

Dereham Church Infant and Nursery School- 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 where they spent time studying circles and triangles	children will use and apply this knowledge within their daily maths meeting. They will also be 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.
Combine 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	Books linking to this area
When using physical representations of 2-D shapes, ensure that they are as thin as possible to support children's understanding that 2-D shapes are completely flat. As in earlier blocks, there will be examples of 'almost' shapes in the environment. It is important to discuss with children why cream crackers, for example, are not square.	Bear in a Square by Stella Blackstone Square by Mac Barnett and Jon Klassen Shapes, Shapes, Shapes by Tana Hoban Night Monkey, Day Monkey by Julia Donaldson The Fox in the Dark by Alison Green
Memorable first hand experiences	Opportunities for communication
Many opportunities to play games. Regular use of a range of manipulatives, loose parts, natural objects etc.	Ask and discuss the key questions provided by White Rose Discuss, share and repeat the sentence stems provided by White Rose

DCINS Reasonable adjustments for pupils with SEND

<p><i>Communication and Interaction</i></p> <p><i>Use a range of visual aids</i> <i>Give clear instructions one at a time</i> <i>Repetition</i> <i>Provide simple instructions</i> <i>Pre teach vocabulary</i> <i>Use working wall where modelling is displayed</i> <i>Give children thinking time</i> <i>Model task</i></p>	<p><i>Cognition and Learning</i></p> <p><i>Check understanding regularly</i> <i>Allow rest breaks</i> <i>Give thinking time</i> <i>Colour code signs that could be confusing</i> <i>Work checklists</i> <i>Break down tasks into small steps</i> <i>Give opportunities for over-learning</i></p>
<p><i>Social, Emotional and Mental health</i></p> <p><i>Allow access to a quiet and calm space</i> <i>Give child a special role to increase self esteem</i> <i>Provide a visual support- what to do if you are stuck</i> <i>Provide a movement break</i> <i>Seat pupil by more confident peer</i> <i>Now and next board</i> <i>Sand timers</i> <i>Movement breaks</i> <i>Break down tasks into small steps</i></p>	<p><i>Sensory and Physical</i></p> <p><i>Consider carpet space position</i> <i>Reduce background noise</i> <i>Provide a range of manipulatives- dienes may be too small</i> <i>Appropriate seating</i> <i>Wobble boards</i> <i>Writing slope</i> <i>Enlarge text</i> <i>Variety of writing tools available</i></p>