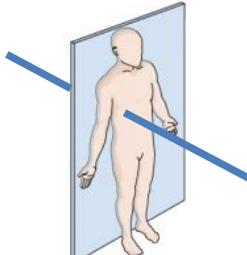
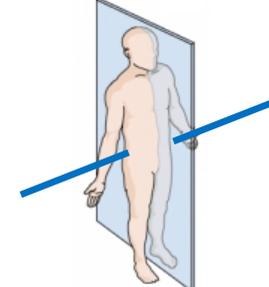
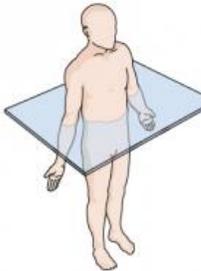
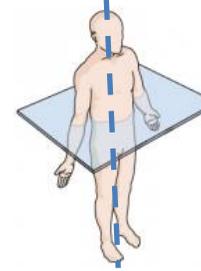


# Paper 1: Planes & Axes of Movement

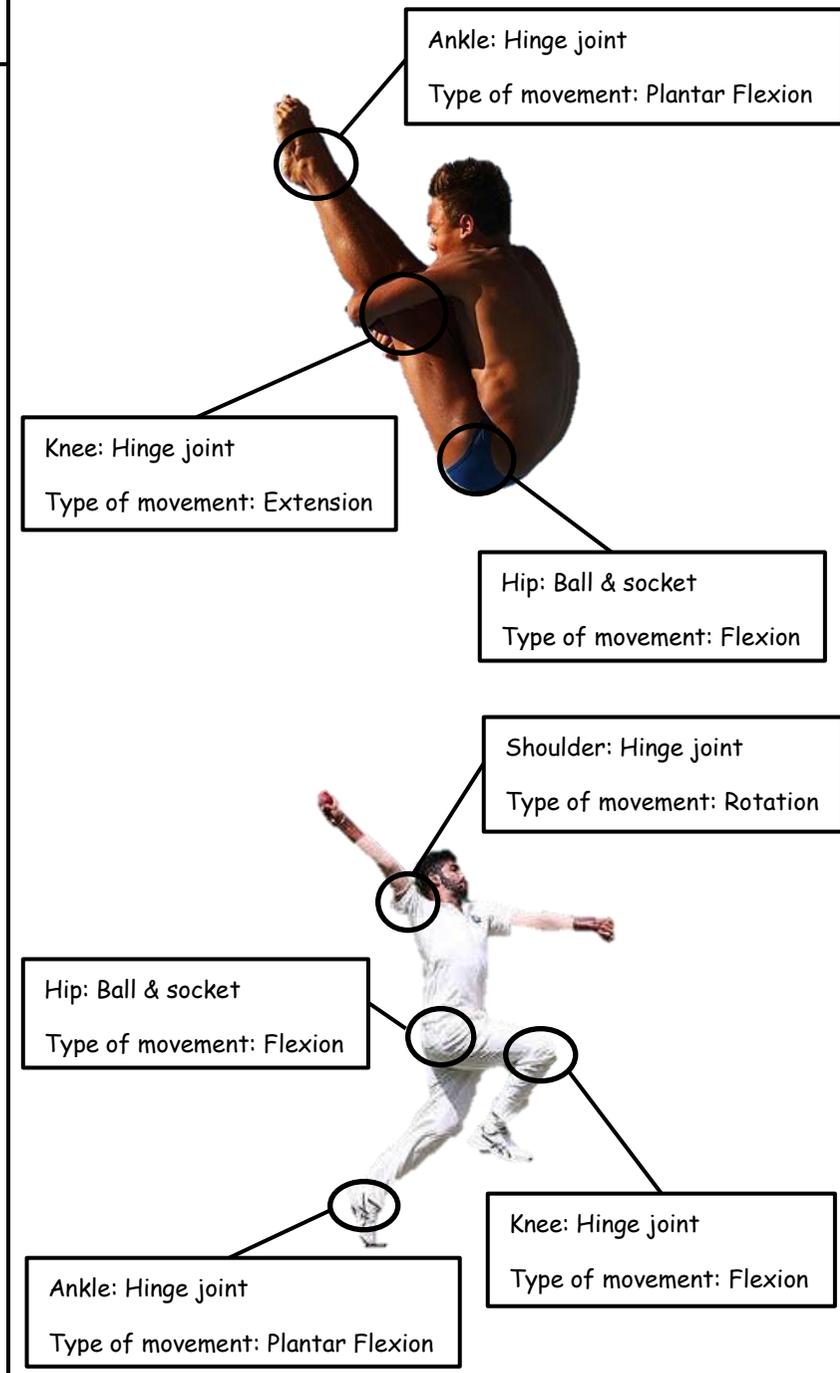
## Planes and axes of movement:

We move in planes around axes. You need to be able to identify and describe the three different body planes and axes

- A plane is an imaginary line that movement direction occurs in
- An axis is a line about which the body or body part can turn

Plane of movement	Axes of movement	Sporting example
		
<b>Frontal Plane</b> Separates the front and the back of the body	<b>Sagittal axis</b> Goes from the front to the back of the body	<b>Cartwheel</b> The only movements are Abduction and adduction
		
<b>Sagittal Plane</b> Separates the left and the right side of the body	<b>Frontal axis</b> Goes from one side to the other side of the body	<b>Somersault</b> The only movements are flexion and extension
		
<b>Transverse Plane</b> Separates the top and the bottom of the body	<b>Vertical axis</b> Goes from the top of the body to the bottom of the body	<b>Full twist (diving)</b> The only movements are rotating and twisting

## Analysis of basic movements in sporting examples:



**Example 1: Cartwheel**

- Ankle: Hinge joint  
Type of movement: Plantar Flexion
- Knee: Hinge joint  
Type of movement: Extension
- Hip: Ball & socket  
Type of movement: Flexion

**Example 2: Full twist (diving)**

- Shoulder: Hinge joint  
Type of movement: Rotation
- Hip: Ball & socket  
Type of movement: Flexion
- Knee: Hinge joint  
Type of movement: Flexion
- Ankle: Hinge joint  
Type of movement: Plantar Flexion