans for all lessons and the review section
- > thought-provoking questions that involve higher-level thinking to enrich the lesson content and trigger critical thinking
- > differentiated activities for students of basic or advanced performance
- > brief description of games, riddles, puzzles and cross-curricular activities
- > EAL (English as an Additional Language) support
- > review and assessment pages for each unit with detailed guidelines on how to approach and carry out each activity
- > keys provided for all the activities
- > safety warnings and guidelines
- > reminders to facilitate the teaching procedure
- > resources such as Resource Sheets and Worksheets to support comprehension and extension of knowledge (provided in the Teacher's Resource CD-ROM)



2.6 Let's put them together!

How many apples are there **altogether**?





theory section

Maths 1, Student's Book



a list with keywords

Activities



1. Circle the correct number.



a.  +  = 7 / 5 / 6



b.  +  = 6 / 5 / 8

c.  +  = 9 / 8 / 10

2. Count and write the numbers.

a.  +  =

b.  +  =

c.  +  =

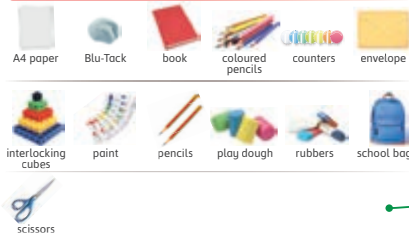
3. How many balls of play dough are there **altogether**?



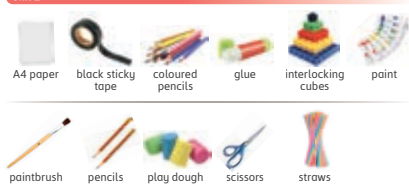
Keywords
altogether
put together
add

Classroom materials

Unit 1



Unit 2



detailed presentation of the classroom materials and the glossary

Glossary

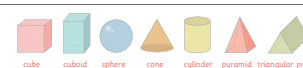
100 square

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

2D shape



3D shape



add

to put numbers or groups of objects together

addition

a number sentence that shows adding

e.g. 6 + 3 = 9

after

 The brown canoe is **after** the green canoe.

afternoon

the part of the day between 12 o'clock and about 6 o'clock

altogether

how much of something there is after adding

backwards

in the direction that is behind us

balance scales

a device for measuring how heavy something is

balanced

when the things placed on the two sides of a scales weigh the same

Maths 1, Student's Book

extra activities for practise in the Workbook

2.6 Let's put them together!

1. How many are there altogether? Write the numbers.





a.  +  =

b.  +  =

c.  =

d.  +  =




2. How many cubes are there altogether? Draw lines to match.




A  B  C  D 




6 six 3 three 7 seven 8 eight




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3. Count the squares and write the numbers.

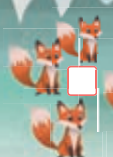
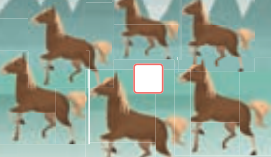
a.  +  = 

b.  +  = 

c.  +  = 

d.  +  = 

4. How many animals are there altogether? Write the numbers.

+ = There are animals altogether.

33

Maths 1, Workbook

2 Unit map

IN UNIT 2, Ss will deal with the domains of Geometry and Numbers. Ss will recognise three different types of lines. Ss will also recognise common 2D shapes and describe their basic attributes. Then Ss will explore symmetry in pictures through folding and identify odd and even numbers. Finally, Ss will add and subtract through putting sets of objects together or taking them away.

2.1 Lines

In this lesson, Ss will recognise three types of lines: straight, curved and zig-zag.

2.2 Name the 2D shapes

In this lesson, Ss will recognise a circle, a triangle, a rectangle and a square. Ss will recognise their basic attributes, the total number of sides and corners they have.

2.3 More 2D shapes

In this lesson, Ss will recognise a pentagon and a hexagon. Ss will recognise their basic attributes, the total number of sides and corners they have.

2.4 Symmetrical or not

In this lesson, Ss will identify line symmetry through folding paper.

2.5 Even or odd

In this lesson, Ss will recognise and differentiate even and odd numbers according to how objects are paired.

2.6 Let's put them together!

In this lesson, Ss will add by putting together sets of objects.

2.7 Now, let's take away!

In this lesson, Ss will subtract by removing or crossing out objects from sets.

Domain

Geometry



Numbers



Prior Knowledge

Ss know some names of common 2D shapes. Ss know some attributes of common 2D shapes.

Ss name, write, read, compare and put numbers up to 10 in order. Ss count sets of up to 10 objects. Ss find the difference between two single-digit numbers.

Learning Objectives

- Distinguish between straight, curved and zig-zag lines.
- Name and recognise common 2D shapes.
- Identify the common 2D shapes that form a picture.
- Describe common 2D shapes referring to the number of their sides and whether they are straight or curved.
- Explore the concept of line symmetry using folded paper.
- Distinguish symmetrical from non-symmetrical images by folding.
- Identify line symmetry.
- Match the symmetrical parts of a drawing.

