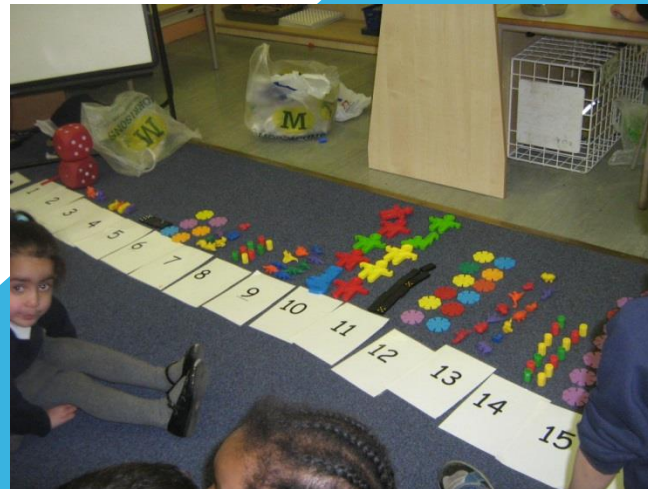




Edgewood Primary School
Building skills and values for life

Numeracy workshop 2015



Numeracy in Foundation Stage 2

LEARNING AND DEVELOPMENT

Mathematics

Number

Shape Space and Measures



NUMBER - EARLY LEARNING GOALS

Count reliably with numbers from 1- 20

Place numbers in order, and be able to say one more and one less

Using quantities and objects, they add and subtract two single digit numbers

They count on or back to find the answer.

They solve problems including doubling, halving and sharing.



FOUR OPERATIONS

At Foundation Stage, children's experiences of addition, subtraction, multiplication and division will be a mixture of practical, oral and mental work.

Very little recording is done at this stage independently

Children may make a record in pictures, words or symbols of activities that they have already carried out, and may begin to construct simple number sentences.

Children are encouraged to explain to someone else what they have done, how they did it and why they did it.

They begin to read records made by their teacher, including simple number sentences.



RESOURCES

Number lines and number tracks

Number square

Counters

Multilink

Counting/sorting objects e.g. stones, pinecones

Numicon



COUNTING

Children need to know when to count (understand the concept of 'How many?')

They need to know the last number is the total, and be able to say there are...

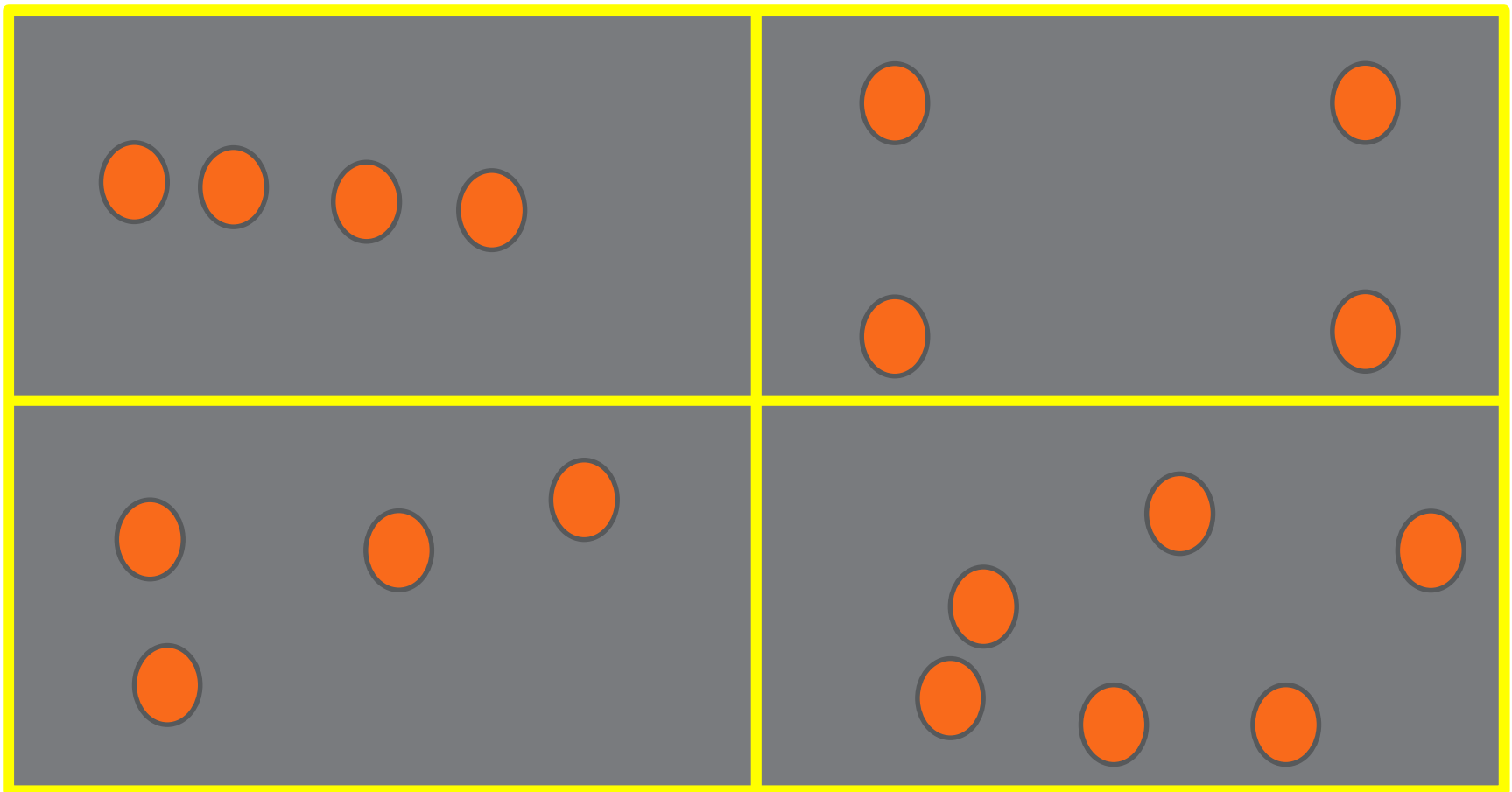
They need to be able to count with 1 to 1 correspondence-
'Count how many cars there are' 'Get me 10 cubes'

