

# Maths

Number

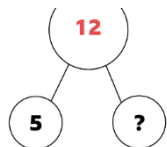
Shape, space &  
measures

Statistics

# Long Term Plan

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn term	Number <b>Place value</b> FREE TRIAL VIEW				Number <b>Addition and subtraction</b> VIEW				Geometry <b>Shape</b> VIEW			
Spring term	Measurement <b>Money</b> VIEW		Number <b>Multiplication and division</b> VIEW				Measurement <b>Length and height</b> VIEW		Measurement <b>Mass, capacity and temperature</b> VIEW			
Summer term	Number <b>Fractions</b> VIEW			Measurement <b>Time</b> VIEW			<b>Statistics</b> VIEW		Geometry <b>Position and direction</b> VIEW		Consolidation	

\*All skills taught during the calculation units at the beginning of the year are then embedded throughout the other areas of Maths.

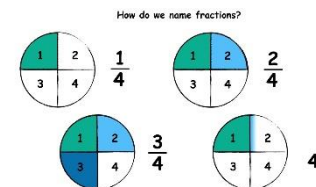


# End of year expectations



## Number

- The pupil can partition two-digit numbers into different combinations of tens and ones, explaining their method verbally, in pictures or using apparatus.
- The pupil can add and subtract any two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus.
- The pupil can recall all number bonds to and within 10 and use these to reason with. Calculate bonds to and within 20, recognising other associated additive relationships.
- The pupil can recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables to solve simple problems, demonstrating an understanding of commutativity as necessary.
- The pupil can identify  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{2}{4}$ ,  $\frac{3}{4}$  and knows that all parts must be equal parts of the whole.

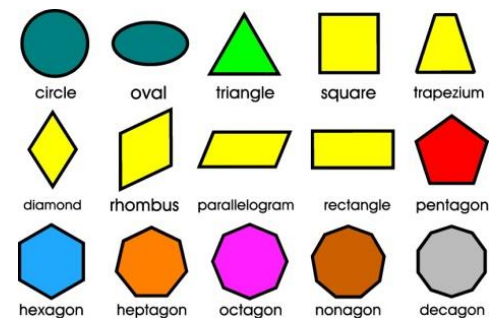


# End of year expectations



## Shape, space and measures

- The pupil can use different coins to make the same amount (e.g. pupil uses coins to make 50p in different ways; pupil can work out how many £2 coins are needed to exchange for a £20 note).
- The pupil can read scales in divisions of ones, twos, fives and tens in a practical situation where all numbers on the scale are given (e.g. pupil reads the temperature on a thermometer or measures capacities using a measuring jug).
- The pupil can read the time on the clock to the nearest 15 minutes.
- The pupil can describe properties of 2-D and 3-D shapes (e.g. the pupil describes a triangle: it has 3 sides, 3 vertices and 1 line of symmetry; the pupil describes a pyramid: it has 8 edges, 5 faces, 4 of which are triangles and one is a square).

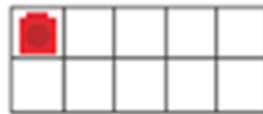


# What is depth?

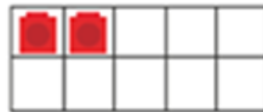
Concrete,

Pictorial,

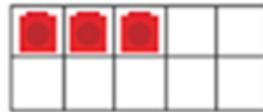
Abstract



1



2



3



4

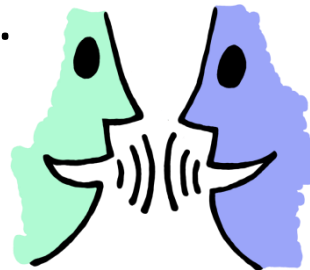


# The Key Three

- Fluency – number facts and quick calculation.  
(Calculation policy available online)



- Reasoning – being able to explain working and show good conceptual understanding.



- Problem Solving – applying mathematical skills and knowledge to unfamiliar situations.

# The Oaktree School Calculation Policy



ADDITION		CPA
<p><b>Strategy and Guidance</b></p> <p>Joining two groups and then recounting all objects using one-to-one correspondance.</p>		
<p><b>Counting On</b></p> <p>As a strategy this should be limited to adding only small numbers such as pupils understanding in at counting on from the greater a more efficient. Pupils will be encouraged to use number bond knowledge as their main strategy.</p>		
<p><b>Numicon as groups</b></p> <p>Numicon is a useful resource for adding two or more numbers together. The children can recognise the pieces as the number because they are able to form the number and can begin by counting up the holes before learning to find the solution by looking at the shape that they</p>		

SUBTRACTION		CPA
<p><b>Strategy and Guidance</b></p> <p>Taking away from the ones.</p> <p>This works best when introduced, concrete objects are placed up on the pictures and the physically 'taken away'.</p>		
<p><b>Counting Back</b></p> <p>Pupils will be encouraged to rely on number bond knowledge as their main strategy.</p>		
<p><b>Five-Five-Whole</b></p> <p>This model is where children to recall the first sum and then add the second sum. They start with ten cubes based on the whole. They then remove what is being taken away from the whole and place it in a jar of the parts. The remaining cubes are the other sum and also the answer. These can be moved into the second</p>		