Maths in Reception at Bessemer

By Laura Dunphy

Aims

* To get an insight into how Maths is taught.
* To outline the different stages in maths development through the year.
* To develop confidence in helping your child at home.

Number Expectation

Number

Children at the expected level of development will:

* Have a deep understanding of number to 10, including

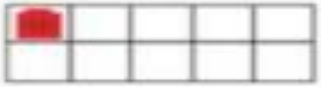
the composition of each number;

* Subitise (recognise quantities without counting) up to 5;
* Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

Numerical patterns

* Verbally count beyond 20, recognising the pattern of the counting system.
* Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
* Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Concrete Pictorial Abstract Approach

Concrete	Pictorial	Abstract
		1
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	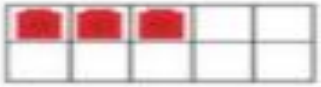	3
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Concrete is the 'doing' stage, using concrete objects to solve problems.

Pictorial is the 'seeing' stage, using representations of the objects involved in maths problems.

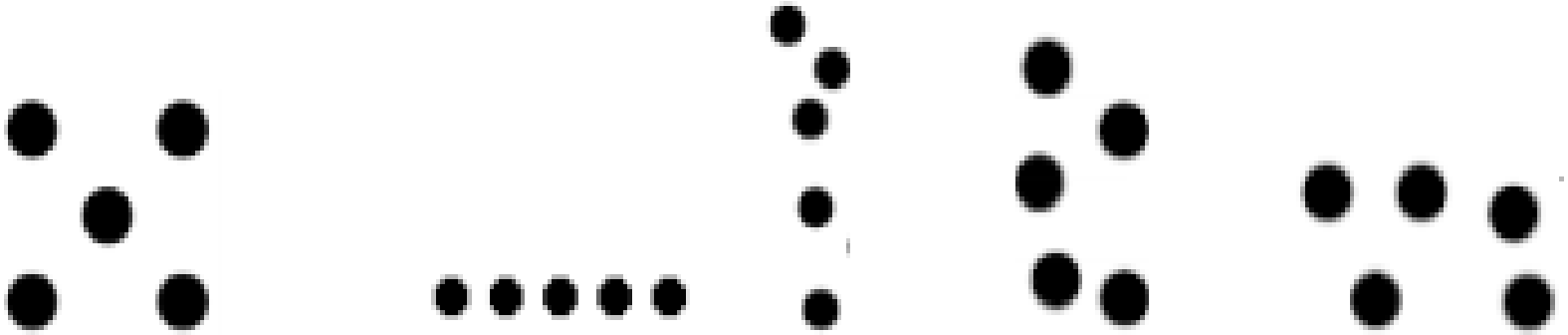
Abstract is the 'symbolic' stage, where children are able to use abstract symbols to model and solve maths problems.

Representing numbers

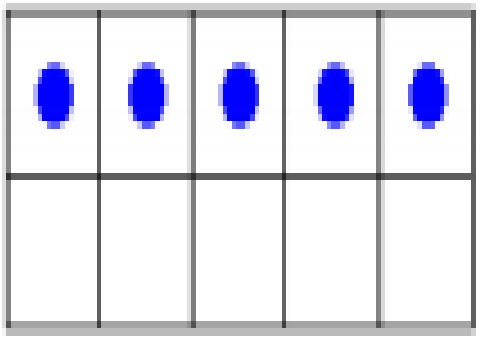
Counting strategies

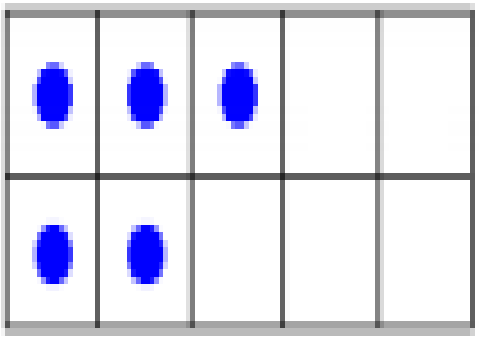
* I can line the objects up
* I can touch and count each object one at a time
* I can count aloud
* I know when I finish counting that is the total amount
* I can check by recounting

