GCSE Physics Learning Checklist

Unit 5: Forces	Sub-Topic: Forces in balance

I can...		After Lesson	After Revision
1	Identify and describe scalar quantities and vector quantities		
2	Identify and give examples of forces as contact or non-contact forces		
3	Describe the interaction between two objects and the force produced on each as a vector		
4	Describe weight and explain that its magnitude at a point depends on the gravitational field strength		
5	Calculate weight by recalling and using the equation: ***[W = mg]***		
6	Represent the weight of an object as acting at a single point which is referred to as the object's 'centre of mass'		
7	Calculate the resultant of two forces that act in a straight line		
8	**HT ONLY: describe examples of the forces acting on an isolated object or system**		
9	**HT ONLY: Use free body diagrams to qualitatively describe examples where several forces act on an object and explain how that leads to a single resultant force or no force**		
10	**HT ONLY: Use free body diagrams and accurate vector diagrams to scale, to resolve multiple forces and show magnitude and direction of the resultant**		
11	**HT ONLY: Use vector diagrams to illustrate resolution of forces, equilibrium situations and determine the resultant of two forces, to include both magnitude and direction**		

Keywords:

Quantity
Magnitude
Scalar
Vector
Centre of mass

Contact force
Non-contact force
Resultant force
Displacement
Friction
Weight

Air resistance
Upthrust
Reaction
Magentic

Exam insights:

Since forces are a vector quantity, it is useful to show their magnitude (size) and direction using an arrow. The arrow points in the direction that the force acts, and its length shows the magnitude.