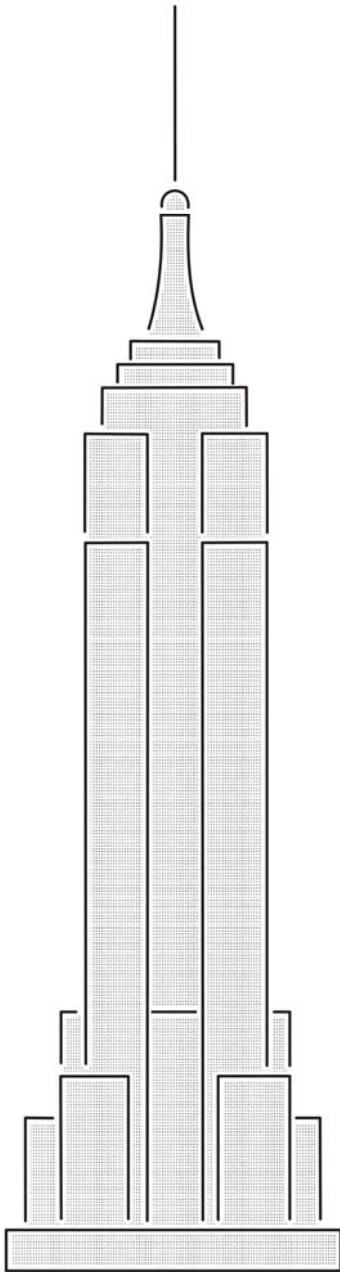


PENNY DROP OFF EMPIRE STATE BUILDING



The height of the building is 443 meters
The mass of a new penny is 2.5 grams

GPE = mgh where $g = 10 \text{ m/sec}^2$
Calculate GPE

KE = $\frac{1}{2} m v^2$
Think about what you know. Calculate the velocity.

Watch Mythbusters Penny Drop. What is the definition of terminal velocity?

Explain the impact of terminal velocity on dropping a penny off the Empire State Bldg.

What is the terminal velocity? Explain.