- Perceive addition as the act of combining numbers to find the total.
- Perceive subtraction as the act of taking away.
- Use the addition and equals signs (+, =) to denote addition in number sentences.
- Use the subtraction and equals signs (-, =) to denote subtraction in number sentences.
- Name the numbers that can be paired as even and the others as odd.
- Identify and name even and odd numbers up to 10 (except zero).

Keywords

- straight line
- curved line
- zig-zag line
- 2D shape
- square
- triangle
- circle
- rectangle
- straight side
- corner
- curved side
- pentagon
- hexagon
- symmetrical
- fold
- line of symmetry

- pair
- even
- odd
- altogether
- put together
- add
- take away
- subtract

a brief introduction to each unit

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Maths 1, Teacher's Book



23

detailed and step-by-step lesson plans

2.6 Let's put them together!

Learning Objectives

- Perceive addition as the act of combining numbers to find the total.
- Use the addition and equals signs (+, =) to denote addition in number sentences.

Keywords

For the presentation of the keywords, see the guidelines in the TB map.

→ altogether → put together → add

Materials and Resources

- Number cards
- Interlocking cubes (2 different colours), play dough, pencils

Common Student Preconceptions

- Some Ss are familiar with various real-life situations where they have to put things together (e.g. while playing or collecting items).
- Some Ss may use the word add incorrectly, without any mathematical meaning. For example, I add some sugar in my tea.
- Some Ss may not use the symbols (+, =) correctly.
- Some Ss may not identify that the number that shows the total is equal to the number of the last object to be counted.
- Some Ss may have difficulties with additions involving zero.

Cross Curriculum Links (CCL)

- This lesson can be linked with lesson 1.5 from Unit 1, as Ss already know how to count up to ten objects.

2.6 Let's put them together!

How many apples are there altogether?

Look!

- Draw Ss' attention to the Look! section.
- Have Ss count the red apples and then the green apples to conclude that there are 6 red apples and 3 green apples.
- Make sure that Ss do not miscount (e.g. Some Ss may count some objects more than once or not count some objects at all).
- Explain to Ss that they have to find how many red and green apples there are altogether.
- Explain to Ss that we count all the apples together to find how many there are altogether.
- Have Ss count aloud with you.
- Make sure that Ss realise that they should start counting the apples one by one and that the last number they say shows how many apples there are altogether.
- Point out to Ss that there are 9 apples altogether.
- Explain to Ss that when we put together, we add.
- Write $6 + 3 = 9$ on the board.
- Explain to Ss that we read (+) as 'and' and (=) as 'is', so we say that 6 and 3 is 9.
- Draw Ss' attention to the picture in the previous section and ask them *How many oranges*

Activities

- Circle the correct number.
 - 1. How many balls are there altogether? (There are 8 balls altogether.)
 - 2. How many balls are there altogether? (There are 5 balls altogether.)
 - 3. How many balls are there altogether? (There are 10 balls altogether.)
- Count out the numbers.
 - a. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
 - b. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
 - c. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
- How many balls are there altogether? (There are 10 balls altogether.)

More practice

For lower-performing Ss:

- Divide Ss into pairs.
- Provide Ss with pencils.
- Have each pair act out a story problem such as *Kate has six pencils. Lin gives her four pencils. How many pencils does Kate have now?* (Kate has 10 pencils now.)
- Encourage Ss to use their fingers to help them add.
- Give Ss some time to do the activity.
- Have Ss repeat the activity with different numbers.

For higher-performing Ss:

- Provide Ss with interlocking cubes.
- Ask Ss questions involving additions of three numbers such as *Kate has 4 cubes, Lin has 4 cubes and Kate has 3 cubes. How many cubes do they have altogether?* (They have 9 cubes altogether.)
- Encourage Ss to use interlocking cubes to answer.
- Give Ss some time to do the activity.
- Have Ss repeat the activity with different numbers.
- Make sure that the totals do not exceed ten.

Don't forget to prepare the materials and resources for the next lesson.

Maths 1, Teacher's Book

assessment pages to help teachers assess students' acquired knowledge

Review

2 Review

- Tick (✓) the correct painting.
 - This painting has only 2 curved lines, 1 zigzag line and 3 straight lines.
- Write the names of the 2D shapes. Then count the sides and the corners.

Shape	Name	Sides	Corners
	triangle	3	3
	rectangle	4	4
	circle	1	0
	square	4	4
	pentagon	5	5
	hexagon	6	6

Activity 1

- Draw Ss' attention to the pictures and ask them to say what they can see (three paintings).
- Explain to Ss that they have to tick the correct painting.

Activity 2

- Draw Ss' attention to the pictures and ask them to say what they can see (2D shapes).
- Explain to Ss that they have to write the name of each 2D shape and then count the sides and corners of each 2D shape.

