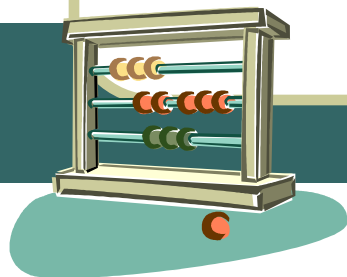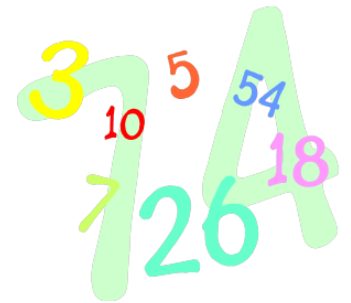# Numeracy
How can we help?

'LEARN TOGETHER'

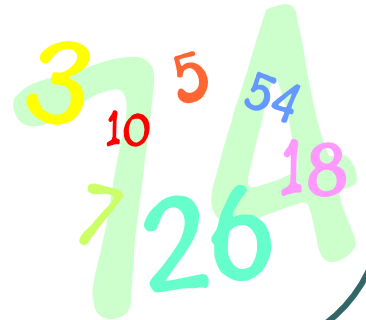*Let's learn to enjoy, achieve, respect and nurture together*

Introduction

- Whole School Calculation Policy
- Teaching methods have changed – focus now on understanding, rather than following a set of given steps to solve problems
- Multiplication – mental methods
- Division – mental methods
- Literacy & Numeracy Framework
- National Testing
- Web Page

Mental skills of multiplication

- Counting on in steps (clever counting)
- Doubling and halving
- Repeated addition
- Commutative e.g 5x2 = 2x5
- Times tables (2's, 5's , 10s, 3s and 4s towards end of year 2)

Physical resources
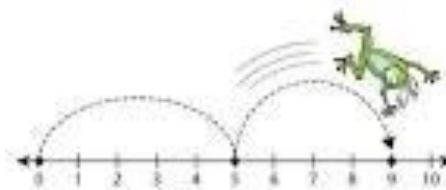
Use a variety of physical resources;
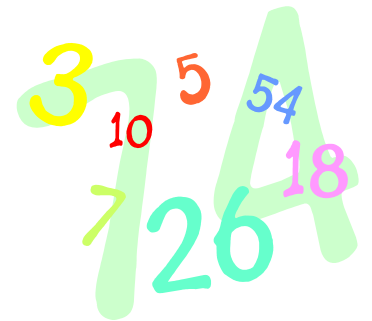
Multilink cubes

