

E PLURIBUS UNUM

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Many words can be regarded as made up of a sequence of smaller ones. Obvious examples are compound words that can be broken down into their component parts, such as *ex-port*, *down-beat*, *fore-court*, *hand-cuffs*. But sometimes the elements of compound words do not conform to their original meanings – *sup-port*, *in-vest*, *in-tent*, *in-vent*, *per-mission*, *con-dole* and so on. Also, some can be broken down into different elements, like *port-end*, *kings-hip*, *best-ride*, *horses-hoe*. More frequent are words whose constituent elements are not related in meaning, such as *pal-ate*, *disc-over* *disco-very*, *ban-king*, *pun-gent*, *tref-oil*, *in-te-re-sting*, *par-a-no-id* and the old favourite *leg-end*

Susan Thorpe (WordWays August 2018) has found pairs of words whose elements can produce meaningful sentences. For example, the phrase ALLIED TOGETHER can be broken down to read AL LIED TO GET HER. For present purposes the use of upper-case letters is not going to be allowed but the less meaningful phrase *mangoes together* would be acceptable. However, combinations of words are not being looked at here, only individual words and their possible constituent elements.

In cryptic crosswords, the answers are to be spelled out in upper case - and distortions are allowed such as using the letters I and O to represent the numerals 1 and 0. A stricter regime not only limits elements to lower-case dictionary entries but would also deny word status to lower-case abbreviations like *ed*, *eg*, *ca*, *etc*, because these are not spoken words but are either spelled out letter by letter or spoken in unabbreviated form. These limitations do rule out otherwise attractive candidates like *not-or-i-o-us*, *o-pi-ate* and *par-li-a-men-tar-i-an*, but enough examples remain that can be viewed from several aspects, including: what word has the largest number of elements: how many different ways can a word be broken down into elements: what about words like *monotonous* which contains *mono* and *nous* as pairs of elements?

In a search for the word with the largest number of elements the ending *-ation* looks promising. Is there anything better than nine elements? Consider –

7 elements	in-tern-a-ti-on-a-list
8 elements	in-tern-a-ti-on-a-li-zed
9 elements	in-tern-a-ti-on-a-li-zati-on

Then, because words can often be broken down a a variety of ways, what words have the largest number of alternative element breakdowns? For instance *monotonous* has four ways, depending on whether *mono* or *nous* or both are used as elements. Better still is *adoration* which has five ways –

a-do-ration
a-do-rat-ion
ad-oration
ad-or-at-ion
ad-or-a-ti-on

Does a better example exist?

Exploring another aspect, there are words of three elements in which the two pairs of elements are also words. There is *re-port-age* in which *report* and *portage* are also words. Likewise *for-got-ten*, in which *forgot* and *gotten* are present. Is there a word of **four** elements with the same properties? This would be a sequence of letters that yielded a total of **ten** words! The words *reformation* and *reformatted* yield a possible nine (the whole word plus eight sub-words), but it would be good to find a perfect ten.

Finally, how many words can be generated by how few letters? *Forgotten* produced six words from nine letters. The word *herein* yields six words from six letters. Equally ‘economical’ are the little words *are* and *ado*. Area is even better, yielding five words from only four letters. But the prize goes to an even shorter word, denoting a type of Hawaiian lava formation – *aa*, which creates three words from just two letters.