Maths Key Concepts Progression Grid

Key Concept	KS1		KS2			
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number and Place Value	Children will count to and across 100, forwards and backwards, starting from 0, 1, or any given number. Children will count in multiples of 1s, 2s, 5s and 10s. Children will read and write numbers to 100 in numerals. Children will identify one more and one less than a given number. Children will revise and consolidate counting skills through Daily 3 activities. Children will revise counting in multiples of 1s, 2s, 5s and 10s forwards and backwards through daily starter activities. Children will read and write numbers from 1 to 20 in numerals and words. Children will revise counting in 1s forwards and backwards to 100 and beyond using 100 squares and number lines. Children will revise counting in 2s, 5s and 10s using daily starter counting activities. Children will revise and consolidate reading and writing numbers from 1 to 20 in numerals and words. Children will consolidate their understanding of place value, addition, subtraction and fractions.	Children will consolidate their understanding by using place value and number facts to solve problems, e.g., 124 – what is the value of the digit underlined? Children will read and write numbers to at least 100 in numerals and in words. Children will count in steps of 2 and 5 from 0, and in tens from any number forwards. Children will recognise the place value of each digit in a two-digit number (tens, ones/units), with revision through Daily 5. Children will count in steps of 2 and 5 from 0, and in tens from any number backwards. Children will compare and order numbers from 0 up to 100. Children will use number bonds to add three single-digit numbers, e.g., 6, 4, 8, with revision through Daily 5. Children will use <, > and = signs, including through measures work. Children will count in steps of 3 from 0, consolidating steps of 2s, 5s, and tens from any number, forwards or backwards. Children will identify, represent and estimate numbers using different representations, including the number line. Children will use place value and number facts to solve problems. Children will consolidate place value objectives through investigative work, e.g., NRich activities. Children will apply place value and number facts to solve problems during Transition Week, e.g., 124 – what is the value of the digit underlined?	Children will count from 0 in multiples of 4, 8, 50 and 100. Children will find 10 or 100 more or less than a given number. Children will revise number and place value concepts through Daily 5 activities. Children will compare and order numbers up to 1000. Children will recognise the place value of each digit in a 3-digit number. Children will revise all Year 3 place value activities, including additional reasoning tasks. Children will engage in mathematical investigations to deepen understanding of taught concepts	Children will count backwards through zero to include negative numbers. Children will count in multiples of 6, 7, 9, 25 and 1000. Children will find 1000 more or less than a given number. Children will compare and order numbers beyond 1000. Children will round any number to the nearest 10, 100 or 1000. Children will find 10, 100 or 1000 more or less than a given number beyond 10,000. Children will read and write all numbers to at least 10,000 in numerals and words. Children will order a set of 4- or 5-digit numbers to 100,000 and beyond in increasing and decreasing order. Children will partition 4- and 5-digit numbers. Children will compare numbers up to 100,000 and beyond using =, <, > symbols. Children will round numbers up to and beyond 100,000 to the nearest 10, 100 or 1000. Children will count on/back in 25s, 50s, and 100s from 0 to 10,000 and in 1000s from 0 to 10,000 and beyond. Children will read Roman numerals to 100 and understand how the numeral system has changed over time to include zero and place value.	Children will count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000. Children will read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit. Children will count up and down in thousandths, recognising that thousandths arise from dividing an object into 1000 equal parts or by dividing numbers or quantities by 1000. Children will solve number and practical problems involving all of the above. Children will interpret negative numbers in context and count forwards and backwards with positive and negative numbers, including through zero. Children will read Roman numerals to 1000 and recognise years written in Roman numerals.	Children will read, write, order and compare numbers up to 10,000,000 and determine the value of each digit. Children will round any whole number to a required degree of accuracy. Children will use negative numbers in context and calculate intervals across zero. Children will solve number and practical problems involving all of the above. Children will interpret negative numbers in context, counting forwards and backwards through zero. Children will perform mathematical investigations as a context for deepening understanding of taught concepts.

