

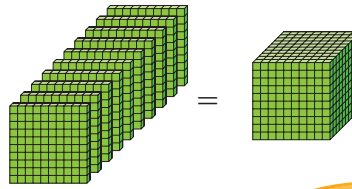
### Understand it!

In a 4-digit number, each digit tells how many thousands, hundreds, tens and ones there are.

# Reading and Writing Thousands

How can you read and write 4-digit numbers?

Ten hundreds equal one thousand.



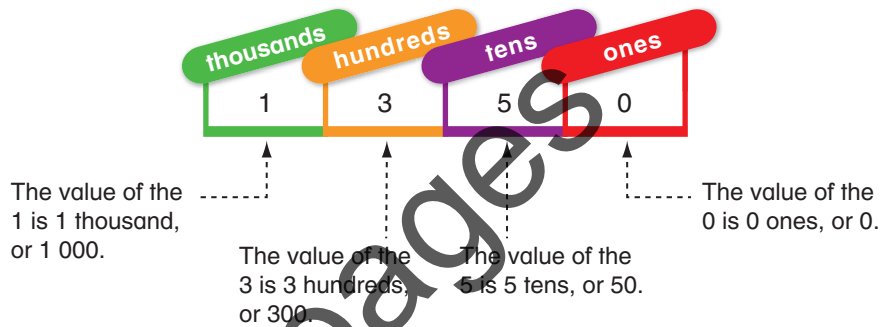
Did you know that a male giraffe weighs between 1 080 and 1 360 kilograms?

This giraffe weighs 1 360 kilograms.



### Another Example

How can you show 1 350 on a place-value chart?



### Guided Practice

Write each number in standard form.

1

2  $8000 + 500 + 30 + 9$

3 two thousand, four hundred and sixty-one

4 four hundred and one

### Independent Practice

Write each number in standard form.

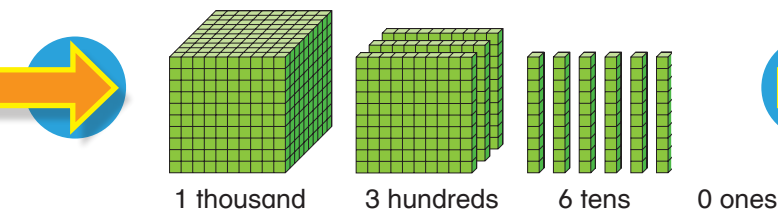
5

6  $4000 + 600 + 50 + 8$

7  $7000 + 200 + 1$

You can show 1 360 in different ways.

**Place-value blocks:**



**Expanded form:**  $1\ 000 + 300 + 60$

**Standard form:** 1 360

↑  
Leave a space between the thousands and the hundreds.

**Word form:** one thousand, three hundred and sixty

↑  
Write a comma between the thousands and the hundreds.

Write each number in expanded form.

8 six thousand, two hundred and four

9 5033

Write the place value of the coloured digit. Then write its value in word form.

e.g. 4865

800

eight hundreds

10 3245

11 9716

12 5309

13 7240

14 List all the even numbers between 4611 and 4623

15 List all the odd numbers between 7522 and 7535

**Problem Solving**



16a Write the largest and the smallest even number possible using the four digits 5, 2, 8 and 1.

largest

smallest

b Write some odd numbers that come between these 2 numbers.

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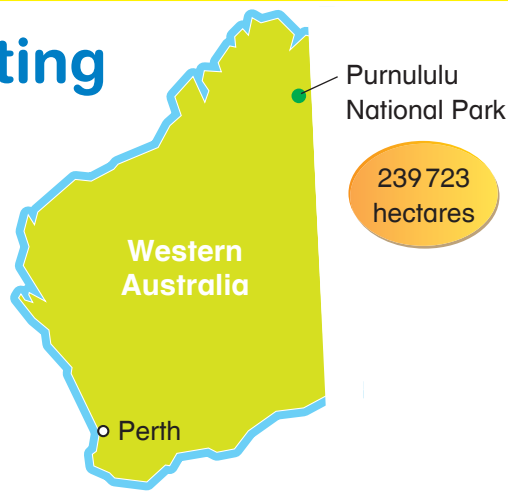
## Understand it!