Counters

Numicon

Number line/ square and kangaroo

Everyday objects

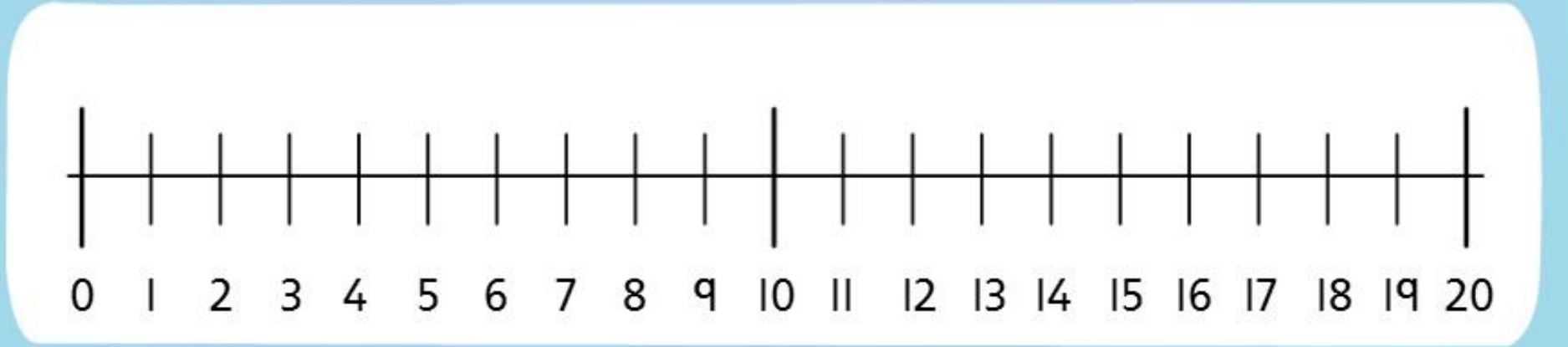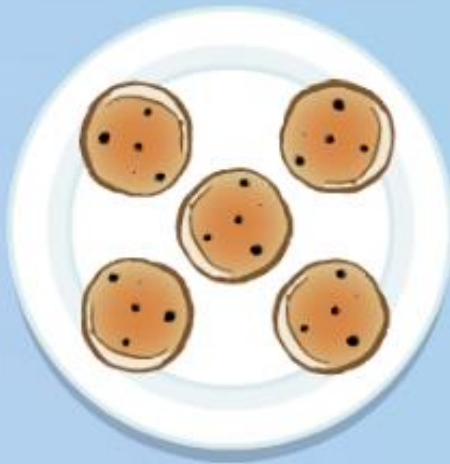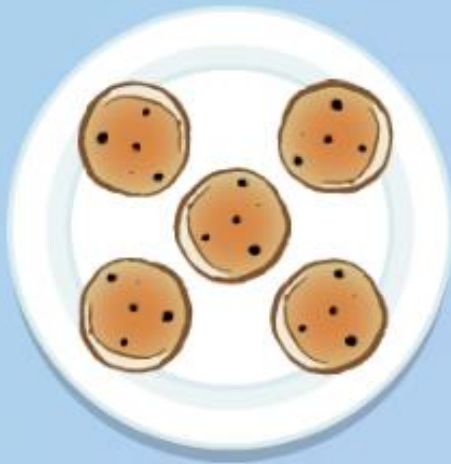# Clever Counting - counting in 2's, 5's and 10's

- Begins in Reception

- Incorporated into 'brain gym' activities in Year 1 and 2

- Introduce 3's at end of Year 2

Repeated addition

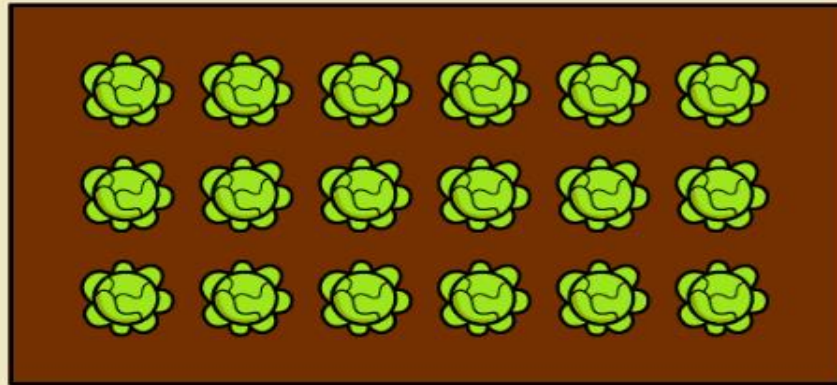3 x 2 = 2 + 2 + 2

5 x 10 = 10 + 10 + 10 + 10 + 10

0   1   2   3   4   5   6   7   8   9   10   11   12   13   14   15   16   17   18   19   20

Commutative

Doubling and halving - inverse

Double 1 = 2   ⟹   Half of 2 = 1

Double 2 = 4   ⟹   Half of 4 = 2
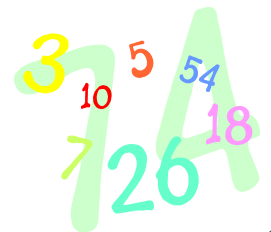
Double 3 = 6   ⟹   Half of 6 = 3

Double 4 = 8   ⟹   Half of 8 = 4
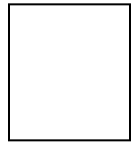
Double 5 = 10   ⟹   Half of 10 = 5