They can count objects in a line

They can count objects in a pile by organising them into a line themselves

'Understand' what numbers mean





How many in each rectangle? Which rectangle has more dots? Which has less?

ONE MORE, ONE LESS

Using practical objects, add one or take one away
(extend to two +)

Physically move/jump to the number one more/one less
than...

Use a number track, 'Tell me one more/less than...'

Start with numbers up to 5, then up to 10. Extend to
numbers up to 20.



ADDITION

‘I have three strawberries, my friend gives me two more. How many have I got altogether?’

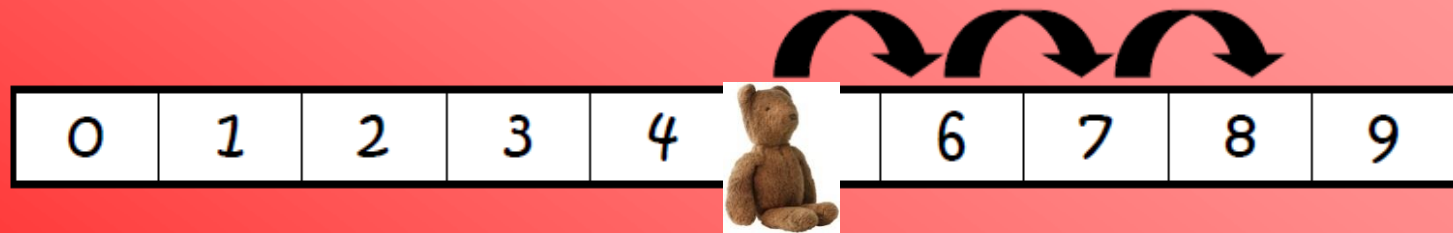
Practical Methods-use actual strawberries

Pictorial Representations



Number sentence $3 + 2 = 5$

NUMBER TRACK TO COUNT ON



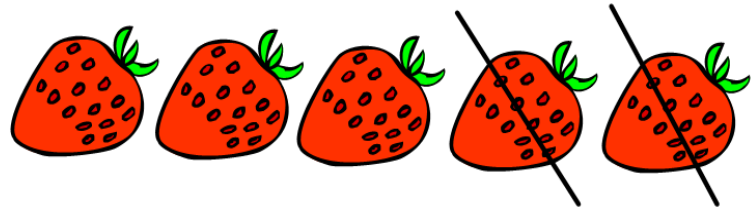
$$5 + 3 = 8$$

SUBTRACTION

'I have three strawberries, I eat two. How many have I got left?'

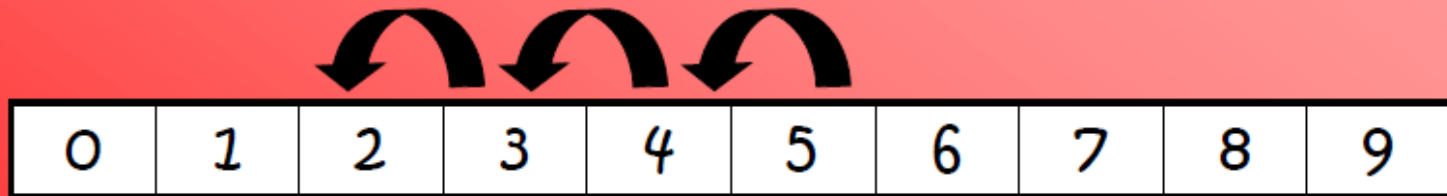
Practical Methods-use actual strawberries.

