Year 1 Calculation Policy

- Addition –Strategies
- Addition – Resources and Vocabulary
- Subtraction –Strategies
- Subtraction – Resources and Vocabulary
- Multiplication –Strategies
- Multiplication – Resources and Vocabulary
- Division –Strategies
- Division – Resources and Vocabulary

Alderman Richard Hallam Primary School

Addition – Mental Strategies and Jottings

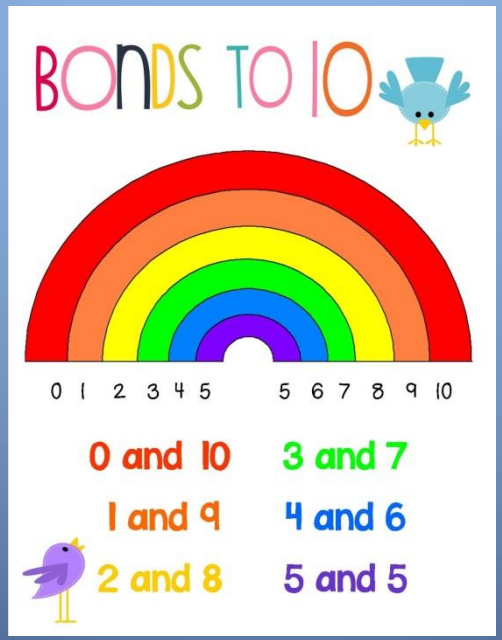
- Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs

10+2=

Count on 2 in your head. 10,11,12. So 10+2= is 12.

- Represent and use number bonds and related subtraction facts within 20

I can use my number bond 4+6=10 to work out 14+□=20.



Addition – Written Strategies

- Add and subtract one-digit and two-digit numbers to 20, including zero *(using concrete objects and pictorial representations)*

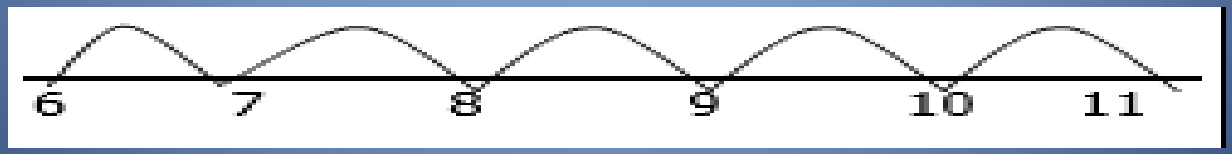
Children should have access to a wide range of counting equipment, everyday objects, as well as hoops, sorting trays, number tracks and numbered number lines.

- Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ - 9

Children are to draw jumps on numbered number lines.

Children are to create their own jumps using rulers, fingers, pens, bodies etc.

7+ 4=



Addition – Resources and Vocabulary

Resources:

- Counting beads
- Cubes
- Counting bears
- Numicon
- Number lines
- 100 Square

Vocabulary:

- Altogether
- Sum
- Double
- And
- Add
- Plus
- More than
- Total

Subtraction – Mental strategies and jottings

- Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs

Understand that subtraction means 'take away'.

14-4=

Children need to count back 4 from 14 to get the answer.

- Represent and use number bonds and related subtraction facts within 20.

5+5=10, therefore 10-5= must be 5.

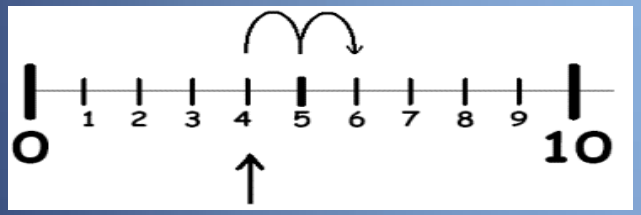
Subtraction – Written strategies

- Solve one- step problems that involve subtraction.

Children are to solve missing number problems e.g. 15 – 7 = □; 20 - □ = 8; 17 – 0 = □; 7 = □ - 9; □ = 4 + □; □ - □ = 13.