Addition and Subtraction	Children will read, write and interpret mathematical statements involving the +, – and = signs. Children will work practically using concrete resources to support their understanding. Children will represent and use number bonds and related subtraction facts within 20. Children will revise and practise key skills through Daily 3 activities and the learning zones. Children will solve one-step problems involving addition and subtraction, using concrete objects, pictorial representations and missing number problems. Children will add and subtract one-digit and two-digit numbers to 20, including zero. Children will consolidate their understanding of place value, addition, subtraction and fractions.	Children will recall and use addition and subtraction facts to 20 fluently. Children will add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • a two-digit number and ones • a two-digit number and tens Children will derive and use related facts up to 100 (e.g., if 7 + 3 = 10, we know that 70 + 30 = 100). Children will show that addition of two numbers can be done in any order (commutative) and that subtraction of one number from another cannot. Children will add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • two two-digit numbers • adding three one-digit numbers Children will recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. Children will complete missing number calculations. Children will solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities, and measures. Children will consolidate their understanding through reasoning activities, including money addition and subtraction problems.	Children will add and subtract numbers mentally, including: • a 3-digit number and ones • a 3-digit number and tens • a 3-digit number and hundreds Children will add and subtract numbers with up to 3 digits using formal written methods of columnar addition and subtraction. Children will estimate the answer to a calculation and use inverse operations to check answers. Children will add and subtract measures (length, weight and volume) with up to 3 digits using formal written methods. Children will solve word problems including missing number problems, number facts, place value, and more complex addition and subtraction.	Children will add and subtract numbers with up to 4 digits using formal written methods of columnar addition and subtraction where appropriate. Children will estimate and use inverse operations to check answers. Children will solve two-step addition and subtraction problems in context, deciding which operations and methods to use and why. Children will consolidate addition and subtraction of 3-digit and 1-digit numbers, a 3-digit number and tens, a 3-digit number and hundreds, and combinations of 2- and 3-digit numbers. Children will find complements to 100 and 1000 and recall addition and subtraction facts for 100 and 1000 (e.g., 37 + 63 = 100, 530 + 470 = 1000). Children will count on/back in steps of 11 and 12.	Children will perform mental calculations, including with mixed operations and large numbers. Children will add and subtract numbers mentally with increasingly large numbers. Children will add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). Children will solve multi-step addition and subtraction problems in context, deciding which operations and methods to use and why. Children will use rounding to check answers to calculations and determine levels of accuracy in context. Children will round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 or 100,000. Children will consolidate addition and subtraction using columnar addition and subtraction.	Children will perform mental calculations, including with mixed operations and large numbers. Children will solve multi-step addition and subtraction problems in context, deciding which operations and methods to use and why. Children will use estimation to check answers and determine an appropriate degree of accuracy in context. Children will use their knowledge of the order of operations (BODMAS) to carry out calculations involving the four operations. Children will solve problems involving addition, subtraction, multiplication and division.

Multiplication and Division	Children will 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. Children will 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.	Children will recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. Children will show that multiplication of two numbers can be done in any order (commutative) and that division of one number by another cannot. Children will calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs (number sentences). Children will solve problems involving multiplication and division using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. Children will consolidate their understanding by solving problems involving multiplication and division using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	Children will recall and use multiplication and division facts for the 3, 4 and 8 times tables. Children will write and calculate mathematical statements for multiplication using known multiplication tables, including 2-digit × 1-digit, using mental and progressing to formal written methods. Children will write and calculate mathematical statements for division using known multiplication tables, including 2-digit ÷ 1-digit, using mental and progressing to formal written methods. Children will consolidate their understanding of multiplication and division, including measures, using known multiplication tables, progressing from mental to formal written methods. Children will practise formal methods of multiplication and division with a focus on reasoning.	Children will recall multiplication and division facts for tables up to 12 × 12. Children will recognise and use factor pairs and commutativity in mental calculations. Children will multiply 2- and 3-digit numbers by a 1-digit number using formal written methods. Children will divide 2- and 3-digit numbers by a 1-digit number using formal written methods. Children will find the effect of multiplying a number with up to 2 decimal places by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths. Children will multiply and divide numbers mentally using place value and known facts, including multiplying by 0 and 1, and dividing by 1. Children will multiply three numbers together using place value, known and derived facts.	Children will perform mental calculations, including with mixed operations and large numbers. Children will multiply two- and three-digit numbers by a one-digit number. Children will multiply and divide whole numbers and decimals by 10, 100 and 1000. Children will identify multiples and factors, including finding all factor pairs of a number and common factors of two numbers. Children will multiply and divide numbers mentally, drawing upon known facts. Children will know and use the vocabulary of prime numbers, prime factors and composite numbers. Children will establish whether a number up to 100 is prime and recall prime numbers up to 19. Children will multiply numbers up to 4 digits by a 1-digit or 2-digit number using a formal written method, including long multiplication for 2-digit numbers. Children will divide numbers up to 4 digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately. Children will recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3}). Children will solve problems involving addition, subtraction, multiplication and division.	Children will identify common factors, common multiples and prime numbers. Children will multiply multi-digit numbers up to 4 digits by a two-digit number using the formal written method of long multiplication. Children will divide numbers up to 4 digits by a two-digit number using the formal written method of short or long division, interpreting remainders appropriately (whole numbers, fractions or rounding) depending on context. Children will solve problems involving addition, subtraction, multiplication and division. Children will use estimation to check answers and determine an appropriate degree of accuracy in context. Children will identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where answers are up to three decimal places. Children will multiply one-digit numbers with up to two decimal places by whole numbers. Children will use written division methods where the answer has up to two decimal places.

