1 The atomic mass of an element is the weighted average of the atomic masses of

      1 the least abundant isotopes of the element
      2 the naturally occurring isotopes of the element
      3 the artificially produced isotopes of the element
      4 the natural and artificial isotopes of the element

2 The arrangement of the elements from left to right in Period 4 on the Periodic Table is based on

      1 atomic mass
      2 atomic number
      3 the number of electron shells
      4 the number of oxidation states

3 Naturally occurring gallium is a mixture of isotopes that contains 60.11% of Ga-69 (atomic mass = 68.93 u) and 39.89% of Ga-71 (atomic mass = 70.92 u). Which numerical setup can be used to determine the atomic mass of naturally occurring gallium?

      1 $\dfrac{(68.93u+70.92u)}{2}$

      2 $\dfrac{(68.93u)(0.6011)}{(70.92u)(0.3989)}$

      3 (68.93 u)(0.6011) + (70.92 u)(0.3989)
      4 (68.93 u)(39.89) + (70.92 u)(60.11)

4 Which notations represent hydrogen isotopes?

      1 $_1^1H$ and $_1^2H$
      2 $_1^1H$ and $_2^4H$
      3 $_2^1H$ and $_3^1H$
      4 $_1^2H$ and $_2^7H$

5 What is the overall charge of an ion that has 12 protons, 10 electrons, and 14 neutrons?

      1 2–
      2 2+
      3 4–
      4 4+