

# Motion in Motion

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While the original goal of the project seemed rather simple I soon learned that making a machine that carries perpetual motion, forever, would be a long and tiring process. The amount of small moving parts that were required to create such a small yet complicated machine was almost too much for my high schooler brain, but for the most, I managed to get a general idea as to how such a machine could be created. You only had to have looked at Newton's laws of motion to understand what had to be done. My design was different from most others, I had stationed a rotating axis in the center of multiple stationary supports, and had multiple revolving weights shift as it had spun. The only problem was friction, and pressure on the axis. Too many weights meant that the axis would not spin, and friction caused the axis to eventually slow down. In order to get rid of these problems, I would need an incredibly specific amount of weight on each part of the axis, each different part required either less weight or more. As for getting rid of friction, a universal law of motion, that one is a little bit trickier, as friction cannot be removed. The only way friction could be removed, is with the addition of a solution that allows the axis to flow freely with its new weights. Perhaps it was friction itself that powered the weights, and maybe I only needed a solution to the first problem, but that's for next year's project.