

Mathematics (Geometry – position and direction)

For pre-formal this is around 'space' and their understanding of where they are within the world

Number (Geometry – position and direction) – KS1 – KS5			
By the end of KS5 our pupils should know:	Redway Pre-Formal Pathway Encounter → Foundation	Redway Semi-formal Pathway Core → Development	Redway Formal Pathway Enrichment → Enhancement
	The pupil can:	The pupil can:	The pupil can:
Position, Direction and Movement			
Describe position, direction, and movement, including whole, half, quarter and three- quarter turns. [NC: YR1]	- Recognise an obvious change happening very close to self (e.g., stills when hand is massaged or when they see a bright flashing light) - Turns to sounds/lights that are activated but in one place e.g., turns head to flashing light - Reacts to movement e.g., Sherbourne, swings, roundabouts - Orientates body towards external stimuli - Attends to stimuli in a busy classroom - Attends to stimuli further away (e.g. smells dinner on a trolley) - Responds to a range of stimuli that are quieter/less obvious e.g. a smile - Locates specific stimulus against a busy background e.g. finding a favourite toy in a box, turning to name being called in a busy room.	- Places object in a designated area - Moves an object along a designated space e.g., car on play mat, train tracks - Takes the lid off to find an object - Places objects in a line (see counting) - Puts an object together - Copies a song/game which involves directional movement e.g., Cha Cha Slide, Hokey Cokey, - Participates in games with some accuracy e.g., throwing beanbags in a bucket, ball through a net - Understands positional language - in - on - under - Uses positional language - in - on - under	- Understands positional language - below - above - next to - in front - behind - on top - Left - right - forwards - backwards - turn - whole - half - quarter - three-quarters - Uses positional language to describe - below - above - next to - in front - behind

	- Recognise when a stimulus starts and stops e.g. stills body when a stimuli stops - Transfers attention from one stimuli to another (e.g. looks at a jumping dog) - Makes things happen when they move randomly e.g. space blanket crackles when the pupil wiggles - Makes things move deliberately with gross motor movements e.g. kick bell, knock bells - Makes things move deliberately with finer motor skills e.g. whole hand or head to activate a switch - Activate toys that provide an interesting effect randomly and without connecting the cause and effect - Activates toys deliberately, using different movement for different toys e.g., bang on the drum or shake of the bells - Look for object that has gone out of sight - Look at the bottom of a slide or tumbling toy for the object to appear when it can't be seen falling - Opens containers to find objects - Takes turns actively e.g., rolling ball to partner - Solves simple problems where understanding the pattern is	- Finds or returns an object to its normal place	- on top - left - right - forwards - backwards - turn - whole - half - quarter - three-quarters
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	important e.g. when there are 4 pegs to a toy and 3 are in place, look for the fourth if out of sight.		
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 anti-clockwise). [YR2]		- Moves an object backwards and forwards on command - Physically follows instructions with - straight line - anti-clockwise - clockwise	- Understands positional language - straight line - anti-clockwise - clockwise - Uses positional language - straight line - anti-clockwise - clockwise - Use, clockwise and anti-clockwise alongside quarter, half, and three-quarter turns. - Begin to understand turns as a measurement of angle e.g., right angles as a quarter turn.
Pattern			
Order and arrange combinations of mathematical objects in patterns and sequences [YR2]		- Use familiar objects and common shapes to create and recreate patterns and build models. - Copy a musical pattern - Copy and continue simple patterns using real-life materials (e.g., apple, orange, apple, orange...etc) [standard 2] - Copy and continue more advanced patterns using real-life materials (e.g., apple, apple, orange, apple, apple, orange, etc...) [standard 3] - Create simple patterns within artwork e.g., stripes and dots	- Copy a repeating pattern ABB, for example or ABC.... - Can continue a repeating pattern ABB, for example or ABC.... - Can create their own repeating pattern - Can find the missing part of a pattern e.g., fill the gap See number for number patterns e.g., counting in 2s.

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| | | <ul style="list-style-type: none">- Copy a repeating pattern AB (not using objects)- Can continue an AB repeating pattern (not using objects)- Can find the missing part of a pattern e.g., fill the gap- Discusses patterns in terms of shapes/lines/colours | |
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- The Redway School