

II. Overview of Job Roles

You will be assigned a grade based on your chosen job. Although this is a group project, you will receive a grade for your work only. You may also earn bonus points based on how well your piece fits together with the other members of the group and how well you work together.

Architect Responsibilities

Prepare blueprint showing two views

- Establish scale
- Draw side view of roller coaster
- Draw top view

Label measurements for speed, distance, time
Create a realistic rendition of roller coaster including:

- Outside environment
- Theatrical or not
- Type of land it sets on and where

Calculate slope of first drop

Find the angle of descent for the first drop

Complete regular journal entries:

- Sketches
- Pictures
- Daily log

Engineer Responsibilities

Prepare technical report or model to include:

- Car and track design description
- Research on design elements and materials
- Mathematical configurations
- Safety measures - forces

Correspond with an outside source through:

- Interview
- Fax
- Email
- Online

Complete regular journal entries:

- Sketches
- Pictures
- Daily log

Research Analysis Responsibilities

Conduct and document Internet research

Prepare creative research approach to include in group's presentation

- Such as a magazine or a newspaper
- Show evidence of research and writing skills

Determine presentation format of group:

- Video, brochure, proposal, or multimedia presentation

Design and coordinate presentation to include:

- Safety measures
- Unique features
- Materials used and coaster specs
- Car design
- Some information from each of the other jobs

Complete regular journal entries:

- Sketches
- Pictures
- Daily log

Show evidence of persuasive writing skills

