

# SINGLE LETTER PREFIXING

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Allow us to start with some simple definitions: this article concerns *prefixing* a single letter to a root word (root for short) to make another word, e.g., M prefixes the root AN to make MAN. In the January 1997 WordsWorth, Ted Clarke asked whether there was a longer set of four-letter words than a list of 16 based on IND as the last three letters. Note that IND is itself a word, meaning indigo. One of us (Thorpe) replied in the affirmative (by letter in the April 1997 issue), giving 23 ways in which the word EST (a modern philosophy and technique) could be prefixed by a single letter to make other words. We were therefore surprised by Richard Lederer's claims (Word Ways, Feb 1998) about two-letter and four-letter roots, since he declared that AT and AD could be prefixed by just 13 different letters, and he remarked that the four-letter champions were ILLS and EARS with only 12 words (we exclude his 'single letter' QU), Bearing in mind the high chance that short strings of letters make a word (see Graph 1 in Gooch's "Statistics of Word Neighbours" in the Nov 1997 Word Ways), we thought that one might find short words which remained words when almost any letter was prefixed to them. Thus we expected there to be almost 26 prefixes possible for some two-letter root, and many more than 12 for some four-letter root.

One approach we took was to identify, for words of a given length, the roots taking most prefixes. This was actually the task set in WordsWorth; however, we chose to accept only roots which were genuine words. For shorter words, the chance that such roots are themselves words is quite good.

In the lists below, for words of length four and longer, the roots which occur most often are listed for their own inherent interest, whether they are words or not. The roots are listed in descending order of the number of single-letter prefixes they take, different frequencies being separated by semicolons (thus ET and ONE have more prefixes than ARE). However, after the order was established, further prefixes were found from the Times Index-Gazetteer of the World and the English Dialect Dictionary, as well as amongst OED variant forms and derived forms. In some cases, therefore, the order differs between the roots and the champions.

In order to find the champions, we select roots which are words (from the lists given or from elsewhere), and attempt to add as many prefixes as possible. However, suppose that ILL is the champion root for four-letter words; then ILLS is an obvious candidate root for five-letter words. In such a case, we have made some attempt to give an unrelated alternative. This policy also applies to derivative forms other than plurals. Derivatives of which we are not certain have been indicated by a question mark; for example, the OED gives WATTER and VATTER as forms of WATER, so are WATTERING and VATTERING acceptable along with WATERING? The fights for champion are very tight, so that readers many well manage to claim new champions with but small improvements to rival candidates.

As can be seen in the lists following (and as in any case to be expected), the number of different prefixes drops as word length increases beyond seven:

Word Length	1	2	3	4	5	6	7	8	9	10	11	12
Number of Prefixes	26	26	25	23	21	20	20	16	11	7	3	16

As in other studies, words of ten letters or more present great difficulties, though in this particular case we serendipitously found seven placenames of length ten, and the ending ANDLESSNESS boosted the results for twelve-letter words far beyond expectations. We might expect a similar effect with other common long endings.

The most common roots for long words only occur a few times each, and very few of them are words. We are still scouring dictionaries for the following:

ENOPHOBIA fear of Eno's Fruit Salts  
 ENOGRAPHY  
 ENOGENESIS  
 ENOTOMIZING  
 ONOPHOBIA fear of Yoko Ono  
 UMPINESSSES states of 'having the 'ump"  
 (N)ANDLESSNESS in many electronic circuits negative logic is used, so they are bereft of AND and OR gates, having instead NANDs and NORs  
 EMISSIONARY proselytizing by e-mail, or what a heated wire is with respect to electrons  
 AWKISHNESSES  
 EROTHERAPIES in massage parlours  
 IGNIFICATION setting fire  
 OWING-MACHINE broken cash dispenser  
 RAINSICKNESS disease endemic to Mancunians

All words in the tables are headwords in the Oxford English Dictionary (OED) except where otherwise noted.

d = derived from an OED headword

d vf = derived from an OED variant form

d EDD = derived from a word in the English Dialect Dictionary  
 DAW = The Dictionary of Archaic Words by James Orchard Halliwell  
 EDD = The English Dialect Dictionary  
 pn = personal name  
 q = quote in OED (followed by headword)  
 STED = Stedman's Medical Dictionary  
 TD = Telecommunications Dictionary by R. Scott Perry (1991)  
 TIG = The Times Index-Gazetteer of the World  
 vf = OED variant form

### WORDS OF LENGTH 1

One of us was quick to spot that the null word can have any of the 26 letters as a prefix, making a valid single-letter word in every case!

### WORDS OF LENGTH 2

Jeff Grant's *The Concise Dictionary of 2-Letter Words* gives sources for all possible 2-letter combinations. If we accept that all single letters are words, it follows that there are 26 single letter words, each capable of taking any of the 26 prefixes to yield a sourced word. However, if we restrict ourselves to single letters that have a role in English other than as a letter, we nominate:

**joint champion: A (26): AA, BA, CA, DA, EA, FA, GA, HA, IA, JA, KA, LA, MA, NA, OA, PA, QA, RA, SA, TA, UA, VA, WA, XA, YA, ZA**

**joint champion: I (26): AI, BI, CI, DI, EI, FI, GI, HI, II, JI, KI, LI, MI, NI, OI, PI, QI, RI, SI, TI, UI, VI, WI, XI, YI, ZI**

Jeff Grant's dictionary gives sources for OA, CI, GI, JI, UI, and ZI

### WORDS OF LENGTH 3

**champion: ON (25): AON (TIG), BON, CON, DON, EON, FON, GON, HON, ION, JON, KON, LON, MON, NON, OON, PON, RON, SON, TON, UON (DAW), VON, WON, X-ON (TD), YON, ZON**

Who will find QON?

