

ROLLER COASTERS - Qualitative

GRIZZLY VORTEX DEMON FLIGHT DECK

DATA

Before you ride

Time for the entire ride _____

Length of Track (Grizzly: 975 m, Demon: 700 m, Vortex: 585 m, Flight Deck: 689 m)

While you ride

Maximum acceleration (in g's) _____ experienced at _____

Minimum acceleration (in g's) _____ experienced at _____

QUESTIONS - Qualitative

Use space on the back of this sheet to answer these questions.

1. Did you sit in the front or back of the train? _____ How does your position in the train affect your ride? (Ask a friend who sat in a different part of the train for their measurements.)
2. Describe the forces acting on you as you went down the first hill.
3. Where on the ride did you experience the greatest acceleration? In which direction was it? Why there and not another place?
4. Was there a place on this ride where you felt like you were being lifted out of your seat? Where was it? How did the ride create that feeling?
5. Where was the highest hill on the roller coaster? Why was it located there?
6. What are the elements (in physics terms) that make a roller coaster "scary"?