

Movement

Analysis –

Levers and

Planes

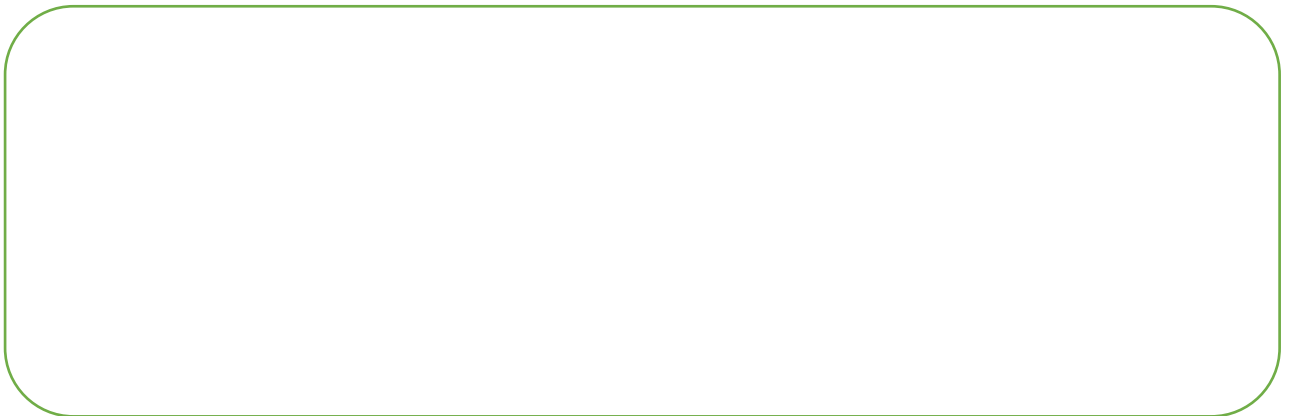
Name.....

Levers and Planes


Remember – Harry And Ellora

Remember the time when **EFL** the **FLE FEL**

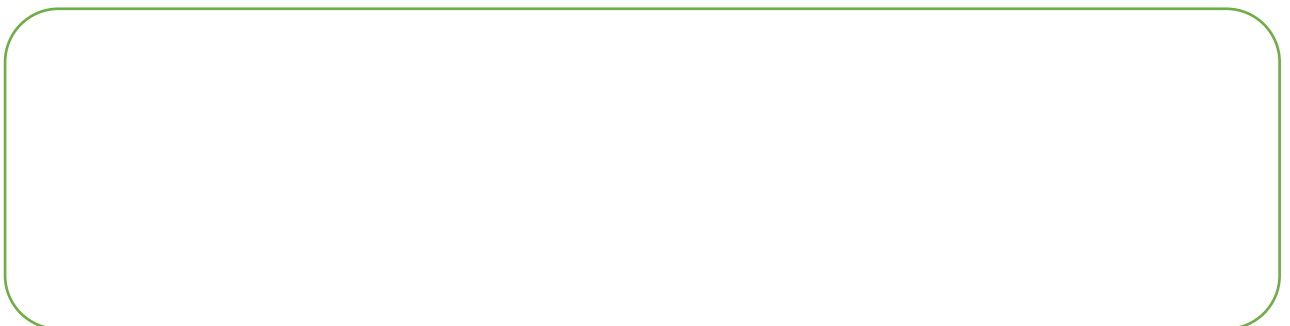
Draw below a first class lever-



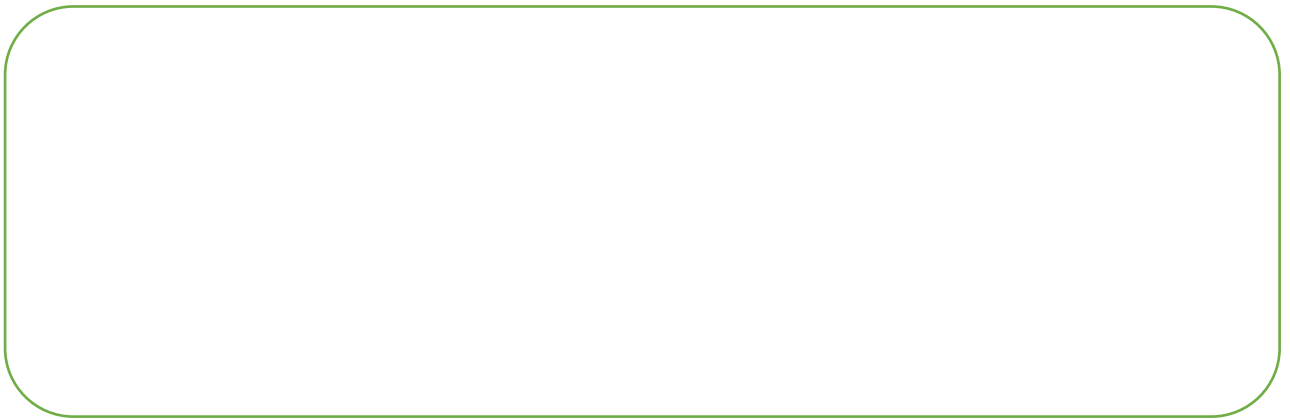
Describe this lever below – **exp. The fulcrum is in the middle**



