

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# The Nucleus

1. This property is responsible for the electromagnetic force
  2. This property is responsible for the gravitational force.
  3. This is NOT strong enough to hold the nucleus together.
  4. This acts to push the apart the nucleus.
  5. This force has an exceptionally short range.
  6. This decay occurs in very large nuclei
  7. This decay occurs in nuclei with too many neutrons.
  8.  $1.6 \text{ E }^{-19} \text{ C}$
  9.  $1.6 \text{ E }^{-19} \text{ J}$
  10. Energy used to pull apart nucleus into particles
  11. Difference in Mass between reactants and products
  12. This equation converts mass into energy
  13. Average Energy to remove one nucleon from the nucleus
- A. Electromagnetism
  - B. Binding Energy per nucleon
  - C. Binding Energy
  - D. Mass Defect
  - E. Gravity
  - F. Beta
  - G. Mass
  - H. Elementary Charge
  - I. Strong
  - J.  $E = mc^2$
  - K. Charge
  - L. Alpha
  - M. Electron-Volt