ACROSS
1 Parent of a classical radiogenic isotope system
5 Isotope anomalies inherited from stars
6 Process by which an unstable atomic nucleus loses energy
8 Unreactive elements with useful isotopes
10 The animal in charge of the pack
11 Source of an object
12 ln2/lambda
14 Not religious
17 Separates parents and daughters

18 Difference between two isotopes of an element
24 A state of balance
25 Can be studied using $\delta^7$Li, $\delta^{26}$Mg, $^{87}$Sr/$^{86}$Sr...
26 Tinder for geochemists
27 Nobody seems keen to have this type of waste dumped near their town.

DOWN
2 Every isotope geochemist's favourite tool
3 In the 2017 UK general election, Theresa May claimed to be strong and

4 Parent of platinum-group isotope system
7 Ionised gas
9 Parent of a short-lived radiochronometer
13 Stable isotopes of this element trace ocean pH
15 Real or hypothetical (isotopic) pool
16 Daughter of a radioactive nuclide
19 Can be studied using fission tracks, U-Th-He,
20 Glows hot to ionise
21 Isotope fractionation style
22 Canonical distillation model
23 Isotope system for rates of processes