Subject: Maths Year: 4 Term: Spring/ Summer

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**Unit:** Decimals



| Vocabulary  | Knowledge  | Understanding   | Skills   |
|---|--|---|--|
|   | Children will know (that)  | Children will understand (that)   | Children will be able to   |
| tenths hundredths decimal decimal fraction decimal point decimal place decimal equivalent | 1 tenth = 1/10 = 0.1 there are ten 0.1 in 1. 1 is 10 times as much as 0.1. there are ten 0.01 in 0.1. 0.1 is 10 times as much as 0.01 1 hundredth = 1/100 = 0.01  Stem Sentences 1 is 10 times the size of one-tenth. One-tenth is 10 times the size of one-hundredth.  1 is 100 times the size of one-hundredth. 10 tenths is equal to 1 one. | <ul> <li>10 tenths are equivalent to 1.         10 hundredths are equivalent to one tenth.</li> <li>the place value of each digit in a number with 2 decimal places.</li> <li>when comparing numbers, they need to start with comparing the digits in the place with the largest value.</li> <li>when dividing by 10 the number is being split into 10 equal parts and is 10 times smaller.</li> <li>when dividing by 100 the number is being split into 100 equal parts and is 100 times smaller.</li> </ul> | <ul> <li>read and write numbers consisting of ones and tenths.</li> <li>regroup 10 tenths to make 1.</li> <li>rewrite tenths from a fraction to a decimal.</li> <li>place a decimal number on a number line.</li> <li>use Base 10 blocks to show a decimal consisting of ones, tenths and hundredths.</li> <li>write fractions as decimals.</li> <li>write mixed numbers as decimals.</li> <li>write tenths as decimals.</li> <li>write hundredths as decimals.</li> </ul> |

| 10 hundredths is equal to 1 tentless of 100 hundredths is equal to 1 one | holder.  |
|--|--|
|  | compare and order numbers with 2 decimal places. |
|  | add/subtract tenths to a number.                 |
|  | add/subtract hundredths to a number.             |

Subject: Maths Year: 4 Term: Summer

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Unit: Money



| Vocabulary  | Knowledge  | Understanding   | Skills   |
|---|--|---|--|
|   | Children will know (that)  | Children will understand (that)   | Children will be able to   |
| money coin penny, pence, pound price, cost buy, bought, sell, sold spend, spent pay | <ul> <li>£1 = 100p</li> <li>10 x 10p = £1</li> <li>the order of the digits to compare based on their place value when comparing amounts</li> </ul> | <ul> <li>decimal notation for pounds and pence.</li> <li>why we write a decimal point between the pounds and the pence.</li> <li>the equivalence between 1/10/100 and 10p and 1p.</li> <li>how to put decimal numbers on a number line when rounding to the nearest pound.</li> <li>the importance of the place holder when writing amounts,</li> </ul> | <ul> <li>convert between pounds and pence.</li> <li>compare amounts of money with different amounts of pounds.</li> <li>compare amounts of money when the amount of pounds are the same.</li> <li>round amounts to the nearest £ and the nearest £10.</li> </ul> |

| change                                       | e.g. three pounds and 5 pence |
|--|-------------------------------|
| dear, costs                                  | is written as £3.05 not £3.5. |
| more   |                               |
| cheap, costs less, cheaper costs the same as |                               |
| how much?                                    |                               |
| how many?                                    |                               |
| total  |                               |