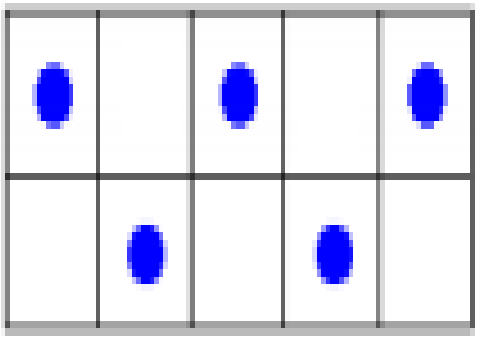
Recognising amounts



Understanding that the total stays the same even when the objects move







Reasoning

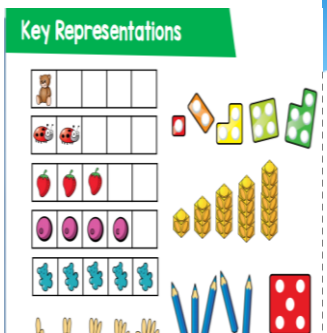
* true and false statements eg adding one to a number always makes it smaller
* spotting incorrect maths eg 1, 2, 3, 4, 6, 5, 7, 8, 9, 10
* explaining how we know something or how we worked it out

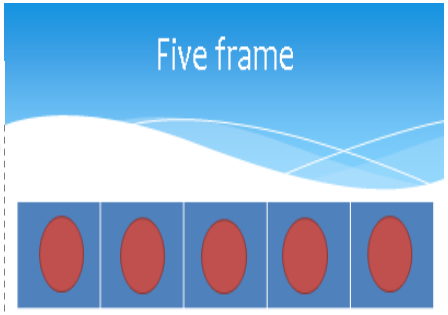
Autumn term
Number words and numerals

* The main focus is the development of children's knowledge and use of the number sequence from one to five, and the recognition of the numbers 1 to 5.

Counting sets

* This focuses on the development of children's ability to count up to five objects and to recognise, without counting, sets of one, two or three objects





How can you help at home?

Remember to keep maths practical and fun!

less

more

Spring term
Number words and numerals

* Focuses on the development of children's knowledge of the number sequence from one to ten and recognition of the numerals 1 to 10

Counting sets

* Concentrates on extending children's counting skills to enable them to count up to ten objects, actions or sounds accurately

How can you help at home?

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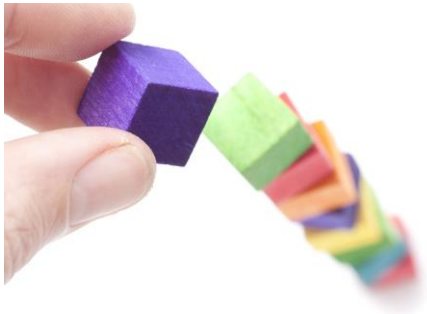
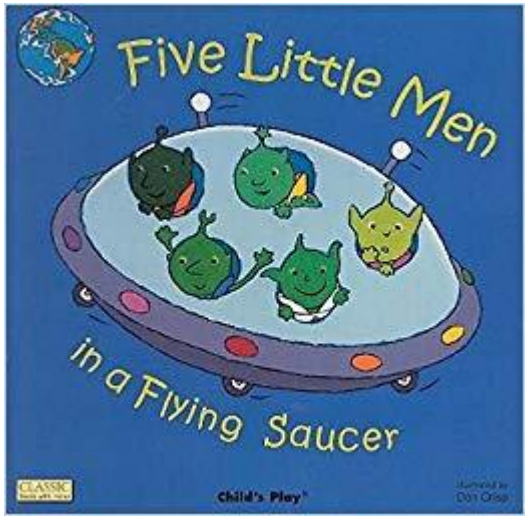
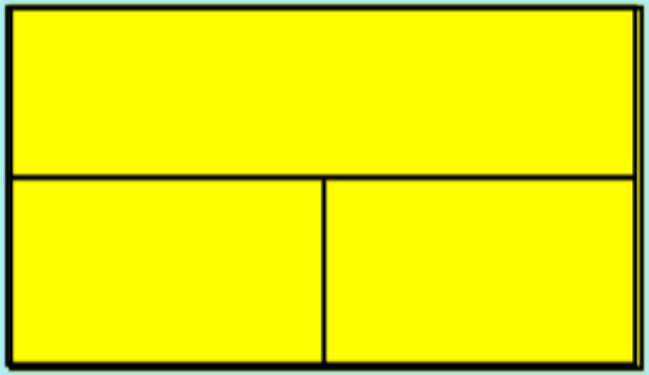




Addition

LQ: Can you solve addition problems?


