AQA Chapter 8 Checklist 2017

(Double Higher)

Can you…?	☺	😐	☹
Chapter 8: Forces in balance			
Write down what displacement is.			
Write down what a vector quantity is.			
Write down what a scalar quantity is.			
Describe how to represent a vector quantity.			
Write down what forces can do.			
Write down the unit of force.			
Write down what a contact force is.			
Describe the forces being exerted when two objects interact.			
Describe what a resultant force is.			
Describe what happens if the resultant force on an object is zero.			
Describe what happens if the resultant force on an object is greater than zero.			
Calculate the resultant force when an object is acted by two forces acting along the same line.			
State what a free-body force diagram is.			
State what the moment of a force measures.			
State what the centre of mass of an object is.			
State where the centre of mass of a metre ruler is.			
Find the centre of mass of an object suspended from a fixed point.			
Find the centre of mass of a symmetrical object.			
State what a parallelogram of forces is.			
State what a parallelogram of forces is used for.			
Write down what is needed to draw a scale diagram of a parallelogram of forces.			
Use a parallelogram of forces to find the resultant of two forces.			
Describe what resolving a force means.			
Describe how to resolve a force into two components.			
Define equilibrium.			
Explain why an object at rest is in equilibrium.			
Chapter 8: Equations I need to know.			
None!			
Chapter 8: Equations I am given and need to use.			
None! Lucky you!			

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(Double Higher)

Chapter 8: Key words I need to know			
Displacement: *distance in a given direction.*			
Force: *a force (in newtons, N) can change the motion of an object.*			
Friction: *the force opposing the relative motion of two solid surfaces in contact.*			
Load: *the weight of an object raised by a device used to lift the object, or the force applied by a device when it is used to shift an object.*			
Magnitude: *the size or amount of a physical quantity.*			
Moment: *the turning effect of a force.*			
Newton's first law of motion: *if the resultant force on an object is zero, the object stays at rest if it is stationary, or it keeps moving with the same speed in the same direction.*			
Newton's third law: *when two objects interact with each other, they exert equal and opposite forces on each other.*			
Parallelogram of forces: *a geometrical method used to find the resultant of two forces that do that do not act along the same line.*			
Principle of moments: *for an object in equilibrium, the sum of all the clockwise moments about any point = the sum of all the anti-clockwise moments about that point.*			
Resultant force: *a single force that has the same effect as all the forces acting on the object.*			
Scalars: *a physical quantity, such as mass or energy that has magnitude only (unlike a vector which has magnitude and direction).*			
Vector: *a vector is a physical, such as displacement or velocity that has a magnitude and a direction (unlike a scalar which has magnitude only).*			