

Lego Launcher Machine



K-2



3-5



6-8

Objective:

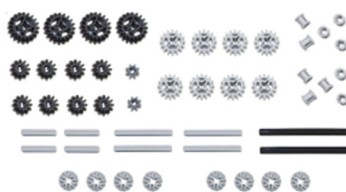
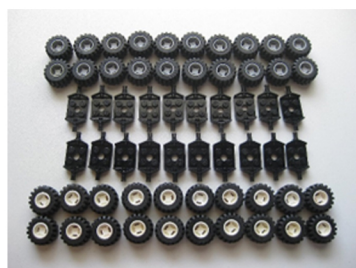
Build a machine to launch your ping pong ball the farthest (measured perpendicular from the starting line)

Engineering Constraints:

- **Size Limit of 16-stud baseplate**

Materials:

- **Legos & Rubber Bands**



Engineering Design Process:

- **Brainstorming session**
- **Design sketch with pieces you need**
- **Build**
- **Test and modify as needed until the competition**
- **Compete**
- **BREAK (45 mins)**
- **Redesign or tweak based on learnings from last competition**
- **Retest and modify if needed**
- **FINAL COMPETITION**

Future Improvement:

What worked the best? Why? Bring out impact, explain why that goes farther.

[get a simple physics explanation for catapult v slingshot v impact]

Notes: need paper and pencil to sketch plans