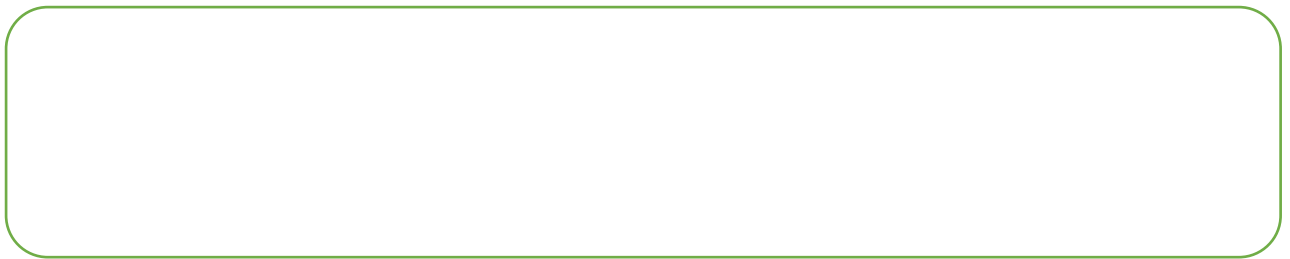
Give a practical example of this lever and state how it works



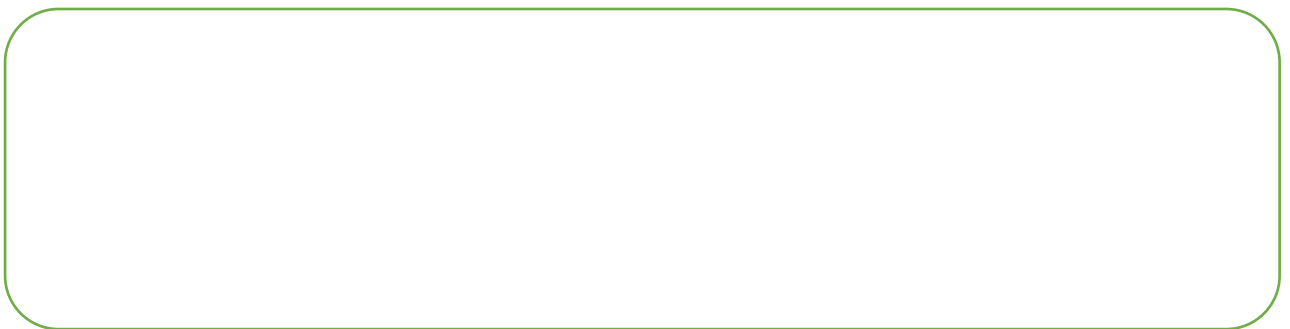
Draw below a second class lever-



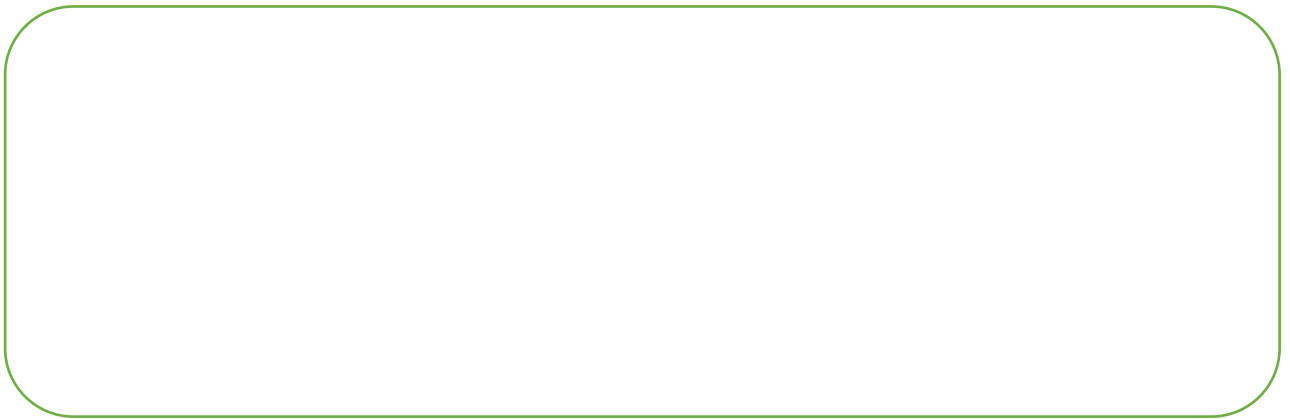
Describe this lever below – **exp. The fulcrum is in the middle**



