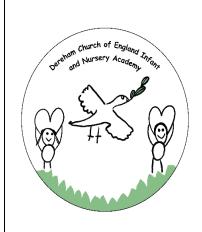
Dereham Church of England Infant and Nursery Academy- Mathematics



Year group: Reception	Area/topic: Mathematics-Talk about measure
	and patterns

Development Matters - 3 and 4-year-olds - Make comparisons between objects relating to size, length, weight and capacity.

Birth to 5 Matters - Range 4 - Explores differences in size, length, weight and capacity.

Birth to 5 Matters - Range 5 - In meaningful contexts, finds the langer or shorter, heavier or lighter and more/less full of two items.

Birth to 5 Matters - Range 5 - Explores and adds to simple linear patterns of two or three repeating items. Joins in with simple patterns in sounds, objects, games and stories, dance and movement, predicting what comes next.

Development Matters - Reception - Continue, copy and create repeating patterns. Birth to 5 Matters - Range 5 - Creates their own spatial patterns showing some organisation or regularity.

Prior learning	Future learning
Children may have been exposed to a basic	Children will continue to spot patterns in their
element of repeating patterns at home and at	everyday lives.
Nursery	

What pupils need to know or do to be secure		
Key knowledge and skills	Possible evidence	
Compare size	Opportunities to participate in a range of	
	games includes ones that children are provided	

with an item and have to find a friend with a larger item, a smaller item etc. Time to explore and experiment with balance Compare mass scales and playdough and a range of other items Compare capacity Photos of children exploring different containers and coloured water Explore simple patterns Re-enacting 'We're going on a bear hunt' reciting the repeating phrases Copy and continue simple patterns Photographs of children being provided a pattern with natural objects and having to continue the pattern Create simple patterns Photos of children making an edible repeating pattern with fruit and then eating it for snack Key vocabulary Big, little, Bigger, smaller, larger, taller, longer, shorter, heavier, lighter, mass, weight, more, most, less, least, same, pattern,

Common misconceptions	Books linking to this area
Children may be more familiar with the word 'weight'	Where's My Teddy? by Jez Albarough
instead of mass, there is no harm in using the words	
interchangeably at this stage.	It's the Bear! by Jez Alborough
When introducing balance scales, children should develop	
the understanding that the heavier object is lower on the	The Blue Balloon by Mick Inkpen
balance scale and the lighter object is higher. It is	
important to model this to children and point out that the	Dear Zoo by Rod Campbell
abjects have the same mass if the scale is balanced.	
To avoid misconceptions, give children the apportunity to	My First Book of Patterns by Bobby and
explore large objects that are light and small objects that	June George
are heavy.	
	We're Going on a Bear Hunt by Michael
When showing and modelling patterns to children, ensure	Rosen
that there are three full units of repeat for them to be able	
to copy and continue. Ensure that children are exposed to	A-B-A-B-A – A Book of Pattern Play by
visual patterns that build both vertically and horizontally.	Brian P. Cleary
Memorable first hand experiences	Opportunities for communication
Making fruit kebabs, completing a large array of activities	Ask and discuss the key questions
using manipulatives, loose parts, natural objects etc.	provided by White Rose
	Discuss, share and repeat the sentence
	stems provided by White Rose

Communication and Interaction

Use a range of visual aids
Give clear instructions one at a time
Repetition

Provide simple instructions
Pre teach vocabulary
Use working wall where modelling is displayed
Give children thinking time
Model task

Cognition and Learning

Check understanding regularly
Allow rest breaks
Give thinking time
Colour code signs that could be confusing
Work checklists
Break down tasks into small steps
Give opportunities for over-learning

Social, Emotional and Mental health

Allow access to a quiet and calm space Give child a special role to increase self esteem Provide a visual support- what to do if you are stuck

Provide a movement break

Seat pupil by more confident peer

Now and next board

Sand timers

Movement breaks

Break down tasks into small steps

Sensory and Physical

Consider carpet space position
Reduce background noise
Provide a range of manipulatives- dienes may be
too small
Appropriate seating
Wobble boards
Writing slope

Enlarge text Variety of writing tools available