



Kew Woods Early Years Foundation Stage



Progression Chart - Mathematics

<p>Personal, Social & Emotional Development</p>	<p>Communication & Language</p> <p>30-50 months To build up vocabulary that reflects the breadth of their experiences. To recite numbers in order to 10.</p> <p>40-60 months To extend vocabulary, especially by grouping and naming, Exploring the meaning and sounds of new words.</p>	<p>Physical Development</p> <p>30-50 months To realise not only objects, but anything can be counted including steps, claps or jumps.</p>
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<p>Reading</p>	<p>Writing</p> <p>30-50 months To realise not only objects, but anything can be counted including steps, claps or jumps.</p>
<p>Number</p> <p>30-50 months To recite numbers in order to 10. To realise not only objects, but anything can be counted including steps, claps or jumps. To compare two groups of objects, saying when they have the same number. To show an interest in numerals in the environment. To show an interest in number problems. To use some number names accurately in play.</p> <p>40-60 months To count up to three or four objects by saying one number name for each item. To count out up to six objects from a larger group. To count actions or objects which cannot be moved. To count objects to 10 and beginning to count beyond 10. To count an irregular arrangement of up to ten objects. To use some number names and number language spontaneously. To know that numbers identify how many objects are in a set. To show an interest in representing numbers. To begin to represent numbers using fingers, marks on paper or pictures. To separate a group of three or four objects in different ways, beginning to recognise that the total is still the same. To sometimes match numeral and quantity correctly. To estimate how many objects they can see and check by counting them. To select the correct numeral to represent 1 to 5, then 1 to 10 objects. To say the number that is one more than a given number.</p>	<p>Shape, Space and Measure</p> <p>30-50 months To show an interest in shape and space by playing with shapes or making arrangements with objects. To show interest in shape by sustained construction activity or by talking about shapes or arrangements. To show interest in shapes in the environment. To use shapes appropriately for tasks. To begin to talk about shapes in everyday objects, e.g. 'round' and 'tall'. To show awareness of similarities of shapes in the environment. To use positional language.</p> <p>40-60 months To order two or three items by length or height. To order two items by weight or capacity. To use everyday language related to time. To order and sequence familiar events. To measure short periods of time in simple ways. To begin to use everyday language related to money. To begin to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. To select particular named shapes. To describe their relative position, such as 'behind' or 'next to'.</p>

<p>To find one more or one less from a group of up to five objects, then ten objects. To begin to identify own mathematical problems based on own interests and fascinations. To recognise some numerals of personal significance. To use the language of 'more' and 'fewer' to compare two sets of objects. To recognise numerals 1 to 5. To find the total of items in two groups by counting all of them. To begin to use the vocabulary involved in adding and subtracting in practical activities and discussion.</p> <p>ELG To count reliably with numbers from one to 20. To say which number is one more or one less than a given number from one to 20. To place numbers one to 20 in order. To add and subtract two single-digit numbers and count on back to find the answer using quantities and objects. To solve problems, including doubling, halving and sharing.</p>	<p>To use familiar objects and common shapes to create and recreate patterns and build models.</p> <p>ELG To use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and solve problems. To explore characteristics of everyday objects and shapes and use mathematical language to describe them. To recognise, create and describe patterns.</p>
<p>Understanding the World 30-50 months To show curiosity about numbers by offering comments or asking questions.</p>	<p>Expressive Arts and Design</p>

Mathematics

30-50 months

Number

Uses some number names and number language spontaneously.
Uses some number names accurately in play.
Recites numbers in order to 10.
Knows that numbers identify how many objects are in a set.
Beginning to represent numbers using fingers, marks on paper or pictures.
Sometimes matches numeral and quantity correctly.
Shows curiosity about numbers by offering comments or asking questions.
Compares two groups of objects, saying when they have the same number.
Shows an interest in number problems.
Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same
Shows an interest in numerals in the environment.
Shows an interest in representing numbers.
Realises not only objects, but anything

Shape, Space & Measure

Shows an interest in shape and space by playing with shapes or making arrangements with objects.
Shows awareness of similarities of shapes in the environment.
Uses positional language.
Shows interest in shape by sustained construction activity or by talking about shapes or arrangements.
Shows interest in shapes in the environment.
Uses shapes appropriately for tasks.
Beginning to talk about the shapes of everyday objects, e.g. 'round' and 'tall'.