Whole numbers greater than 999 have groups of three digits.

# Reading and Writing Larger Numbers

## How can you read and write larger numbers?

Purnululu National Park in Western Australia covers 239 723 hectares of land.



## Guided Practice

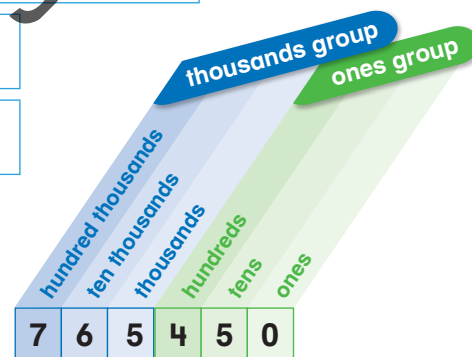
Write each number in standard form.

1 three hundred and forty-two thousand, six hundred and seven

2 ninety-eight thousand, three hundred and twenty

3  $500\,000 + 40\,000 + 600 + 90 + 3$

4 What is the value of the 9 in 379 050?



## Reasoning

5 John says the value of the digit 7 in 765 450 is 70 000. Do you agree? Why or why not?

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6 Describe how 130 434 and 434 130 are alike and how they are different.

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## Independent Practice

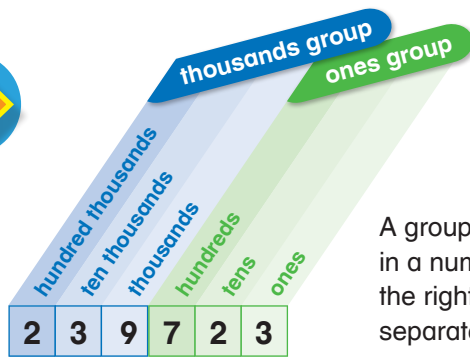
Write each in standard form.

7 twenty-seven thousand, five hundred and fifty

8  $800\,000 + 20\,000 + 6\,000 + 300 + 50$

How can you show 239 723 in different ways?

Place-value chart:



A group is a set of 3 digits in a number, starting from the right. Two groups are separated by a space.

Standard form:

239 723

Expanded form:

$200\,000 + 30\,000 + 9\,000 + 700 + 20 + 3$

Word form: two hundred and thirty-nine thousand, seven hundred and twenty-three

Write each number in expanded form.

9 46 354

10 395 908

Write the place value of the coloured digit. Then write its value in word form.

11 40**4**705

12 **1**63254

Find each missing number.

13  $26\,305 = 20\,000 + \square + 300 + 5$

14  $801\,960 = 800\,000 + 1\,000 + \square + 60$

### Problem Solving



15a Christopher had these five cards.

Arrange the cards to make 5-digit numbers. How many numbers can you make that are greater than 80 000?

b How many numbers can you make that are greater than 90 000?

## Understand it!

Place value can be used to compare and order whole numbers.

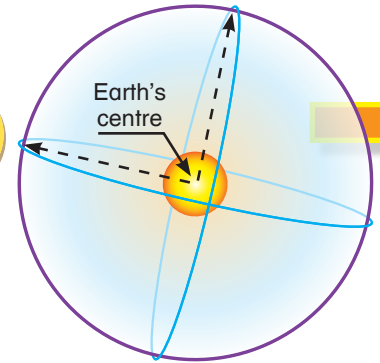
# Comparing and Ordering Whole Numbers

## How do you compare numbers?

Earth is not perfectly round. The North Pole is 6356 kilometres from Earth's centre. The Equator is 6378 kilometres from the centre. Which is closer to the Earth's centre: the North Pole or the Equator?

Equator  
6378 km  
from centre

North Pole  
6356 km  
from centre



## Mental Computation

Solve each question then complete the rules that follow.

1  $3 + 5 =$

2  $15 + 5 =$

3  $7 + 8 =$

4  $23 + 6 =$

5  $8 + 2 =$

6  $16 + 6 =$

7  $12 + 7 =$

8  $34 + 4 =$

9 odd + odd = odd or even (*circle*)

10 even + even = odd or even (*circle*)

11 odd + even (or even + odd) = odd or even (*circle*)

## Guided Practice

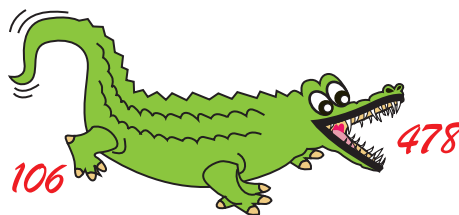
Use the symbols  $<$  or  $>$  to compare the numbers.

