


Dereham Church Infant and Nursery School- Mathematics

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|  | Year group: 1 | Area/topic: Mathematics- shape |
| | <p>Recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles]; 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]</p> | |

| Prior learning | Future learning |
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| <p>Children will have been exposed to 2-D and 3-D shapes during their daily maths meetings when in the EYFS.</p> | <p>The learning from this unit will be continued and applied further, particularly within Measurement, position and direction, mass and capacity</p> |

| What pupils need to know or do to be secure | |
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| Key knowledge and skills | Possible evidence |
| <p>Recognise and name 3-D shapes</p> <p>Sort 3-D shapes</p> <p>Recognise and name 2-D shapes</p> <p>Sort 2-D shapes</p> <p>Patterns with 2-D and 3-D shapes</p> | <p>Photos of children's shapes that they have made using modelling clay</p> <p>Opportunities to play the odd one out game</p> <p>Photo evidence of children making and exploring 2-D shapes using sticks outside</p> <p>Children to complete a shape hunt around the school. Take photos, print these and then sort them.</p> <p>Patterns created/stuck into maths book</p> |

| Key vocabulary | |
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| <p>2-D, 3-D, cube, cuboid, cylinder, pyramid, cone, sphere, roll, stack, flat face, curved surface, triangle, square, rectangle, circle, same, different, repeating pattern, symmetrical pattern,</p> | |
| Common misconceptions | Books linking to this area |
| <p>Children may think that a 3-D shape can only be placed or viewed in a certain way. Ensure that children are exposed to shapes in different orientations.</p> <p>Children may be familiar with the names of 2-D shapes from earlier learning or real-life experience, and may confuse these names with the names of 3-D shapes.</p> <p>If children are not used to seeing 3-D shapes presented in different orientations, they may try to sort by shapes that are “upside down”.</p> <p>Children may think that cubes and cuboids can never be sorted into the same group, because they do not realise that a cube is a special type of cuboid</p> <p>Children may not recognise that a square is a special type of rectangle.</p> <p>Children may find it harder when a pattern involves more than two shapes, as they may not find the rule as easy to spot.</p> <p>Where a pattern repeats the same shape multiple times in</p> | <p>Rapunzel by Stephanie Stansbie</p> <p>Mouse Shapes by Ellen Stoll Walsh</p> <p>Which one doesn't belong? By Christopher Danielson</p> <p>The perfect fit by Naomi Jones</p> <p>One more try by Naomi Jones</p> <p>Triangle by Mac Barnett</p> <p>Circle by Mac Barnett</p> <p>Square by Mac Barnett</p> |

| <p>a row, for example ABBBABBB, children may find it more difficult to identify the rule and therefore to continue the pattern</p> | |
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| <p>Memorable first hand experiences</p> | <p>Opportunities for communication</p> |
| <p>Use a range of manipulatives. Complete a shape hunt in the school grounds Opportunities to explore making shapes with modelling clay,</p> | <p>Ask key questions and discuss</p> <p>Discuss and answer stem sentences provided by White Rose</p> <p>Complete odd one out activity and discuss</p> <p>Discuss/debate What's the same/what's different?</p> |

DCINS Reasonable adjustments for pupils with SEND

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