

Presentation _____/24

Completeness _____
Quality _____
Impression _____
Rubric _____

Ride Name _____

Coordinator _____
Architect _____
Physicist _____
Engineer _____

Written _____/24

Completeness _____
Quality _____
Impression _____
Rubric _____

Organization and Timeliness

Steps 2-4

- 4: All turned in, Received together, Received on time
- 3: All turned in, Not received together, Received on time
- 3: All turned in, Received together, Not received on time
- 2: All turned in, Not received together, Not received on time
- 1: Only some turned in or all turned in very late

Step 1: 1 point for turning in. 1 point for using approved form

Step 5: 2 additional points for turning in algebra support and physics as separate packets (as instructed on website)

Step 6: 2 points for description. 2 points for picture

Coordinator _____/15

Cohesiveness _____
Impression _____
Rubric _____

Architect _____/15

Appearance _____
Budget _____
Rubric _____

1	2	3	4	5	6		= _____ /20
_____	_____	_____	_____	_____	_____		

Physicist _____/15

Impression _____
Work/Quality _____
Rubric _____

Engineer _____/15

Building Quality _____
Appearance _____
Rubric _____

Overall _____/15

Would Sea World fund this project? _____

Score _____/143

Written Proposal

_____ Cover or Title Page

_____ Executive Summary (one page that overviews the whole thing)

_____ Name of your coaster

_____ Basics of your design

_____ Total Cost

_____ What makes it special or stand out

_____ Why should Sea World choose your design?

_____ Table of Contents

_____ Individual Sections, each with a brief introduction followed by supporting work, pictures, etc.

_____ Architect

_____ Physicist

_____ Engineer

_____ Budget

_____ Appendix

Completeness Grade _____

Quality Grade _____

Impression Grade _____

Rubric Score _____

Elements are missing.	All necessary elements are included	All necessary elements are included	All necessary elements are included
Papers are not put together in an organized manner	Slightly unorganized or not cohesive.	Looks professional and is cohesive.	Looks professional and cohesive.
Ride is impractical	Effort is made to make ride desirable.	Portfolio highlights reasons to build coaster	A very strong case is made for construction of coaster.

Presentation

_____ All members take part

Completeness Grade _____

Quality Grade _____

Impression Grade _____

Rubric Score _____

<p>Each task force member presents some of their portion of the project but is unable to answer any questions for clarification.</p> <p>The presentation is unorganized and unprofessional in nature.</p> <p>The presentation is not easy to understand, and does not demonstrate the knowledge of the task force members.</p>	<p>Each task force member presents most of their portion of the project and is able to answer a few questions for clarification.</p> <p>The presentation is organized but not professional in nature.</p> <p>The presentation is not easy to understand but demonstrates that the task force members have some knowledge of their subject.</p>	<p>Each task force member presents their portion of the project in its entirety answering most questions for clarification.</p> <p>The presentation is organized but lacks a little professionalism.</p> <p>The presentation is easy to understand and demonstrates that the task force members have knowledge of their subject.</p>	<p>Each task force member presents their portion of the project in its entirety answering any questions for clarification.</p> <p>The presentation is organized and professional in nature.</p> <p>The presentation is easy to understand and demonstrates the knowledge of the task force members.</p>
--	--	--	---

Project Coordinator

Budget

Track Cost= _____ Justified? _____ Excel? _____
Architecture= _____ Itemized? _____ Justified? _____ Reasonable? _____
Buffer= _____
Total= _____

Extra Track? _____
Sig Figs? _____
Schematic? _____
Excel? _____ (not req'd)
Grade _____

Cohesiveness Grade _____

Impression Grade _____

Grade _____

Rubric Score _____

Budget goes over financial constraints.	Budget meets financial constraints.	Budget meets financial constraints.	Budget meets financial constraints.
Formal presentation and portfolio are not coordinated professionally.	Formal presentation and portfolio lack professional Coordination.	Formal presentation and portfolio lack some professional Coordination.	Formal presentation and portfolio are professionally Coordinated.
Introduction and Summary are not relevant to the presentation.	Introduction and Summary are some what relevant to the presentation.	Introduction and Summary are relevant to the presentation.	Introduction and Summary complements the presentation.

Architect

What is the theme? _____
Appropriate? _____ Well-represented? _____

Shows what it will look like within park _____

Shows some details _____

Quality of art _____

Appearance Grade _____

Budget

_____ Area=81,000 m²

_____ Sidewalk for 150 people (27 m²)

_____ Building Space

Additional Effects? _____ Justified? _____ Reasonable? _____

Excel? _____ Spreadsheet Quality _____

Reasonable Budget? _____

Explained Budget? _____

Budget Grade _____

Rubric Score _____

The architectural budget does not meet the financial constraints.

There is no evidence of an architectural design of the ride.

The architectural budget meets the financial constraints.

The theme is not well represented in the architectural design of the ride.

The architectural budget meets the financial constraints.

The theme is represented in the architectural design of the ride.

The architectural budget meets the financial constraints.

The theme is well represented throughout the architectural design of the ride.

Physicist

_____ Diagram Reasonable? _____
 _____ h Reasonable? _____
 _____ PE Reasonable? _____
 _____ KE Reasonable? _____
 _____ v Value _____ Reasonable? _____
 _____ g's (max 6g) Reasonable? _____
 _____ Friction (not req'd) Reasonable? _____

_____ Consistent Units

Mass _____

Sufficient calculated points? _____

Work shown? _____

Work right? _____

Excel? (not req'd) _____ Spreadsheet Quality _____

Will it work considering the laws of physics? _____

Unique Features _____

Impression Grade _____

Physics work/quality Grade _____

Rubric Score _____

<p>Work is incomplete.</p> <p>Diagrams sloppy.</p> <p>There are incorrect or missing calculations and it shows no thought or effort.</p>	<p>Work is incomplete.</p> <p>Diagrams are sloppy.</p> <p>There are incorrect or missing calculations.</p>	<p>Work is complete.</p> <p>Diagrams are complete, but somewhat sloppy.</p> <p>The calculations are complete with KE, PE, height, speed, and acceleration calculations</p>	<p>Work is exemplary.</p> <p>Diagrams are complete, detailed, and artistically drawn.</p> <p>The calculations are complete with KE, PE, height, speed, acceleration and friction calculations.</p>
--	--	--	--

Engineer

_____ Not store bought

_____ Works

Scale _____

Built from _____

Building Quality _____

Appearance _____

_____ Pictures

_____ Discussion of Process

_____ Results

Rubric Score _____

Roller Coaster model
construction incomplete
and not to scale.

Demonstrates unsuccessful
simulated test run.

Roller Coaster model
construction completed and
not to scale.

Demonstrates unsuccessful
simulated test run.

Roller Coaster model
construction completed
and to scale

Demonstrates successful
simulated test run.

Roller Coaster model
construction completed, to
scale, and shows exceptional
effort/workmanship

Demonstrates successful
simulated test run.