Izzy made 7  robots and her grandad made 4 more. How many did she have **altogether**?



Key Questions?

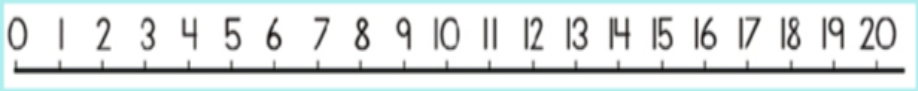
Is this an addition or subtraction problem?

How do you know?

Which words tell us that?

How can you work out your answer?

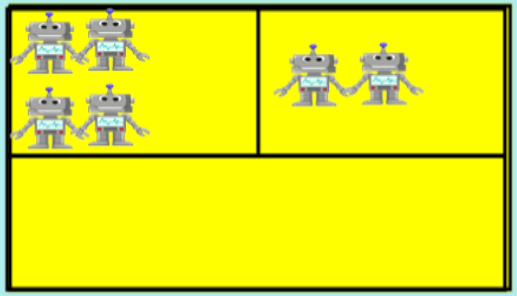
How can we check?



Addition

LQ: Can you solve addition problems?

Izzy  made 4  robots and her grandad made 2 more. How many did she have **altogether**?



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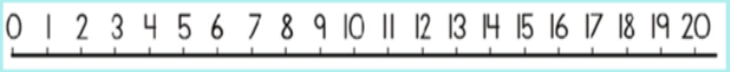
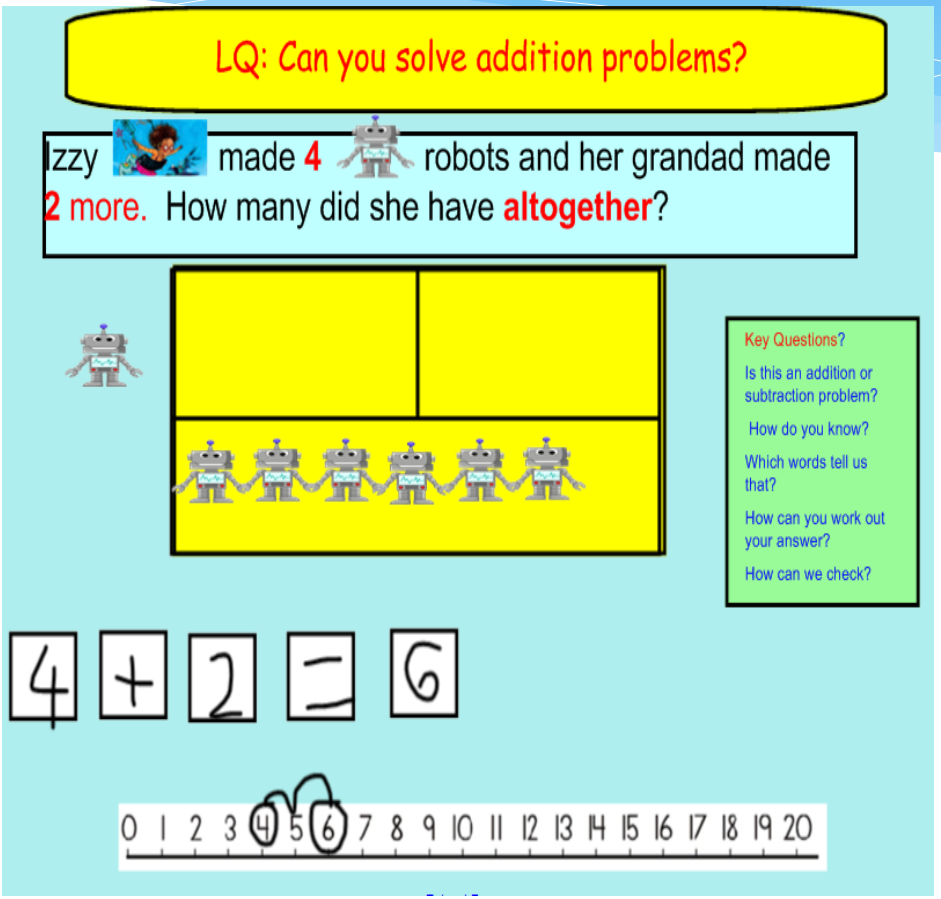
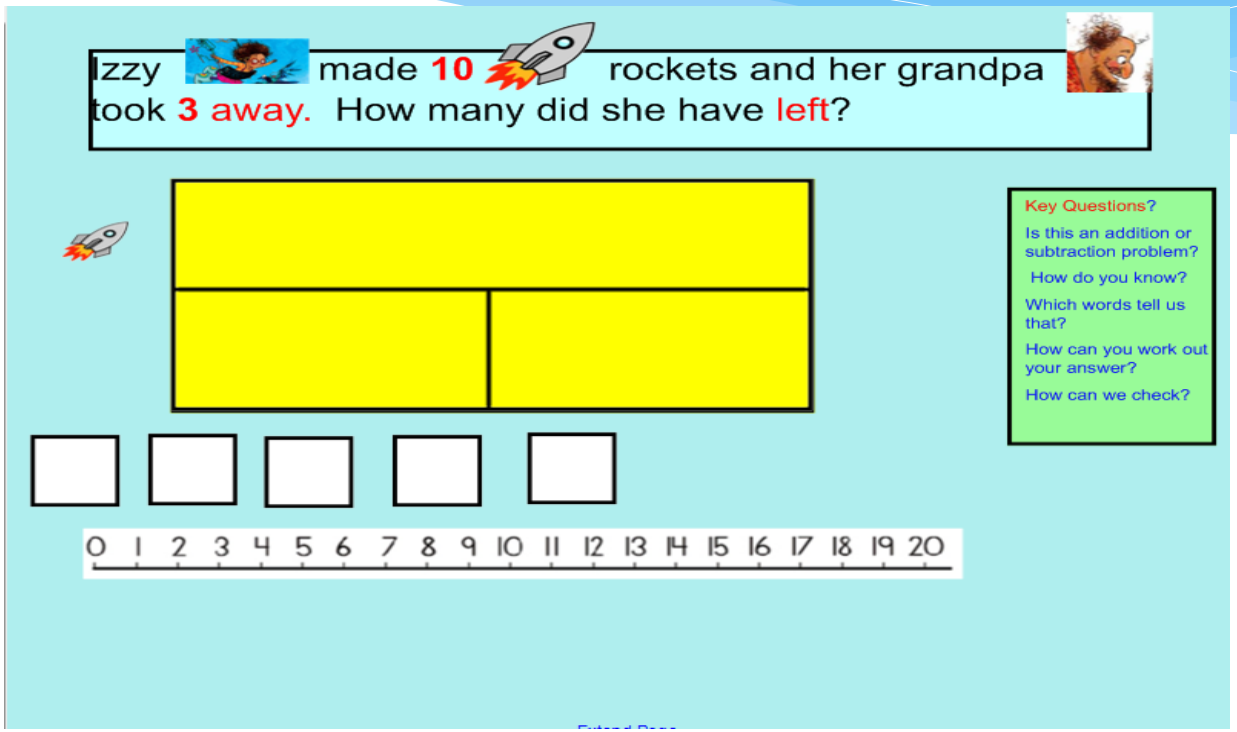


