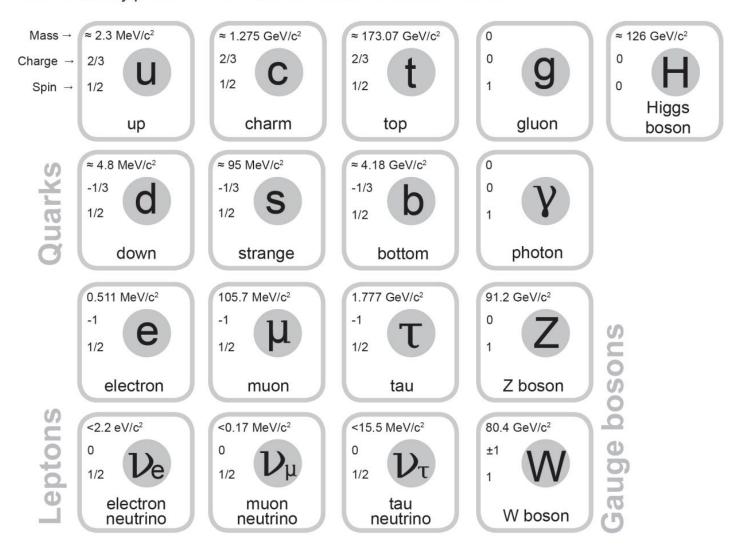
The elementary particles of the Standard Model are shown below.



- (a) If up (u) and down (d) quarks are the building blocks of nucleons, suggest a combination of three quarks that would produce a
 - (i) proton: _____ (1 mark)
- (ii) neutron: _____ (1 mark)
- (b) Identify **one** type of gauge boson and describe its role in the nucleus. (2 marks)