

## Luna Park Quiz

For each of the following situations, state a ride and when during that ride, that it occurs.

1. The vertical acceleration is zero, but you are moving \_\_\_\_\_
2. The vertical acceleration is greater than  $9.8 \text{ m/s}^2$  \_\_\_\_\_
3. The vertical acceleration is less than  $9.8 \text{ m/s}^2$  \_\_\_\_\_
4. Potential Energy is converted into Kinetic Energy \_\_\_\_\_
5. Kinetic Energy is converted into Potential Energy \_\_\_\_\_
6. Other forms of energy are being converted into Thermal Energy \_\_\_\_\_
7. The acceleration in the direction of motion is forward \_\_\_\_\_
8. The acceleration in the direction of motion is backward \_\_\_\_\_
9. The sideways acceleration is significant \_\_\_\_\_
10. Centripetal acceleration is directed horizontally \_\_\_\_\_
11. Centripetal acceleration is directed vertically upwards \_\_\_\_\_
12. centripetal acceleration is directed vertically downwards \_\_\_\_\_
13. A place where the effects of friction are immediately apparent \_\_\_\_\_
14. The ride that gives the greatest net force on you \_\_\_\_\_