Extend Page

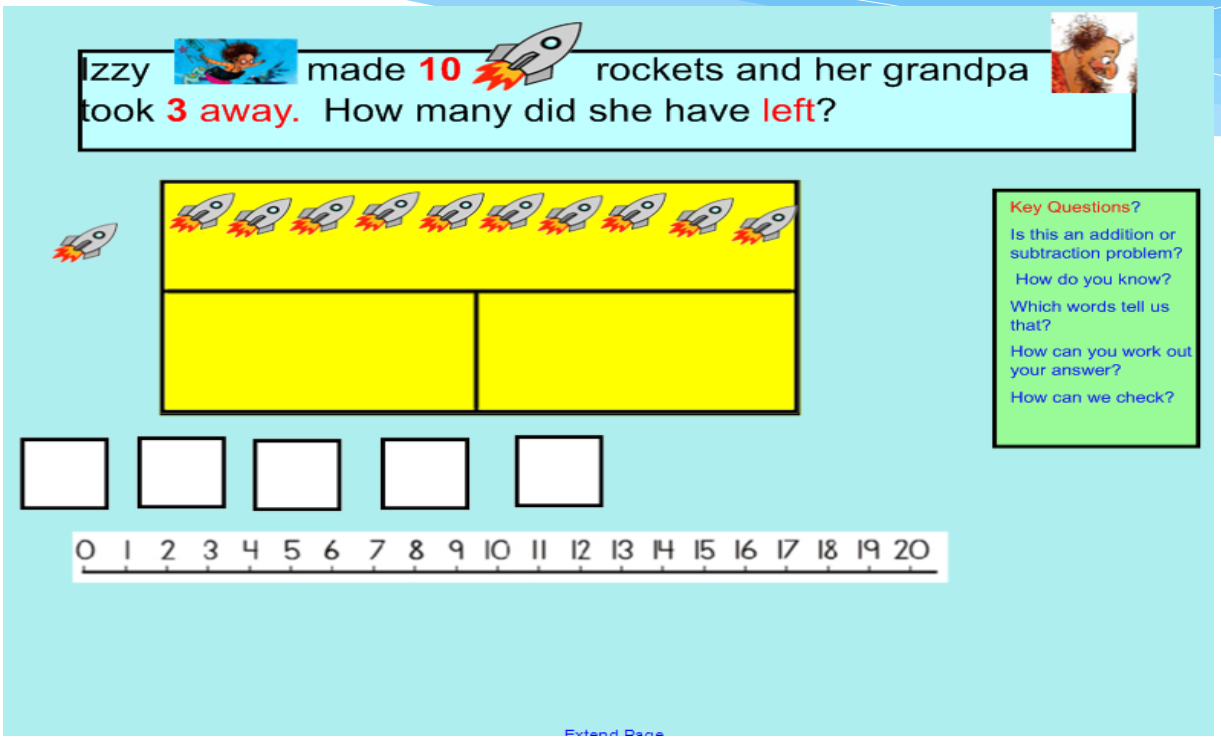
Addition


LQ: Can you solve addition problems?
Izzy made 4 robots and her grandad made 2 more. How many did she have altogether?
Key Questions?
Is this an addition or subtraction problem?
How do you know?
Which words tell us that?
How can you work out your answer?
How can we check?
4 + 2 = 6
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

