Guiding Question revisited

How do the nuclei of atoms differ?

In this chapter we explored the structure of the atom and how the nuclei of atoms differ.

- [ ] All atoms are made up of protons, neutrons and electrons.
- [ ] The protons and neutrons, which contribute most of the mass of the atom, are in a small dense nucleus surrounded by electrons which occupy most of the volume of the atom.
- [ ] The atomic number gives the atom its identity. This is the number of protons in the nucleus. In a neutral atom this is also the number of electrons.
- [ ] The mass number is the number of nucleons: the number of protons and neutrons in the nucleons.
- [ ] Evidence shows that most elements have more than one isotope: atoms with the same number of protons but a different number of neutrons.
- [ ] The relative atomic mass, which is the average mass of an atom, can be determined from the relative abundance of its isotopes.