Subject: Maths Year: 4 Term: Summer

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Unit: Time



| Vocabulary   | Knowledge   | Understanding   | Skills   |
|--|---|---|--|
|  | Children will know (that)   | Children will understand (that)   | Children will be able to   |
| days of the week, Monday,<br>Tuesday   |   |   |  |
| months of the year (January, February) seasons: spring, summer,                    |   | how many minutes past the<br>hour determines the digital<br>time.                                     | <ul> <li>tell time to the minute and<br/>hour using an analogue clock.</li> </ul>  |
| autumn, winter day, week, weekend, fortnight,                                      | the number of seconds in 1 minute. the number of seconds in 10 minutes. | <ul> <li>the difference between a.m times and p.m times.</li> <li>the relationship between</li> </ul> | <ul> <li>use a.m. and p.m. to describe the time of day.</li> <li>use a clock to show and tell</li> </ul>   |
| month, year, century morning, afternoon, evening, night today, yesterday, tomorrow | the number of months in a year.   | multiplying by 6 and multiplying by 60 when converting times.   | <ul> <li>time.</li> <li>use 12-hour time notation.</li> <li>use 24-hour time notation.</li> <li>convert 12-hour time into 24-hour time and view and</li></ul> |
| before, after  |   |   | hour time and vice versa. • determine the duration of time using analogue and  |

| earlier, later next, first, last<br>midnight, noon<br>calendar, date  |  | digital clocks, 12- and 24-<br>hour time.  use a number line to compare<br>12- and 24-hour time. |
|---|--|--|
| takes longer, takes less  |  | <ul> <li>convert minutes into seconds</li> </ul>   |
| how long ago? how long will it<br>be to? how long will it take to<br>? how often? always, never,<br>often, sometimes usually once,<br>twice                                       |  | and vice versa.  |
| hour, o'clock, half past, quarter past, quarter to 5, 10, 15 minutes past   |  |  |
| a.m., p.m. clock, clock face,<br>watch, hands   |  |  |
| digital/analogue clock/watch,<br>timer hour hand, minute hand<br>hours, minutes, seconds<br>timetable, arrive, depart Roman<br>numerals 12-hour clock time,<br>24-hour clock time |  |  |

Subject: Maths Year: 4 Term: Summer

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Unit: Properties of shape



| Vocabulary  | Knowledge   | Understanding  | Skills   |
|---|---|--|--|
|   | Children will know (that)   | Children will understand (that)  | Children will be able to   |
| 2-D shape  Polygon- (from Greek "manyangled)  Quadrilateral- (Latin quadrilaterus, from quadri- "four" and latus "the side, flank of humans or animals, lateral surface,")  Regular, irregular  Vertex, vertices  sides  point, pointed | <ul> <li>an acute angle is more than 0 degrees and less than 90 degrees.</li> <li>a right-angle is exactly 90 degrees.</li> <li>an obtuse angle is greater than 90 degrees and less than 180 degrees.</li> <li>equilateral triangles have equal vertices of 60 degrees.</li> <li>a rhombus has equal length sides but not angles.</li> </ul> Stem Sentences | <ul> <li>regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal.</li> <li>whether a shape is a polygon or not.</li> <li>right-angled triangles can be either isosceles or scalene triangles but cannot be equilateral triangles.</li> <li>a square is a type of rectangle.</li> <li>where line symmetry exists within a shape, the shape can be split into two parts which are a reflection of one another.</li> </ul> | <ul> <li>use an angle tester to check if an angle is larger or smaller than a right angle.</li> <li>compare and order the size of angles in ascending and descending order.</li> <li>identify angles in different representations, including in shapes and on a grid.</li> <li>classify triangles using the names 'isosceles', 'scalene' and 'equilateral'.</li> <li>classify quadrilaterals according to their properties.</li> <li>identify line symmetry in 2D shapes presented in different orientations.</li> </ul> |

| Triangles  Isosceles- (Greek isoskelēs, from isos 'equal' + skelos 'leg'.)  Scalene- (Greek skalēnos 'unequal'; related to skolios 'bent'.)  Equilateral- (Latin aequilateralis, from aequilaterus 'equal-sided')  Quadrilaterals  Square  Rectangle  Rhombus  Parallelogram  Trapezium | "This is a regular polygon, because all of the sides are the same length, and all of the interior angles are equal."  "This is a line of symmetry because it splits the shape into two equal parts which are mirror images." | reflect shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry |
|---|--|--|
| 3-D shape<br>Face   |  |  |
| Edge  |  |  |
| vertex, vertices  |  |  |
| арех  |  |  |
| prism   |  |  |

| Angle          |  |  |
|----------------|--|--|
| Right-angle    |  |  |
| Acute          |  |  |
| obtuse         |  |  |
| Clockwise      |  |  |
| Anti-clockwise |  |  |
|                |  |  |
| <u>Line</u>    |  |  |
| Horizontal     |  |  |
| Vertical       |  |  |
| Parallel       |  |  |
| Perpendicular  |  |  |
|                |  |  |
|                |  |  |
|                |  |  |
|                |  |  |

