## WHERE IS IT IN THE PARK??

Describe at least one place at California's Great America that fits each of the descriptions below. The same ride may be used more than once, or not at all. Some descriptions may be met at a location other than a ride. Be sure to describe the location fully, don't just give the name of the ride - tell where on the ride this occurs.

1. The vertical $g$-force is zero, but the rider is moving:

Example: When you are going at a steady speed across the horizontal section at the top before going down the first hill on The Demon
2. The vertical acceleration is greater than +1 g :
3. The vertical acceleration is less than +1 g but greater than 0 :
4. Potential Energy is being converted into Kinetic Energy:
5. Kinetic Energy is being converted into Potential Energy:
6. Other forms of energy are being converted into Heat:
7. The longitudinal acceleration is equal to or greater than 1 g :
8. The longitudinal acceleration is less than 1 g , but not zero:
9. The longitudinal acceleration is negative:
10. The lateral acceleration is significant:
11. Centripetal Force is directed horizontally:
12. Centripetal Force is directed vertically upwards:
13. Centripetal Force is directed vertically downwards:
14. A place where the effects of friction are immediately apparent:
15. The ride which gives the greatest net force to the riders (describe fully):

Teachers can choose to include as many of the items above as fit conveniently on a page or that their students can successfully master. More space per item could be provided through simple editing.

