

**TEAM  
BELARUS  
PRESENTS...**

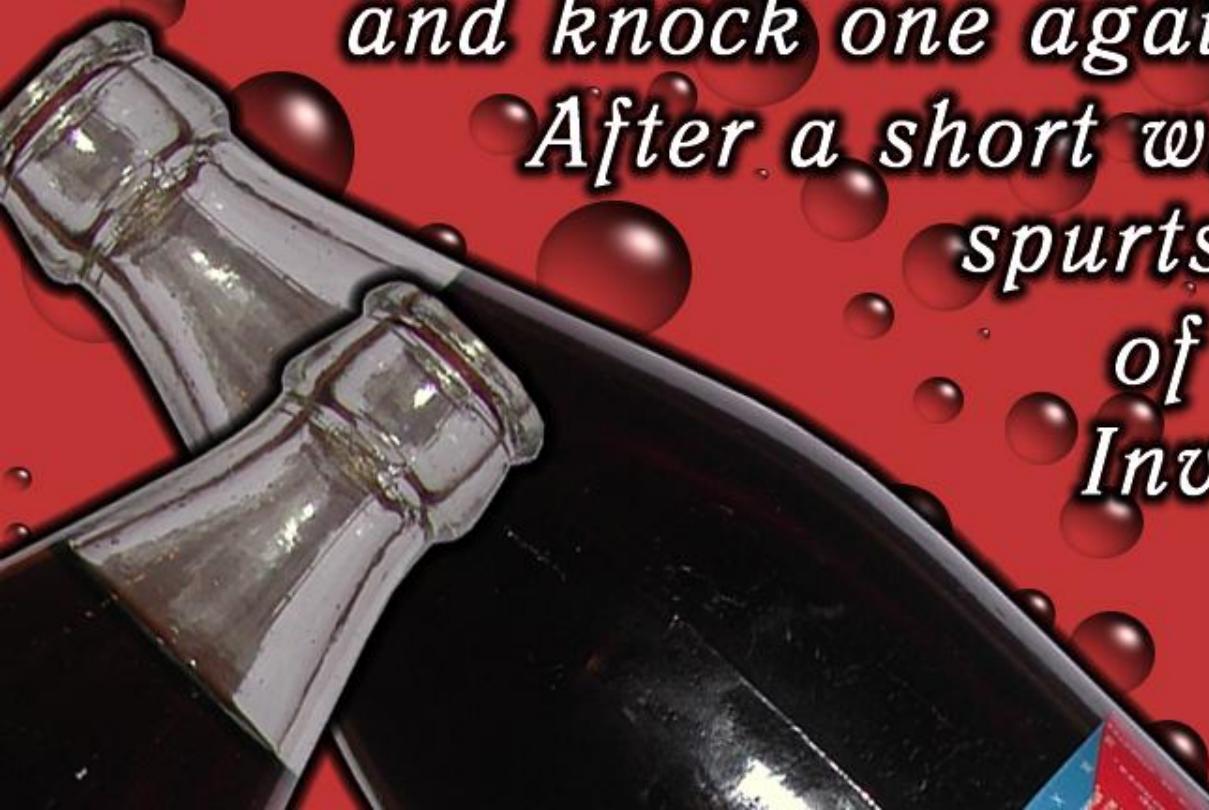


# BOTTLE BATTLE

*Take two opened glass bottles of cola and knock one against the other.*

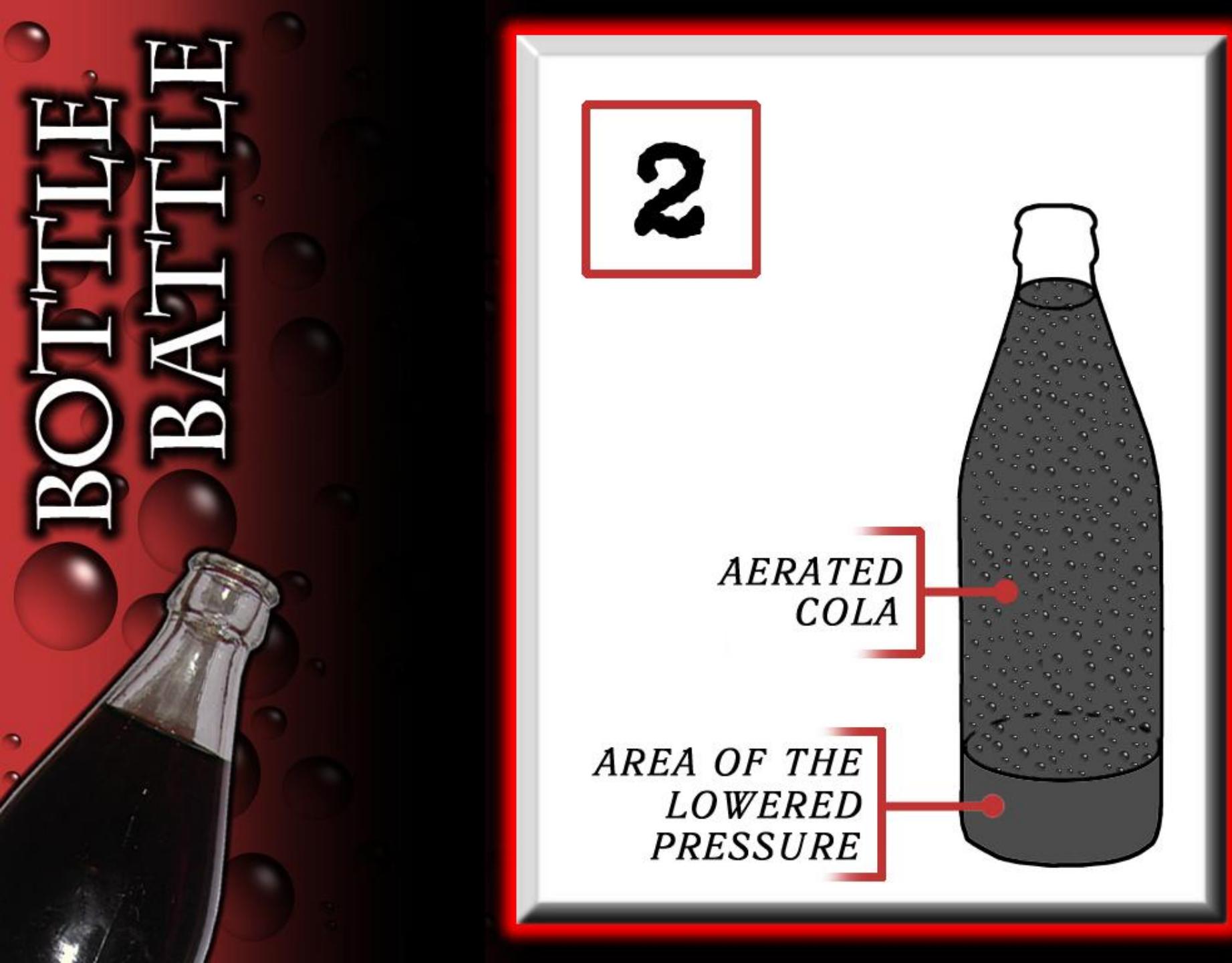
*After a short while, the cola spurts out of one of the bottles.*