Assessment Sheet

Assessment Sheet | Unit 2

- Draw lines to match.
 - 5 straight sides
 - 1 curved side
 - 4 straight sides
 - 6 corners
 - zigzag line
 - 3 corners
- Write the numbers.
 - a. 10 - 3 = 7
 - b. 5 + 0 = 5
- Write the numbers, as in the example.
 - a. 10 - 3 = 7
 - b. 5 + 0 = 5

Activity 1

- Draw Ss' attention to the pictures and ask them to say what they can see (a square, a circle, a pentagon, a triangle, a hexagon, a zigzag line).
- Explain to Ss that they have to draw lines to match the pictures with the sentences.

Activity 2

- Draw Ss' attention to the pictures and ask them to say what they can see (three octopuses).
- Explain to Ss that they have to tick the symmetrical octopus.

Activity 3

- Draw Ss' attention to the pictures and ask them to say what they can see (three lakes with ducks).
- Explain to Ss that they have to write 'Yes' if they agree and 'No' if they don't agree with the sentences.

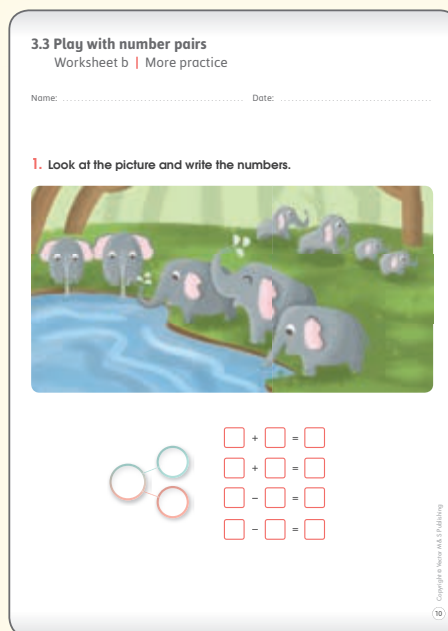
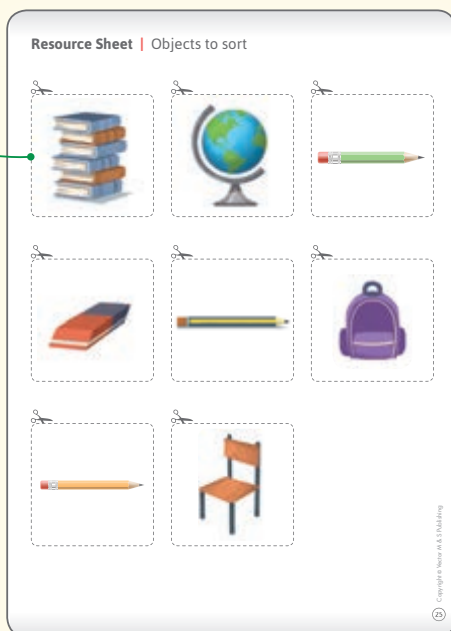
Activity 4

- Explain to Ss that they have to write the numbers in the boxes in order to add or subtract.

Maths 1, Teacher's Book

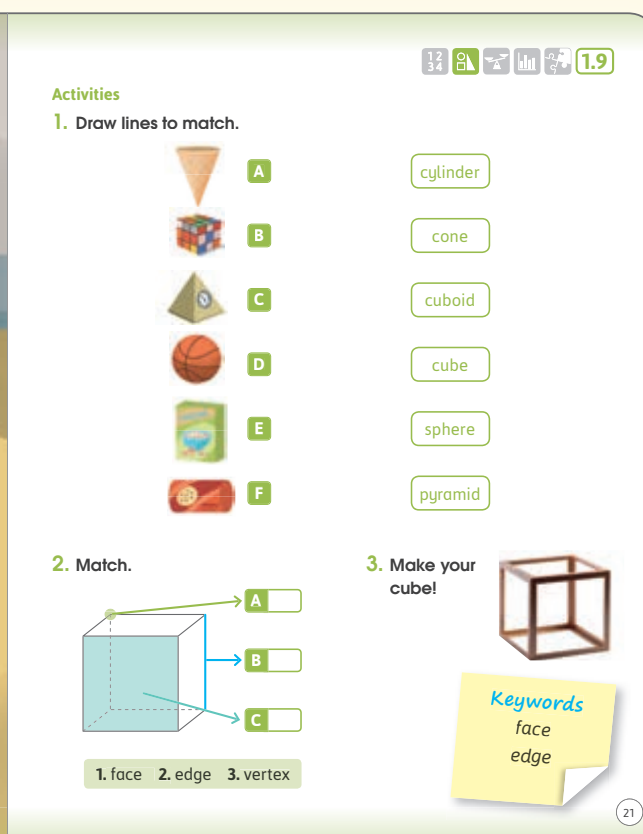
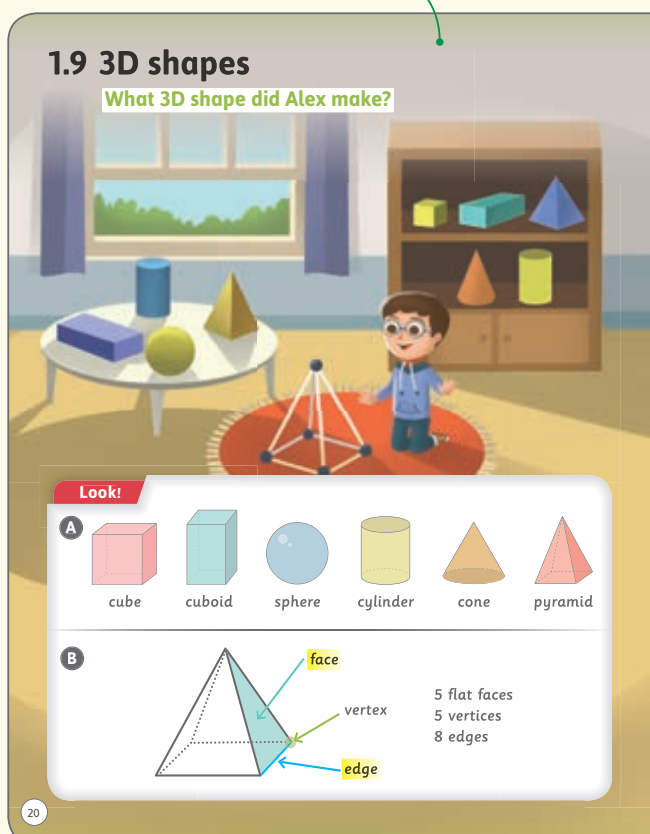


