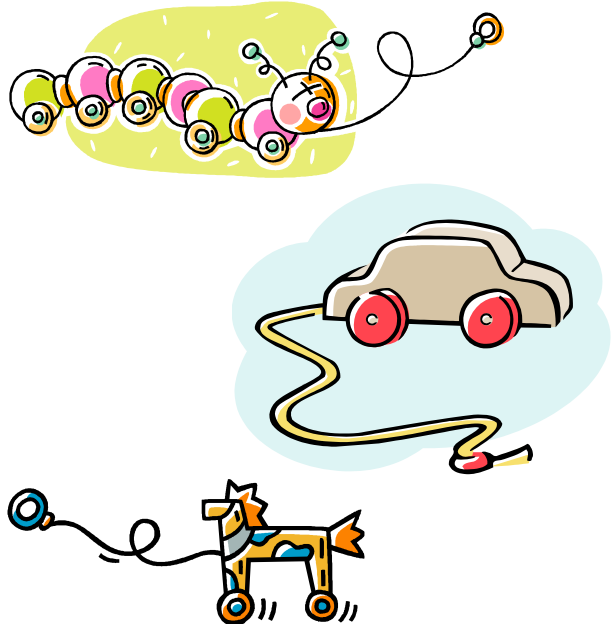


Project 2.2.4 Pull Toy Construction

Introduction

A pull-toy is pulled along the ground and a movement is produced, such as a head nods, a tail wags or a figure bobs up and down. The pull-toys use mechanisms to transfer energy from the wheels to the characters that define them.



Equipment

- Engineering notebook
- Pencil
- VEX kits

Procedure

With your knowledge of mechanisms, you and your partner will use the design process to design and build a mechanism or series of mechanisms that will meet the following criteria:

- The mechanism is to be built entirely from VEX parts provided in the lab.
- The mechanism is to be built on a small 4 wheel chassis capable of being pulled across a table-top surface, the movement of the wheels will make the toy move.
- A gear mechanism attached to the wheels will make another part of the pull toy move.
- An illustration should be added to the output of the mechanism so as to simulate the toy.

Use the templates to document your design process.

- Design Brief Template – Define the problem.
- Decision Matrix Template – Decide which solution you will pursue (each student in the group should sketch and annotate at least one idea).
- My Design Process Solution – Describe what steps your group takes to solve the problem.

