# Maths Revision \& Proctice Booblet 

Name:

Number and Place Volue

## Revise

## Read and Write Numbers

All numbers are made up of digits. To be able to read and write a large number, we need to know the place value of each digit.

A digit becomes ten times greater as the place value position moves to the left.
Remember that commas or spaces are used in larger numbers to make them easier to read or write, and zeroes are used as place value holders.


## Order and Compare Numbers

When ordering a set of numbers, we compare the place value of the digits in each number, starting with the digits in the largest place value position.

If numbers have the same digit in a place value position, we look at the digits in the place value position to the right until we find a difference. It is sometimes useful to line the numbers up vertically and align the place value columns.

## Round Whole Numbers

Rounding can make it easier to talk about, understand and work with numbers.

We can round numbers to estimate answers or to explain how near a number is to another number. We round whole numbers to different powers of ten.

Remember to look at the digit immediately to the right of the place value position you are rounding to.


If the digit immediately to the right of the place value position you are rounding to is $\mathbf{0 , 1 , 2 , 3}$ or 4 , we round the number down.

If the digit immediately to the right of the place value position you are rounding to is $5,6,7,8$ or 9 , we round the number up.

## Revise

## Use Negative Numbers

Negative numbers are numbers below zero.
They are expressed with a negative sign before the number.
The greater the negative number, the further below zero it is.

When solving a problem that involves crossing zero, it can be useful to draw a number line.


## Read Roman Numerals

Roman numerals originated in ancient Rome. Today, we see Roman numerals in many ways. They can be used to identify kings and queens, on the credits of television programmes or on analogue clocks.

Roman numerals are based on seven different symbols that are combined to represent different values.

| Symbol | I | V | X | L | C | D | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Value | 1 | 5 | 10 | 50 | 100 | 500 | 1,000 |

When a smaller symbol is
after a greater symbol, we
use addition:
$\mathrm{VI}=6$ because we read the symbols as $5+1$.

When a smaller symbol is
before a greater symbol, we use subtraction:

IX $=9$ because we read the symbols as 10-1.

## Practise

## Supercharge your number

 and place value powers by answering these questions.1. Write the number 654,082 in words.
2. Look at this number.

35,094,206 $\square$ 2 marks

Write the digit that is in the ten thousands place. $\square$
Write the digit that is in the millions place.
3. The numbers in the sequence decrease by the same amount each time.
$1,327,845$
1,317,845
1,307,845
1,297,845

What number would come next in the sequence?

4. Write the number that is two hundred less than three million.

5. Write the number that is forty thousand less than three million.

## Practise

6. Round $1,307,845$
to the nearest 100 $\square$
to the nearest $\mathbf{1 , 0 0 0}$ $\square$
to the nearest $\mathbf{1 0 , 0 0 0}$ $\qquad$
$\square$
7. Complete the table and show the numbers rounded to the nearest thousand.

|  | rounded to the nearest thousand |
| :---: | :---: |
| 1,297 |  |
| 12,978 |  |
| 129,784 |  |
| $1,297,845$ |  |

8. 



D

£207,860

£217,860

Order these prices starting with the lowest price.

## Practise

9. Use the signs to make these correct.
429,784
$45, ~+~$
$4,46,329$
10. Here are the temperatures of the superhero hideouts at $10 \mathrm{a} . \mathrm{m}$. and $10 \mathrm{p} . \mathrm{m}$.

| Superhero Hideout | Temperature |  |
| :---: | :---: | :---: |
|  | $\mathbf{1 0} \mathbf{a . m}$. | $\mathbf{1 0} \mathbf{p . m}$. |
| Ice Caves | $-8^{\circ} \mathrm{C}$ | $-21^{\circ} \mathrm{C}$ |
| Fire Cavern | $32^{\circ} \mathrm{C}$ | $23^{\circ} \mathrm{C}$ |
| Plasma Palace | $-3^{\circ} \mathrm{C}$ | $2^{\circ} \mathrm{C}$ |
| Hero Hideaway | $-15^{\circ} \mathrm{C}$ | $-9^{\circ} \mathrm{C}$ |

At 10 p.m., how many degrees colder were the Ice Caves than Plasma Palace?
$\square$

Which hideout was 9 degrees warmer at 10 a.m. than 10 p.m.?

11. Here is part of a number line.

Write the missing numbers in the boxes.

$$
+10
$$



## Practise

12. The cover of this book has Roman numerals written on it.

13. Look at these numbers written as Roman numerals.

Circle the smallest number.
MDCLI
MCMIV
MMCCC
MMCCL

What is the value of the greatest number? $\square$
14. Look at these Roman numerals.

CCCLXXXII

Write the number in figures. $\square$

## Self-Assessment

Colour in the superhero strength-o-meter to show how you feel about each of these statements:

I can read, write, order and compare numbers up to $10,000,000$ and determine the value of each digit.


I can round any whole number to a required degree of accuracy.


I can use negative numbers in context and calculate intervals across zero.


I can count forwards or backwards in steps of powers of 10 for any given number up to $1,000,000$.


I can read Roman numerals to 1,000 ( $M$ ) and recognise years written in Roman numerals.


## Comments

