Which has more atoms:
A one-gram sample of carbon-12, or
a one-gram sample of carbon-13?

Next-Time Question

Which has more atoms: A one-gram sample of carbon-12, or a one-gram sample of carbon-13?


Answer: a, Carbon-12

Think of it this way: If you had a pound of Ping-Pong balls in one bag and a pound of golf balls in another, in which bag would you have more balls? Because each golf ball weighs more, there are fewer of them in one pound. Similarly, each carbon-13 isotope weighs more than carbon-12 isotopes. So for equal masses of carbon-12 and carbon-13, there are more carbon-12 atoms in the carbon-12 sample.