Contents

Chapters

1 **Numbers up to 1000** 3
Notes p. 4 · Practice p. 15 · Answers p. 263

2 **Addition and Subtraction** 24
Notes p. 25 · Practice p. 38 · Answers p. 265

3 **Multiplication and Division** 47
Notes p. 48 · Practice p. 58 · Answers p. 267

4 **Fractions** 66
Notes p. 67 · Practice p. 79 · Answers p. 269

5 **Money** 87
Notes p. 88 · Practice p. 99 · Answers p. 272

6 **Length** 108
Notes p. 109 · Practice p. 120 · Answers p. 274

7 **Mass** 129
Notes p. 130 · Practice p. 142 · Answers p. 276

8 **Volume of Liquid** 154
Notes p. 155 · Practice p. 166 · Answers p. 278

9 **Time** 176
Notes p. 177 · Practice p. 188 · Answers p. 280

10 **2D and 3D Shapes** 199
Notes p. 200 · Practice p. 210 · Answers p. 283

11 **Picture Graphs** 222
Notes p. 223 · Practice p. 234 · Answers p. 286

End-of-Year Practice Examination

P1 **Paper 1: Numbers, Addition and Subtraction, Multiplication and Divisio...** 247
Answers and mark scheme p. 289

P2 **Paper 2: Length, Mass, Volume, Time, Shapes, Picture Graphs** 253
Answers and mark scheme p. 291

Answers and Mark Schemes

Chapters 1 to 11 and the examination 262

Name: _____ Class: _____ Date: _____

PRIMARY 2 · MATHEMATICS · NUMBERS UP TO 1000

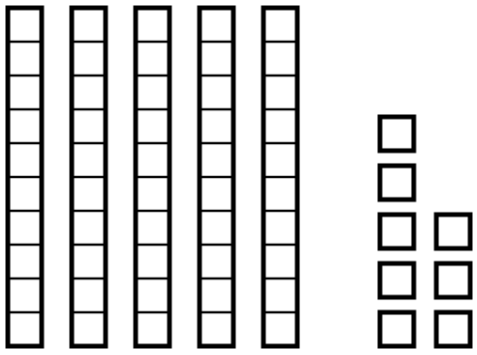
Numbers up to 1000

Theory and worked examples

What You Already Know

In Primary 1 you counted up to 100. You know that 10 ones make 1 ten. A number like 58 has 5 tens and 8 ones. In this chapter we count on to 1000.

- 10 ones make 1 ten.
- You can count in 2s, 5s and 10s: 10, 20, 30, 40 ...
- 1 more than 99 is 100. We say one hundred.



WORKED EXAMPLE

How many cubes are there in the picture above?

1. Count the rods. Each rod is 1 ten. There are 5 tens.
2. Count the small cubes. Each cube is 1 one. There are 8 ones.
3. 5 tens and 8 ones make 58.

There are 58 cubes.

TRY THIS

What is 1 more than 99?

Answer: 100

Hundreds, Tens and Ones

10 tens make 1 hundred. A flat is 1 hundred. A 3-digit number has three places: hundreds, tens and ones. We can write the digits in a place value chart.

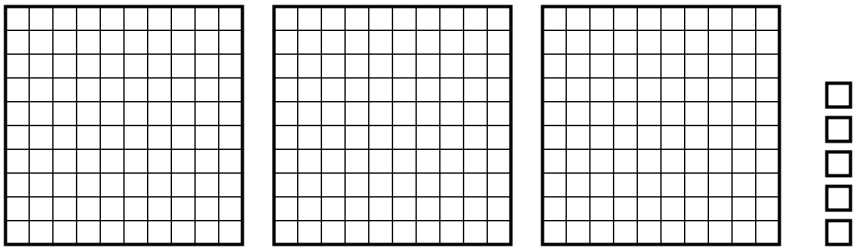
KEY IDEA

10 ones = 1 ten. 10 tens = 1 hundred. 10 hundreds = 1 thousand (1000).

WORDS TO KNOW

digit	one of 0, 1, 2, 3, 4, 5, 6, 7, 8, 9
place	where a digit sits: hundreds, tens or ones
numerals	a number written with digits, like 305

Hundreds	Tens	Ones
3	0	5



WORKED EXAMPLE

How many cubes are there in the picture above? Write the number in numerals.

1. Count the flats. Each flat is 1 hundred. There are 3 hundreds.
2. There are no rods. There are 0 tens.
3. There are 5 small cubes. There are 5 ones.
4. Put the digits in the chart: 3 hundreds, 0 tens, 5 ones. The 0 keeps the tens place.

There are 305 cubes.

TRY THIS

Ali has 2 boxes of 100 pencils and 7 packets of 10 pencils. How many pencils does he have?

Answer: 270

The Value of a Digit

A digit is worth a different amount in each place. Its value depends on its place. In 427, the digit 2 is in the tens place, so it stands for 2 tens, which is 20.

