

# kinetic carnival

## rotation

PART 1:  
CIRCULAR MOTION



*In which our hero reminisces about using physics on a date and turns out a lesson while going for a spin in the Rotor.*

### JEARL GOES FOR A DRIVE

1. What is the name of Jearl's high school sweetheart?  
A. Cindy    B. Jan    C. Marsha    D. Carol    E. Alice    F. Bobbi

### JEARL RAMPS UP

2. Centrifugal force is  
A. a force that pushes you outward while you make a turn  
B. an imaginary force  
C. a real force that explains things in the everyday world  
D. seen only by a stationary observer watching you turn
3. When you're a passenger in a car undergoing a turn, your car  
A. pushes you toward the outside of the circle  
B. pushes you toward the front of the car  
C. is unable to keep up with your body and therefore falls behind  
D. moves underneath you

### JEARL GOES FOR A SPIN

4. When Jearl is spinning in the Rotor, his body is really trying to move in a \_\_\_\_\_.

5. To Jearl, it feels like there's a force pushing on his \_\_\_\_\_.

6. Jearl doesn't slide downward when the floor drops out because there's a lot of \_\_\_\_\_ between the \_\_\_\_\_ and his \_\_\_\_\_.

### JEARL WATCHES THE ROLLER COASTERS GO BY

- 7-9. What is the shape of a loop in a "double loop" (not the corkscrew)? In the space below, name the shape, draw it, and explain why that shape is used.