Rode Heath Primary School
'Inspiring learning; nurturing minds; achieving for life'

Rode Heath Primary School: EYFS Mathematics Calculation Policy

$2 \times 9 = 18$
$3 \times 9 = 27$
$4 \times 9 = ?$
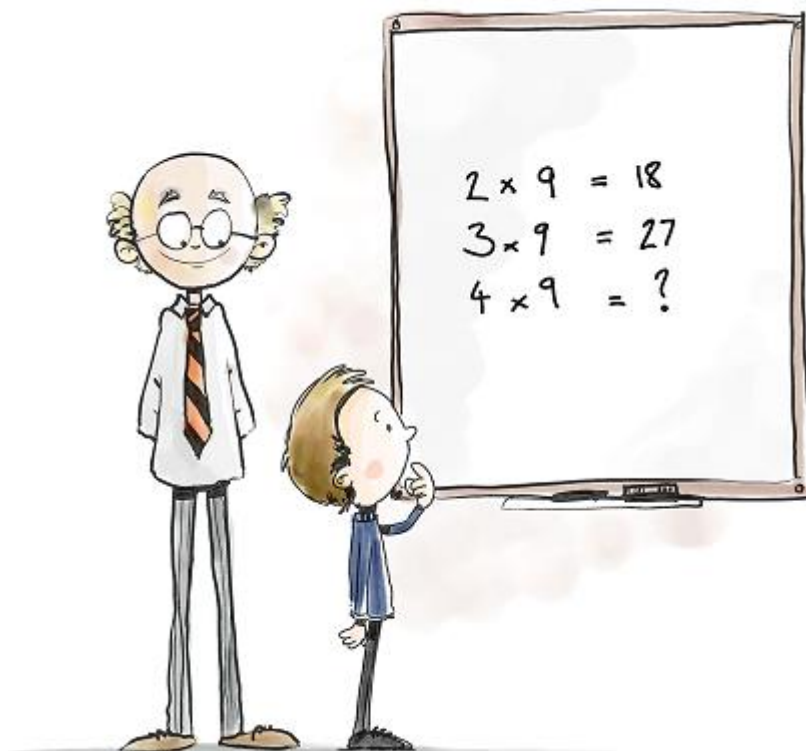
Calculation Policy for Mathematics

This calculation policy sets out the methods used to help our pupils with calculations and has been devised to meet requirements of the National Curriculum for the teaching and learning of mathematics. It is also designed to give pupils a consistent and smooth progression of learning in calculations across the school, taking into account Maths No Problem! - A Singaporean teaching style in Maths.

The Calculation Policy shows methods that pupils will be taught within their respective year group. It is shown in teaching order. Children should be confident in choosing and using a strategy that they know will get them to the correct answer as efficiently as possible; pupils are free to choose their preferred method to solve calculations.

 Concrete, Visual, Abstract: A key principle behind the Singapore Maths textbooks and Maths Mastery is based on the concrete, visual and abstract approach. Pupils are first introduced to an idea or skill by acting it out with real objects (a hands-on approach). Pupils then are moved onto the visual stage, where pupils are encouraged to relate the concrete understanding to pictorial representations. The final abstract stage is a change for pupils to represent problems by mathematical symbols. Whilst this calculation policy aims to show the CPA approach to the different calculations, it is not always noted further up the year groups. However, it is expected that the CPA approach is used continuously in all new learning and calculations even when not noted.

EYFS

In EYFS pupils should be developing their concept of the number system through the use of **concrete materials and pictorial representations**. They should experience practical calculation opportunities using a wide variety of equipment, e.g. small world play, role play, counters, cubes etc. They develop ways of recording calculations using pictures, etc.

EYFS: Addition: Add two single digit numbers, counting on to find the answer

add, addend, more, make, sum, total, altogether, more, sum, one more, ten more.


Pupils must be provided with opportunities to develop their skills so that they are able to count reliably, including one to one correspondence and count on from a given number. Pupils should be given the opportunity to count out sets of objects and then combine them to make a total

e.g. 6 + 2 = 8

First count out a group of 6. Then count out a group of 2. Finally combine them to find a total.

Pupils should recognise different ways of making numbers. E.g 6 can be made as
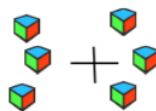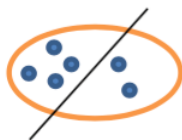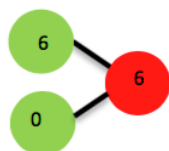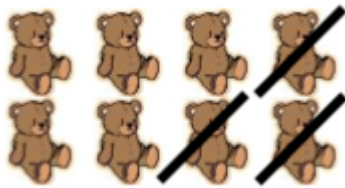
EYFS: Subtraction: Using quantities and objects, subtract two single-digit numbers and count back to find the answer

take (away), leave, how many are left/left over? how many have gone? one less, two less… ten less… how many fewer is… than…? difference between, is the same as

Pupils should count out a group of objects, move some away and recount the total.

8 – 3 = 5

After pupils have recognised different ways of making numbers, they should use this number bond knowledge to help with subtraction facts.   Children should use concrete materials to start counting back in order to solve subtraction problems. 8 – 3 =
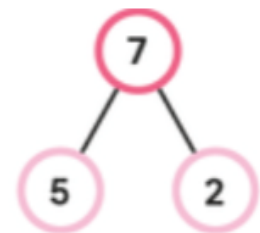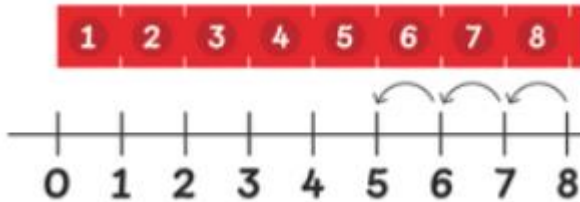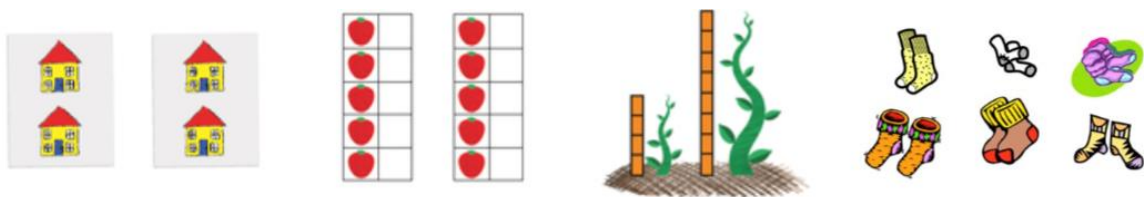

EYFS: Multiplication: Solve problems, including doubling

'lots of', 'doubling'

Children will experience equal groups of objects. They should work on practical problem solving activities.

Use a range of concrete materials to show a number and then repeat the number to show doubling. Then move onto pictorial representations.

EYFS: Division: Solve problems, including halving and sharing

share, share equally, groups of, how many groups?

Pupils should have many practical experiences of sharing objects e.g. sharing between 2 people, or finding ½ of a group of objects.

Use a range of concrete materials to show a number and then share them equally. Then move onto pictorial representations.