

Stretching springs

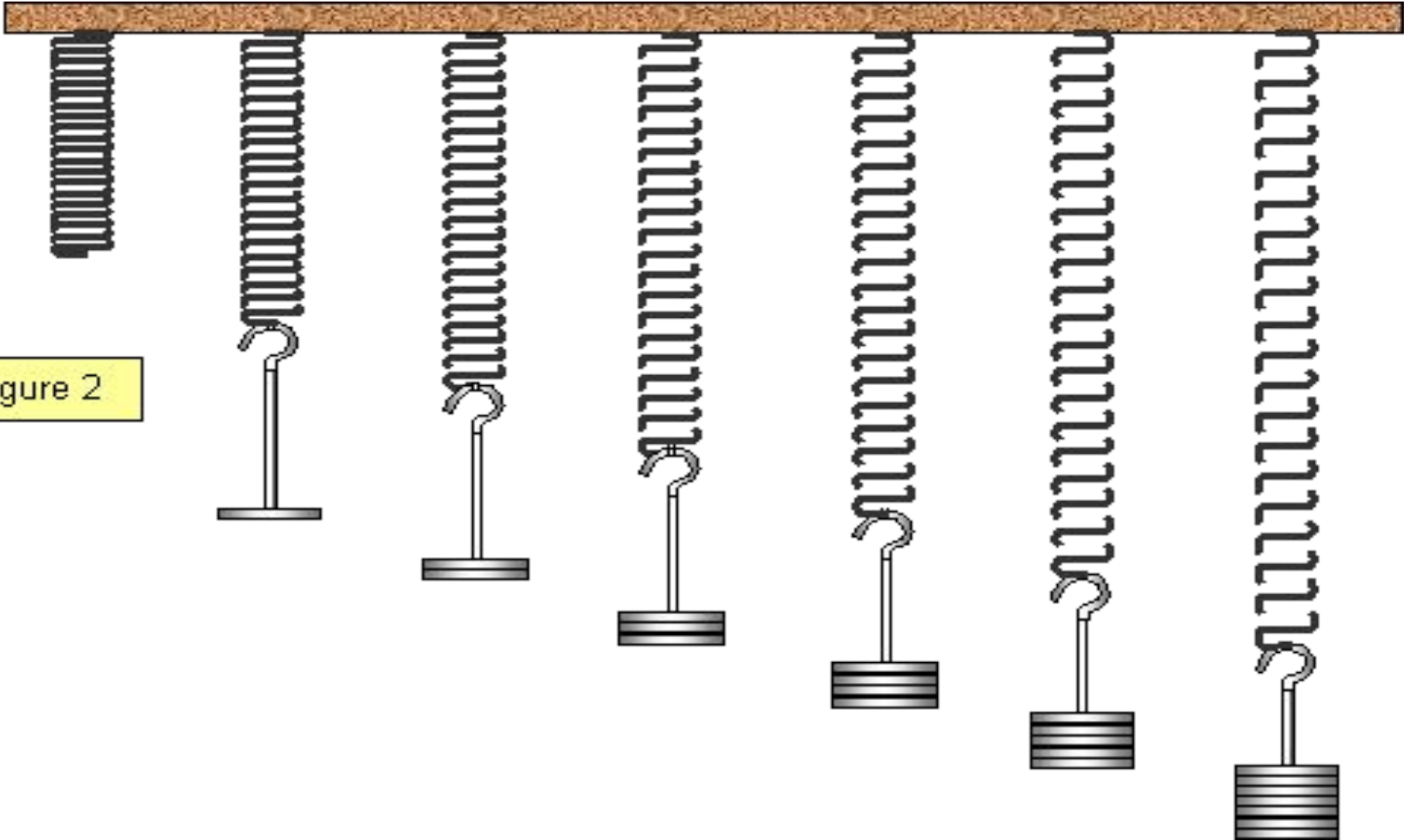
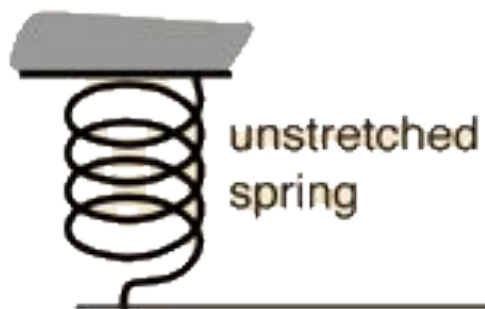


Figure 2

Hooke's law



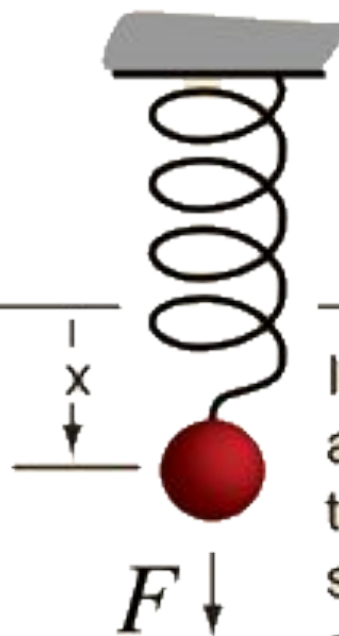
Robert Hooke
(1635-1703)



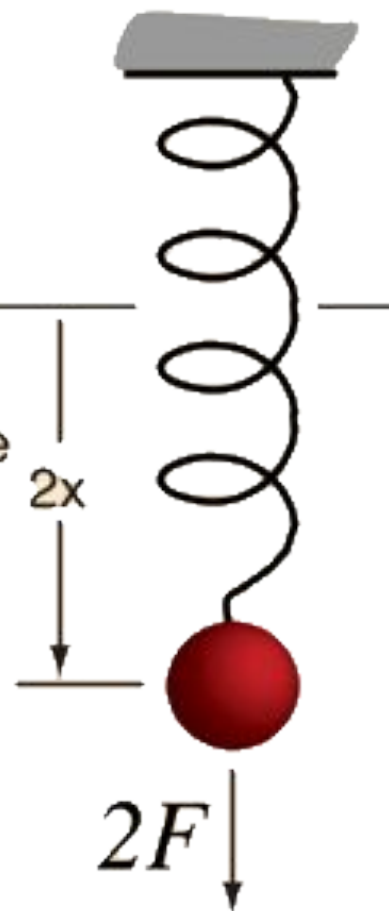
Hooke's Law:

$$F_{spring} = -kx$$

Spring constant k



It takes twice as much force to stretch a spring twice as far.



$$F = kx$$

F = Force applied on the spring

k = spring constant

x = extension of the spring