

Maths, Year 4, Autumn 1



What I will know by the end of the Autumn 1 term

Arithmetic 1

Calculate Maths Stories for all four operations with mixed numbers, 1-digit whole numbers, halves and quarters using pupil tables and pupil cups.

Mentally calculate Maths Stories combining addition, subtraction and multiplication with mixed numbers, 1-digit whole numbers, halves and quarters.

Geometry

On a pair of axes, draw the image of an object in a vertical, horizontal or oblique mirror line and label the image accurately,

Data & Measure

Read metric prefixes, from milli- to kilo-, with any of the basic units of length, mass and volume, and convert between units of measure.

Arithmetic 2

Use a grid to multiply a 2-digit whole number by a 2-digit whole number.

Calculate answers to one-step word problems using addition, subtraction, multiplication or division.

Reasoning

Read and write tens, hundreds, thousands, ten thousands, hundred thousands, millions, ten millions, hundred millions, billions in figures and words.

Read and write large products of ten as powers of ten.

$$\text{e.g. } 10^5 = 100\,000$$

Compare and order decimals (up to 2 decimal places)

Identify the number of hundredths e.g. 34.12 – 12 hundredths

Use clockwise and anti-clockwise turns and draw an arc to show turns

To know the measure in degrees (360 / 270 / 180 / 90) as whole turn, half turn, quarter etc.

Multiplication tables for 2,3,4,5,8,10 and related division facts (recap)

To count in multiples of 6 & know the related division facts.

Additional Coverage

$$\text{e.g. } 2\frac{1}{2} - 1\frac{1}{4} + \frac{1}{4} + 3\frac{1}{4} = 4\frac{3}{4}$$

$$\text{e.g. } 100\text{ cg} = 1\text{ g}$$

$$\text{e.g. } 24 \times 25 = 600$$

Activities to try at home & Useful Links

- <https://www.bbc.co.uk/bitesize/topics>
- Purplemash.com
- Mymaths.co.uk
- TTrockstars.com

Here are a few fun **times tables games**, These are perfect for use at home, to help children to learn and practice times tables.

- Bingo
- Rock, Paper, Times tables
- Playing cards



Useful Vocabulary

Numerator

The numerator of a fraction shows how many parts we have out of the whole, while the denominator below the line shows how many equal parts there are in total.

Denominator

A denominator is the bottom number in a fraction. It shows the equal number of parts something is divided into.

Place value

A number can be made of more than one digit. We use place value headings, like ones, tens, hundreds and thousands to help us understand the value of each digit.

Partition

Partitioning is a useful way of breaking numbers up so they are easier to work with. The number 746 can be broken down into hundreds, tens and ones. 7 hundreds, 4 tens and 6 ones.

Greater than

If a number is further along the number line than another, it will be greater than the number you're comparing it to.

Less than

If a number is closer to the start of the number line than another, it will be less than the number you're comparing it to.

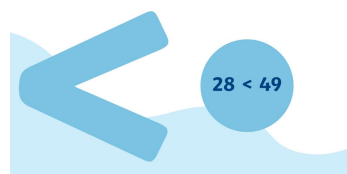
Reflection

Reflection is a type of transformation. To reflect an object, you need a mirror line.

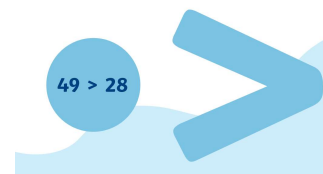
Mirror line

A mirror line is a line which can be drawn onto a shape to show that both sides have exact reflective symmetry. It is called a 'mirror' line because it acts in exactly the same way a normal mirror does, reflecting a figure and flipping it symmetrically so that it faces the other way and retains its shape.

Less Than (<)



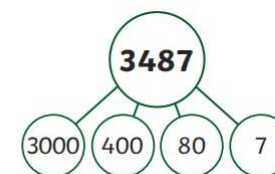
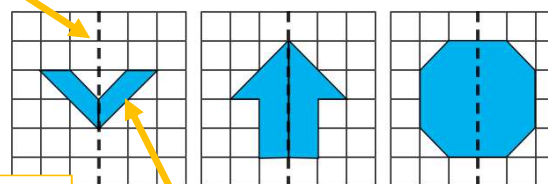
Greater Than (>)



2 → Numerator
—
3 → Denominator

Mirror line

Thousands	Hundreds	Tens	Ones
1000 1000 1000	100 100 100	10 10 10 10	1 1 1 1



Halves

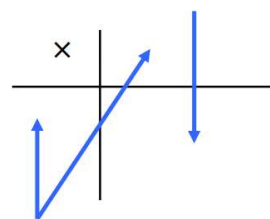


Quarters



Reflection

This is a picture of the Maths Table.



This is for jotting.

Lots × lots is lots and lots!

Prefix	Meaning
Kilo -	1,000
Hecto-	100
Deca-	10
Liter/Gram/Meter	1
Deci-	0.1
Centi-	0.01
Milli-	0.001