



Compound Gear System Project



For this project you will be designing and building your own compound gear systems using the fischertechnik build kits in the classroom. Working in small teams (1 to 3 members) you will need to implement the engineering design process so that you plan, build, and deliver a design that meets all the requirements listed below.

- Your compound gear ratio must be as close to a 1:100 gear ratio as possible without going higher. (Let's see who can get the closest!)
- You will need to create a gear box to house your gears, using a minimal amount of materials so that you do not waste materials. It's okay to use materials just make sure if you are using a part that it serves a purpose.
- In addition to conserving materials your gear box should be visually appealing.
- Using your gear box you will need to be able to demonstrate both the "gearing up" and "gearing down" process.

Group Deliverables:

Evidence of Engineering Design Process, specifically brainstorming of design

Working gear box.

Quick five minute presentation to a faculty member describing how gears work and more specifically how your gear box works.

Projects must be completed by September 7th.