Activity Title	Rolling Tin
Education level	Secondary/University
Time	30mins
Group size	15
Location	Does not matter
Materials	biscuit tin, a weight, a piece of wooden ramp
Type of learning activity	Demonstration, fun learning
Core skills	Carrying out investigation, Asking question, Communicating information, Constructing explanation
Goals:	
Engage	• Attach the weight to the edge of the tin on one side. • Secure It in place using anything that will work. • Place hole sin the back of the tin. • Close the tin and you are ready to begin the demonstration. • Place the tin on a ramp with the counter weight on the uphill side. You will need to experiment to find the best incline. Let go of the tin and see which direction it goes
Explore	• What would happen if I change the wood? • What would happen if I place the weight at the other side? • Can I get the tin to stay in one position?
Explain	The added weight changes the centre of gravity (COG) of the tin which would normally be at the centre of the cylindrical tin. The COG is now situated close to the extra weight on the edge of the tin. Gravity acts on the COG and pulls it downwards. In order for the COG to move downwards, the tin has to roll up hill. Physics works !
Elaborate	Discuss the effect of pregnancy on the centre of gravity.
Evaluate	Students will be asked to explain the theory behind the experiment, to assess their understanding.