Double 6 = 12   ⟹   Half of 12 = 6

Mental skills of division

- Clever counting
- Using multiplication facts
- Grouping
- Sharing
- Division is <u>NOT</u> commutative

Clever counting
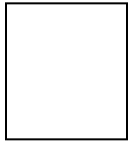
☐ x 5 = 20   5, 10, 15, 20

☐ x 2 = 8   2, 4, 6, 8

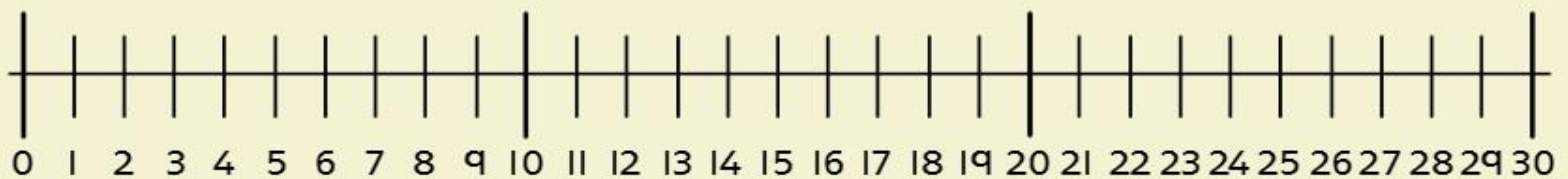# Division – grouping

Division – sharing (video of Year 1 dividing food in half for picnic.)

Share food between 2 teddies. Are the two portions equal?

Shows that half is two equal parts

NOT commutative

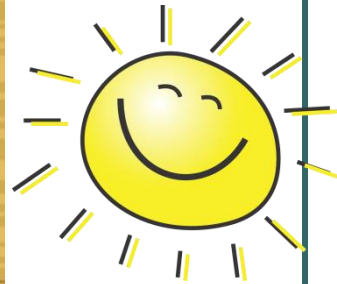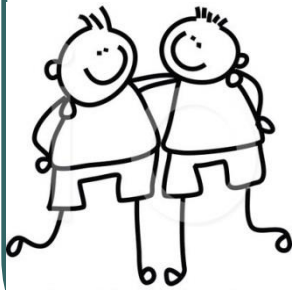Would we get the same answer?

20 ÷ 5

5 ÷ 20

Inverse operations

Encourage children to recognise that division is an inverse of multiplication;

e.g. 7 x 10 = 70

70 ÷ 10 = 7

Applying Maths - Word Problems

There are 3 nests, each with 5 birds.
How many birds?
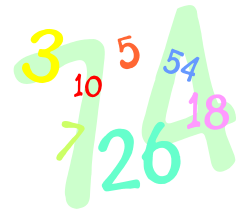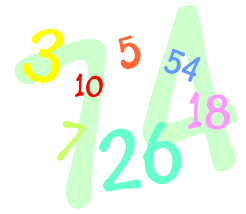
1/2

Plenary

- **Mental strategies:**
  - Importance of having a good understanding of <u>place value</u> and <u>number facts</u>.
- **Multiplication:**
  - Counting on in steps of 2, 5, 10, 3
  - Commutative
  - Repeated addition
- **Division:**
  - Using multiplication facts
  - Not commutative

The National Curriculum and the Numeracy Framework

- Set of expectations for each year group from Reception to Year 9

- Applying numeracy skills in all areas of the curriculum

- Change in thinking – applying numerical skills rather than just isolated maths lessons

National Tests

- All children in Wales from Y2 to Y9.
- Test window set by Welsh Government: 5th – 12th May 2015
- Two parts to the Numeracy Tests:

  1) Procedural (Thursday 7th May 2015)

  2) Numerical Reasoning (Tuesday 12th May 2015)

Next steps…..

Any questions?

Have a look at the web page:
www.barkerslaneprimary.co.uk

Please complete the questionnaire – your feedback is important to us!
Diolch yn fawr iawn!