Drop Rides

Featured Ride: **Drop Tower**

Materials Needed: Stopwatch, horizontal and vertical accelerometers, calculator

Hints:

1) Apparent weightlessness is a characteristic of systems in free fall.

2) $F_w = mg$ $d_y = v_i t + 1/2\ gt^2$

Questions to Be Answered:

Intermediate:

1) How long is the free fall time on the ride?

2) How can it be demonstrated that riders are really in free fall during the ride?

Advanced:

3) Compare the deceleration of the ride at its end to ***g*** (acceleration due to gravity on Earth).

Investigative Steps: Describe your procedure here.

Data and Observations: Record and organize your results here.

Calculations and Conclusions: Explain your answers to the questions here.

From Kathleen Holley and Cheryl Brooks, Ft. Worth, TX