

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 about size	The children will study shapes with 4 sides at 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 Shapes in the environment Describe position	Photos of children using twigs/sticks to make almost triangles, what did they notice? Photos of children completing a shape hunt in the school environment- what did they find? Photo evidence of children setting up and completing an obstacle course, could a friend give them instructions using positional vocabulary?
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, ensure that they are as thin as possible to support children's understanding about them being flat. It is important that children are shown circles of different sizes, and different types of triangles that vary in size and orientation. Support children to talk about the properties of the shapes and to explain how they know it is the same shape, even if the orientation or the size is different. Introduce children to non-examples or 'almost' circles and 'almost' triangles. Examples of 'almost' circles would be a biscuit or a pancake, while examples of 'almost' triangles	Circle, Triangle, Elephant! A Book of Shapes and Surprises by Kenji Oikawa and Mayuko Takeuchi Triangle by Mac Barnett and Jon Klassen Shapes, Shapes, Shapes by Tana Hoban We're Going on a Bear Hunt by Michael Rosen Rosie's Walk by Pat Hutchins

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

DCINA Reasonable adjustments for pupils with SEND

<i>Communication and Interaction</i> <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>	<i>Cognition and Learning</i> <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>
<i>Social, Emotional and Mental health</i> <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>	<i>Sensory and Physical</i> <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>