# Maths Vocabulary Progression 

This document outlines the vocabulary progression across our mathematics curriculum (White Rose)

| Number - Number and place <br> value |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nursery | Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| count | order/ordinal | sort | count in steps | ascending | negative <br> numbers | ten thousands | millions |
| subitise | compare | represent | count in <br> multiples | descending | roman <br> numerals | one hundred <br> thousands | ten millions |
| numerals | forwards | multiples | place value | 10 or 100 <br> more | 1000 more | powers of |  |
|  | backwards | partitioning | estimate | 10 or 100 <br> less | 1000 less | integer |  |
|  | digit | ones | compare | hundreds | thousands |  |  |
|  | one more | tens |  |  | round |  |  |
|  | one less |  |  |  |  |  |  |
|  | equal to <br> more than |  |  |  |  |  |  |


| Addition and subtraction |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nursery | Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| total | add | addition/add | sum | column <br> addition | 4-digit <br> number |  |  |
|  | plus | subtraction | 3-digit <br> number | column <br> subtraction | operations |  |  |
|  | altogether | difference | commutative | exchange | methods |  |  |
|  | take away <br> /minus | equals |  | estimate |  |  |  |
|  | number <br> bonds | facts |  |  |  |  |  |
|  | part | problems |  |  |  |  |  |
|  | whole | missing <br> number <br> problems |  |  |  |  |  |


| Multiplication and <br> division |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |  |
| double | multiplication | multiplication <br> tables | exchange | factor pairs | multiples | multi-digit <br> numbers |  |
| half | division | commutative | mathematical <br> statements | formal <br> written <br> layout | factors | long division |  |
| twice as many | arrays | repeated <br> addition | missing number <br> problems | distributive <br> law | prime numbers |  |  |
| equal |  |  | integer scaling <br> problems | remainders | square <br> numbers |  |  |
| unequal |  |  | correspondence <br> problems |  | cube numbers |  |  |
| share |  |  | derived facts |  | short division |  |  |
| group |  |  |  |  | product |  |  |
| odd |  |  |  |  | dividend |  |  |
| even |  |  |  |  |  | divisor |  |


| Fractions/Decimal s/Percentages |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Recep tion | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | $\begin{gathered} \text { Year } \\ 6 \end{gathered}$ |
|  | whole | three quarters | tenths | decimal equivalence | fifth |  |
|  | half | third |  | hundredths | thousandt hs |  |
|  | quarter | equivalent fractions |  | $\begin{gathered} \text { conv } \\ \text { ert } \end{gathered}$ | mixed numbers |  |
|  | equal parts | unit fractions |  | proper <br> fractions | $\begin{gathered} \text { per cent } \\ \% \\ \hline \end{gathered}$ |  |
|  |  | non unit fractions |  | improper fractions | factors |  |
|  |  | numerator |  | decimal point | integer |  |
|  |  | denominator |  |  | complem ents |  |
|  |  | one whole |  |  |  |  |


| Ratio and proportion |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  |  |  |  |  |  | relative size |
|  |  |  |  |  |  | missing values |
|  |  |  |  |  |  | integer <br> multiplication |
|  |  |  |  |  |  | percentages |
|  |  |  |  |  |  | scale factor |
|  |  |  |  |  | unequal sharing <br> \& grouping |  |


| Algebra |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |  |
|  |  |  |  |  |  | formulae |  |
|  |  |  |  |  |  | linear number <br> sequences |  |
|  |  |  |  |  |  | algebraically |  |
|  |  |  |  |  |  | equation |  |
|  |  |  |  |  |  | unknowns |  |
|  |  |  |  |  |  | combinations |  |
|  |  |  |  |  |  | variables |  |


| Measurement (Measure and Length) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nursery | Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| compare | measure | compare | standard units | millimetre mm | kilometres km | decimal notation | conversion |
| long(er)(est) | wide(er) |  | estimate | perimeter | rectilinear figure | scaling | miles |
| short(er)(est) | narrow(er) |  | order |  | area | metric units | formulae |
| length |  |  | record results |  |  | imperial units | parallelograms |
|  |  |  | centimetre cm |  |  | inches | triangles |
|  |  |  | metre m |  |  | compound shape | feet |
|  |  |  |  |  |  | irregular shapes |  |
|  |  |  |  |  |  | square centimetres |  |
|  |  |  |  |  |  | square metres |  |


| Measurement (Height, <br> Weight and Capacity) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nursery | Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| height | biggest | mass | kilogram kg |  |  | cubic <br> centimetre | cubic metre |
| long(er)/short(er) | less than | volume | gram g |  |  | pounds | cubic <br> millimetre |
| tall(er)/short(er) | half/half <br> full |  | quarter full |  |  | cubic <br> kilometre |  |
| weight |  |  | three <br> quarters full |  |  | gallons |  |
| capacity |  |  | litres I |  |  |  | stones |
| heavy/light |  |  | millilitres ml |  |  |  | ounces |
| heavier than |  |  | temperature |  |  |  |  |
| lighter than |  |  | Celsius |  |  |  |  |
| big/bigger |  |  |  |  |  |  |  |
| full/empty |  |  |  |  |  |  |  |
| more than |  |  |  |  |  |  |  |
| Little |  |  |  |  |  |  |  |
| small |  |  |  |  |  |  |  |
| fewer than |  |  |  |  |  |  |  |


