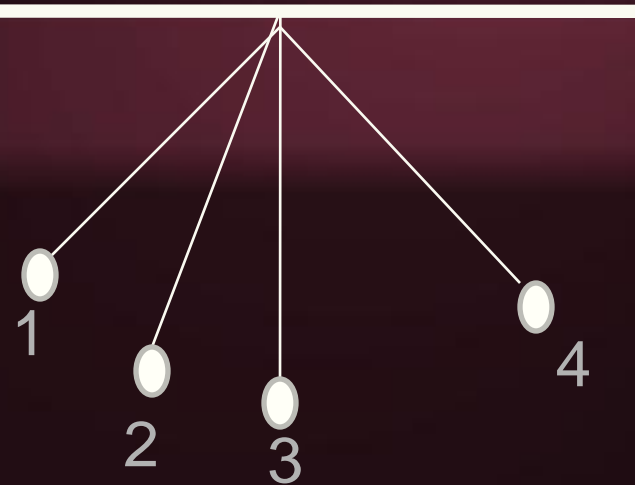


# Warm Up

As the 2.0-kg pendulum bob swings to and fro, its height and speed change. Use energy equations to determine the missing values.



**Position 1**

PE = 6 J

KE = 0 J

v = \_\_\_\_\_

**Position 2**

PE = 3 J

KE = \_\_\_\_\_

h = \_\_\_\_\_

**Position 3**

PE = 0 J

KE = \_\_\_\_\_

v = \_\_\_\_\_

**Position 4**

PE = \_\_\_\_\_

KE = 0 J

h = \_\_\_\_\_