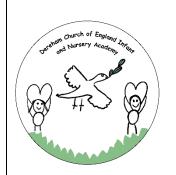
# Dereham Church of England Infant and Nursery Academy- Mathematics



# Year group: Reception

Area/topic: Mathematics- shapes with 4 sides

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 – Reception – Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.

Birth to 5 Matters – Range 5 – Enjoys partitioning and combining shapes to make new shapes with 2D and 3D shapes

Development Matters - Reception - 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 5 - Shows awareness of shape similarities and differences between objects.

Development Matters - 3 and 4-year-olds - Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'

Birth to 5 Matters - Range 6 - Is increasingly able to order and sequence events using everyday language related to time.

Prior learning	Future learning
Children completed a block earlier this half term	children will use and aplly this knowledge within
where they spent time studying circles and	their daily maths meeting. They will also be
triangles	introduced to 3D shapes next term.

What pupils need to know or do to be secure		
Key knowledge and skills	Possible evidence	
Identify and name shapes with 4 sides	Provide opportunities where you have hidden a range of squares, rectangles, circles and triangles for children to find. Prompt them to find, identify and name the shapes.	
Cambine shapes with 4 sides	Children's printing work where they have used plastic bricks and paint and printed these	
Shapes in the environment	Children's completed work where they have been given a selection of real-life scenes such as buildings or street scenes and the children have had to find the squares and rectangles in the pictures.	
My day and night	Continue to share the daily visual timetable and discuss that at regular points throughout each school day.	

Key vocabulary		
Squares, rectangles, sides, straight, corners, same,		
different, small, large, first, then, after, before, day,		
night, morning, afternoon, today, tomorrow, now,		
next, later,		
Common misconceptions		

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Common misconceptions	Books linking to this area
When using physical representations of 2-D shapes,	Bear in a Square by Stella Blackstone
ensure that they are as thin as possible to support	
children's understanding that 2-D shapes are completely	Square by Mac Barnett and Jon Klassen
flat.	Shapes, Shapes by Tana Haban
As in earlier blocks, there will be examples of 'almost'	Night Monkey, Day Monkey by Julia
shapes in the environment. It is important to discuss with	Donaldson
children why cream crackers, for example, are not square.	
	The Fox in the Dark by Alison Green
Memorable first hand experiences	Opportunities for communication
Many opportunities to play games. Regular use of a	Ask and discuss the key questions
range of 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