



Medium Term Planning Maths – Counting

Planning format developed by Karen Wilding. www.eymaths.co.uk



Medium -Term Planning ‘Maths Map’ Are you properly equipped for your journey yet?

Counting

End destination – Counting verbally to at least 20 and counting at least 10 objects accurately

1. Check Your facts

Subject knowledge References:

Karen Wilding www.eymaths.co.uk

First Maths Glossary DK – page 10-13

NCETM [Cardinality and Counting](#) | NCETM

Progression document

[Counting \(learningtrajectories.org\)](http://learningtrajectories.org)

2. Secure Your Expert Language!

Key language AND definitions so everyone is consistent.

How many? (counting) – To count how many are in the set.

Quantity – how many of something there are

Order – we count to understand which is first, second etc of a set of objects

More – comparative used to mean greater in size or amount

Less – is used for singular mass amounts or things that cannot be counted - this includes ‘3 is less than 5’

Fewer – a smaller amount of countable things – cars, leaves, dogs, counters, pounds, bricks etc.

Greater (than) – an inequality used to compare two or more numbers, quantities or values. It is used when a quantity or

3. Predict the Hazards and Opportunities!

Identify the misconceptions and remember these are VERY valuable teaching opportunities.

-missing out an object or counting an object twice

-when asked how many cars are in a group of four, simply recounting ‘1, 2, 3, 4,’ without concluding that ‘there are four cars in the group’



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number is bigger or larger than the second or rest of the quantities or numbers.

-when asked to 'get five oranges' from a trayful, a child just grabs some, or carries on counting past five

-when objects in a group are rearranged, the child (unnecessarily) recounts them to find how many there are

-confusion over the 'teen' numbers – missing a number like 15 (13 or 15 are commonly missed out) or confusing 'thirteen' and 'thirty'.



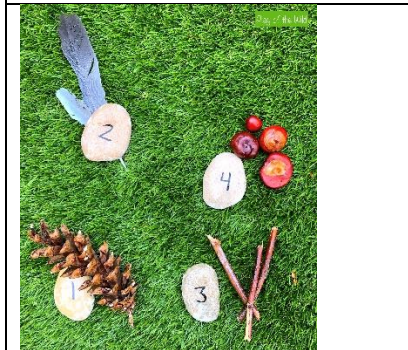
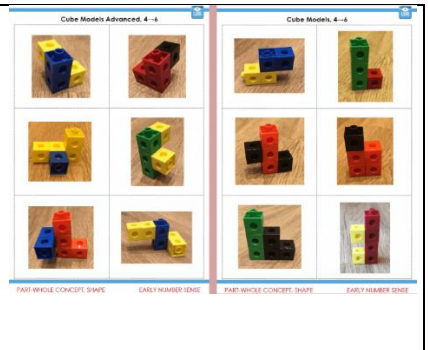
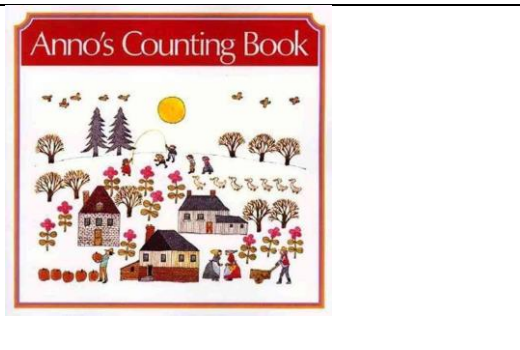
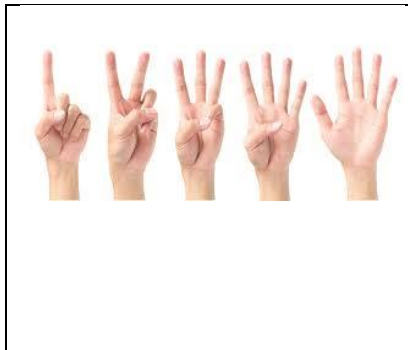
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<p>4. Identify Your 'Vehicles/Hooks'</p> <p>What have the children shown you they are interested in that you can use to engage their interest and build upon what they already understand?</p>	<p>5. Build Essential Connections!</p> <p>Which other existing mathematical tools will they need to bring out and use here? Make these neutral.</p>	<p>6. Sharpen Those Tools!</p> <p>List the activities that will give children the opportunity to focus upon and become skilful in using specific tools. Use hyperlinks, images of tasks, book names and page</p>	
<ul style="list-style-type: none"> • Nature/natural world • Nursery rhymes and singing • Snack time fruit • Scoring games • Interests – observe and use • Tidying up time – count back to be ready on the carpet • Tidy up time spot timer (5 spots) • Loose parts 	<ul style="list-style-type: none"> • Communicating - Talking/Demonstrating/Pictorial • Counting principles (see attached doc.) • Cardinality • Pattern (noticing/seeing pattern in numbers) 	<p>Math is visual website</p>	<p>Cardinality - Counting and Quantity Principles - Math Is Visual</p>
		<p>Karen Wilding training library</p> <p>www.eymaths.co.uk</p>	<p>Teaching Early Number Sense courses</p>
		<p>NCETM Early maths and number sense resources</p>	<p>https://www.ncetm.org.uk/podcasts/how-early-years-children-develop-mathematical-thinking/Cardinality and Counting NCETM</p>
		<p>WRM Counting Principles</p>	<p>https://wrm-13b48.kxcdn.com/wp-content/uploads/2020/07/Reception-Scheme-Guidance-for-teachers-Autumn-2020.pdf</p>