Fractions and Decimals	Children will recognise, find and name a half as one of two equal parts of an object, shape or quantity. Children will recognise, find and name a quarter as one of two equal parts of an object, shape or quantity. Children will recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. Children will consolidate their understanding and start to link to numbers by recognising, finding and naming a half as one of two equal parts and a quarter as one of four equal parts of an object, shape or quantity.	Children will recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity using division. Children will write simple fractions, e.g., 1/2 of 6 = 3, and recognise the equivalence of 2/4 and 1/2. Children will practise fractions through Daily 5 activities. Children will consolidate their understanding of fractions.	Children will count up and down in tenths and recognise that tenths arise from dividing an object into ten equal parts or by dividing numbers or quantities by 10. Children will recognise and show, using diagrams, equivalent fractions with small denominators. Children will recognise, find and write fractions of a discrete set of objects, including unit fractions and non-unit fractions with small denominators. Children will compare and order unit fractions and fractions with the same denominators. Children will add and subtract fractions with the same denominator within one whole. Children will revise all Year 3 fraction and decimal activities through Daily 5.	Children will recognise and show, using diagrams, families of common equivalent fractions. Children will add and subtract fractions with the same denominator. Children will find the effect of dividing a 1- or 2-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths. Children will count up and down in hundredths and recognise that hundredths arise from dividing an object into 100 equal parts or dividing numbers/quantities by 100. Children will recognise and write decimal equivalents of tenths and hundredths. Children will recognise and write decimal equivalents of $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$. Children will round decimals with one decimal place to the nearest whole number. Children will compare numbers with the same number of decimal places up to two decimal places. Children will count on/back in $\frac{1}{2}$, $\frac{1}{4}$, 1/3, 1/10 and other unit fractions, including on a number line. Children will revise all Year 4 fraction and decimal activities through Daily 5.	Children will identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. Children will read and write decimal numbers as fractions, e.g., 0.71 = 71/100. Children will recognise mixed numbers and improper fractions and convert from one form to the other, writing mathematical statements. Children will compare and order fractions whose denominators are all multiples of the same number. Children will round decimals with two decimal places to the nearest whole number and to one decimal place. Children will read, write, order and compare numbers with up to three decimal places. Children will recognise the percent symbol (%) and understand that per cent relates to "number of parts per hundred," writing percentages as fractions with denominator 100 and as decimals.	Children will use common factors to simplify fractions and common multiples to express fractions in the same denominator. Children will compare and order fractions, including fractions greater than 1. Children will add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. Children will multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g., $\frac{1}{4} \times \frac{1}{2} = 1/8$). Children will divide proper fractions by whole numbers (e.g., $1/3 \div 2 = 1/6$). Children will associate a fraction with division and calculate decimal fraction equivalents (e.g., 3/8 = 0.375). Children will recall and use equivalences between simple fractions, decimals and percentages in different contexts. Children will solve problems which require answers to be rounded to specified degrees of accuracy. Children will solve problems involving the calculation of percentages (e.g., 15% of 360) and use percentages for comparison. Children will solve problems involving the relative sizes of two quantities where missing values can be found using integer multiplication and division facts. Children will solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
Ratio and Proportion						Children will solve problems involving similar shapes where the scale factor is known or can be found. Children will use simple formulae to solve problems. Children will generate and describe linear number sequences. Children will express missing number problems algebraically. Children will find pairs of numbers that satisfy number sentences involving two unknowns.
Algebra						Children will use simple formulae to solve problems. Children will generate and describe linear number sequences. Children will express missing number problems algebraically. Children will find pairs of numbers that satisfy number sentences involving two unknowns.