KEY IDEA

Find the place first. Then say what the digit stands for: hundreds, tens or ones.

Digit in 427	Place	Value
4	hundreds	400
2	tens	20
7	ones	7

WORKED EXAMPLE

In 427, what is the value of the digit 2?

1. Read the places from the right: ones, tens, hundreds.
2. The digit 2 is in the tens place.
3. 2 tens = 20.

The value of the digit 2 is 20.

TRY THIS

In 951, what is the value of the digit 9?

Answer: 900

Numbers in Words and Numerals

Read the hundreds first, then say "and", then the tens and ones (no "and" for whole hundreds like 300). Put a hyphen (-) between the tens word and the ones word, as in forty-seven. 100 is one hundred and 1000 is one thousand.

KEY IDEA

Forty has no "u". The numbers 11 to 19 have their own words: 615 is six hundred and fifteen.

Numbers	In words
1 to 9	one, two, three, four, five, six, seven, eight, nine
10 to 19	ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen
20 to 90	twenty, thirty, forty, fifty, sixty, seventy, eighty, ninety

WORKED EXAMPLE

(a) Write 615 in words. (b) Write three hundred and eight in numerals.

1. (a) 615 is 6 hundreds and 15. Say: six hundred and fifteen.
2. (b) Three hundred is 3 hundreds. Eight is 8 ones. There are no tens.
3. Write 0 in the tens place: 3 hundreds, 0 tens, 8 ones = 308.

(a) six hundred and fifteen (b) 308

TRY THIS

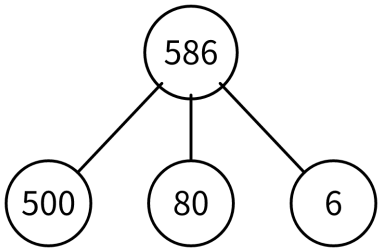
Write 940 in words.

Answer: nine hundred and forty

Expanded Form and Renaming

We can break a number into hundreds, tens and ones and add them. This is the expanded form. Sometimes there are more than 9 ones or 9 tens. Then we rename: 10 ones make 1 ten.

- 586 = 500 + 80 + 6
- The parts can come in any order: 8 + 60 + 200 = 268.
- 12 ones = 1 ten 2 ones. 15 tens = 1 hundred 5 tens.



WORKED EXAMPLE

What number is 3 hundreds, 2 tens and 14 ones?

1. 3 hundreds = 300.
2. 2 tens = 20.
3. 14 ones = 14. That is 1 ten and 4 ones.
4. 300 + 20 + 14 = 334.

The number is 334.

TRY THIS

Fill in the blank: 200 + ___ tens + 13 ones = 253

Answer: 4

Comparing and Ordering Numbers

To compare numbers, line up the places. Compare the hundreds first. If the hundreds are the same, compare the tens. If the tens are the same too, compare the ones.

- 458 < 485 means 458 is smaller than 485.
- 485 > 458 means 485 is greater than 458.
- The open side of > or < faces the greater number.
- A 3-digit number is always greater than a 2-digit number: 102 > 98.

Number	Hundreds	Tens	Ones
362	3	6	2
326	3	2	6
632	6	3	2
263	2	6	3

WORKED EXAMPLE

Arrange 362, 326, 632 and 263 in order. Begin with the smallest.

1. Look at the hundreds digits: 3, 3, 6, 2.
2. 2 is the smallest, so 263 is the smallest. 6 is the greatest, so 632 is the greatest.
3. 362 and 326 both have 3 hundreds. Compare the tens: 2 tens is smaller than 6 tens.
4. So 326 comes before 362.

263, 326, 362, 632

TRY THIS

Write > or < in the blank: 547 ___ 574

Answer: <

CHAPTER 1

Practice Questions

Part 2: Numbers up to 1000



In the practice questions

25 questions, 50 marks. Show your working in the space given and write your answer on the answer line. The answers are on page 263.

- Section A: Multiple Choice: 10 questions, 15 marks
- Section B: Short Answer: 10 questions, 15 marks
- Section C: Word Problems: 5 questions, 20 marks

Name: _____ Class: _____ Date: _____

PRIMARY 2 · MATHEMATICS · NUMBERS UP TO 1000

Numbers up to 1000

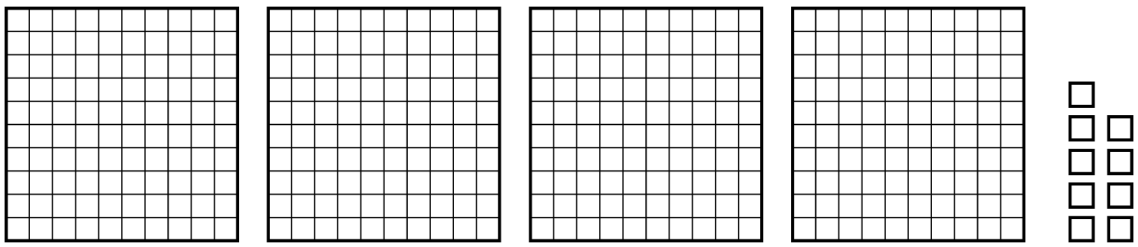
INSTRUCTIONS

- 25 questions, 50 marks in total. Time allowed: 1 hour 15 minutes.
- Answer all questions in the spaces provided.
- Show your working in the space below each problem sum.