extra resources
are provided
to support
learning
comprehension



Maths 1, Teacher's Resource CD-ROM

high quality illustrations



Maths 2, Student's Book



Subjects



Biology



Chemistry



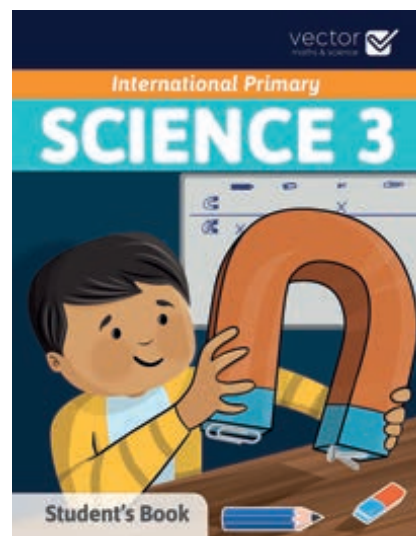
Physics



Science



CEFR		A1		A2	
LEVELS		A1.1	A1.2	A2.1	A2.2
Science	p. 28				



Vector IPS* is a brand-new exciting series designed to engage students, spark their interest in scientific knowledge and equip them with the skills necessary to excel in the modern, ever-changing world.

Vector IPS* is an innovative six-level course for primary students. The framework is designed to provide a comprehensive set of progressive learning objectives for science and aims to systematically develop practical skills through scientific enquiry. These skills are useful in everyday life and are not limited to science lessons. The course is organised through the topic-based approach, thus allowing learners to investigate a variety of scientific topics in depth and encouraging them to ask questions, predict, observe, explore, explain, practise, and assess their understanding and abilities.

Course features

FOR STUDENTS:

- > age-appropriate learning objectives
- > an integrated approach to the gradual development of scientific enquiry skills
- > lessons based on the teaching model of Engage, Explore, Explain, Elaborate, Evaluate (5E Model)
- > a special emphasis on vocabulary building and EAL (English as an Additional Language) support
- > a focus on scientific literacy and literacy support
- > glossary with definitions and pictures
- > a section with the necessary materials for each unit
- > resources, such as Resource Sheets and Resource Pictures
- > a 'Work like a scientist' section with the necessary scientific methods, procedures and tools for each level
- > activities encouraging critical thinking and personal response
- > independent exploration and lab activities
- > homework activities
- > end of unit review pages
- > colourful, high-quality pictures and visuals that assist scientific knowledge
- > questions and activities that challenge students to extend or expand their knowledge into scientific concepts
- > extension of topics and ideas in real-life contexts
- > unit maps which organise and present the scientific concepts of each unit

*International Primary Science



Components



Student's Book



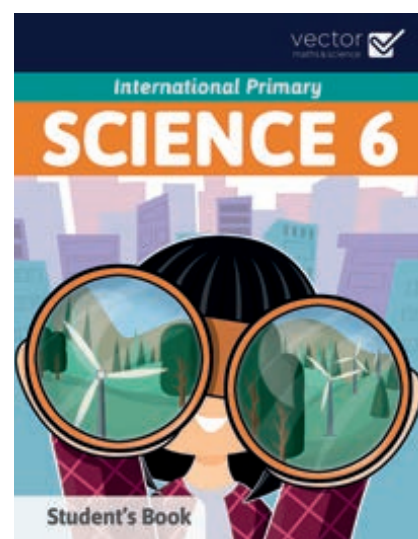
Workbook



Teacher's Book



Teacher's Resource CD-ROM



FOR TEACHERS:

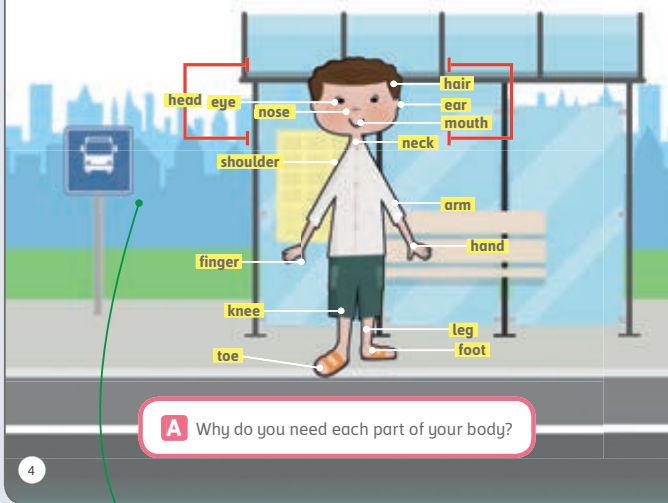
- > learning objectives identified and scientific enquiry skills developed in each lesson
- > scientific background information
- > lists of student preconceptions and guidance for detecting and reconstructing them
- > extensive and detailed lesson plans for all lessons and review sections; ideas and suggestions for teaching scientific enquiry; as well as differentiated activities and questions for students of basic or advanced performance
- > guidance for practical activities
- > EAL (English as an Additional Language) support
- > a focus on higher order thinking questions according to Bloom's taxonomy
- > safety warnings and guidelines
- > continuous assessment support by various means
- > reminders to facilitate the teaching procedure
- > resources, such as Worksheets, Resource Sheets, Resource Pictures, Language Focus activities and Assessment Sheets (The Resources are also provided in the Teacher's Resource CD-ROM)
- > the keys for all the questions and activities in the Student's Book and the Workbook, as well as the keys for the Worksheets, the Language Focus activities and the Assessment Sheets
- > cross-curriculum links
- > all sections of the Student's Book are provided for teachers in an easy-to-access form
- > optional activities making the lesson more enjoyable and giving further practice

1 Humans and Animals

1.1 What are the parts of your body?

Keywords arm body ear eye finger foot hair hand head knee leg model mouth name neck nose shoulder toe

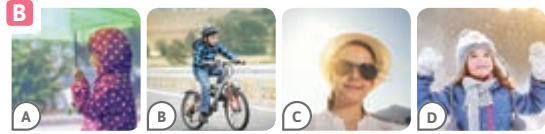
Let's think Your **body** has many parts.



A Why do you need each part of your body?

visuals and high-resolution pictures

Humans and Animals Unit 1



The children are wearing a raincoat, a helmet, a hat and sunglasses, a woolly hat, a scarf and gloves. On which parts of the body are they wearing them? Why?

Let's explore!

- Make a **model** of the human body.
- Draw the parts of the head on your model.
- **Name** the parts of your model.



Fun fact



Each human has lines on the ends of their fingers.



Your body has many parts.

5

Science 1, Student's Book

important concepts and ideas presented in the lesson

1 Review

1. Draw lines, as in the example.



2. How are you and your partner similar? How are you different?



3. Complete the table with the numbers (1-9) for the kinds of food.

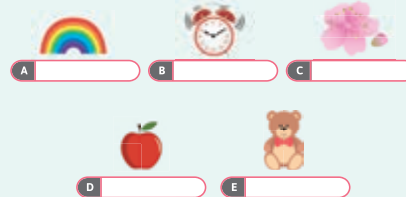
1. fish	2. bread	3. oil	Bread, rice, cereal, potatoes, spaghetti
4. apples	5. milk	6. carrots	Meat, fish, eggs, beans
7. rice	8. broccoli	9. cereal	Milk, cheese, yoghurt
			Fruit and vegetables
			Oils and spreads

review activities to consolidate students' knowledge

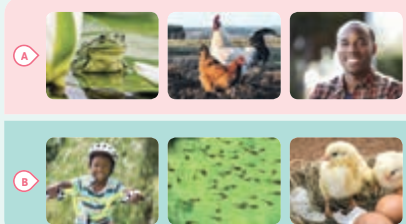
Humans and Animals Unit 1

4. Complete A-E with the words in the box.

hearing sight smell taste touch



5. Draw lines to match the young with their parents.




Science 1, Student's Book

glossary with definitions and pictures

Materials

Unit 1 Humans and Animals



banana cardboard box cinnamon sticks coloured pencils

glue onions paper fasteners pebbles

pencils rice scissors

64

Glossary

adult a fully-grown person or animal 12

alarm a device that warns us of danger 44

aluminium foil* a thin sheet of metal 21

ambulance* a big van that takes people to hospital when they are very ill 49

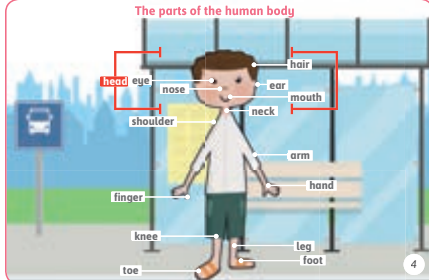
animal a living thing that is not a person or plant 26

ask to make a question 7

baby a very young child or animal 12

body the whole of a person 4

The parts of the human body



caterpillar* a small, long animal with many legs that eats the leaves of plants and grows into a butterfly 12

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Science 1, Student's Book

extra activities for practise

1 Humans and Animals

1.1 What are the parts of your body?

- Read about a funny person and draw him. Then colour him in.