Measurement		Children will compare, describe and solve practical problems for lengths and heights, and mass/weight. Children will measure and begin to record the following: • Lengths and heights • Mass/weight Children will compare, describe and solve practical problems for capacity and volume. Children will sequence events in chronological order using language such as before, after, next, first, today, yesterday, tomorrow, morning, afternoon, evening. Children will recognise and use language relating to dates, including days of the week, weeks, months and years. Children will compare, describe and solve practical problems for time. Children will measure and begin to record the following: • Capacity and volume Children will tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. Children will consolidate their learning involving length, weight and mass, capacity and volume, time and money. Children will recognise and know the value of different denominations of coins and notes. Children will revise and practise their understanding through Daily 3 activities and the learning zones. Children will consolidate all learning involving length, weight and mass, capacity and volume, time and money.	Children will choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) and mass (kg/g), using rulers, scales and measuring vessels. Children will choose and use appropriate standard units to estimate and measure capacity (litres/ml) to the nearest appropriate unit, using rulers, scales and measuring vessels. Children will compare and order lengths, mass, and volume/capacity, and record the results using >, < and =. Children will compare and sequence intervals of time. Children will tell and write the time to five minutes, including quarter past and quarter to the hour, and draw the hands on a clock face to show these times. Children will know the number of minutes in an hour and the number of hours in a day. Children will recognise and use symbols for pounds (£) and pence (p), and combine amounts to make a particular value. Children will find different combinations of coins that equal the same amounts of money. Children will solve simple problems in practical contexts involving addition and subtraction of money of the same unit, including giving change. Children will choose and use appropriate standard units to estimate and measure temperature (°C) using scales and thermometers.	Children will measure the perimeter of simple 2D shapes. Children will measure, compare, add and subtract amounts of money to give change, using both £ and p in practical contexts. Children will know the number of seconds in a minute and the number of days in each month, year and leap year. Children will compare durations of events to calculate time taken by tasks. Children will estimate and read time with increasing accuracy to the nearest minute. Children will tell and write the time from an analogue clock, including using Roman numerals I–XII, and 12-hour and 24-hour clocks. Children will record and compare time in seconds, minutes, and hours, using vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight.	Children will convert between different units of measure (e.g., km to m, hr to min). Children will find the area of rectilinear shapes by counting squares. Children will measure and calculate the perimeter of rectilinear figures (including squares) in cm and m. Children will read, write and convert time between analogue and digital 12- and 24-hour clocks. Children will explain how the digital clock system works, e.g., 10 past 2 pm = 2:10 pm = 14:10.	Children will measure and calculate the perimeter of composite rectilinear shapes in cm and m. Children will calculate and compare the area of rectangles, including squares, using standard units (cm^2 and m^2) and estimate the area of irregular shapes. Children will estimate volume (e.g., using 1 cm^3 blocks to build cubes, including cuboids) and capacity (e.g., using water). Children will convert between different units of metric measure (e.g., km/m, cm/m, cm/mm, g/kg, l/ml). Children will solve problems involving converting between units of time. Children will understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.	Children will recognise that shapes with the same area can have different perimeters and vice versa. Children will recognise when it is possible to use formulae for area and volume of shapes. Children will calculate the area of parallelograms and triangles. Children will calculate, estimate and compare the volume of cubes and cuboids using standard units (cm^3, m^3) and extend to other units (e.g., mm^3, km^3). Children will solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. Children will use, read, write and convert between standard units, converting length, mass, volume and time from a smaller unit to a larger unit and vice versa, using decimal notation up to three decimal places. Children will convert between miles and kilometres.