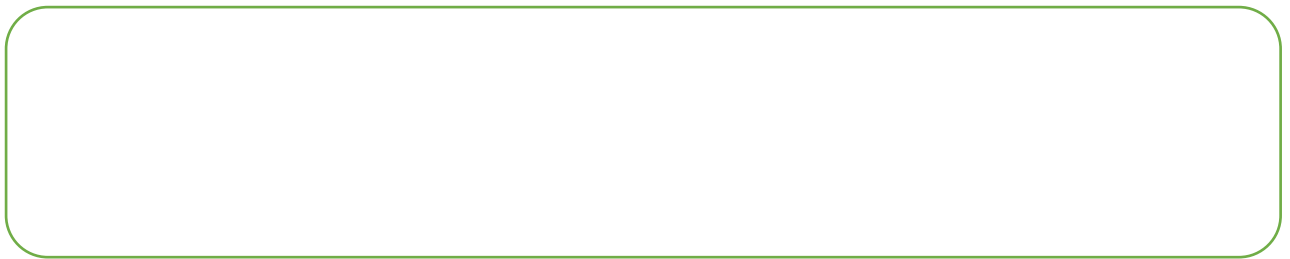
Give a practical example of this lever and state how it works



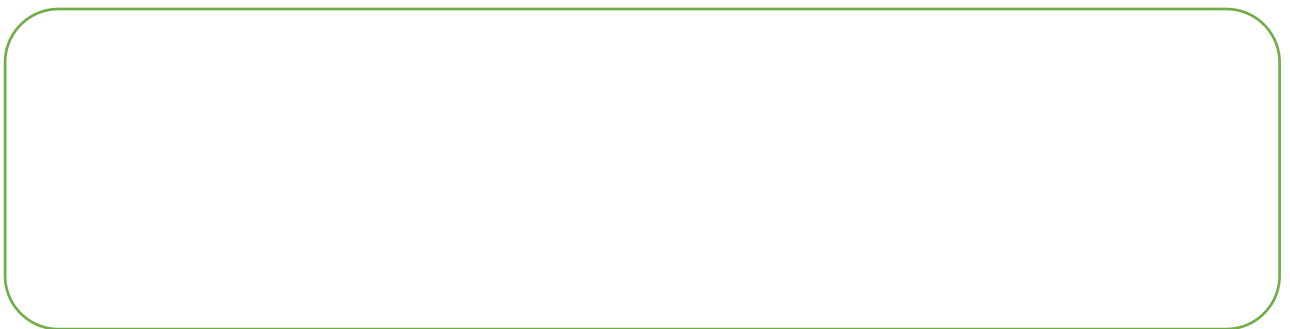
Draw below a third class lever-



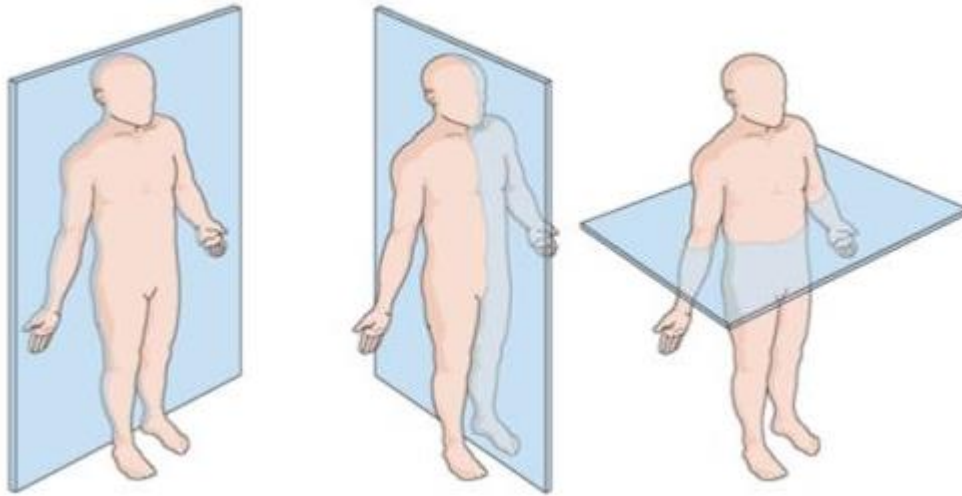
Describe this lever below – **exp. The fulcrum is in the middle**



Give a practical example of this lever and state how it works



Label the plane on each body



Give a practical example of movement that takes place in each plane –

F.....

S.....

T.....

Draw a line through each of the bodies to show axes of rotation



Plane	Movement	Axis	Activity example
	Flexion/Extension		
			Pirouette
		Frontal	

Key terms

Mechanical advantage -

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Centre of rotation –

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SUMMARY

- Levers are important in movement because they allow efficiency and force to be applied to the body's movements.
- First class and second class levers can both provide mechanical advantage.
- First class levers – the fulcrum is located between the effort force and the load force.
- Second class levers – this is when the load or resistance is between the fulcrum and the effort.
- Third class levers – this is when the effort is between the fulcrum and the load or resistance.
- The frontal plane runs vertically and divides the body in sections, between front (anterior) and back (posterior). Movements in the frontal plane are abduction and adduction.
- The transverse plane divides the body into upper or superior section and lower or inferior section. Movements in the transverse plane are rotational.
- The sagittal plane splits the body vertically into left and right sides. Movements in the sagittal plane are the up and down movements of flexion and extension.
- An axis is a straight line around which an object rotates. There are three axes of rotation:
 - frontal (front to back) axis
 - transverse (side to side) axis
 - longitudinal (top to bottom) axis.