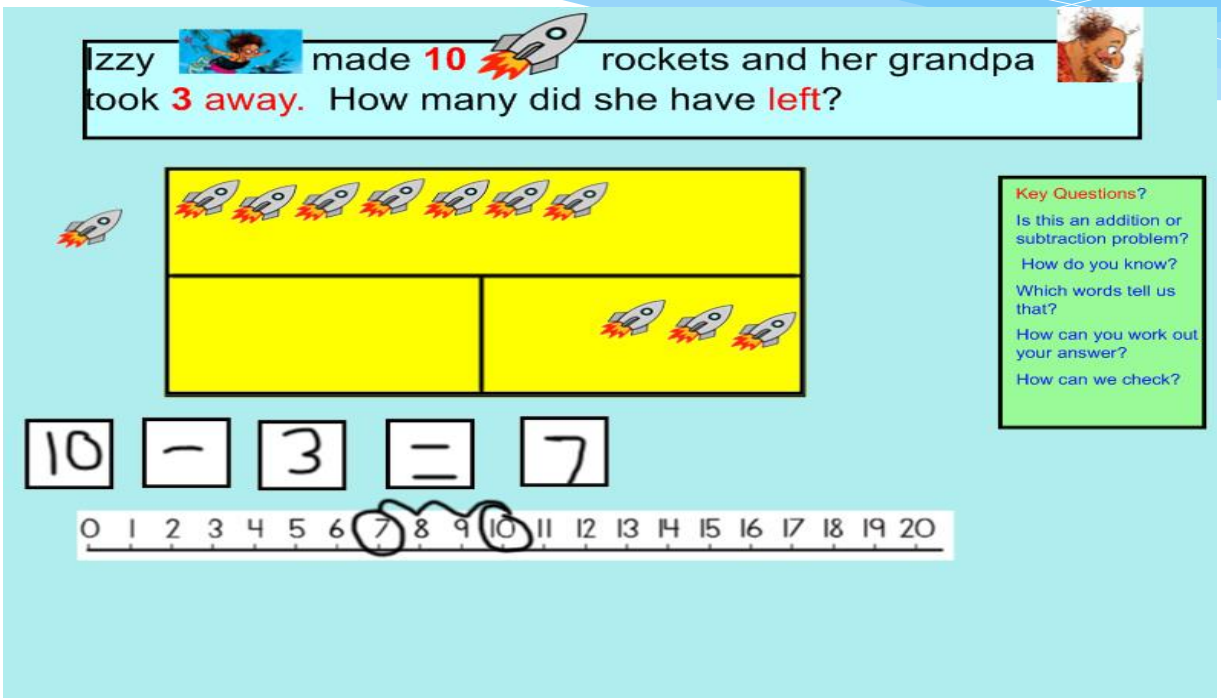
Subtraction



Subtraction

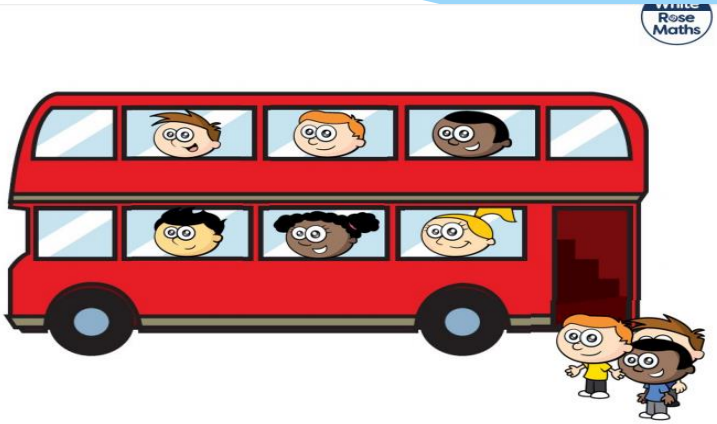


Subtraction



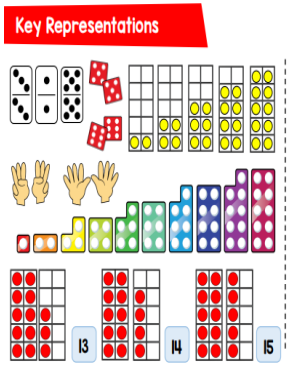
How can you help at home?

Remember to keep maths practical and fun!



Summer term
Number words and numerals

* Extends the range of numbers that children can confidently use, including zero and numbers to 20