He has:

- a big head
- small eyes
- a big mouth
- a big nose
- big ears
- a short neck
- curly hair
- short arms
- big hands
- long fingers
- long legs
- small feet

- Find and circle the words in the grid, as in the example.

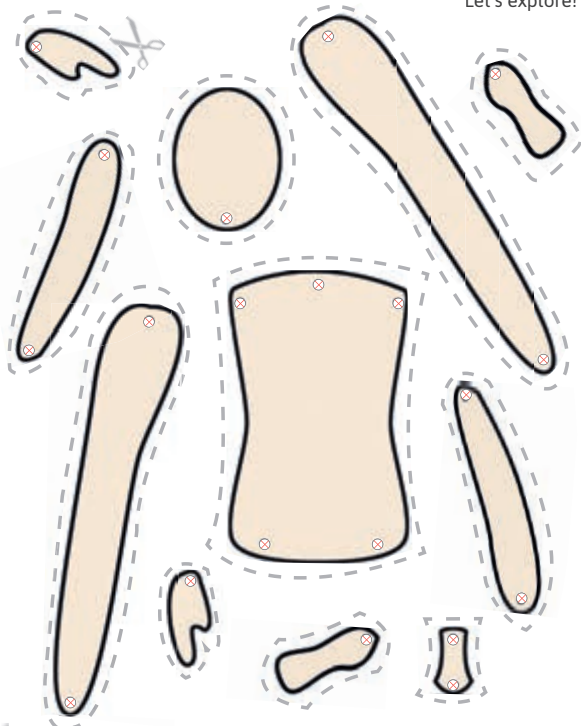
body knee neck finger toe shoulder

x	k	n	e	e	r	n	s	t
f	i	n	g	e	r	e	w	o
b	o	d	y	f	e	c	q	e
p	h	z	y	i	p	k	e	d
p	s	h	o	u	l	d	e	r

6

1.1 What are the parts of your body?

Resource Pictures
Let's explore!



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Science 1, Workbook



International Primary • Sample Pages

extensive
and
detailed
lesson plan

1.1 What are the parts of your body?

Learning Objectives

- Identify the main external parts of the body.

Scientific Enquiry Skills

- Observe and collect evidence in order to answer a question.
- Make suggestions and follow instructions.
- Model and share ideas in order to evaluate and expand on them.

Cross-curricular links (CCL)

Let's explore section can be linked with the school subject of art and design, as Ss are asked to make a model of the human body.

Let's explore! (LE)

RS is a Rb, Rb, Rb. Let's explore!

Let's explore! coloured pencils (or crayons), scissors, paper fasteners (10 per S).

Command Student Resource pages

1. Ss may have never thought about the purpose of different external parts of the body.

2. Some Ss may confuse parts of the body, for example, hands-arms, legs-feet, etc.

Humans and Animals 1.1 What are the parts of your body?

Key words

arm > body > ear > eye > finger > foot > hair > hand > head > knee > leg > model > mouth > name > neck > nose > shoulder > toe

Let's think

Read the text to provide Ss with useful information on the topic of the lesson.

Let's explore! (LE)

Draw Ss attention to the picture and ask them to say what they see (Enzo is standing at a bus station).

Starting from his head, read each word out loud and encourage Ss to point to each part of Enzo's body, as well as you doing the same thing.

Then, read each word out loud again and encourage Ss to point to each part of their body, as well as you doing the same thing.

Ask Ss the question.

Ask Ss questions, like *Do you need your hands to write?* (Yes.) *Do you need your nose to walk?* (No, I need my nose to smell.) This will help lower-performing Ss.

Encourage Ss to name other body parts and things they can do with each part. This will challenge higher-performing Ss.

LESSON PLAN

Key words

For the presentation of the keywords, see the guidelines in TB map.

arm > body > ear > eye > finger > foot > hair > hand > head > knee > leg > model > mouth > name > neck > nose > shoulder > toe

Let's think

Read the text to provide Ss with useful information on the topic of the lesson.

Let's explore! (LE)

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Then, read each word out loud again and encourage Ss to point to each part of their body, as well as you doing the same thing.

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Ask Ss questions, like *Do you need your hands to write?* (Yes.) *Do you need your nose to walk?* (No, I need my nose to smell.) This will help lower-performing Ss.

Encourage Ss to name other body parts and things they can do with each part. This will challenge higher-performing Ss.

Let's explore! (LE)

Before you begin the Let's explore! activity, read the following guideline carefully and explain it to Ss in order to keep them safe.

