

Year 12 Biomechanics checklist

Topic	Details			
1. Newton's laws	<ol style="list-style-type: none"> I can define newton's 3 laws I can give a sporting example and relate to newton's 3 laws 			
2. Calculations	<ol style="list-style-type: none"> I can calculate the following calculations <ul style="list-style-type: none"> Velocity Momentum Acceleration Force 			
3. Forces	<ol style="list-style-type: none"> I can define force I can explain when internal force and external force is generated I can explain forces 5 effects of motion I know the following vertical forces <ul style="list-style-type: none"> Weight Reaction I can explain the following horizontal forces <ul style="list-style-type: none"> Friction (+ factors affecting) Air resistance (+ factors affecting) 			
4. Free body diagram	<ol style="list-style-type: none"> I can label a free body diagram and know where the following points should originate from <ul style="list-style-type: none"> Direction of motion Friction Weight Air resistance Reaction I can explain the size of the arrow and relationship between forces 			
5. Centre of mass	<ol style="list-style-type: none"> I can define centre of mass I can relate centre of mass to a sporting example 			
6. Stability	<ol style="list-style-type: none"> I can define stability I can explain the following factors affecting stability <ul style="list-style-type: none"> Mass Height Base of support Line of gravity I can explain how a performer will maximise stability I can explain how a performer will minimise stability 			
7. Lever System	<ol style="list-style-type: none"> I can explain the following levers <ul style="list-style-type: none"> First Second Third Can explain mechanical advantages and mechanical disadvantages 			