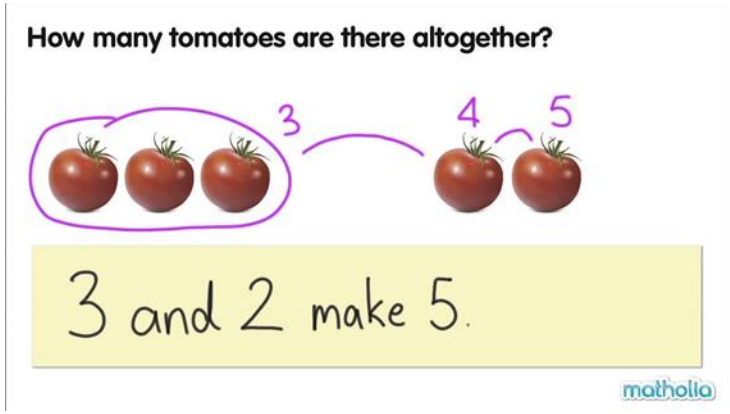


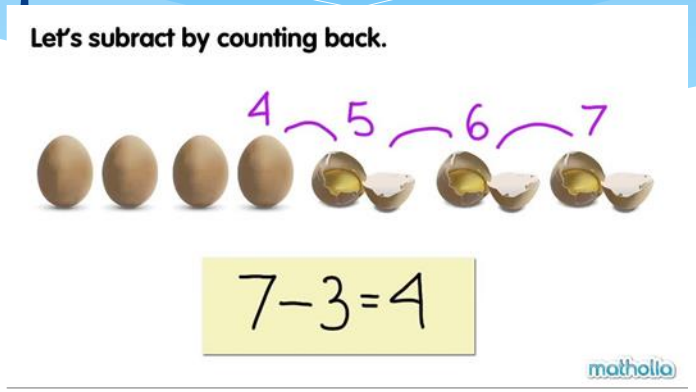
Counting sets

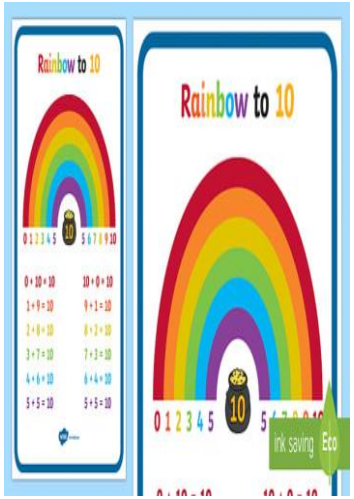
* Focuses on extending children's counting skills to enable them to count up to ten objects accurately, in any arrangement. Doubling and halving amounts as well as sharing.

How can you help at home?

Remember to keep maths practical and fun!







BINGO		
5	9	15
6	8	18
1	13	16

BINGO		
3	10	19
6	9	15
7	13	16

BINGO		
5	11	16
3	14	17
1	9	20

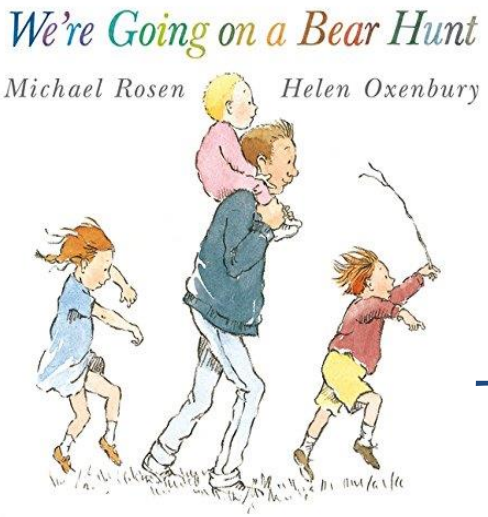
BINGO		
2	8	20
7	10	17
6	12	18

Show the children a bowl of strawberries. Explain that you are going to share them into 2 equal groups so there will be half for you and half for your friend. Put a handful straight onto each plate without counting – make sure that one plate has much more strawberries than the other. Ask the children if that is fair. Prompt them to show you how to share the strawberries fairly.

Sorting


Barbies
Small Dolls
Vehicles
Animal Figurines
Train set
Little People
Duplo
Pony/Pet Shop
Lego
Wooden Blocks