Let's explore! (LE)

Before you begin the Let's explore! activity, read the following guideline carefully and explain it to Ss in order to keep them safe.

Let's explore! (LE)

Before you begin the Let's explore! activity, read the following guideline carefully and explain it to Ss in order to keep them safe.

Let's explore! (LE)

Before you begin the Let's explore! activity, read the following guideline carefully and explain it to Ss in order to keep them safe.

Science 1, Teacher's Book

supportive material for class activities

keys to the
activities
in the
Workbook

1.3 How can you have a healthy diet?

Worksheet Let's explore!

Name: _____ Date: _____

1. Make a plan of a healthy meal and draw it. Have food from each food group in your meal.

1.3 How can you have a healthy diet?

Worksheet Let's explore!

Name: _____ Date: _____

1. Make a plan of a healthy meal and draw it. Have food from each food group in your meal.

1.3 How can you have a healthy diet?

Worksheet Let's explore!

Name: _____ Date: _____

1. Make a plan of a healthy meal and draw it. Have food from each food group in your meal.

1.3 How can you have a healthy diet?

Worksheet
Let's explore!

Name: _____ Date: _____

1. Make a plan of a healthy meal and draw it. Have food from each food group in your meal.

Fruit and vegetables	Bread, rice, cereal, potatoes and spaghetti
Meat, fish, eggs and beans	Oils and spreads
Milk, cheese and yoghurt	

Science 1, Teacher's Book



introduction of each lesson without revealing all the scientific concepts

1 Humans and Animals

1.1 What are skeletons?

Keywords bone conclusion pattern skeleton structure support vertebrate

Let's think

Humans and some animals have **bones** inside their bodies. You can feel some of these bones through your skin.

A



1. Where do you think you have bones in your body?
2. Touch your arms and head. What do they feel like?
3. Who do you think has more bones: an adult or a baby?



Let's explore!

- Make a model of the human body.
- Where do you think you have bones in your body? How can you find out where your bones are?
- Explore the bones you can feel in your body.
- Draw the bones in your model.
- Does your partner's model have bones in the same places? Compare the models.
- Compare your model to your classmates' models. What's your **conclusion**?



? Can you see a **pattern** in the models?

6

Humans and Animals Unit 1

B



A human skeleton



B cat skeleton



C jellyfish

Bones are hard, strong and not heavy. The human **skeleton** is the **structure** of the bones inside the body. The skeleton **supports** the body and gives it a shape. Most **vertebrates** have skeletons made of bones. Not all animals have skeletons. Jellyfish have very soft bodies. There is fluid inside the body of a jellyfish, which gives it its shape. Name animals with skeletons made of bones.



How can you make your bones stronger?

Science in action



The body of a baby has about 300 bones. The body of an adult has 206 bones. What do you think happens to some of the bones that a baby has as it grows up?



- The skeleton is the structure of the bones inside a human's or an animal's body.
- Not all animals have skeletons.
- Some animals have skeletons made of bones.
- A skeleton supports the body and gives it its shape.

7

activities that focus on the development of the vocabulary

Science 4, Student's Book

Unit 1: Humans and Animals

Language Focus

Name: _____ Date: _____

1. Match. Write a-e in the boxes.

- | | | |
|-------------------|--------------------------|--|
| 1. irregular bone | <input type="checkbox"/> | a. the part of the skeleton that protects the brain |
| 2. long-term | <input type="checkbox"/> | b. an illness that lasts for years or for the whole of a person's life |
| 3. skull | <input type="checkbox"/> | c. a bone that is not long and straight but has a different shape to other bones |
| 4. spine | <input type="checkbox"/> | d. a strong elastic structure between each vertebra of the spine |
| 5. spinal disc | <input type="checkbox"/> | e. the line of bones in an animal's or human's back that are connected together |

2. Complete the sentences with the words in the box.

prescription warnings flu short-term fever syrup

1. Diabetes is a long-term illness, but the flu is a _____ illness.
2. When people feel sick, they may have a _____.
3. Sometimes when you cough you take a _____ to feel better.
4. The doctor gives you a _____ with the medicines you have to take.
5. The purpose, the uses, the _____, the directions and the other information are important to read before taking a medicine that doesn't need a doctor's prescription.
6. When people have a _____, his body temperature is higher than it should be.

3. Complete the sentences with the words in the box.

pollen insulin germs

1. _____ are harmful to humans.
2. _____ may cause an allergy.
3. _____ is a substance that keeps the amount of glucose in the blood at the level it should be.

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Unit 1: Humans and Animals

Assessment Sheet

Name: _____ Date: _____

Total score / 40

1. Read the sentences. Write Yes or No.

1. All animals have skeletons inside their bodies. _____
2. The human skeleton is the structure of bones inside the body. _____
3. Human and animal skeletons have similar bones. _____
4. Muscles can push bones. _____
5. We can see microorganisms with the naked eye. _____
6. Germs cause all illnesses. _____

Score / 6

2. What are the three functions of the skeleton?

Score / 3

3. Complete the sentences with the words in the box.

symptoms pairs skull shapes useful lungs long

1. Bones have different _____ and sizes. There are flat bones, _____ bones, short bones and irregular bones.
2. The _____ protects the brain. The ribs protect the _____, the heart and other important organs.
3. Muscles work in _____.
4. Some microorganisms are harmful and some microorganisms are _____ to humans.
5. When people are not well, they may have _____ like sneezing, coughing, headaches, fever, etc.