| Measurement (Time) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nurser | Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year $6$ |
| before | time | chronological order | interva Is of time | analogu e clock | conve rt |  |  |
| after | quicker | days of the week | quarte past/to | roman numeral s |  |  |  |
| first | slower | months of the $\qquad$ year | $\begin{aligned} & \text { duratio } \\ & \mathrm{n} \end{aligned}$ | 12-hour clock |  |  |  |
|  | earlier | $\begin{gathered} \text { mont } \\ \mathrm{h} \end{gathered}$ |  | 24-hour clock |  |  |  |
|  | later | year |  | a.m./p. m. |  |  |  |
|  | next | $\begin{aligned} & \text { o'clo } \\ & \text { col } \end{aligned}$ |  | noon |  |  |  |
|  | today | half <br> past |  | $\underset{t}{\text { midnigh }}$ |  |  |  |
|  | yesterd <br> ay | $\begin{gathered} \text { seco } \\ \text { nd } \end{gathered}$ |  | leap <br> year |  |  |  |
|  | tomorro <br> w |  |  | digital |  |  |  |
|  | $\begin{gathered} \text { mornin } \\ \mathrm{g} \\ \hline \end{gathered}$ |  |  |  |  |  |  |
|  | afternoon |  |  |  |  |  |  |
|  | evening |  |  |  |  |  |  |
|  | day |  |  |  |  |  |  |
|  | week |  |  |  |  |  |  |
|  | hour |  |  |  |  |  |  |


|  | minutes |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |


| Measurement <br> (Money) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Recepti <br> on | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |  |
|  | money | value |  |  |  |  |  |
|  | coins | change |  |  |  |  |  |
|  | notes |  |  |  |  |  |  |
|  | pounds $£$ |  |  |  |  |  |  |
|  | pence p |  |  |  |  |  |  |


| Geometry - Properties of Shape |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nurser | Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| 2-d shapes | characteristic s | propertie s | pentagon | rightangle triangle | isosceles | regular polygon | radius |
| rectangl e | cone | pyramids | hexagon | heptagon | equilateral |  | diameter |
| square | curved | faces | line of symmetr y | octagon | scalene |  | circumferenc e |
| circle |  |  | $\begin{gathered} \text { propertie } \\ \mathrm{s} \\ \hline \end{gathered}$ | polygon | trapezium |  | dimensions |
| triangle |  |  | edges | $\begin{gathered} \text { propertie } \\ \mathrm{s} \\ \hline \end{gathered}$ | rhombus |  |  |
| sides |  |  | vertices | prism | parallelogra m |  |  |


| corners |  |  | vertex |  | kite |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3-d <br> shapes |  |  |  |  | geometric <br> shapes |  |  |
| cuboids |  |  |  |  | quadrilateral <br> s |  |  |
| cubes |  |  |  |  |  |  |  |
| spheres |  |  |  |  |  |  |  |
| straight |  |  |  |  |  |  |  |
| flat |  |  |  |  |  |  |  |
| cylinder |  |  |  |  |  |  |  |
| round |  |  |  |  |  |  |  |


| Geometry Properties of shape (2) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Recepti on | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  |  |  | orientations |  | reflex angles |  |
|  |  |  | angles |  | degrees |  |
|  |  |  | acute angle |  | one whole turn |  |
|  |  |  | obtuse angle |  | angles on straight line |  |
|  |  |  | turn |  | angles around a point |  |
|  |  |  | right angles |  | vertically opposite |  |
|  |  |  | half turn |  | missing angles |  |
|  |  |  | three quarters of a turn |  |  |  |
|  |  |  | greater than |  |  |  |


|  |  |  | right angle |  |  |  |
| :--- | :--- | :--- | :---: | :--- | :--- | :--- |
|  |  |  | less than right <br> angle |  |  |  |
|  |  |  | horizontal lines |  |  |  |
|  |  |  | vertical lines |  |  |  |
|  |  |  | perpendicular <br> lines |  |  |  |
|  |  |  | parallel lines |  |  |  |
|  |  |  |  |  |  |  |


| Geometry - Position and direction |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nursery | Reception | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| under | over | position | clockwise/anticlockwise |  | coordinates | reflection | four quadrants |
| on | between | direction | straight line |  | first quadrant |  | COordinate plane |
| behind | around | movement | rotation |  | grid |  |  |
| repeat | through | whole turn | arrange |  | translation |  |  |
| patterns | into | quarter turn | sequences |  | plot |  |  |
| in | next to | half turn |  |  | polygon |  |  |
| out | beneath | threequarter turn |  |  | axis |  |  |
| in front of | order |  |  |  |  |  |  |
|  | on top of |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |


| Statistics |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Recepti on | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|  |  | pictograms | table | time graph | timetable | pie chart |
|  |  | tally chart | bar chart | discrete data | two-way tables | mean |
|  |  | block diagram | one-step problem | $\begin{gathered} \text { continuous } \\ \text { data } \end{gathered}$ |  |  |
|  |  | category | two-step problem | line graph |  |  |
|  |  | sorting |  | comparison problem |  |  |
|  |  | totalling |  | sum problem |  |  |
|  |  | comparing |  | difference problem |  |  |
|  |  | horizontal |  | calculate |  |  |
|  |  | vertical |  | interpret |  |  |

