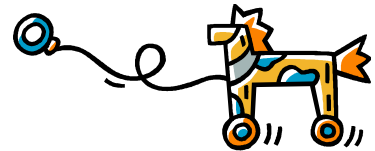
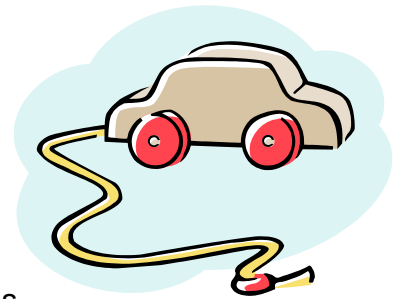


Project 2.2.4 Pull Toy Construction

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.



Before the build

- Each partner **MUST** draw two sketches of what they want their pull toy to look like. Within the sketch, you must have accurate descriptions of the parts being used. This is a *very* detailed picture of what you want your toy to look like and how you are going to make it work.
-
- Conference with your partner about your sketches.
-
- Design a compromised sketch that incorporates both partners ideas and is the final design of what you are going to build

During the build

- Both partners **MUST** contribute to the build. One partner is not the “go for” while the other partner builds. You are a team, act as one.
-
- As you make modifications as you are building, make a note of those on your sketch so you know what you did differently.
-
- Use your time wisely!!!



After the build

- One completed model
-
- Once approved, you need to draw a **FINAL SKETCH** of your final product.
- This is a sketch of **EXACTLY** what you built. Be sure that it is detailed.
-
- Complete the questions individually. (Each partner will submit answers to each question.)

Sketch of my ideas:

Names: _____

Compromised Sketch

Names: _____

Final Product Sketch

Names: _____

Names: _____

Conclusion

1. What would you have changed if you had time to redesign one part of your pull toy?
2. Which solution to the pull toy problem presented by another group was intriguing to you and why?

Names: _____

How I'm graded:

Topic	Points Possible	Points Earned	Comment
2 individual sketches			
Compromised Sketch			
Final Sketch			
Conclusion questions			
Working toy...when pulled, another feature of the toy moves (not just the wheels)			
The input direction and output direction are different			
On a four wheel chassis			
Illustration added to the moving part of the toy			

Decision Matrix