Wedge Park Primary School Mathematics Essential Learnings

Topic	Foundation	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
Number and Place Value(P-4) Types of Number (5/6)	**Counting** I can count each object once to find a total I can count forwards and backwards in sequence from 0 to 20 I can count forwards and backwards from any starting points to 20 I can connect number names, numerals and quantities to 10 (then 20) I can order numbers to 20 **Subitising** I can subitise small collections of objects I can use subitising to compare the size of collections **Friends of 5/10** I can create partners of numbers to 5 I can create patterns of numbers to 10	**Counting** I can count to and from 100 by 1s from any starting point I can skip count by 2s from zero I can skip count by 5s from zero I can skip count by 10s from zero **Place Value** I can recognise numbers to 100 I can model numbers to 100 I can read numbers to 100 I can write numbers to 100 I can order numbers to 100 I can locate numbers on a number line and place them onto a prepared number line. I can model numbers in different ways using materials and images I can partition two digit numbers into tens and ones	**Counting** I can skip count by 2's, 5's and 10's from any starting point I can skip count by 3's **Place Value** I can read numbers to 1000 I can model numbers to 1000 using concrete materials and pictures I can write numbers to 1000 I can order numbers to 1000 I can group, partition and rearrange numbers up to 1000 I can place numbers on a numberline by creating intervals	**Counting** I can identify odd numbers I can identify even numbers **Place Value** I can recognise numbers to 10000 I can model numbers to 10000 I can read numbers to 10000 I can order numbers to 10000 I can place numbers on a number line which has a non zero starting point	**Place value** I can recognise numbers to tens of thousands I can model numbers to tens of thousands I can read numbers to tens of thousands I can order numbers to tens of thousands	**Place value** I can recognise numbers to hundreds of thousands I can model numbers to hundreds of thousands I can read numbers to hundreds of thousands I can order numbers to hundreds of thousands I can identify factors I can identify multiples	**Types of Number** I can identify prime and composite numbers I can identify square and triangular numbers I can locate integers on a number line I can use the order of operations to solve a multi-step problem	**Types of Number** I can find the square root of a number using my knowledge of square numbers I can find the difference between two integers I can add and subtract integers I can identify base and index forms of a number and show them in expanded notation

Addition and Subtraction (P-4)	I can add two numbers together by counting all I can add two numbers together by counting on I can count on from the larger number by using a number line I can add two numbers together by drawing a picture, making a model or using a tens frame I can take objects away from a group and work out what is left over I can take away by drawing a picture, making a model or using a tens frame	I can add two numbers together by counting on from the bigger number I can use number facts to ten to solve addition problems I can use friends of 10 to solve addition problems I can find the other 'part' to a whole number I can stop counting when I get to the larger number to find the difference I can use number facts to ten to solve subtraction problems I can take away by counting back	I can add 10 to a number I can use the bridging strategy to add numbers I can double single digit numbers I can double and add 1 I can use the addition symbol when writing addition problems I can use the subtraction symbol when writing subtraction problems I can subtract 10 from a number I can halve numbers to 20	I can explain the connection between addition and subtraction I can identify efficient and inefficient strategies to solve addition and subtraction problems I can use 100s facts to solve addition problems I can use 100s facts to solve subtraction problems	I can partition numbers to solve addition problems I can partition numbers to solve subtraction problems I can use the distributive law to solve addition problems I can use the vertical algorithm to add and subtract numbers	
Multiplication and Division (P-5)	I can share a collection equally using one to one correspondence	I can identify if there is any leftovers when sharing I can represent everyday situations that model sharing.	I can identify and show multiplication as repeated addition I can identify and show multiplication as groups I can identify and show multiplication as arrays I can identify and show division as grouping into equal sets I can solve simple division problems by using knowledge of multiplication I can identify the difference between dividing an object into equal groups and dividing the same set of objects into groups (partition Vs quotation)	I can use strategies to recall multiplication facts of two, three, five and ten I can use my knowledge of multiplication facts to find related division facts	I can investigate number sequences involving multiples of 3, 4, 6, 7, 8, and 9. I can recall multiplication facts up to 10x10 and related division facts I can use known facts and strategies such as commutativity, doubling and halving for multiplication I can solve word problems by using number sentences involving multiplication or division where there is no remainder	I can identify and describe factors and multiples of whole numbers and use them to solve problems I can solve problems involving multiplication of large numbers by one- or two-digit numbers I can use the area model to solve multiplication problems I can solve problems involving division by a one digit number, including those that result in a remainder