*Investigate and explain the phenomenon.*





F



2

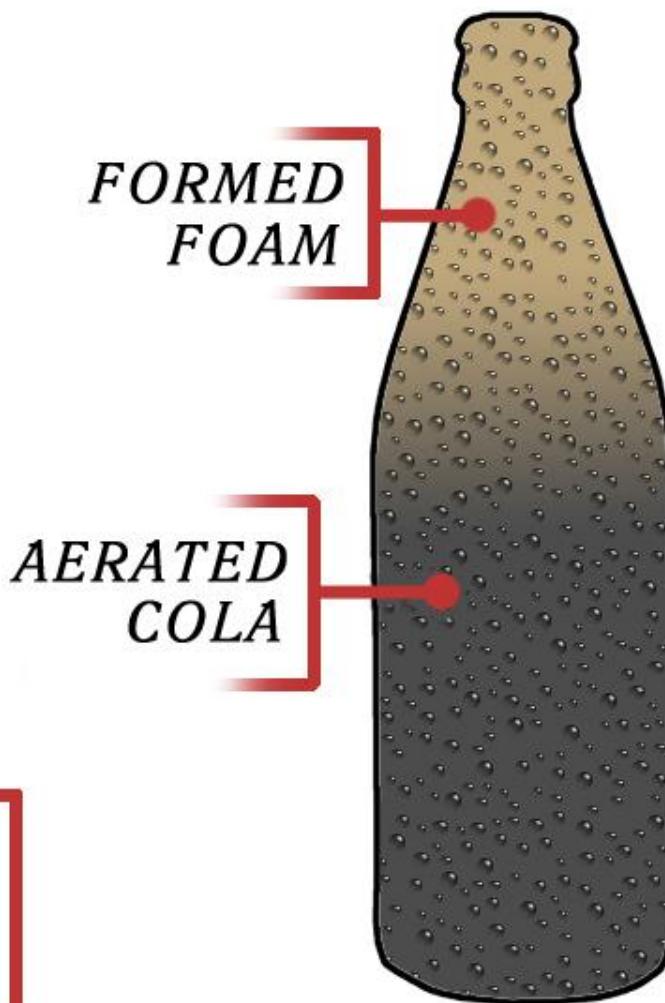
AERATED  
COLA

AREA OF THE  
LOWERED  
PRESSURE

# BOTTLE BAIT



3

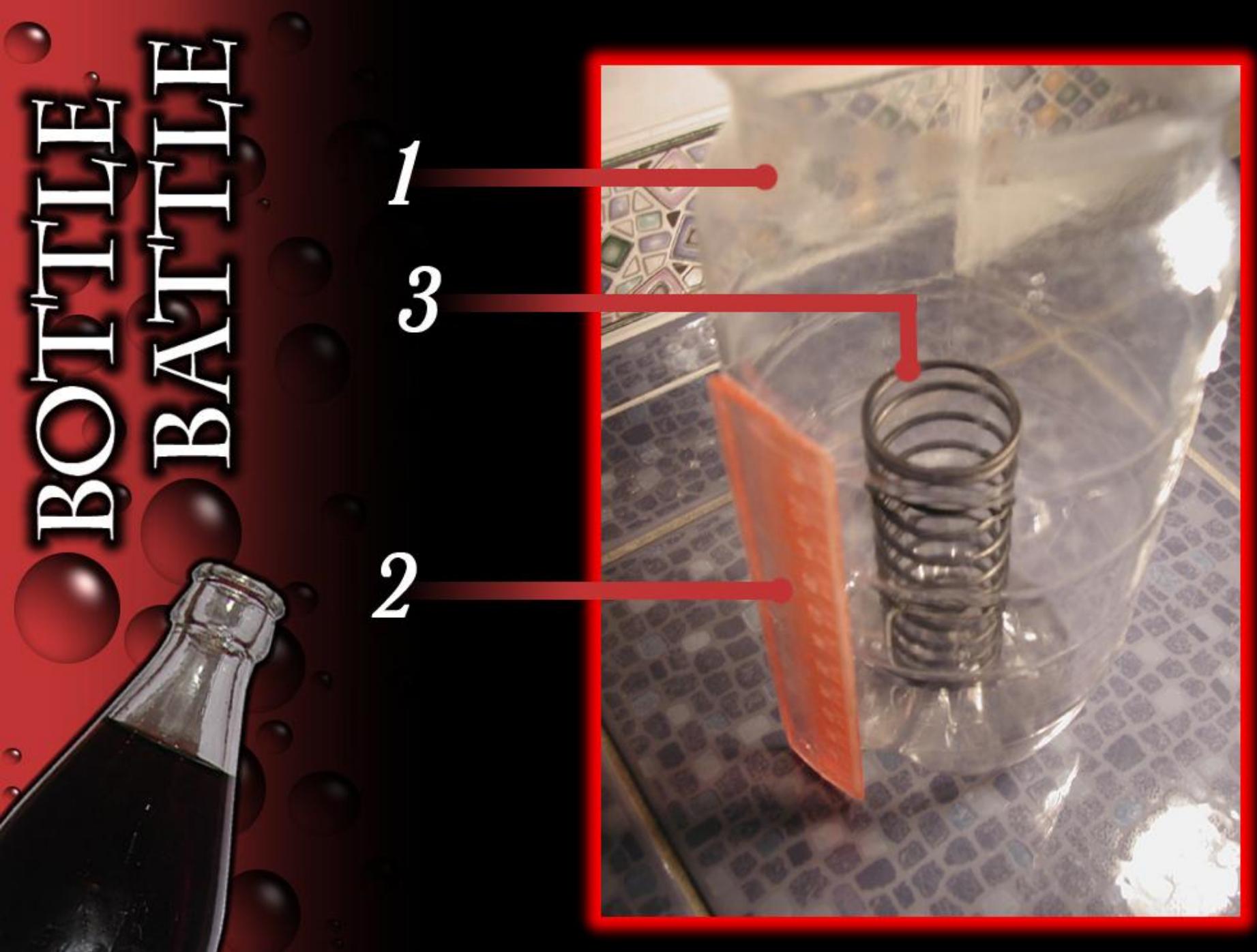






BOTTLE