Geometry		Children will describe position, direction and movement, including half, quarter and three-quarter turns. Children will consolidate their learning by describing position, direction and movement, including half, quarter and three-quarter turns, and link this to shapes. Children will revise their understanding through Daily 3 activities and through learning zones. Children will recognise and name common 2D shapes, including circles and triangles. Children will identify and describe common 2D shapes, including rectangles (including squares), circles and triangles. Children will revise their understanding through Daily 3 activities and through learning zones. Children will recognise and name common 3D shapes, including cuboids, cubes, pyramids and spheres.	Children will identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. Children will identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. Children will compare and sort common 2-D and 3-D shapes and everyday objects. Children will identify 2-D shapes on the surface of 3-D shapes, for example, a circle on a cylinder and a triangle on a pyramid. Children will use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn, and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise). Children will order and arrange combinations of mathematical objects in patterns and sequences.	Children will identify horizontal and vertical lines and pairs of perpendicular and parallel lines. Children will draw 2D shapes. Children will make 3D shapes using modelling materials, recognise 3D shapes in different orientations, and describe them. Children will recognise angles as a property of shape or as a description of a turn. Children will identify right angles and recognise that two right angles make a half-turn, three make three-quarters of a turn, and four make a complete turn. Children will identify whether angles are greater than or less than a right angle.	Children will identify lines of symmetry in 2D shapes presented in different orientations. Children will complete a simple symmetric figure with respect to a specific line of symmetry. Children will identify acute and obtuse angles and compare and order angles up to two right angles by size. Children will describe positions on a 2D grid as coordinates in the first quadrant. Children will describe movements between positions as translations of a given unit to the left/right and up/down. Children will plot specified points and draw sides to complete a given polygon.	Children will know that angles are measured in degrees and estimate and compare acute, obtuse and reflex angles. Children will identify angles at a point on a straight line and half a turn (180°), angles at a point and one whole turn (360°), and other multiples of 90°. Children will draw given angles and measure them in degrees. Children will identify, describe and represent the position of a shape following a reflection or translation using appropriate language, understanding that the shape has not changed. Children will distinguish between regular and irregular polygons based on reasoning about equal sides and angles. Children will identify 3D shapes, including cubes and other cuboids, from 2D representations. Children will use the properties of rectangles to deduce related facts and find missing lengths and angles. Children will consolidate and revise all Year 5 geometry learning, including work on angles, translations and shape.	Children will draw 2-D shapes using given dimensions and angles. Children will compare and classify geometric shapes based on their properties and sizes. Children will find unknown angles in triangles, quadrilaterals and regular polygons. Children will illustrate and name parts of circles, including radius, diameter and circumference, and know that the diameter is twice the radius. Children will recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. Children will recognise, describe and build simple 3-D shapes, including making nets. Children will describe positions on the full coordinate grid (all four quadrants). Children will draw and translate simple shapes on the coordinate plane and reflect them in the axes.
Statistics			Children will ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Children will interpret and construct simple pictograms, tally charts, block diagrams and simple tables. Children will ask and answer questions about totalling and comparing categorical data.	Children will interpret and present data using bar charts, pictograms and tables. Children will solve 1-step and 2-step questions such as 'How many more?' and 'How many fewer?' using information presented in scaled bar charts, pictograms and other graphs.	Children will interpret and present discrete and continuous data using appropriate graphical methods. Children will solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	Children will complete, read and interpret information in tables, including timetables. Children will solve comparison, addition and difference problems using information presented in a line graph. Children will revise statistics learning through Daily 5 activities.	Children will revise statistics from previous years through Daily 5 reasoning challenges. Children will interpret and construct pie charts and line graphs and use these to solve problems. Children will calculate and interpret the mean as an average.

Key Concept	EYFS

Number and Counting	Children will count objects, actions and sounds reliably. Children will count beyond 10, moving towards counting beyond 20. Children will select the correct numeral to represent a set of objects. Children will count irregular arrangements of up to ten objects.
Understanding Quantity	Children will understand that counting tells us how many objects there are (cardinal principle). Children will subitise small numbers (recognise quantities without counting) up to 5. Children will recognise the composition of numbers to 10, including the idea that numbers can be made up of smaller parts. Children will automatically recall number bonds up to 5, and some number bonds to 10, including doubles.
Comparing and Ordering	Children will compare quantities up to 10 in different contexts and recognise when one quantity is greater than, less than, or the same as another. Children will use the language of 'more', 'fewer', 'same' and 'equal' when comparing sets.
Simple Addition and Subtraction	Children will say the number that is one more than a given number. Children will find one more or one less from a group of up to ten objects and begin to see the pattern of early addition and subtraction. Children will begin to use vocabulary involved in adding and subtracting in practical activities and discussions.

Numerical Patterns	Children will verbally count beyond 20, recognising the pattern of the counting system. Children will explore and represent patterns within numbers up to 10, including using with concepts such as evens and odds and how quantities can be distributed equally.
Shape, Space and Measures (Spatial Reasoning and Comparison)	Children will select, rotate and manipulate shapes to develop spatial reasoning. Children will recognise and describe simple 2D and 3D shapes using words like *side*, *corner*, *flat*, *round*. Children will compose and decompose shapes, noticing that shapes can contain other shapes within them. Children will continue, copy and create repeating patterns. Children will compare lengths, weights and capacities using everyday language.
Early Learning Goals (End of Reception)	Children will have a deep understanding of number to 10, including the composition of each number. Children will subitise (recognise quantities without counting) up to 5. Children will automatically recall number bonds up to 5 (including subtraction facts) and some number bonds to 10. Children will verbally count beyond 20, recognising the pattern of the counting system. Children will compare quantities up to 10 and recognise when one quantity is greater than, less than, or the same as another. Children will explore and represent patterns using numbers up to 10.