40-60 months

Number

Recognise some numerals of personal significance.
Recognises numerals 1 to 5.
Counts up to three or four objects by saying one number name for each item.
Counts actions or objects which cannot be moved.
Counts objects to 10, and beginning to count beyond 10.
Counts out up to six objects from a larger group.
Selects the correct numeral to represent 1 to 5, then 1 to 10 objects.
Counts an irregular arrangement of up to ten objects.
Estimates how many objects they can see and checks by counting them.
Uses the language of 'more' and 'fewer' to compare two sets of objects.
Finds the total number of items in two groups by counting all of them.
Says the number that is one more than a given number.
Finds one more or one less from a group of up to five objects, then ten objects.
In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting.
Records, using marks that they can interpret and explain.
Begins to identify own mathematical problems based on own interests and fascinations.

Shape, Space & Measure

Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes.
Selects a particular named shape.
Can describe their relative position such as 'behind' or 'next to'.
Orders two or three items by length or height.
Orders two items by weight or capacity.
Uses familiar objects and common shapes to create and recreate patterns and build models.
Uses everyday language related to time.
Beginning to use everyday language related to money.
Orders and sequences familiar events.
Measures short periods of time in simple ways.

ELG	<p>Number Children count reliably with numbers from 1 to 20. They place them in order. They say which number is one more or one less than a given number. Using quantities and objects, they add and subtract 2 single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.</p> <p>Shape, Space & Measure Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.</p>
Exceeding	<p>Number Children estimate a number of objects and check quantities by counting up to 20 They solve practical problems that involve combining groups of 2,5 and 10, or sharing into equal groups.</p> <p>Shape, Space & Measure Children estimate, measure, weigh and compare and order objects and talk about properties, position and time.</p>
Year One (KS1)	<p>Number Place Value Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. Given a number, identify one more and one less. Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. Read and write numbers from 1 to 20 in numerals and words.</p> <p>Addition and Subtraction Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs. Represent and use number bonds and related subtraction facts within 20. Add and subtract one-digit and two-digit numbers to 20, including zero. Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = [] - 9$.</p> <p>Multiplication and Division Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.</p> <p>Fractions Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.</p> <p>Measurement Compare, describe and solve practical problems for: lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half) mass or weight (e.g. heavy/light, heavier than, lighter than) capacity/volume (full/empty, more than, less than, quarter) time (quicker, slower, earlier, later)</p> <p>Measure and begin to record the following: lengths and heights mass/weight capacity and volume time (hours, minutes, seconds)</p> <p>Recognise and know the value of different denominations of coins and notes. Sequence events in chronological order using language such as: before and after, next, first, today, Yesterday, tomorrow, morning, afternoon and evening. Recognise and use language relating to dates, including days of the week, weeks, months and years.</p>

Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.

Properties of Shape

Recognise and name common 2-D and 3-D shapes, including:
2D shapes (e.g. rectangles (including squares), circles and triangles)
Recognise and name common 2-D and 3-D shapes, including:
3-D shapes (e.g. cuboids (including cubes), pyramids and spheres).

Position and Direction

Describe position, directions and movements, including half, quarter and three-quarter turns.

EARLY YEARS EXPECTATIONS

Early Learning Goals

Number

Children count reliably with numbers from 1 to 20.

They place them in order.

They say which number is one more or one less than a given number.

Using quantities and objects, they add and subtract 2 single-digit numbers and count on or back to find the answer.

They solve problems, including doubling, halving and sharing.

Shape, Space & Measure

Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.

They recognise, create and describe patterns.

They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

EXCEEDING EARLY YEARS EXPECTATIONS

Exceeding

Number

Children estimate a number of objects and check quantities by counting up to 20

They solve practical problems that involve combining groups of 2, 5 and 10, or sharing into equal groups.

Shape, Space & Measure

Children estimate, measure, weigh and compare and order objects and talk about properties, position and time.

FUTURE LEARNING

Number

Place Value

Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.

Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.

Given a number, identify one more and one less.

Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.

Read and write numbers from 1 to 20 in numerals and words.

Addition and Subtraction

Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.

Represent and use number bonds and related subtraction facts within 20.

Add and subtract one-digit and two-digit numbers to 20, including zero.

Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = [] - 9$.

Multiplication and Division

Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

Fractions

Recognise, find and name a half as one of two equal parts of an object, shape or quantity.

Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

Measurement

Compare, describe and solve practical problems for:

lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half)

mass or weight (e.g. heavy/light, heavier than, lighter than)

capacity/volume (full/empty, more than, less than, quarter)

time (quicker, slower, earlier, later)

Measure and begin to record the following:

lengths and heights

mass/weight

capacity and volume

time (hours, minutes, seconds)

Recognise and know the value of different denominations of coins and notes.

Sequence events in chronological order using language such as: before and after, next, first, today, Yesterday, tomorrow, morning, afternoon and evening.

Recognise and use language relating to dates, including days of the week, weeks, months and years.

Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.

Properties of Shape

Recognise and name common 2-D and 3-D shapes, including:

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