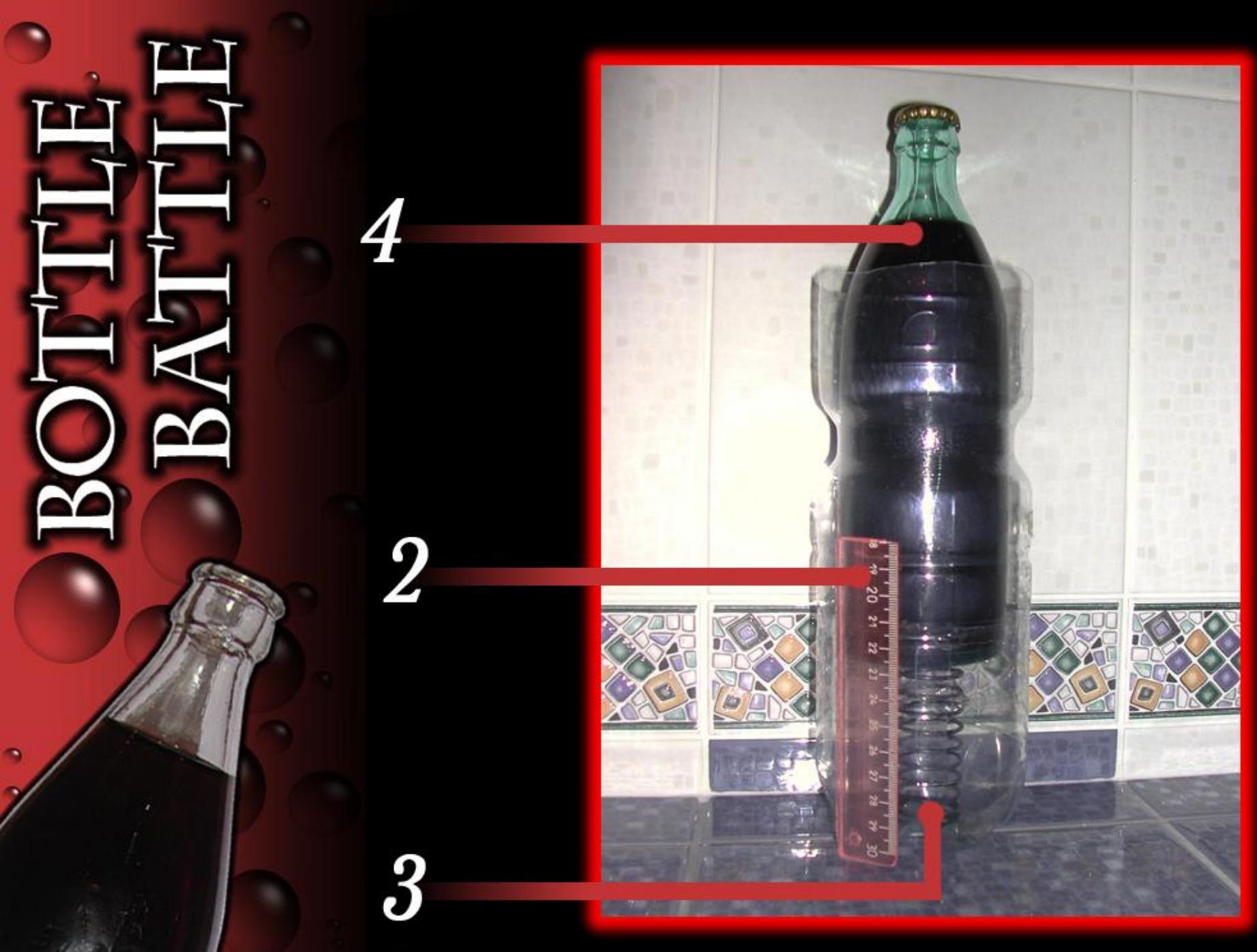


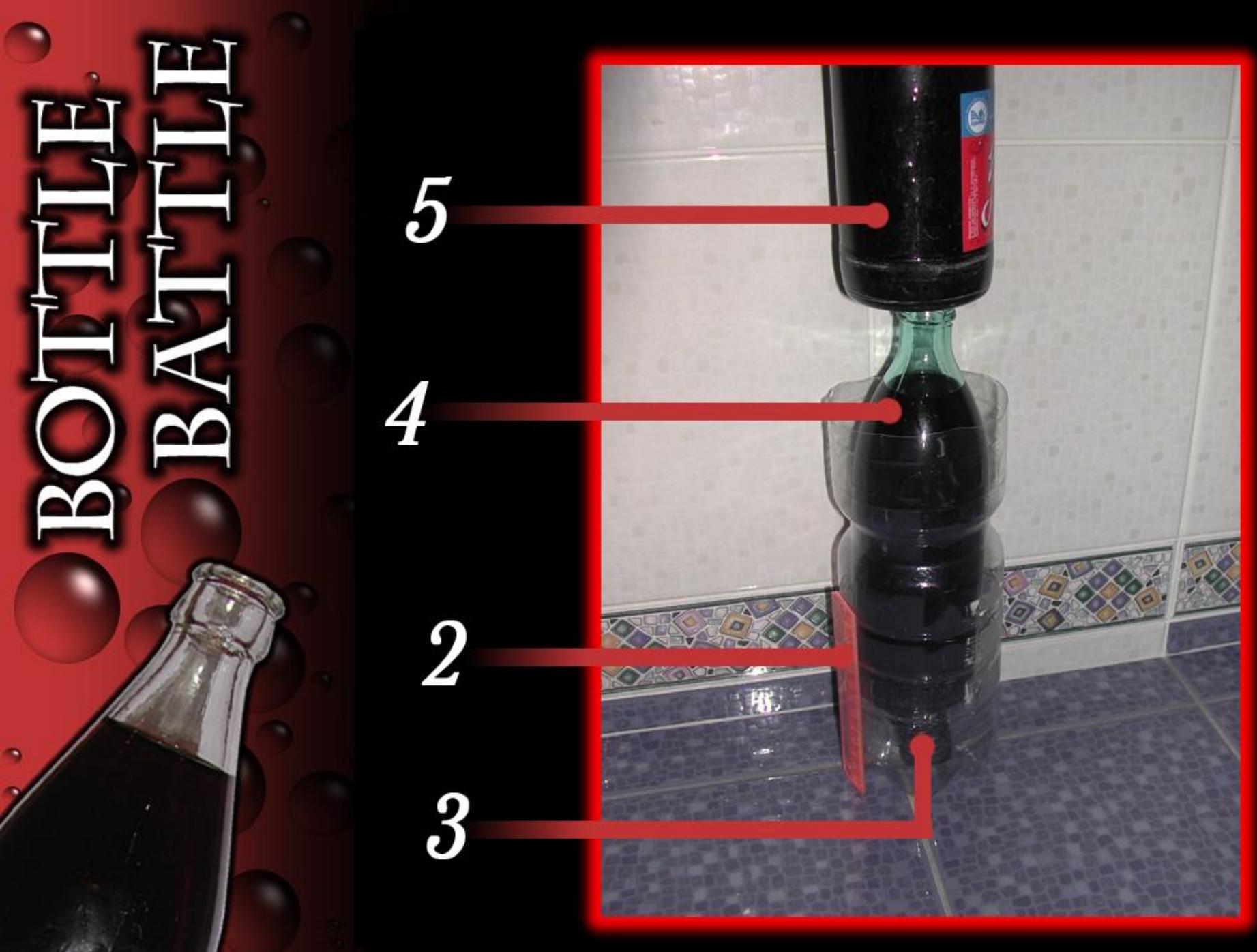


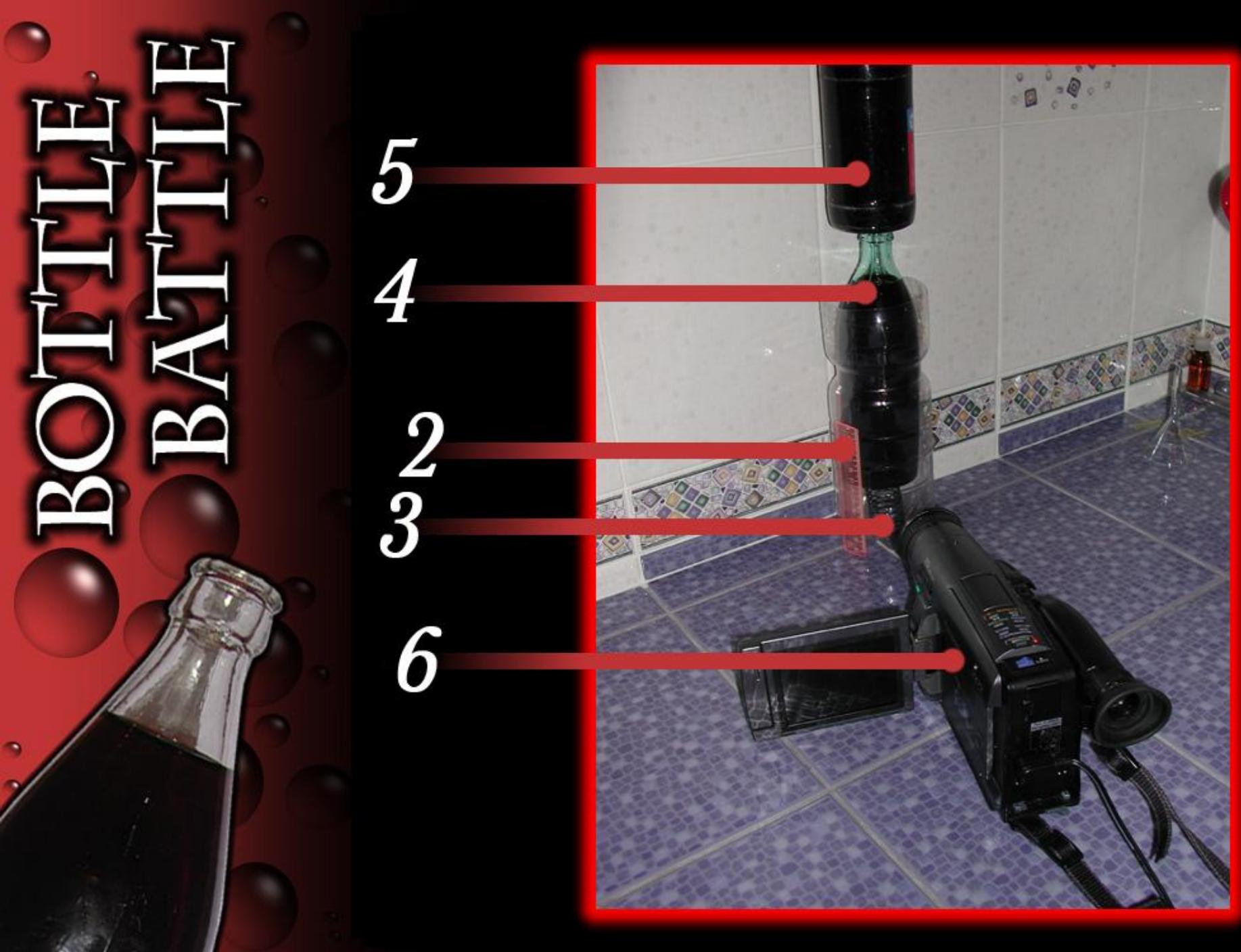
1

3

2

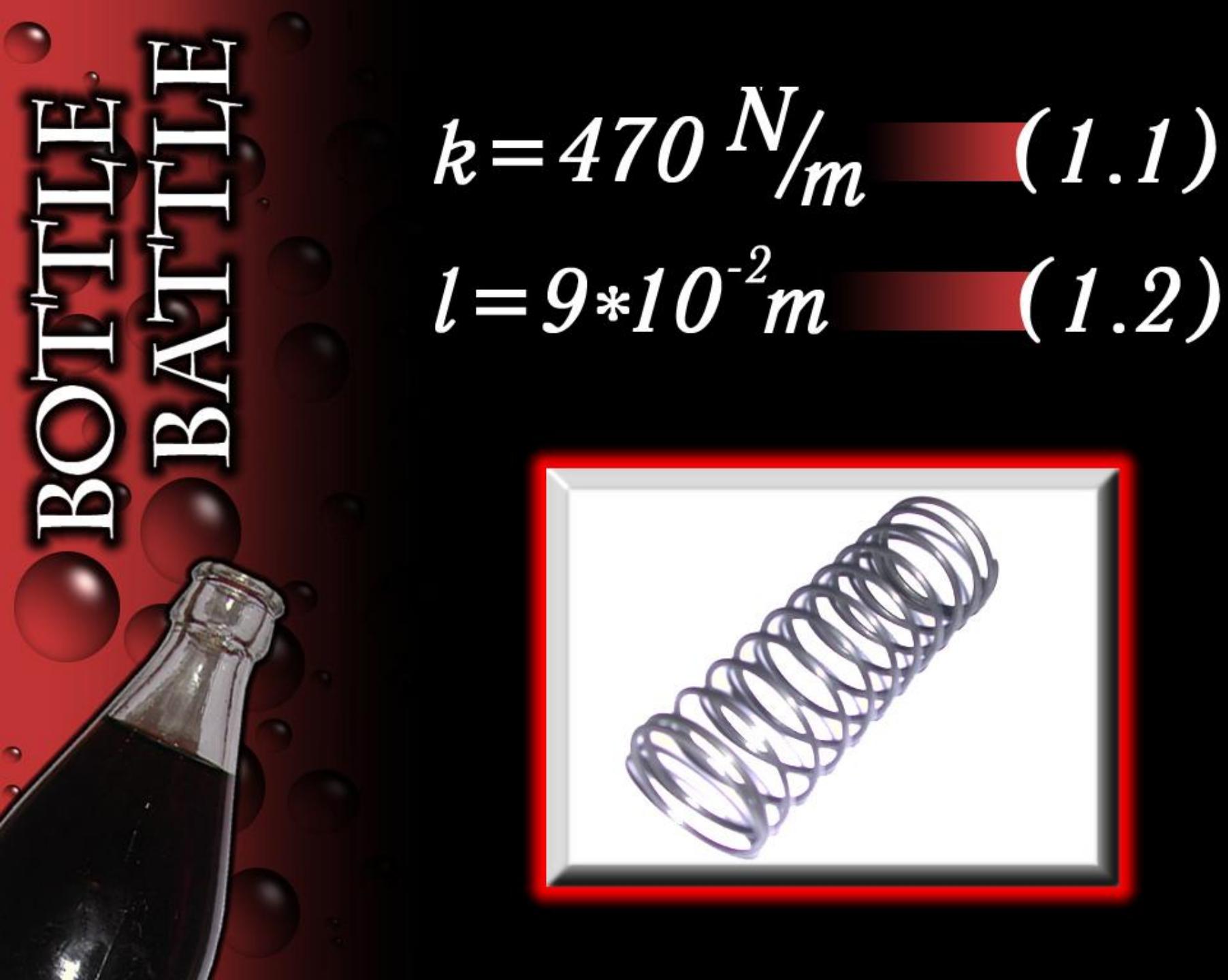






BOTTLE

5  
4  
2  
3  
6



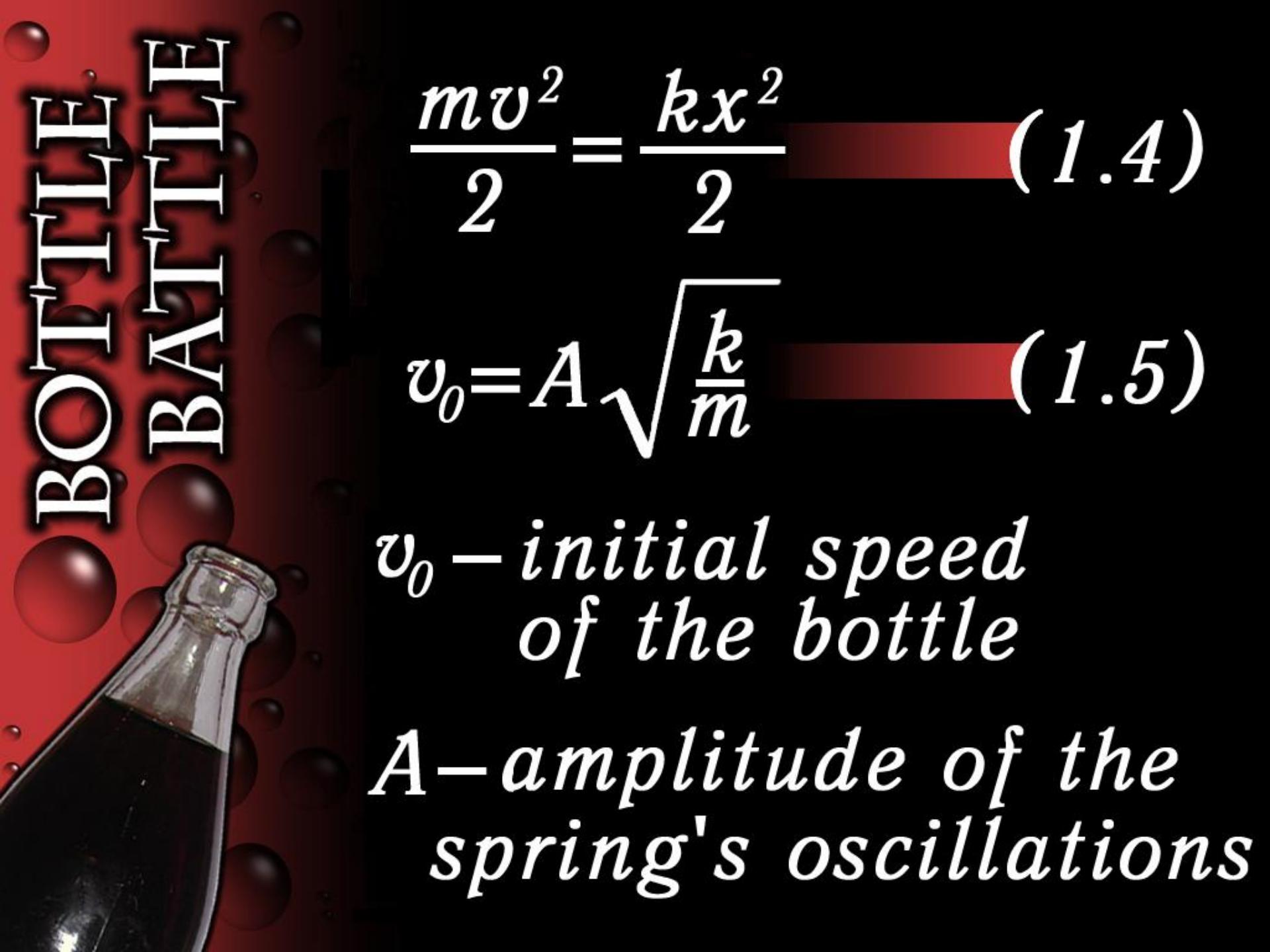
$$k = 470 \text{ N/m} \quad (1.1)$$

$$l = 9 * 10^{-2} \text{ m} \quad (1.2)$$

BOTTLE  
BOTTLE

$$m = 0.9 \text{ kg} \quad (1.3)$$



The background features a dark red gradient with numerous black spheres of varying sizes, resembling bubbles or water droplets. A clear glass bottle containing dark beer is positioned in the lower-left corner, with condensation droplets visible on its surface.
$$\frac{mv^2}{2} = \frac{kx^2}{2} \quad (1.4)$$

