



	Nursery	Reception	Year 1	Year 2	Year 3	Year 4
White Rose Maths Small Steps	<u>Pattern 1 – Explore Repeats</u> <u>Pattern 2 – Join in with repeats</u> <u>Shape, space and measure 2 – Explore position and space (also in measure)</u> <u>Shape, space and measure 3 – Explore position and routes</u> <u>Pattern 3 – Explore own first patterns</u> <u>Shape, space and measure 4 – Match, talk, push and pull</u> <u>Pattern 4- Lead on own repeats</u> <u>Shape, space and measure 5 – Starting to puzzle</u> <u>Pattern 5 – Making patterns to together</u> <u>Pattern 6 – my own pattern</u>	<u>Match, sort and compare</u> -identify a set -sort objects to a type -explore sorting techniques -create sorting rules (also in place value) <u>Talk about patterns</u> -Explore simple patterns -Copy and continue simple patterns -Create simple patterns <u>Circles and triangles</u> - Identify and name circles and triangles -Compare circles and triangles - Shapes in the environment -Describe position <u>Shapes with 4 sides</u> -Identify and names shapes with 4 sides -Combine shapes with 4 sides -Shapes in the environment <u>Explore 3D shapes</u> -Recognise and name 3-D shapes -Find 2-D shapes within 3-D shapes -Use 3-D shapes for tasks	<u>Shape:</u> -Recognise and name 3-D shapes -Sort 3-D shapes -Recognise and name 2-D shapes -Sort 2-D shapes -Patterns with 2-D and 3-D shapes <u>Position and direction:</u> -Describe turns -Describe position – left and right -Describe position – forwards and backwards -Describe position – above and below -Ordinal numbers	<u>Shape:</u> -Recognise 2-D and 3-D shapes -Count sides on 2-D shapes -Count vertices on 2-D shapes -Draw 2-D shapes -Lines of symmetry on shapes -Sort 2-D shapes -Count faces on 3-D shapes -Count edges on 3-D shapes -Count vertices on 3-D shapes -Sort 3-D shapes -Make patterns with 2-D and 3-D shapes <u>Position and direction:</u> -Language of position -Describe movement -Describe turns -Describe movement and turns -Shape patterns with turns	<u>Shape:</u> -Turns and angles -Right angles -Compare angles -Measure and draw accurately -Horizontal and vertical -Parallel and perpendicular -Recognise and describe 2-D shapes -Draw polygons -Recognise and describe 3-D shapes -Make 3-D shapes <u>Position and direction:</u> -Not in Year 3	<u>Shape:</u> -Understand angles as turns -Identify angles -Compare and order angles -Triangles -Quadrilaterals -Polygons -Lines of symmetry -Complete a symmetric figure <u>Position and direction:</u> -Describe position using coordinates -Plot coordinates -Draw 2-D shapes on a grid -Translate on a grid -Describe translation on a grid



		-3-D shapes in the environment -Identify more complex patterns -Copy and continue patterns -Patterns in the environment <u>Manipulate, compose and decompose</u> -Select shapes for a purpose -Rotate shapes -Manipulate shapes -Explain shape arrangements -Compose shapes -Decompose shapes -Copy 2-D shape pictures -Find 2-D shapes within 3-D shapes <u>Visualise, build and map</u> -Identify units of repeating patterns -Create own pattern rules -Explore own pattern rules -Replicate and build scenes and constructions -Visualise from different positions -Describe positions -Give instructions to build -Explore mapping -Represent maps with models -Create own maps from familiar places				
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		-Create own maps and plans from story situations				
National Curriculum Links	<u>Development Matters- 3-4-year-olds:</u> -Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. -Understand position through words alone – for example, "The bag is under the table," – with no pointing. -Describe a familiar route. -Discuss routes and locations, using words like 'in front of' and 'behind'. -Select shapes appropriately: flat surfaces for building, a triangular prism for a roof, etc. -Combine shapes to make new ones – an arch, a bigger triangle, etc. -Talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs', etc. -Extend and create ABAB patterns – stick, leaf, stick, leaf. -Notice and correct an error in a repeating pattern.	<u>Development Matters – reception year:</u> -Select, rotate and manipulate shapes to develop spatial reasoning skills. -Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. -Continue, copy and create repeating patterns.	<u>Shape:</u> -Recognise common 2-D shapes, including: (e.g. rectangles (including squares), circles and triangles). -Recognise and name common 3-D shapes, including: (e.g. cuboids (including cubes), pyramids and spheres). <u>Position and direction:</u> -Describe position, direction and movement, including whole, half, quarter and three-quarter turns	<u>Shape:</u> -Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. -Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. -Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]. -Compare and sort common 2-D and 3-D shapes and everyday objects. <u>Position and direction:</u> -order and arrange combinations of mathematical objects in patterns and sequences -use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise)	<u>Shape:</u> -Draw 2-D shapes and make 3-D shapes using modelling materials. -Recognise 3-D shapes in different orientations and describe them. -Recognise angles as a property of shape or a description of a turn. -Identify right angles, recognise that two right angles make a half turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle. -Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	<u>Shape:</u> -Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. -Identify acute and obtuse angles and compare and order angles up to two right angles by size. - -Identify lines of symmetry in 2-D shapes presented in different orientations. -Complete a simple symmetric figure with respect to a specific line of symmetry. <u>Position and direction:</u> -Describe positions on a 2-D grid as coordinates in the first quadrant. -Plot specified points and draw sides to complete a given polygon. -Describe movements between positions as translations of a given unit to the left/ right and up/ down.



South Gosforth First School

Maths – Geometry - Whole School Progression



Vocabulary	build, curved, curvy, different, flat, match, pointy, round, same, sharp, stack <u>Pattern:</u> after, line, next, pattern, spot, star, stripe, swirl, zigzag <u>Position and direction:</u> behind, between, down in, in front, inside, move, on, out, outside, over, through, under, up,	2-d shape, properties 3-d shape, circle, cone, corner, cube, cuboid, curved, cylinder, face, flat, pyramid, rectangle, rotate, set, sides, solid, sort, sphere, square, straight, surface, triangle <u>Pattern:</u> continue, copy, mistake, repeat, repeating, pattern, same, unit of repeat, <u>Position and direction:</u> above, around, backwards, below, beside, bottom, forwards, map, next to, position, route, top	Properties <u>Position and direction:</u> far, full turn, half turn, left, near, quarter turn, right, three-quarter turn, direction	edge, line of symmetry, symmetrical, vertex, vertices <u>Pattern:</u> decreasing, increasing, sequence <u>Position and direction:</u> anti-clockwise, between, clockwise	acute, obtuse, angle, vertical horizontal, parallel, perpendicular, polygon, right angle	equilateral, regular, irregular, isosceles, parallelogram, quadrilateral, rhombus, scalene, trapezium <u>Position and direction:</u> coordinates, grid, reflection, translation,
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