

A Walk in the Park!

Choose a place in the park that matches 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. Don't just give the name of the ride. Be sure to describe the location fully, and sketch the ride, indicating the location.

1. The vertical acceleration is greater than $+1\text{ g}$:
2. The vertical acceleration is less than $+1\text{ g}$ but greater than 0:
3. Potential Energy is being converted into Kinetic Energy:
4. Kinetic Energy is being converted into Potential Energy:
5. Other forms of energy are being converted into Heat:
6. The longitudinal acceleration is equal to or greater than 1 g :
7. The longitudinal acceleration is negative:
9. The lateral acceleration is significant:
10. Centripetal Force is directed horizontally:
11. Centripetal Force is directed vertically upwards:
12. Centripetal Force is directed vertically downwards:
13. A place where the effects of friction are immediately apparent:
14. A place where an object is moving at a constant speed and is also accelerating:

Teachers can choose to include as many of the items as they deem fit.