Fractions (1-6)		I can explain that a fraction is made up of equal parts I can find half of an object I can share a collection into halves	I can describe how we use fractions in our everyday lives I can partition an object into quarters I can partition an object into eighths I can share a collection into quarters I can share a collection into eighths	I can locate ½, ¼, 1/3 and 1/5 on a number line I can make unit fractions including 1/2, 1/4, 1/3, 1/5 and their multiples to a complete whole	I can recognise common equivalent fractions in real-life situations I can use a fraction wall to find fractions which are equivalent I can continue number sequences involving multiples of quarters, halves and thirds, including with mixed numerals on a number line I can convert mixed numbers to improper fractions and vice versa I can make connections between fractions and decimals	I can compare and order common unit fractions, by using their denominators, and locate and represent them on a number line I can add and subtract fractions with the same denominators	**Real Number** I can find fraction families and locate them on a number line I can add and subtract fractions with related denominators I can find a fraction of a quantity I can connect fractions, decimals and percentages as different representations of the same number	**Real Number** I can add unrelated fractions I can subtract unrelated fractions I can multiply fractions I can divide fractions I can solve rate and ratio problems
Decimals (4-6)					I can explain what a decimal is I can explain the place value of decimals to the hundredths place	I can explain the place value of decimals past the hundredths place I can compare, order and represent decimals on a number line	I can add and subtract decimals I can multiply and divide decimals by multiples of powers of 10	
Patterns and Algebra (P-6)	I can sort and classify familiar objects and explain my reasoning I can copy a non-numerical pattern I can continue a non-numerical pattern I can create a non-numerical pattern	I can identify the repeating part of a pattern I can continue a number pattern	I can describe a pattern I can find the missing number in a counting pattern	I can describe, continue, and create number patterns resulting from performing addition or subtraction I can identify and write the rules for number patterns. I can describe a rule for an increasing or decreasing number pattern	I can use equivalent number sentences involving addition and subtraction to find unknown quantities I can identify missing quantities in number sentences	I can use equivalent number sentences involving multiplication and division to find unknown quantities I can describe, continue and create patterns with fractions, decimals and whole numbers resulting from addition and subtraction	I can identify a linear pattern I can continue and create sequences involving whole numbers, fractions and decimals and describe the rule used to create the sequence	I can construct a table of values I can use a rule to find an unknown value. I understand the difference between an expression and an equation. I can create expressions involving addition and subtraction from a rule I can explain how to substitute values into an equation I can solve simple linear equations using the balance method
Financial Maths (P-6)	I can use toy money to pay for goods in play situations	I can recognise and describe the Australian coins by using their features I can order the Australian coins by their value.	I can count small collections of coins and notes according to their value I can order small collections of coins and notes according to their value	I can represent money values in multiple ways I can count the change required for simple transactions to the nearest five cents	I can solve problems involving purchases and the calculation of change to the nearest five cents in real-life scenarios I can apply the four operations to money transactions	I can create a simple budget	I can investigate and calculate percentage discounts of 10%, 25% and 50% on sale items	I can investigate and calculate best buys

Geometric Reasoning (3-6)				I can identify angles as measures of turn I can recognise that angles have arms and a vertex I can compare angle sizes	I can compare angles and classify them as equal to, greater than or less than a right angle I can classify angles as acute, right or obtuse	I can identify the size of a right angle as 90° and defining acute, obtuse, straight and reflex angles I can estimate, measure and compare angles using degrees I can measure and construct angles using 180° and 360° protractors	I can identify complementary angles I can identify supplementary angles	I can identify corresponding, alternate and co-interior angles in transversals I can justify the conditions of parallel lines I can classify triangles according to their properties I understand the angle sum of a triangle
Length (P-6)	I can compare objects directly to determine which is longer	I can measure and compare the length using the same size everyday objects.	I can compare and order several shapes and objects based on length I can use appropriate everyday objects of the same size to measure length such as a piece of string	I can measure, order and compare objects I can recognise and use centimetres and metres	I can use scaled instruments to measure and compare the length of objects I can use scaled instruments to compare temperatures	I can choose appropriate units of measurement for length	I can connect decimal representations to the metric system I can convert between common metric units of length	
Area/ Perimeter (2-6)			I can use appropriate everyday objects of the same size to measure the area such as a kinder square	I can measure the area of rectangles (including squares) by counting the number of square centimetres	I can compare the areas of regular and irregular shapes using square centimetres	I can calculate the perimeter of rectangles I can find the area of rectangles	I can compare the area of two objects	I can find the areas of parallelograms and triangles
Volume (4-6)					I can compare objects using familiar metric using centimetre cubes	I can choose appropriate units of measurement for volume	I can find the volume of rectangular prisms using centimetre cubes	I can find the volume of rectangular prisms using a formula
Capacity (P-3)	I can compare objects directly to determine which holds more/less	I can measure and compare capacity of containers using same materials e.g. cups, jugs		I can measure, order and compare objects using millilitres and litres				
Mass (P-5)	I can compare objects directly to determine which is heavier/lighter	I can measure and compare mass of objects using words. E.g. heavier, lighter, same		I can recognise and use grams and kilograms	I can compare masses using metric units			
Time (P-6)	I can compare and order the duration of events using everyday language of time I can name the days of the week I can identify the days of the week and link specific days to familiar events I can sequence familiar events in time order	I can describe duration of familiar events using months, weeks, days and hours I can identify the features of a clock (clockwise and anti-clockwise) I can read time to o'clock and the half hour on analogue and digital clocks	I can name and order the months and seasons I can find a date on a calendar I can say the number of days in a month I can tell the time using ¼ past the hour I can tell the time using ¼ to the hour	I can tell the time to the minute I can investigate the relationship between units of time(e.g. 60 minutes in an hour)	I can convert between units of time I can use am and pm notation and solve simple time problems	I can compare 12- and 24-hour time systems and convert between them	I can interpret and use timetables I can measure, calculate and compare elapsed time	