What could the numbers be? What couldn't they be?

Children are to find the 'difference' and write it as: Counting up the number line.



6-4=

Find the difference between 4 and 6 by counting up the number line.

Children are to take away and write it as: Counting down the number line.

I had 7 toy cars. 4 cars can fit in the garage. How many cars can not fit in the garage?

Subtraction – Vocabulary and Resources

Resources:

- Counting beads
- Cubes
- Counting bears
- Numicon
- Number lines
- 100 Square

Vocabulary:

- Drawing jumps on a number line.
- Constructing our own number lines.
- Distance between.
- Distance between.
- Less than.
- Take away.

Multiplication – Mental strategies and jottings

- Solve one- step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

Children should be able to use their knowledge of counting in 2's, 5's and 10's to solve a problem.

How many ducks all together?

Count in 2's. 2,4,6.



Children should be able double numbers up to 10. Double 10 must be 20 as

2 x 10= 20.

Children should be able to make connections and spot patterns to identify when sometimes doesn't fit.

5, 10, 15, 21, 25.

Children should be able to recognise that 21 is incorrect as it is not part

Of the 5 times table.

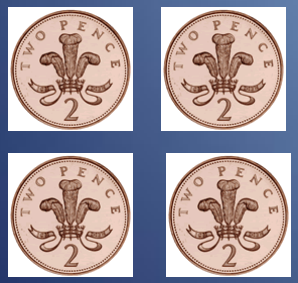
Multiplication – Written strategies

- Solve one- step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

Combining groups that are equal.


5 + 5= is the same as double 5 which is 10.

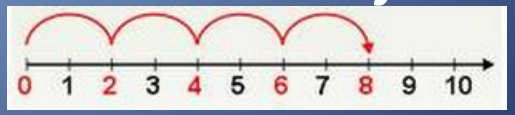
Working out simple problems including money and measures, recording what they have done practically with pictorial or symbol representation.



4 friends gave me 2p each. How much do I have altogether?

4 lots of 2

2 + 2 + 2 + 2 = 8p Or you could count in 2's four times on the number line.



Multiplication – Vocabulary and Resources

Resources:

- Counting beads
- Cubes
- Counting bears
- Numicon
- Sweets
- Objects

Vocabulary:

- Multiplication
- Equal groups
- Lots of
- Pairs
- Array (rows and columns)
- Double
- Repeated addition
- Count on/ up,
- How many..
- Calculate
- Jumps
- Steps
- Forwards

Division – Mental strategies and jottings

- Solve one- step problems involving division by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

Children should be able to use their knowledge of counting in 2's, 5's and 10's to work out a sharing problem.

I have 8 cakes and 2 friends.

How many cakes do we each get?

Count how many jumps in 2.

2, 4, 6, 8.

Children should be able to halve numbers to 20.

Half of 10 is 5. Half of 8 is 4. Half of 6 is 3.

Children should be able to make connections and spot patterns to identify when sometimes doesn't fit.

100, 90, 80, 65, 60.

Children should be able to recognise that 65 is incorrect as it is not part

Of the 10 times table.

Division – Written strategies

- Solve one- step problems involving division by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

Halving groups that are equal.
Half of 10.

Working out simple problems including money and measures, recording what they have done practically with pictorial or symbol representation.

I want to make 5 cupcakes. I have 25g of flour. How many grams does each cupcake get?
25g shared by 5.
Count how many 5's go into 25. 5,10,15,20,25. 25 shared by 5 is 5.

Working out simple missing number problems, e.g. 16 halved = □
Half of 20 is 10. Half of 18 is 9. Half of 16 is 8.

Division – Vocabulary and Resources

Resources:

- Counting beads
- Cubes
- Counting bears
- Numicon
- Sweets
- Objects

Vocabulary:

- Division
- Equal groups
- Array (rows and columns)
- Halve
- Repeated subtraction
- Count down/ backwards
- Calculate
- Jumps
- Steps