Score / 7

activities for the evaluation of the knowledge students have acquired



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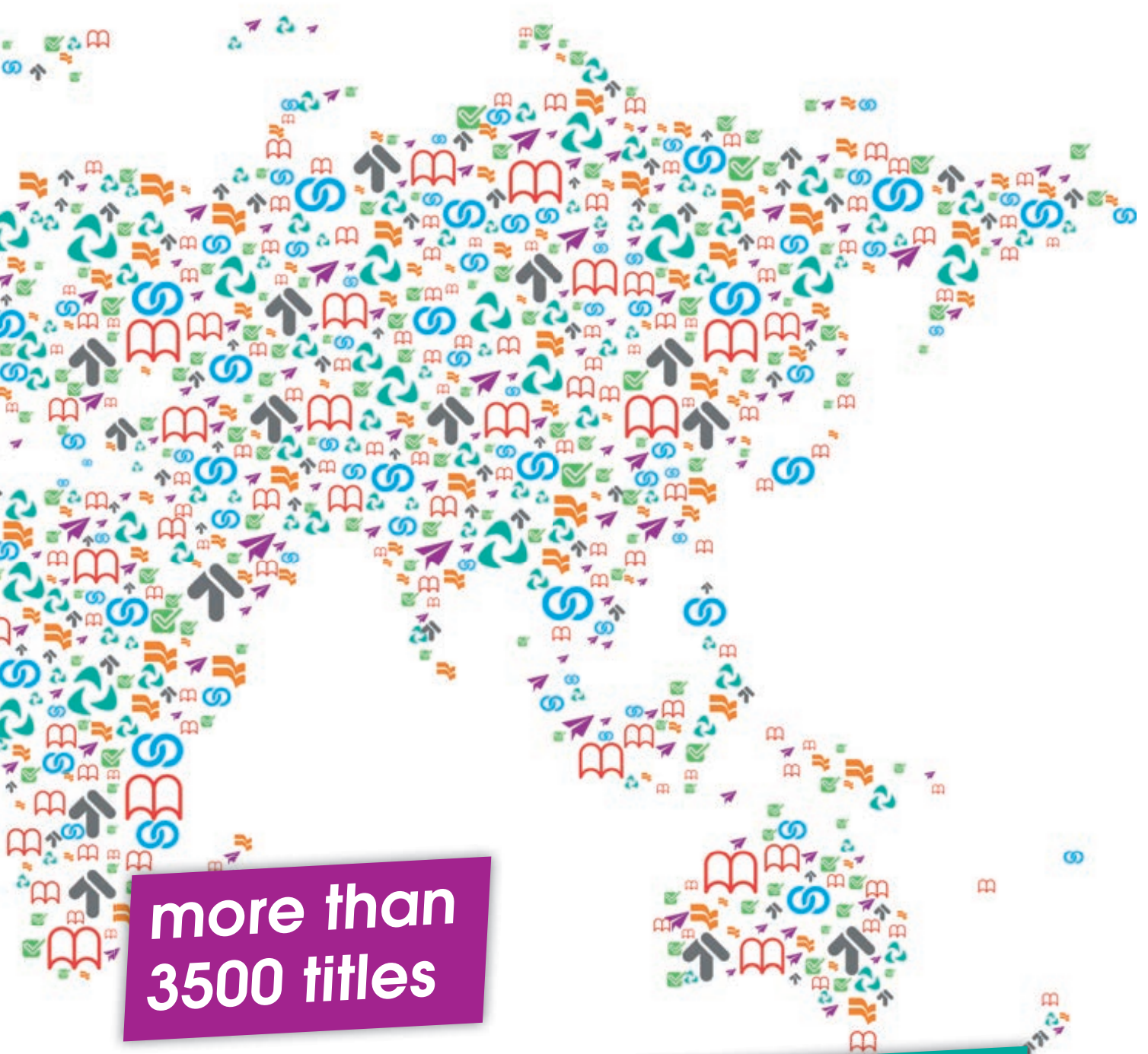
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CEFR LEVELS: Global Scale

Proficient User	C2	Can understand with ease virtually everything heard or read. Can summarise information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express himself/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations.
	C1	Can understand a wide range of demanding, longer texts, and recognise implicit meaning. Can express himself/herself fluently and spontaneously without much obvious searching for expressions. Can use language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices.
Independent User	B2	Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
	B1	Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics which are familiar or of personal interest. Can describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinions and plans.
Basic User	A2	Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.
	A1	Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. Can introduce himself/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows and things he/she has. Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.

The correspondence of books by Vector M & S Publishing to the CEFR levels is presented in order to facilitate teachers.

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