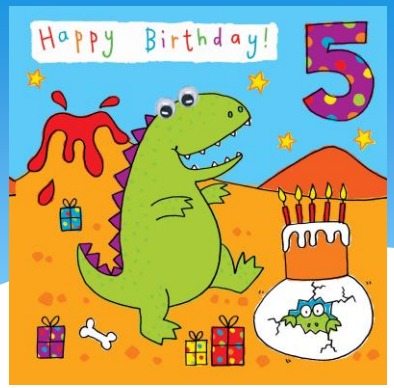
Positional language and Shape

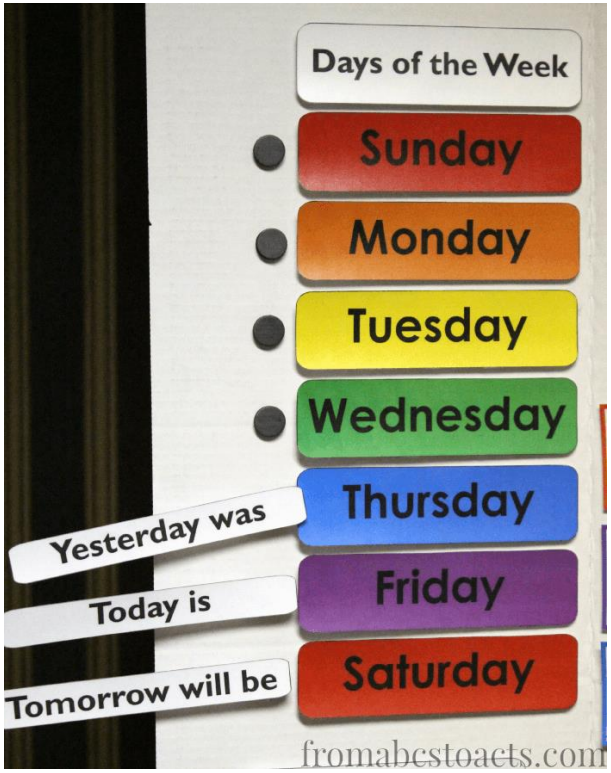


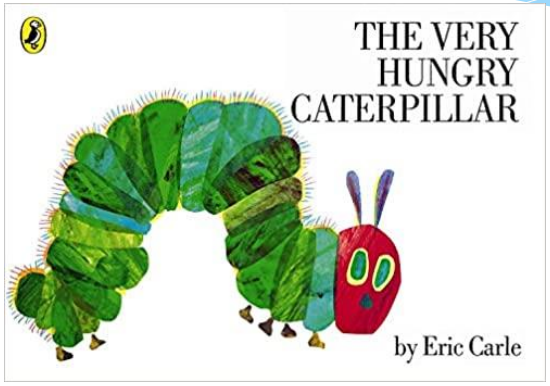
Under
Over
Through

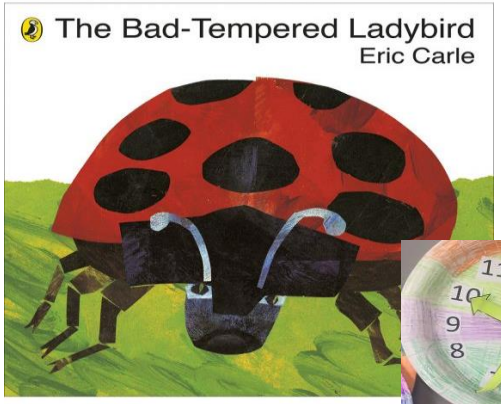
Circle
Square
Rectangle
Sides
Corners

Time


Happy Birthday!
5


Days of the Week
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Yesterday was
Today is
Tomorrow will be
fromabcstoacts.com

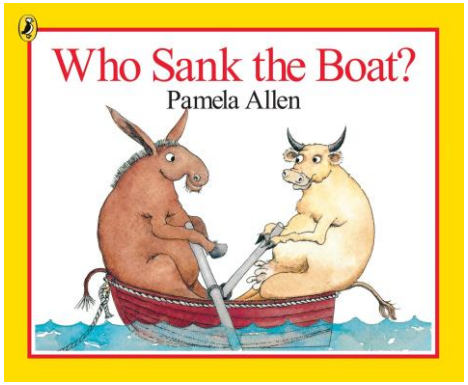

THE VERY HUNGRY CATERPILLAR
by Eric Carle


The Bad-Tempered Ladybird
Eric Carle


Half past ten

Weight and Capacity

Float or sink?

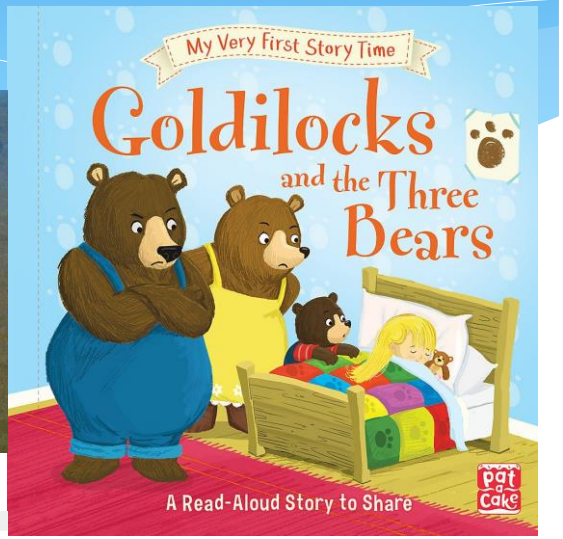


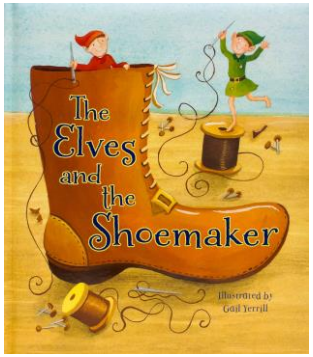
Heavy or light?

Full or empty?

Size – length, height and distance

Big, middle sized or small?





Long or short?

Tall or short?

Patterns

Online learning

Questions?