$$v_0 = A \sqrt{\frac{k}{m}} \quad (1.5)$$

*v<sub>0</sub> – initial speed  
of the bottle*

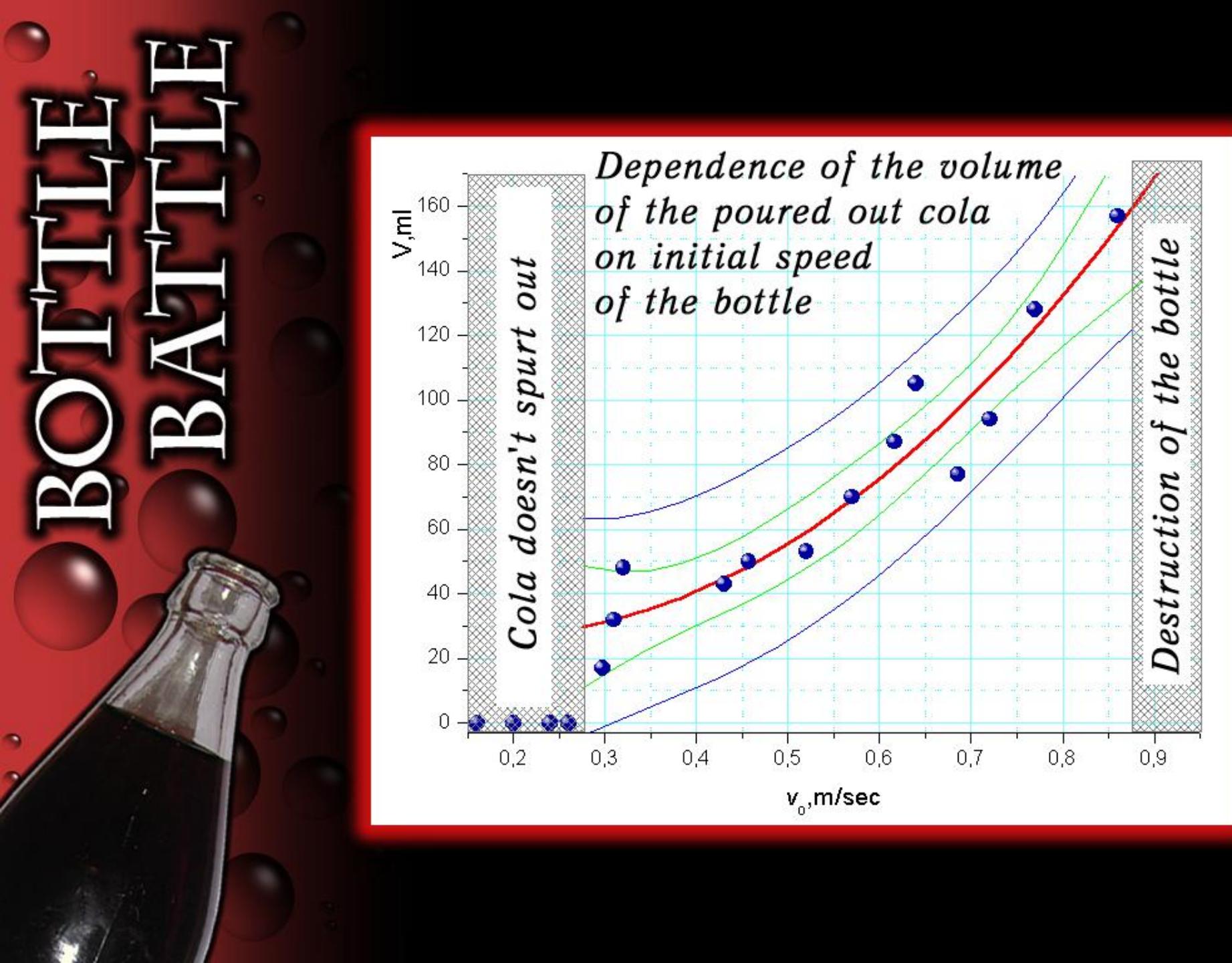
*A – amplitude of the  
spring's oscillations*