Pictorial Representations



Number sentence $5 - 2 = 3$

NUMBER TRACK TO COUNT BACK



$$5 - 3 = 2$$

MULTIPLICATION

Learn Its – 1 digit doubles

Counting in multiples- 2s,
10s, 5s

Practical counting e.g. pairs
of socks

Counting using a hundred
square

Counting using body parts

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



LEARN ITS

Addition 'Learn Its' - By Year Group

+	2	3	4	5	6	7	8	9
2	4							
3	5	6						
4	6	7	8					
5	7	8	9	10				
6	8	9	10	11	12			
7	9	10	11	12	13	14		
8	10	11	12	13	14	15	16	
9	11	12	13	14	15	16	17	18

Foundation	Year 1	Year 2
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$$1 + 1$$

$$2 + 1$$

$$2 + 2$$

$$3 + 3$$

$$4 + 4$$

$$5 + 5$$

$$2 + 3$$

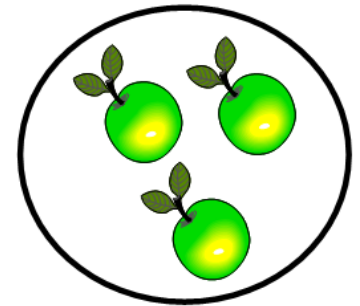
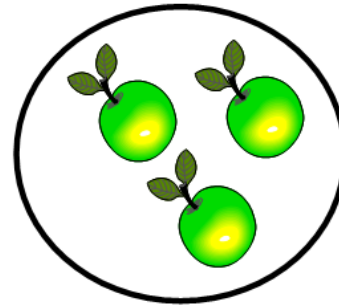
$$3 + 2$$

DIVISION

There are six apples, can you share them fairly between Mr Elephant and Spot.

Practical Methods - use actual apples.

Pictorial Representations



GENERAL PROBLEM SOLVING

I need 6 coloured pencils. I have 2, how many more do I need?

Amy has 12 raisins, I have 3 raisins, what is the difference?

How many socks do 3 people need?

Cars are 4p each....do I have enough with a 10p? How much change will I get?

How many grapes can I fit in this tub?



SHAPE, SPACE AND MEASURE

Children use everyday language to talk about size, weight, capacity, position, distance, time and money.

They compare quantities and objects and solve problems.

They recognise, create and solve problems.

They explore characteristics of everyday objects and shapes, and use mathematical language to describe them.



USE EVERYDAY LANGUAGE TO TALK ABOUT SIZE, WEIGHT, CAPACITY, POSITION, DISTANCE, TIME AND MONEY.

Where is the teddy? The teddy is behind the tree. The teddy is on the table. The teddy is inside the basket.

Which car is bigger than my car? Which is the smallest car? These two cars are the same size.

Which is the heaviest/lightest present? How do you know it is heavy? Can you weigh the present on the scales?

Which container holds the most? Which is full? Can you fill it half full?

What did you do yesterday? When is your birthday? What day is it today?

How many pennies do you need to buy the toy?



EXPLORE CHARACTERISTICS OF EVERYDAY OBJECTS AND SHAPES, AND USE MATHEMATICAL LANGUAGE TO DESCRIBE THEM.

Can you name these shapes? Can you find a square/triangle?

Guess my shape...Its has 4 sides.

Describe the shape. How do you know it's a cuboid?

Which shapes would you use to make a car?

How are a triangle and rectangle the same? How are they different?



2D Shapes



Circle



Triangle



Square



Rectangle



Pentagon



Hexagon



Heptagon



Octagon



Nonagon



Decagon

3D Shapes



Sphere



Prism



Cuboid



Cube



Cylinder



Pyramid



Cone

SHAPE, SPACE AND MEASURES-

KEY VOCABULARY

Big/biggest

Small/smallest

Large/largest

Long/longest

Short/shortest

Tall/tallest

Heavy/heaviest/heavier

Light/lightest/lighter

Full/fullest

Empty

Half full

In, on, under, beneath

Next to, opposite, in between

Behind, in front

To the left/right of

Up, down, around

Far, near, furthest, nearest

Days of the week

Months of the year

Daily routine

Money, pence, pennies, 1p, 2p, 5p, 10p, 20p, 50p, £1, £2.

2D shapes-flat shapes

Circle, triangle, square, rectangle

Corners, points, sides, length, curved, straight, round

3D shapes-not flat

Cube, cuboid, sphere, cylinder, cone

Edges, faces,

TIPS FOR HOME

Maths is happening all around us all the time which helps us to make it real and make it fun!

Make the most of everyday opportunities

- What numbers can you see?
- What shapes can you see?
- Bake – weigh ingredients, compare amounts
- Counting by rote, forwards and backwards to 20, in 2's, 5's, 10's
- Play shops using real coins
- Teddy bear tea party – sharing a given number of raisins, setting the table
- Board games such as snakes and ladders, Ludo
- Play hide the sock
- Snap – choose 2 cards and ask your child to make a given number
- Use magnetic numbers to write sums for children to solve on the fridge.











Courtney

Which vehicle
is the....
•heaviest?
•lightest?









Areeba



TALK ABOUT THINGS

***‘LOTS OF PEOPLE ARE AFRAID
OF MATHS BECAUSE THEY
DIDN’T PLAY WITH MATHS’***

