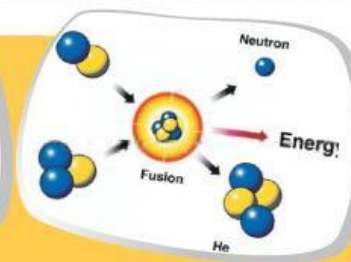
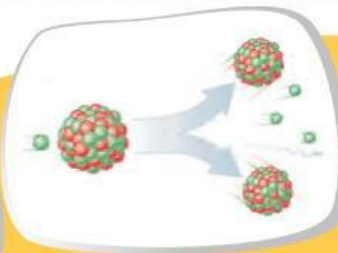


Answer these questions :

1. At the centre of each atom is a tiny core called a \_\_\_\_\_ which is surrounded by a cloud of electrons or electrically charged particles that move in the outer regions of the atom.
2. The number of protons in a nucleus is the same as the number of \_\_\_\_\_ surrounding it, thus making the atom electrically neutral.
3. The mass of a nucleus is slightly less than the sum of its constituent neutron and proton masses. This so-called mass defect is also known as the \_\_\_\_\_.
4. The atom bomb is based on which nuclear principle ? \_\_\_\_\_
5. Many nuclei decay not only by emitting X-rays but also by giving off beta particles (electrons or their positively charged partners, positrons) or alpha particles (clusters of the protons and two neutrons), or by splitting up into two large sections. This splitting up is called nuclear \_\_\_\_\_ theory of relativity binding energy electrons nucleus quarks fission Marie Curie nuclear fission.
6. Electrons are not the smallest particles present in atoms, electrons are also made of smaller particles called \_\_\_\_\_.
7. After Henri Becquerel's research on X-rays, which had been discovered by Wilhelm Rontgen, it was \_\_\_\_\_ who coined the term 'radioactivity'.
8. In 1905 Albert Einstein published his \_\_\_\_\_ from which he derived the famous equation :  $E = mc^2$ .



Theory of Relativity, binding energy, electrons, nucleus, quarks, fission, Marie Curie, nuclear fission