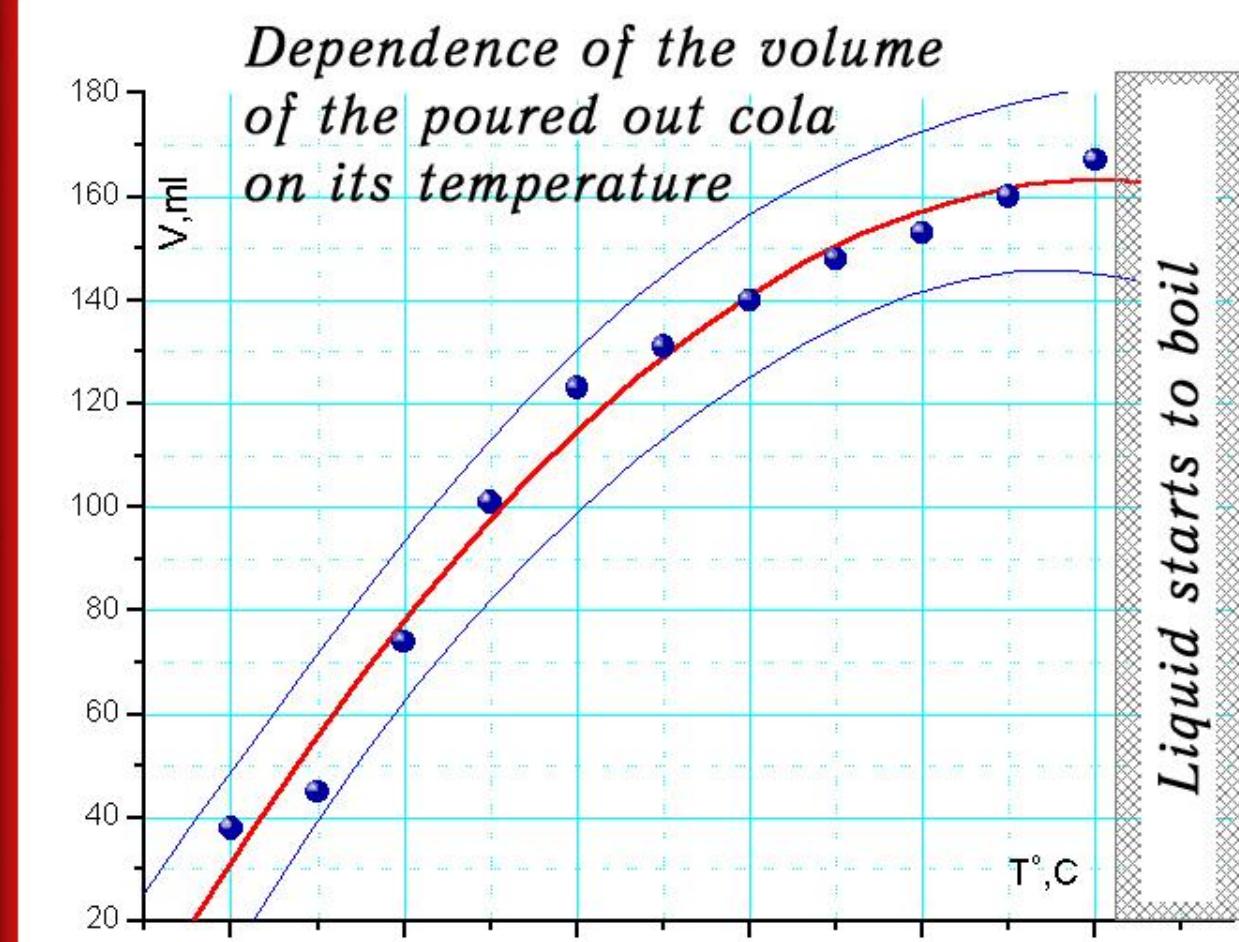
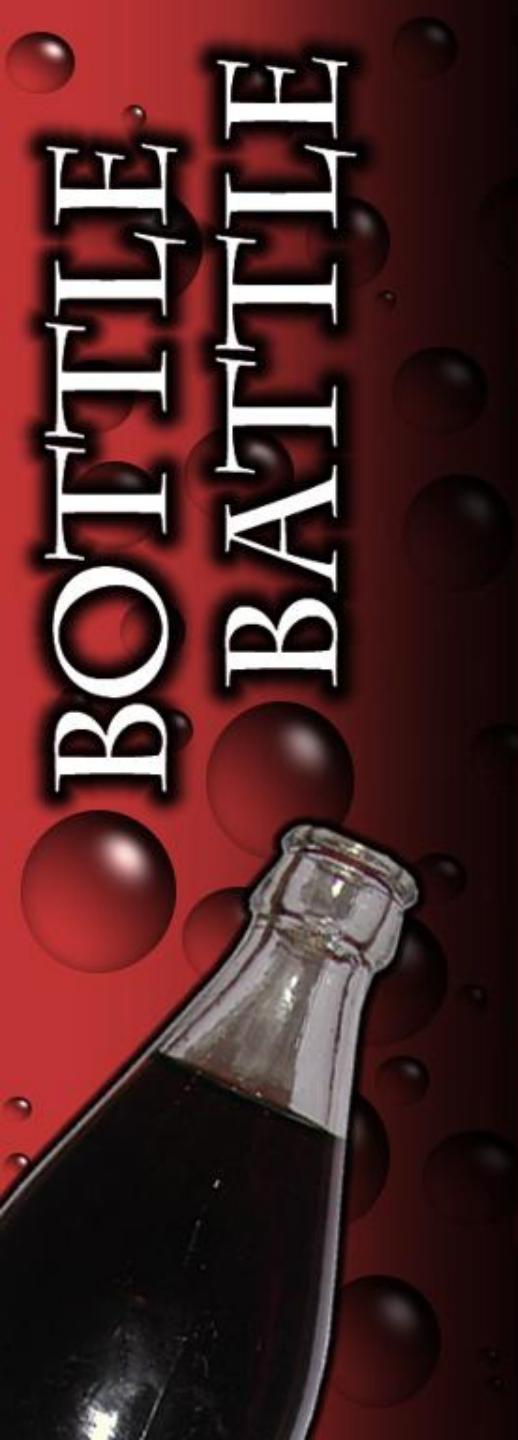
BOTTLE  
BATTLE