Section A: Multiple Choice

For each question, four options are given. One of them is the correct answer.
Write the letter (A, B, C or D) of the correct answer in the brackets provided.

1 How many cubes are there? ( ) [1]



(A) 49 (B) 490 (C) 409 (D) 940

2 In 738, the value of the digit 3 is ____. ( ) [1]

(A) 3 (B) 30 (C) 38 (D) 300

3 Which of the following is an even number? ( ) [1]

(A) 351 (B) 573 (C) 919 (D) 846

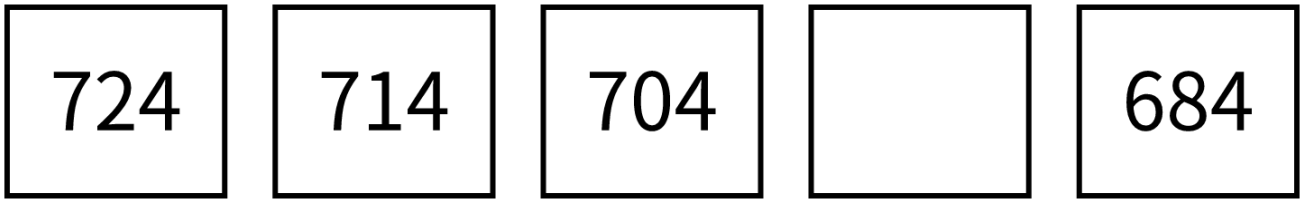
4 10 more than 293 is ____. ( ) [1]

(A) 303 (B) 294 (C) 393 (D) 283

5 4 + 90 + 300 = ____ ( ) [1]

Ⓐ 349 Ⓑ 493 Ⓒ 394 Ⓓ 943

6 What is the missing number in the number pattern below? ( ) [2]



Ⓐ 700 Ⓑ 694 Ⓒ 703 Ⓓ 794

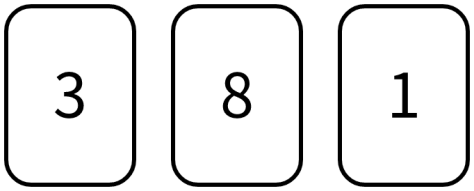
7 Which of the following is seven hundred and six in numerals? ( ) [2]

Ⓐ 706 Ⓑ 76 Ⓒ 760 Ⓓ 7006

8 Which odd number is greater than 500? ( ) [2]

Ⓐ 487 Ⓑ 516 Ⓒ 640 Ⓓ 593

9 Use all the digit cards below once each. Which is the smallest 3-digit even number that can be formed? ( ) [2]



Ⓐ 138 Ⓑ 183 Ⓒ 318 Ⓓ 813

10 5 hundreds, 3 tens and 14 ones is the same as ____. ( ) [2]

Ⓐ 534 Ⓑ 544 Ⓒ 5314 Ⓓ 644

Section B: Short Answer

Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

11 Write 870 in words.

Ans: _____ [1]

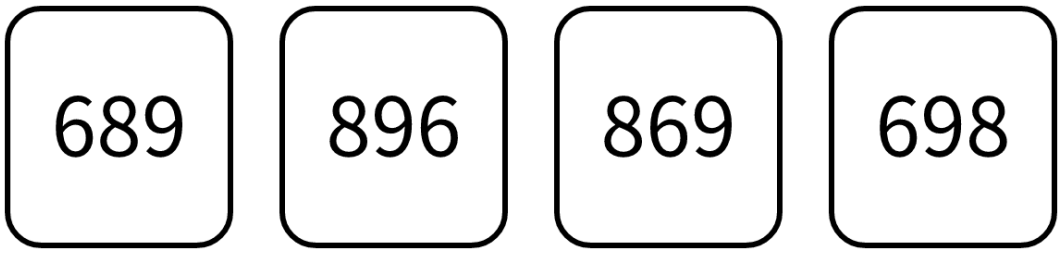
12 Write nine hundred and four in numerals.

Ans: _____ [1]

13 Fill in the blank. In 562, the digit ____ is in the tens place. [1]

14 Fill in the blank. 100 less than 315 is ____. [1]

15 Look at the numbers below. Which is the greatest number?



Ans: _____ [1]