Mount Charles School
Geometry position and direction
Objective. K-Knowledge. S-Skills

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
New Vocabulary	Over, under, underneath, above, below, top, bottom, side On,in, outside, inside In front, behind Front, back, before, after Beside, next to Middle Up, down, forwards, backwards, sideways Close, far Through Towards, away from Side, roll turn	half turn turn quarter turn three-quarter turn position whole turn left right forwards above top middle bottom below up down in between	anticlockwise clockwise		Grid coordinates	mirror line translation	Quadrant Reflect translate
Position, Direction and Movement	**Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints** **Investigates turning and flipping objects in order to make shapes fit and create models; predicting and visualising how they will look (spatial reasoning)**	**describe position, direction and movement, including half, quarter and three-quarter turns.** K – meaning of words half, quarter and three-quarter K – meaning of words used to describe position, direction and movement	**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**		**describe positions on a 2-D grid as coordinates in the first quadrant** K – how to read coordinates in the first quadrant K – how coordinates are written (3,4) S – describe positions on a 2-D grid as coordinates in the first quadrant **describe movements between positions as translations of a given**	**identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed** K – difference between reflection and translation K – appropriate language to describe a reflection or translation	**describe positions on the full coordinate grid (all four quadrants)** K – how to read a full coordinate grid K – how to write coordinates in all four quadrants S – describe positions on the full coordinate grid **draw and translate simple shapes on the coordinate plane, and**

	May enjoy making simple maps of familiar and imaginative environments, with landmarks	S – use appropriate vocabulary to describe position, direction and movement.	**anti-clockwise)** K – meaning of clockwise and anti-clockwise K – difference between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns. S – use mathematical vocabulary to describe position, direction and movement including movement in a straight line S – distinguish between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns		**unit to the left/right and up/down** K – translation is the movement of shape and the shape stays the same size K – how to count using the grid lines accurately S – describe movements between positions as translations of a given unit **plot specified points and draw sides to complete a given polygon** K – properties of polygons K – how to plot points on an axis K – using a ruler to draw accurately. S -plot specified points and draw sides to complete a given polygon	K – shape does not change when reflected or translated S – identify, describe and represent the position of a shape following a reflection or translation S -use appropriate language	**reflect them in the axes.** K – the difference between translation and reflection K- properties of simple shapes S – draw and translate simple shapes on the coordinate plan S – reflect shapes in the axis

Pattern	**Spots patterns in the environment, beginning to identify the pattern "rule"** **• Chooses familiar objects to create and recreate repeating patterns beyond AB patterns and begins to identify the unit of repeat**		**order and arrange combinations of mathematical objects in patterns and sequences** K – the difference between a pattern and a sequence S – order and arrange combinations of mathematical objects in patterns and sequences				