# BOTTLE BATH

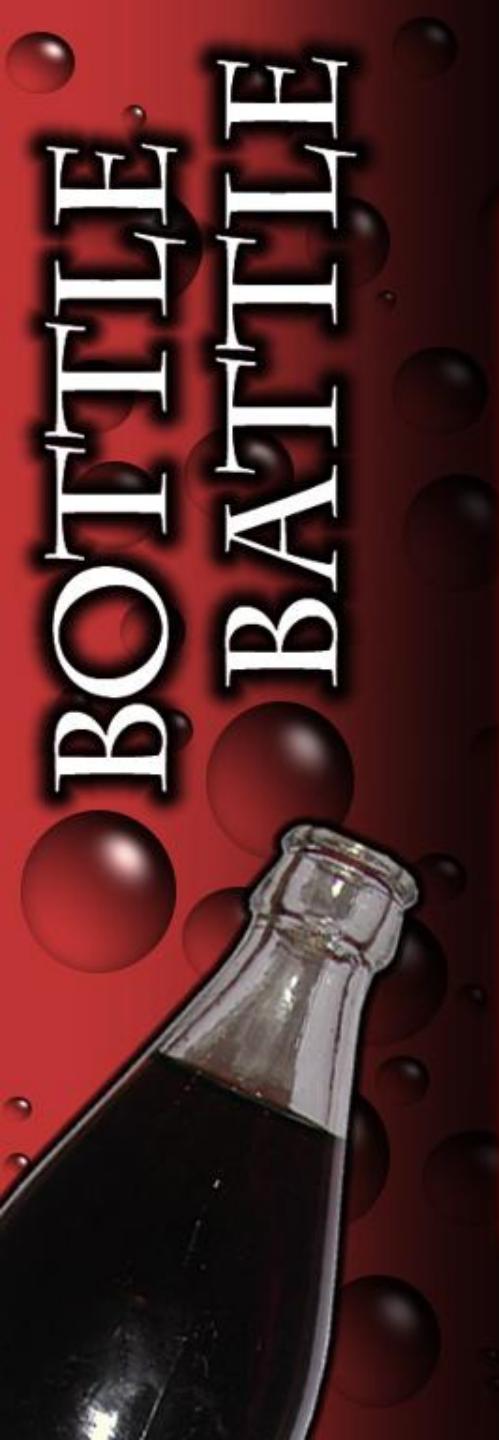




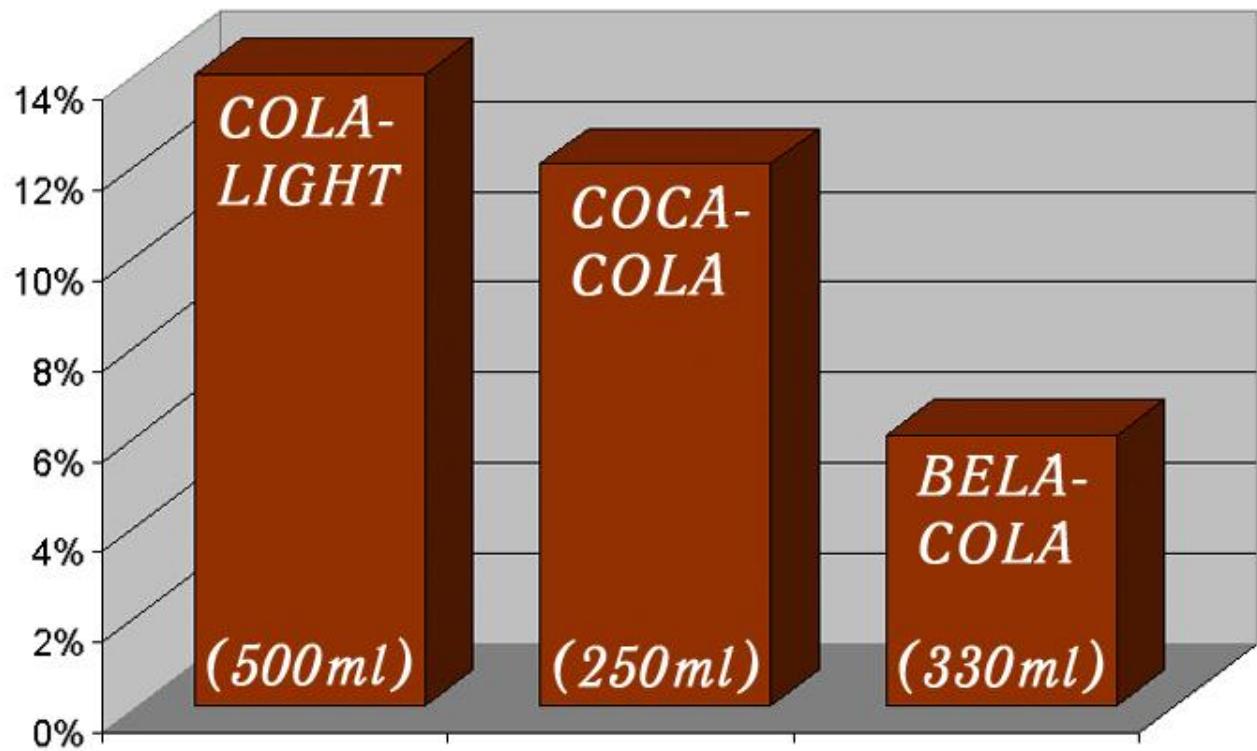


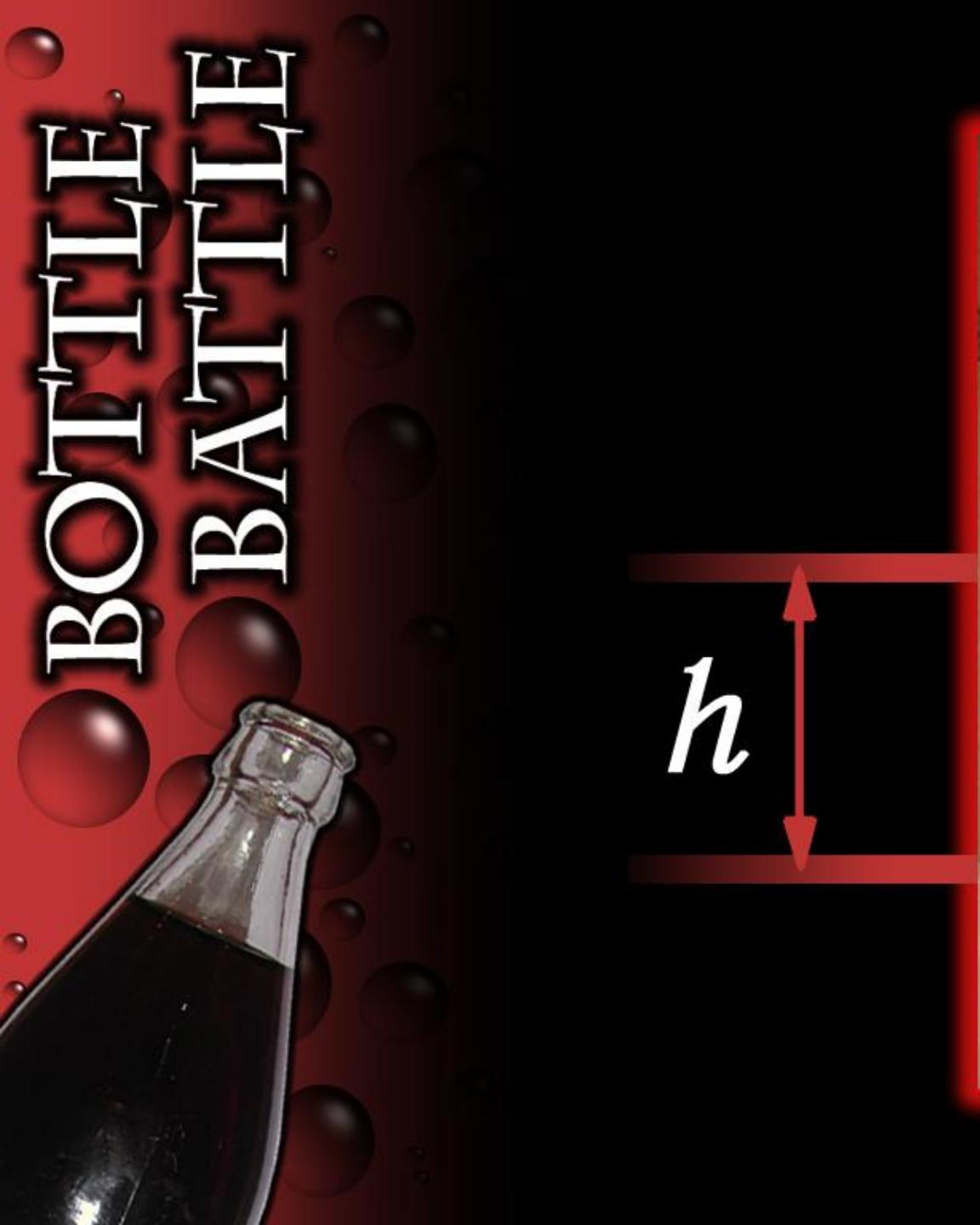




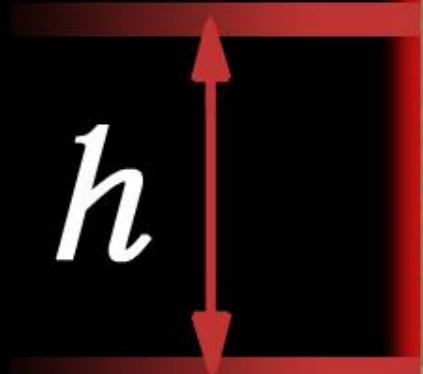


*Relative parameters of the  
poured out volumes*





BOTTLE  
BOAT



**THANKS  
FOR  
ATTENTION**