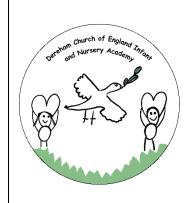
# Dereham Church of England Infant and Nursery Academy- Mathematics



Year group: Reception	Area/topic: Mathematics- Circles and
	triangles

Development Matters - 3 and 4-year-olds - Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language.

Birth to 5 Matters - Range 6 - Uses informal language and analogies, (e.g. heart-shaped and hand-shaped leaves), as well as mathematical terms to describe shapes Development Matters - 3 and 4-year-olds - Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language.

Development Matters - 3 and 4-year-olds -Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'.

Birth to 5 Matters - Range 5 - Responds to and uses language of position and direction.

Prior learning	Future learning
Children will build on their previous learning	The children will study shapes with 4 sides at
about size	the end of this term

What pupils need to know or do to be secure		
Key knowledge and skills	Possible evidence	
Identify and name circles and triangles	Opportunities to sort a selection of triangles and circles	

Compare circles and triangles	Phot	os of children using twigs/sticks to make
	almo	st triangles, what did they notice?
Shapes in the environment	Phot	os of children completing a shape hunt in
	the s	school environment- what did they find?
Describe position	Phot	o evidence of children setting up and
	comp	pleting an obstacle course, could a friend
	give	them instructions using positional
	U	ıbulary?
Key vocabulary		-
Same, different, shape, pointy, sharp, sides,		
straight, corners, round, almost, small, large, in,		
on, under, over, beside, between, in front of,		
around, through, behind, next		
Common misconceptions		Books linking to this area
When using physical representations of 2-D shapes,		Circle, Triangle, Elephant! A Book of
ensure that they are as thin as possible to support		Shapes and Surprises by Kenji Oikawa
children's understanding about them being flat.		and Mayuko Takeuchi
		·
It is important that children are shown circles of diff	erent	Triangle by Mac Barnett and Jon Klassen
sizes, and different types of triangles that vary in size	ze	
and orientation. Support children to talk about the		Shapes, Shapes, Shapes by Tana Hoban
properties of the shapes and to explain how they know it		We're Going on a Bear Hunt by Michael
is the same shape, even if the orientation or the size is		Rosen
different.		
		Rosie's Walk by Pat Hutchins
Introduce children to non-examples or 'almost' circles	and	, and the second
'almost' triangles. Examples of 'almost' circles would.		
biscuit or a pancake, while examples of 'almost' triang	gles	

would be a slice of pizza, a musical instrument triangle	
and a cheese triangle with rounded corners. Support	
children to explain why they are not circles and triangles.	
Memorable first hand experiences	Opportunities for communication
	Ask and discuss the key questions
	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