

Hopper Goal Statement

My goal for this project is to create a hopper inspired by the jackknifing motion of the click beetle to lift itself off the ground and spin midair. Through doing this project, I want to learn skills that will help me to formulate and test out my design ideas.

I want to create a hopper that is interesting but effective and simple. To do this, I want my hopper to jump up and spin while it's in the air, creating the theatrical component to its performance. I don't have very much previous design experience, although I am detail-oriented and fairly confident in my ability to create and assemble parts. Instead of focusing on the building part of this challenge, I'm hoping to learn more about how to use the engineering design process and sketch modelling to aid me in coming up with design ideas, work on and revise them, and refine them into a functional end product instead of jumping right into building.