

Fun With Physics: TIDAL WAVE



The Tidal Wave is an example of a pendulum. When you enter the ride, you can choose to sit in one of the 8 rows. If you want to experience a more exciting ride, then I would recommend one of the outside rows. Although, the inside rows are entertaining too.

Once the boat is loaded two wheels start wheeling the boat higher and higher.

- a.) At what point in this ride do you have the most potential energy?
- b.) At what point in this ride do you have the most kinetic energy?
- c.) How many supports are there? _____ When does the supporting structure experience the most force: (at the top) or (at the bottom) of the swing?
- d.) Ride the ride with your eyes closed. In what way does it feel different than when you ride with your eyes open?
- e.) Can you explain why the outside rows are more exciting than the inside rows? A force diagram might help.