12 2643  2801

13 6519  6582

14 785  731

15 6703  6699



Write the numbers from smallest to largest.

16 7502, 6793, 6723 \_\_\_\_\_

17 80371, 15048, 80137 \_\_\_\_\_

## Step 1

Use place value to compare numbers.

Write the numbers, lining up places. Begin at the left and compare.

6 356  
6 378

The thousands digit is the same in both numbers.

## Step 2

Look at the next digit.

6 356  
6 378

The hundreds digit is also the same in both numbers.

## Step 3

The first place where the digits are different is the tens place. Compare.

6 356    5 tens < 7 tens,  
6 378    so 6 356 < 6 378.

The symbol  $>$  means is greater than, and the symbol  $<$  means is less than.

The North Pole is closer to Earth's centre than the Equator.

## Independent Practice

Use the symbols  $<$  or  $>$  to compare the numbers.

18    22 495        21 388

19    52 744        56 704

20    13 752        13 122

21    4 937        4 939

- 22 Mary made a sandcastle with 22 873 grains of sand. Tranh made a sandcastle with 22 774 grains of sand. Who used more sand?

\_\_\_\_\_

## Problem Solving

- 23a Roll four 10-sided dice. Note the 4 numbers that come up. What are all the numbers you could make?

\_\_\_\_\_

\_\_\_\_\_

- b Write the numbers on cards then order them in ascending order.

## Understand it!

Place value can be used to round whole numbers.

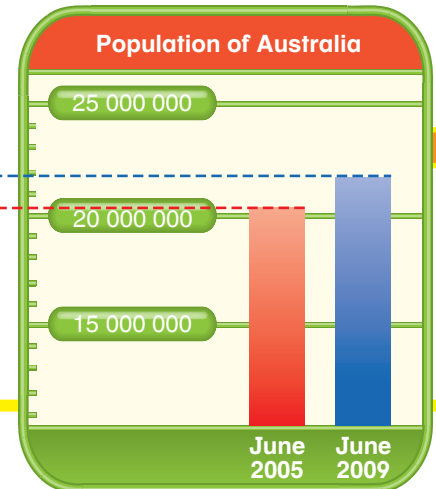
# Rounding Whole Numbers

## How can you round numbers?

Round 21 874 900 to the nearest thousand and to the nearest hundred thousand. You can use place value to round numbers.

21 874 900

20 328 600



## Guided Practice

Round each number to the place of the coloured digit.

1 28955

2 85639

3 9924

4 19542

5 60656

6 49590

## Reasoning

- 7 Explain how to round a number when 7 is the digit to the right of the rounding place.

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- 8 In 2010, the population of Australia was 22 387 164. Round 22 387 164 to the nearest hundred thousand.

## Independent Practice

Round each number to the place of the coloured digit.

9 93295

10 39230

11 77292

12 5846

13 4028

14 66365



Round 21 874 900 to the nearest thousand.

thousands place

21 874 900

21 875 000

If the digit to the right of the rounding place is 5 or more, add 1 to the rounding digit. If it is less than 5, leave the rounding digit alone.

Since  $9 > 5$ , change the rounding digit to 5. Change the digits to the right of the rounding place to zeroes.

So, 21 874 900 rounds to 21 875 000.

Round 21 874 900 to the nearest hundred thousand.

hundred thousands place

21 874 900

21 900 000

The digit to the right of the rounding place is 7.

Since the digit is 7, round by adding 1 to the digit in the hundred thousands place.

So, 21 874 900 rounds to 21 900 000.

15 53280

17 1406

19 21679

16 17909

18 55560

20 47547

21 Round these numbers to complete the table.

	Nearest hundred	Nearest thousand	Nearest ten thousand
43 111			
831 963			
69 475			
58 347			

### Problem Solving

22a What numbers rounded to the nearest ten thousand can be rounded to 60 000?

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

largest

smallest