

Year 6 Maths – Autumn 2

Counting

Count on/back from a given number in steps of 10/100/1000/10000 to 1,000,000 and beyond
Count on/back in whole numbers, fraction and decimal sequences through zero to include negative numbers (e.g. 2.5 or $1\frac{1}{4}$)

Number and Place value

Read, write, partition, order and compare numbers to 5,000,000 and decimal numbers up to 3dp
Order and compare numbers including fraction and decimals

Fractions, decimals and percentages

Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
Identify, name and write equivalent fractions of a given fraction
Recognise mixed numbers and improper fractions and convert from one form to the other
Associate a fraction with division to calculate decimal fraction equivalents.
Recall and use equivalences between simple fractions, decimals and percentages including in different context.

Meeting Expectations

- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
- Multiply simple pairs of proper fractions
- Divide proper fractions by whole numbers
- Associate a fractions with division and calculate its decimal fraction equivalent

Hook for learning:

Learning Challenge links to light/body and WW2 topic

Learning Challenge links

Can you use addition and subtraction methods to find a total number of deaths for each country in WW2?
Can you describe the heart rate in the human body compared to other animals?

Calculation in Arithmetic skills time

Multiply 4digit by 1 digit
Divide 4 digit by 1 digit
Add and subtract numbers with up to 2dp
Mental addition and subtraction by rounding
Halves and doubles of whole numbers and decimals

Non-negotiables:

* Identify common factors, multiples and prime numbers
* recognise mixed numbers and fractions and convert from one to another

PiXL therapies

Can recall and use multiplication and division facts for all the times tables
Can solve multi-step problems with addition and subtraction
Can multiply and divide mentally using known facts
Can multiply and divide whole numbers and decimals by 10,100 and 1,000
Can solve problems using place value and number facts

Geometry

Recognise that shapes with the same areas can have different perimeters and vice versa.
Compare and classify geometrical shapes based on properties and sizes.
Draw and translate simple shapes on the coordinate plane and reflect them in the axes

Exceeding Expectations

Compare, order and convert between fractions, decimals and percentages in contexts related to science, history or geography learning

Maths –Weekly

Week 1: Four operations

Find factors and factor pairs of each number to 100, including common factors

Can identify multiples and common multiples

Can identify prime numbers, square and cube numbers

PIXL Therapy – Can recall and use multiplication and division facts for all the times tables

Basic arithmetic focus - short division and short multiplication

Week 2: four operations/fractions

To understand the effect of brackets on a calculation

Can use common factors to simplify fractions

PIXL Therapy – Can solve multi-step problems with addition and subtraction

Basic arithmetic focus – mental addition and subtraction

Week 3: fractions

Can compare and order fractions

Can add and subtract fractions

PIXL Therapy – Can multiply and divide mentally using known facts

Basic arithmetic focus – halves and doubles

Week 4: addition and subtraction of fractions

Can add and subtract fractions including mixed numbers

Solve problems involving adding and subtracting fractions

PIXL Therapy – Can multiply and divide whole numbers and decimals by 10,100 and 1,000

Basic arithmetic focus – 10% and 50% of amounts

Week 5: multiplication and division of fractions

Can multiply fractions by a whole number or another fraction

Can divide fractions by a whole number

PIXL Therapy – Can solve problems using place value and number facts

Basic arithmetic focus – unit fractions of amounts

Week 6: geometry – position and direction

Investigate translations and reflections on a coordinate grid

Solve problems on a coordinate grid

Use coordinates to describe the position of a point

PIXL Therapy – dependent on assessment data

Basic arithmetic focus – addition and subtraction of fractions