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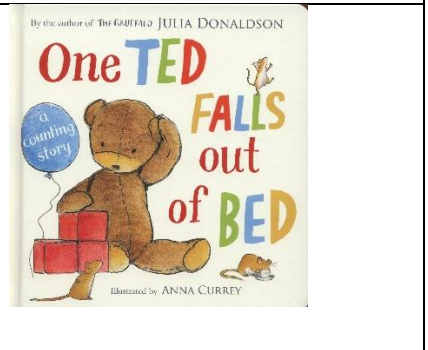
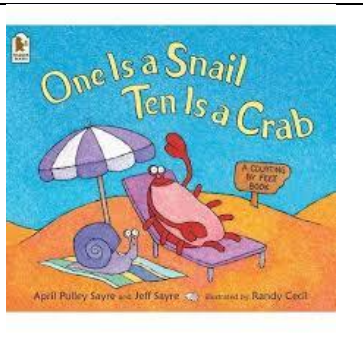
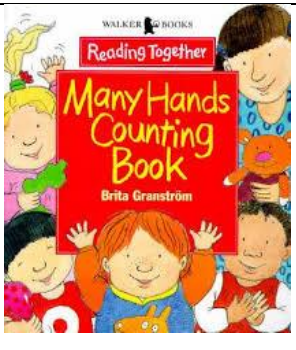
		Making Math Moments	Counting Principles - Counting and Cardinality - Make Math Moments 10 principles that support counting
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Counting songs

BBC Teach - School Radio - EYF5 - Nursery Rhymes and Songs
Nursery rhymes and songs for learning the numbers 1 to 10.

- The animals went in two by two**
Watch and sing along with the video.
- Five currant buns... for sale!**
Watch and sing along with the video.
- Five little apples**
Watch and sing along with the video.
- Five little ducks went swimming one day**
Watch and sing along with the video.
- Five little men in a flying saucer**
Watch and sing along with the video.
- Five little monkeys jumping on the bed**
Watch and sing along with the video.





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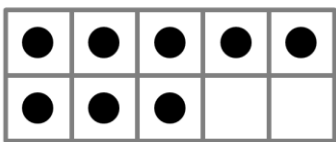
7. 'Concrete' Experiences 'Walk the Walk'

'Move from 'Real World' to 'Maths World'.

Concrete real world



Concrete maths world



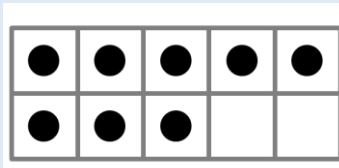
Five and ten frame filled from left to right to add more and take counters from right to left when subtracting.



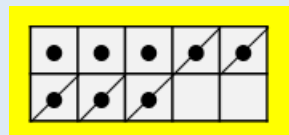
8. Creating Representations 'Capture the experience using an Image!' (Pictorial)

Pictorial

Adults will model how to represent counting on and back pictorially using a five and ten frame when appropriate.



adding counters on a five/ten frame when counting on.

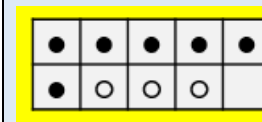


Crossing the counters off to subtract or count back.

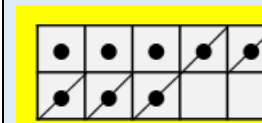
9. Translate the Experience into 'Abstract' Symbols

Numerals – 1,2,3,4,5,6,7,8,9,10

Adults will show the children the addition and subtraction symbols and model recording number sentences using numerals and symbols. These will be accompanied by a pictorial ten frame.



$$6+3=$$



$$8-5=$$



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Self registration in Reception classrooms



Birthday display



Voting for the story of the day



End Point - What do I want the children to understand and be able to do? Long Term aims for subitising – Nursery/Reception

- Children understand that numbers represent how many and words identify how much
- Children count objects in a line by touching each one and answers the question ‘how many?’ by recalling the last number counted, understanding that this represents the total group of objects
- Children can write/draw to represent how many in a group.
- When counting verbally, children will be able to say the next number in the sequence (to 20 or beyond) by recognising the numerical pattern, especially between the tens and ones.
- Children will count confidently

Characters of Effective Learning – How do young children learn best?

Playing and exploring – engagement Finding out and exploring Playing with what they know Being willing to ‘have a go’	Active learning – motivation Being involved and concentrating Keeping trying Enjoying achieving what they set out to do	Creating and thinking critically – thinking Having their own ideas Making links Choosing ways to do things
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Children’s interests – What are this group of children motivated by? What areas interest them? How are these children engaged in their learning? What do they love to do? When are they at their most happiest?



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Steps needed	Adult led/provocations/enhancements	Continuous Provision areas