

Name: _____

Date: _____

Use what you know about **atoms** and **atomic structure** to evaluate the following statements. If they are false, correct them. If they are true, be able to explain why. Don't worry too much about getting an answer, we just want you to think it through.

True/False

_____ Food emits radiation

_____ Naturally occurring radioactivity is safe to humans

_____ The human body emits radiation

_____ Subatomic particles are the basis of atoms, (i.e. protons, neutrons and electrons) and therefore can not be divided

_____ High doses of radiation can give you cancer

_____ One element can spontaneously turn into another element

_____ Radiation can be used as medicine

_____ Some isotopes are radioactive

_____ Radioactive isotopes decay over time into other isotopes

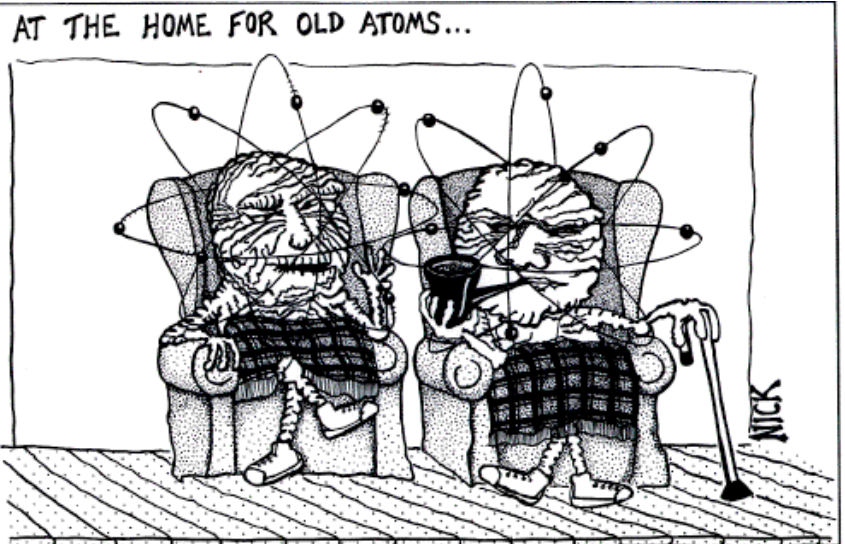
_____ Half-life is the amount of time it takes for radioactive material to reduce its mass by one Half

_____ Radiation has mass

_____ Radiation can be stopped by thin paper

_____ Radiation can go through bone

Past Expiry by Johnny Ancich 748



"When I was young I used to feel so alive, so dangerous..! In fact, would you believe that I started out life as a Uranium-238 ? Then one day I accidentally ejected an alpha particle, and that's where it all began. Now look at me, a spent old atom of Lead-206. It seems that all my life since then has been nothing but decay, decay, decay...."

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