HIGHER GCSE UNIT SUMMARY: UNIT 18: Vectors and geometric proof

18) **Vectors and geometric proof**

Unit Description	Taught	Revision Priority
Understand and use vector notation, including column notation, and understand and interpret vectors as displacement in the plane with an associated direction.		
Understand that 2**a** is parallel to **a** and twice its length, and that **a** is parallel to –**a** in the opposite direction.		
Represent vectors, combinations of vectors and scalar multiples in the plane pictorially.		
Calculate the sum of two vectors, the difference of two vectors and a scalar multiple of a vector using column vectors (including algebraic terms).		
Find the length of a vector using Pythagoras' Theorem.		
Calculate the resultant of two vectors.		
Solve geometric problems in 2D where vectors are divided in a given ratio.		
Produce geometrical proofs to prove points are collinear and vectors/lines are parallel.		