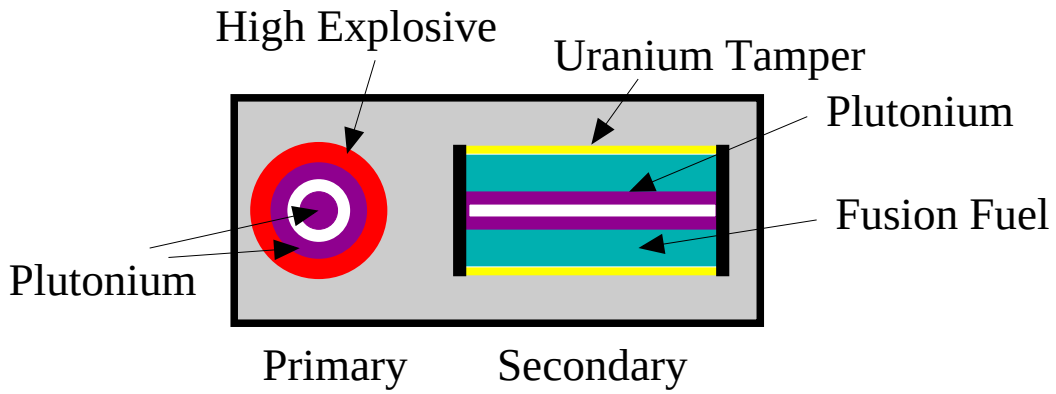
Nuclear Weapons 101

- A ‘typical’ US-Russian, two-stage, thermonuclear weapon.



- High explosive detonates crushing the plutonium pit to a density where the fission neutrons will usually strike another nucleus instead of escaping.
- The energy released by the primary crushes the uranium tamper, the fusion fuel (containing deuterium and ^6Li), and the remaining plutonium. The uranium and plutonium ‘burn’ and increase the temperature until fusion occurs.
- The energy released by the fusion reaction raises the temperature even higher and burning more of the fission fuel.