Shape (P-6)	I can sort familiar two-dimensional shapes (squares, circles, triangles and rectangles) I can describe familiar two-dimensional shapes I can name familiar two-dimensional shapes I can sort familiar three-dimensional shapes (cubes, spheres) I can describe familiar three-dimensional shapes I can name familiar three-dimensional shapes	I can describe two-dimensional shapes and objects using 'corners, 'edges' and 'faces' I can recognise and classify familiar three-dimensional objects focusing on simple features such as faces and (sides) and vertices.	I can identify kites and rhombuses I can identify the features of a two-dimensional shape, including straight or curved lines, edges and corners I can identify a cylinder, cone, rectangular prism and triangular prism. I can describe the features of a three-dimensional object, including faces, corners and edges	I can make models of three-dimensional objects I can describe key features/properties of three-dimensional shapes (vertex, vertices, edge, face)	I can identify what two-dimensional shapes the faces of three-dimensional shapes are made up of	I can connect three-dimensional objects with their nets and other two-dimensional representations	I can construct simple pyramids and prisms.	I can draw different views of prisms and solids formed from multiple prisms
Location and Transformation (P-6)	I can use positional words such as beside, between, near, next to, forwards and backwards to describe location I can follow simple directions	I can give and follow directions to familiar locations using directional vocabulary I can use the language of clockwise and anti-clockwise to give and follow directions (use language when teaching clocks)	I can locate locations on familiar maps (school)	I can create and interpret simple grid maps to show position and pathways	I can use the scale to interpret a map I can use the legend to interpret a map I can use directions to find features on a map	I can use a grid reference system to describe locations and pathways	I can locate points on a Cartesian Plane	I can plot points on the Cartesian plane and find coordinates for a given point I can solve simple linear equations I can analyse graphs from real life data
Chance (1-6)		I can describe the outcomes of familiar events using everyday language such as 'will happen', 'won't happen', or 'might happen'	I can describe the outcome of an event as likely or unlikely I can identify some events as certain or impossible I can explain why an event is likely, unlikely, certain or impossible	I can conduct chance experiments I can identify and describe possible outcomes from chance experiments and recognise variation in the results	I can describe possible everyday events and order their chances of them occurring from 'least likely' to 'most likely'. I can identify everyday events where one cannot happen if the other happens I can identify events where the chance of one will not be affected by the occurrence of the other	I can recognise that probabilities range from 0 to 1 I can list outcomes of chance experiments involving equally likely outcomes I can express the probability of the outcomes of simple chance experiments using fractions I can explain the term 'random'	I can describe the probabilities of fractions, decimals and percentages I can conduct chance experiments with both small and large numbers of trials I can predict likely outcomes from chance events and distinguish these from surprising results	I can explain and construct the sample space of an experiment I can explain theoretical probability I can explain experimental probability
Data (P-6)	I can answer a question that has only two possible answers I can use simple displays to represent responses to questions I can use a pictograph to identify more or less	I can ask simple questions to gather data that I need I can represent data in a pictograph I can describe pictographs by comparing data	I can create a question to gather categorical data I can use tally marks accurately to collect data I can record my results in a list,table and pictograph I can interpret the data from lists, tables and pictographs	I can plan for the collection of data I can collect data, organise into categories and create displays using column graphs I can interpret and compare data displays	I can create pictographs with a key I can trial different ways to collect data I can identify the best way to display data I can evaluate the effectiveness of different data displays	I can identify if data is numerical or categorical I can pose questions and collect categorical or numerical data I can construct displays, including column graphs, dot plots and tables depending on the data I can compare and interpret different data sets in context	I can construct, interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables I can pose and refine questions to collect categorical or numerical data by observation or survey I can interpret secondary data presented in digital media and elsewhere	I can create a dot plot I can interpret a dot plot I can create a stem and leaf plot I can interpret a stem and leaf plot I can find the mean, median, mode and range of data I can compare the measures of centre when analysing data