



Flipping Physics Lecture Notes:

Stable, Unstable, and Neutral Equilibrium

<https://www.flippingphysics.com/stable-unstable-neutral-equilibrium.html>

- Neutral Equilibrium is where the Potential Energy of the object remains constant regardless of position. For example, a ball rolling on a level surface.
- Stable Equilibrium is where the Potential Energy of the object increases as the position of the object moves away from the equilibrium position and therefore the object naturally returns to the equilibrium position. For example, a water bottle being tipped to the side.
- Unstable Equilibrium is where the Potential Energy of the object decreases as the position of the object moves away from the equilibrium position and therefore the object naturally moves away from the equilibrium position. For example, a marker being tipped to the side.

