Project Compound-Grading Sheet

Your Team's Task:_____

Presentation Grading Sheet

Score	Points	Description
	35	Effort Force provided by single human input
	75	Constructed of 3 DIFFERENT mechanisms
		Mechanism 1 (25 pts)
		Mechanism 2 (25 pts)
		Mechanism 3 (25 pts)
	30	Made of various VEX® components (1 2 3 4 5) x 6 pts
	30	Successfully completes task (30pts-1st try 20pts -2nd try 10pts-3rd try 5)
	40	Values of Overall IMA, AMA, Gear/Speed Ratio, Efficiency (stated in presentation and work shown in notebook)

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Name_____

Example Notebook Layout-Project Compound

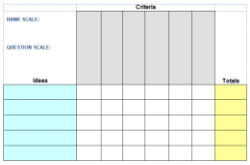
Project Compound

Define the Problem:

-Summarize the Design Problem you are solving
-Task:_____

Generate Concepts:

-Brainstorm
-Decision Matrix



Develop a Solution

-Preliminary Sketch of Final Idea labeled (IMA >1, IMA<1, IMA =1) for all machines

Project Compound

Construct & Test Prototype:

Any notes during construction, documentation of modifications

Photograph of Final Prototype (Label each mechanism)

Project Compound

Evaluate the Design:

Mechanism 1: (Name what it is)

Sketch or Photo:

Include proper documentation such as force, distance, ***direction, and key mechanism features.***

Calculate IMA or Gear or Speed Ratio:

Show measurements with units
Equation
Substitution of numbers into equation
Final Answer

REPEAT FOR ALL OF YOUR MECHANISMS!!!!

Project Compound

Overall Gear/Speed Ratio:

Equation
Substitute numbers
Final Answer

Overall IMA:

Equation
Substitute numbers
Final Answer

Overall AMA:

Equation
Substitute numbers
Final Answer

Overall Efficiency of Device:

Equation
Substitution of numbers into equation
Final Answer

CONCLUSION QUESTIONS:

There are 5 of them.
Answer them here

Name_____

Engineering Notebook Grading Sheet

Score	Points	
		Define the Problem
Done	10	Problem Defined and Task identified
		Generate Concepts
Done	20	Brainstorm
Done	15	Decision Matrix
		Develop a Solution
Done	20	Preliminary Sketch
		Construct & Test Prototype
		Notes of design modifications during build process
	20	Labeled Photograph of final design solution
		Evaluate the Solution
		Mechanism 1
	5	Sketch of Photo
	5	Measurements with units
		IMA or GR or SR
	5	Equation
	5	Substitution of Numbers and units into Equation
	5	Final Answer
		Mechanism 2
	5	Sketch of Photo
	5	Measurements with units
		IMA or GR or SR
	5	Equation
	5	Substitution of Numbers and units into Equation
	5	Final Answer
		Mechanism 3
	5	Sketch of Photo
	5	Measurements with units
		IMA or GR or SR
	5	Equation
	5	Substitution of Numbers and units into Equation
	5	Final Answer

		Overall Gear/Speed Ratio
	4	Equation
	4	Substitution of Numbers and units into Equation
	4	Final Answer
		Overall IMA
	4	Equation
	4	Substitution of Numbers and units into Equation
	4	Final Answer
		Overall AMA
	4	Force Measurements with units
	4	Equation
	4	Substitution of Numbers and units into Equation
	4	Final Answer
		Overall Efficiency
	4	Equation
	4	Substitution of Numbers and units into Equation
	4	Final Answer
	20	Conclusion Questions
		a
		b
		c
		d
		e