




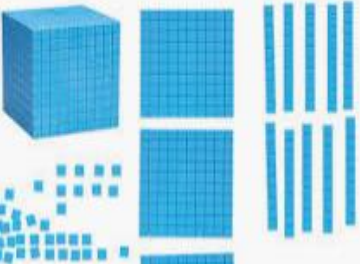


Concrete Resource Bank for Maths

Concrete resource	Picture	Learning that it can support...
2d shapes		<ul style="list-style-type: none"> Names and properties of 2d shapes Sorting and classifying Ratio- <i>for every 3 red circles, there are 2 yellow circles</i> Tessellation Repeating patterns
3d shapes		<ul style="list-style-type: none"> Names and properties of 3d shapes Sorting and classifying Ratio- <i>for every 3 red cubes, there are 2 yellow cubes</i> Repeating patterns
Analogue clock face		<ul style="list-style-type: none"> Time Fractions- <i>quarter, half, 3 quarters</i> Position and direction- <i>clockwise, anti-clockwise, quarter, half, three quarter</i>
Arrow cards		<ul style="list-style-type: none"> Place value Partitioning All four operations
Balancing scales		<ul style="list-style-type: none"> Weight Comparing weights- <i>use of vocabulary such as heavier and lighter</i> Sorting and classifying
Base 10		<ul style="list-style-type: none"> Place value Partitioning All four operations Volume- <i>to demonstrate w x l x d using cubed cms</i> Comparing numbers

<p>Bead strings</p>		<ul style="list-style-type: none"> • Adding and subtraction (counting on and back, more and less) • Division- <i>split the beads into equal groups</i> • Odds and evens- <i>investigating the number 7, do all beads have a partner?</i>
<p>Beakers, jugs and containers</p>		<ul style="list-style-type: none"> • Volume- <i>how much is in the container?</i> • Capacity- <i>how much can the container hold?</i>
<p>Bean bags</p>		<ul style="list-style-type: none"> • Sorting and classifying- <i>sorting colours</i> • Ratio- <i>for every 3 greens, there are 2 yellows</i> • Counting- <i>one to one correspondence</i>
<p>Coins and notes</p>		<ul style="list-style-type: none"> • Money- <i>identifying notes and coins, addition and subtraction, finding change</i>
<p>Coloured counters</p>		<ul style="list-style-type: none"> • Fractions- <i>$\frac{1}{4}$ are red, $\frac{1}{2}$ are yellow and $\frac{1}{2}$ are blue</i> • Percentages- <i>20% are red, 10% are blue, 30% are purple and 40% are purple</i> • Decimals- <i>using 10 counters to represent 1 being broken into tenths-each counter is 0.1</i> • Ratio- <i>for every 3 purples, there is 1 yellow</i> • Place value- <i>placing the correct amount into each column of a place value grid</i>
<p>Compare bears, dinosaurs etc</p>		<ul style="list-style-type: none"> • Sorting and classifying • One more and one less • Counting- <i>one to one correspondence</i> • Comparing- <i>larger/smaller</i>

<p>Counting stick</p>		<ul style="list-style-type: none"> • Fractions- <i>show me where $\frac{1}{2}$ is, show me where $\frac{3}{4}$ is...</i> • More and less • Equivalent fractions- <i>use several sticks to build a fraction wall</i> • Counting- <i>counting in 2s, 5s and 10s etc</i>
<p>Dice</p>		<ul style="list-style-type: none"> • Probability- <i>what is the probability that I will roll as even number?</i> • Number bonds- <i>roll 2 dice and at speed, add them together</i> • Times tables- <i>roll 2 dice and at speed, multiply them together</i>
<p>Digit cards</p>		<ul style="list-style-type: none"> • Recognising digits • Counting • Ordering numbers • One more and one less
<p>Dominoes</p>		<ul style="list-style-type: none"> • Repeating pattern • Number bonds- <i>at speed, add both sides of the domino together</i>
<p>Double sided counters</p>		<ul style="list-style-type: none"> • Ratio • Representing number- <i>here are 10 counters, represent the number 1752</i> • Place value- <i>place them into the correct columns of a place value grid</i>
<p>Geo boards</p>		<ul style="list-style-type: none"> • Properties of 2d shapes- <i>create a pentagon, using it's properties</i> • Naming shapes- <i>shape pictinary, with a partner</i> • Translation- <i>move the shape 2 squares down and 2 squares left</i> • Reflection- <i>reflecting a shape across a mirror line</i> • Coordinates- <i>place numbers around the edge of the board and record coordinates of a shape</i>

<p>Large class bar model</p>		<ul style="list-style-type: none"> • Equivalent fractions • Finding fractions of numbers • All four operations- <i>including missing number problems</i> • Problem solving- <i>working out which operation would be best to solve the problem</i> • Number bonds- <i>the full bar is 10, the 2 parts represent 7 and ____?</i>
<p>Metre ruler 30cm ruler</p>		<ul style="list-style-type: none"> • Measuring- <i>finding perimeter and area</i> • Decimals- <i>the stick is the whole, the tens represent tenths and the smaller numbers represent the hundredths</i> • Odds and evens- <i>identifying odd and even numbers</i>
<p>Multilink cubes</p>		<ul style="list-style-type: none"> • All four operations • Sorting and classifying • Volume- <i>build a shape that has a volume of 27cm³</i> • Fractions- <i>find 1/3 of the amount of cubes</i> • Number bonds
<p>Number fans</p>		<ul style="list-style-type: none"> • Counting • One more and one less
<p>Numbered cones/tiles</p>		<ul style="list-style-type: none"> • Ordering numbers • Counting in 1s, 2s etc • One to one correspondence
<p>Numicon</p>		<ul style="list-style-type: none"> • Identifying odds and evens • Addition and subtraction • Symmetry • Doubling • Number bonds

<p>Peg board</p>		<ul style="list-style-type: none"> Counting Sorting Grouping colours Pattern making Multiplication and division-<i>arrays</i>
<p>Place value counters</p>		<ul style="list-style-type: none"> Place value- <i>determine the value of each digit by building the number from the counters</i> Partitioning-<i>place counters on a place value grid</i> Addition and subtraction- <i>use partitioning to assist with calculations</i>
<p>Sorting circles</p>		<ul style="list-style-type: none"> Sorting and classifying-<i>sorting into groups or a Venn diagram</i> Reasoning skills-<i>children to sort problems into categories of what operation will need to be used. For GDS, children to choose the categories for each problem and reason as to why they have chosen that category</i>
<p>Ten frames</p>		<ul style="list-style-type: none"> Number bonds to 10/20 Adding- <i>bridging 10, use an additional board</i> Identifying odd and even numbers Place value- <i>the number 12 is 1 ten and 2 ones</i> Decomposing numbers- <i>all the possibilities of pairs of numbers to make 7</i>
<p>Thermometers</p>		<ul style="list-style-type: none"> Measuring temperature
<p>Weighing scales</p>		<ul style="list-style-type: none"> Weighing items Comparing and difference- <i>weighing 2 different quantities and working out the difference in weight</i> Problem solving - <i>"Phoebe needs 500g of sugar to bake a cake. She has 225g, how much more does she need?"</i>