

Hopper Goal Statement

My goal is to make a hopper that spins midair inspired by the way that a kangaroo jumps using its back legs. I want to work on using the hopper's stored energy efficiently to create a higher jump and allowing it to spin more.

The reason that I want my hopper to spin is that it creates a more interesting jumping movement and adds a theatrical component to its performance while still keeping my design effective and simple. I also think it would be a fun challenge to optimize my hopper to make it jump higher, which would be done by applying physics concepts such as center of gravity and levers to improve my hopper geometry and to adjust its jump angle.