Subject: Maths Year: 4 Term: Summer

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**Unit: Statistics** 



| Vocabulary  | Knowledge  | Understanding   | Skills  |
|---|--|---|---|
|   |  |   |   |
|   | Children will know (that)  | Children will understand (that)   | Children will be able to  |
| Chart, bar chart, frequency table, Carroll diagram, Venn diagram Axis, axes Diagram | <ul> <li>the different ways to present data.</li> <li>how to read different scales.</li> <li>the X axis is the horizontal axis and the y axis is the vertical axis.</li> <li>what the x and y axes represent in different graphs.</li> </ul> | <ul> <li>which scale is most appropriate when drawing bar charts.</li> <li>continuous data in the context of time.</li> <li>continuous data can be measured, but as values are changing all the time, the values we read off are only estimates.</li> </ul> | <ul> <li>gather their own data, using tally charts and then present the information in bar charts.</li> <li>ask and answer questions relating to data in a variety of diagrams and charts.</li> <li>read a line graph accurately.</li> <li>make up their own stories for empty line graphs</li> </ul> |
| Horizontal rows  Vertical columns  Continuous data                                  | <ul> <li>how to use a ruler to read<br/>information from a line graph.</li> </ul>  | <ul> <li>the difference between bar<br/>charts (discrete) and line<br/>graphs (continuous).</li> </ul>  |   |
| Line graph  |  |   |   |

Subject: Maths Year: 4 Term: Summer

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Unit: Position and direction



| Vocabulary  | Knowledge   | Understanding  | Skills  |
|---|---|--|---|
|   | Children will know (that)   | Children will understand (that)  | Children will be able to  |
| Coordinates Axes X axis Y axis Quadrant First quadrant clockwise, anticlockwise | <ul> <li>Pupils know how to read and write coordinates.</li> <li>Pupils know that when reading and writing coordinates, the X axis is read first.</li> <li>Pupils know the notation of coordinates within brackets.</li> <li>Pupils know that when translating shapes, each vertex must make the same movement.</li> <li>Pupils know that when translating shapes, you move along the X axis first (left</li> </ul> | <ul> <li>Pupils understand why describing the distance from 2 locations gives and accurate position.</li> <li>Pupils understand that points must be plotted on grid lines not between them.</li> <li>Pupils understand that when translating a shape, the shape itself does not change.</li> </ul> | <ul> <li>Pupils can use the grid to describe position.</li> <li>Pupils can describe position accurately.</li> <li>Pupils can describe the position of vertices from the x and y axis.</li> <li>Pupils can describe a translation given the final coordinates of one vertex of the shape.</li> <li>Pupils can use a coordinate grid to translate figures.</li> </ul> |

| compass point  | /right) before moving along the                              |  |
|--|--|--|
| north, south, east, west, N, S, E, W north-east, north-west, | Y axis (up/down)  Stem Sentences                             |  |
| south-east, south-west, NE,<br>NW, SE, SW                    | "The polygon has been  |  |
| horizontal, vertical, diagonal                               | translated 4 squares to the right and 3 squares down."       |  |
| translate, translation                                       |  |  |
| movement   | "First count along the x-axis, then count along the y-axis." |  |
| whole turn, half turn, quarter turn, three-quarter turn      |  |  |
| rotate, rotation   |  |  |
| angle, is a greater/smaller<br>angle than degree             |  |  |
| right angle  |  |  |
| acute angle  |  |  |
| obtuse angle   |  |  |
| reflection   |  |  |
| straight line  |  |  |