

Year 6 basic skills

Count forward and backwards in steps of power of 10 for any given number up to 10, 000, 000

Count forwards and backwards with positive and negative whole numbers including zero and calculate intervals across zero

Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit

Partition numbers into place value columns

Partition numbers in different ways

Round any whole number to a required degree of accuracy

Use rounding to support estimation and calculation

Use knowledge of place value to derive new addition and subtraction facts

Recognise and use square and cube numbers

Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers

Establish whether a number up to 100 is prime and recall prime numbers up to 19

Double any number between 1 and 1000 and find all corresponding halves

Add and subtract mentally with jottings with increasingly large numbers to aid fluency e.g. HthTthTHTU \pm TthTHTU, TthTHTU \pm THTU, HTU.t \pm TU.t

Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 giving answers up to 3 decimal places

Perform mental calculations including with mixed operations

Count up and down in tenths, hundredths and thousandths in decimals and fractions including bridging zero for example on a number line

Use their knowledge of the order of operations to carry out calculations involving the four operations

Use factors to simplify fractions

Compare and order decimals and fractions including fractions >1

Calculate simple percentages of amounts

Recognise mixed numbers and improper fractions and convert from one form to another and write mathematical statements >1 as a mixed number

Derive decimal complements to 1 working with decimals up to 3 decimal places

Recall and derive equivalences between fractions, decimals and percentages

Convert between money and measures including time