**reserve champions: AR, AS, AT, EN, UE (all 24)**

### WORDS OF LENGTH 4

**roots: EST, ONE; ARE; AIN, ERE, ETE, IST, ULE, YNE**

**joint champion: ERE (23): AERE (vf), BERE, CERE, DERE, EERE (vf), FERE, GERE, HERE, IERE (vf), JERE, KERE, LERE, MERE, NERE, PERE, QERE, RERE, SERE, TERE, UERE (TIG), VERE, WERE, YERE**

**joint champion: EST (23): AEST, BEST, CEST, DEST (vf), EEST (vf), FEST, GEST, HEST, IEST, JEST, KEST, LEST, MEST, NEST, OEST, PEST, REST, SEST, TEST, VEST, WEST, YEST, ZEST**

**reserve champions: AIN, ANE, ANG, ETE (all 22)**

### WORDS OF LENGTH 5

**roots: ETTE; ESTE, ILLS, OWER; AGER, ATCH, EARE, IGH; ANGS, ATER, ATES, ESSE, ITCH, OLLY**

**joint champions: ARES (vf, singular), ESTE, ETTE, ILLS (all 21)**

For example: **BESTE, CESTE, DEST, FESTE (vf), GESTE (vf), HESTE (vf), IESTE (vf), JESTE (vf), KESTE, LESTE, MESTE (vf), NESTE, OESTE (TIG), PESTE, RESTE, SESTE, TESTE, VESTE, WESTE, YESTE, ZESTE (vf)**

**WORDS OF LENGTH 6**

**roots:** ESTER, ETTER; INGLE; AGGER, ITHERR; AGGED, AGGER, APPED, ASTER, ATTER, AUGHT, INDER, ODDER

**champion:** ESTER (19 or 20): **BESTER, CESTER (vf), DESTER, FESTER, GESTER, HESTER (pn), IESTER (vf), JESTER, KESTER (TIG), LESTER (pn), MESTER, NESTER, PESTER, RESTER, SESTER, TESTER, VESTER, WESTER, YESTER, ZESTER?**

**reserve champion:** ETTER (18): **BETTER, DETTER (vf), FETTER, GETTER, HETTER, IETTER (vf), JETTER, KETTER (EDD), LETTER, METTER, NETTER, PETTER, RETTER, SETTER, TETTER, VETTER, WETTER, YETTER**

**WORDS OF LENGTH 7**

**roots:** SHAPED (ignored); AGGING, ELLING; APPING; ASHING, EARING, ETTING, ILLING, ITTING; AILING, ASTING, EALING, INGING, INKING, IPPING, OBBING, OCKING, OLLIES, OPPING, OUNDER, UCKING

**champion:** ESTERS (19 or 20): **BESTERS, CESTERS (vf), DESTERS, FESTERS, GESTERS, HESTERS (plural pn), IESTERS (vf), JESTERS, KESTERS (two places in TIG), LESTERS (plural pn), MESTERS, NESTERS, PESTERS, RESTERS, SESTERS, TESTERS, VESTERS, WESTERS, YESTERS, ZESTERS?** All are derived except for H, K, and L

**reserve champion:** EARING (18): **BEARING, CEARING (d), DEARING, FEARING, GEARING, HEARING, JEARING (d vf), LEARING, MEARING, NEARING, PEARING (d), REARING, SEARING, TEARING, VEARING (d), WEARING, YEARING, ZEARING (TIG)**

**second reserve:** ELLING (16 or 17, TIG): **BELLING, CELLING (d), DELLING? (= dealing), FELLING, GELLING, HELLING, JELLING (d), KELLING (Sted), LELLING (d), MELLING, PELLING (1606q pell), SELLING, TELLING, UELLING (d), VELLING, WELLING, YELLING**

**WORDS OF LENGTH 8**

**roots:** IGHING; ANGLING, ASTINGS, INGLING; ATCHING, ATELESS, ATTERED, ETTINGS, ITTERED, OBBLING, OTATION, UDDLING; ACKINGS, ACKLESS, AILINGS, AMBLING, ATCHERS, AUNTING, EEDLESS, ENDABLE, IDDLING, ILLABLE, ILLINGS, IPPUEST, OUCHING, OUNDERS, OWERING, UCKLING, UMBLERS, UMBLING, USHUEST, USTIEST

**champion:** ANDLESS (16): **AANDLESS (vf), BANDLESS, CANDLESS, DANDLESS, FANDLESS, HANDLESS, KANDLESS, MANDLESS, LANDLESS, NANDLESS, PANDLESS, RANDLESS, SANDLESS, VANDLESS, WANDLESS, ZANDLESS.** All are derived except for B, H, and L.

**joint reserve champion:** ANGLING (14): **BANGLING, CANGLING (d), DANGLING, FANGLING (d), GANGLING, IANGLING (1588q jangle), JANGLING, LANGLING (d), MANGLING, NANGLING (TIG), RANGLING, TANGLING, WANGLING, YANGLING (d)**

**joint reserve champion:** INGLING (14): **BINGLING, CINGLING, DINGLING, GINGLING (vf), JINGLING, KINGLING, LINGLING (TIG), MINGLING, NINGLING (d), PINGLING, RINGLING, SINGLING, TINGLING, YINGLING (d vf)**

**WORDS OF LENGTH 9**

**roots:** ARISHEST, OUNDINGS; ADDISHER, ATCHINGS, ATTEREST, ATTERETH, ATTERING, ITTERING, USTINESS; ALLOWEST, ALLOWING, ARROWING, ATTINESS, EARABLER, EEDINESS, ETTABLER, ETTERING, IGGISHER, IGHTESS, ILLABLER, ITTEREST, LIGHTING, ONINGTON, OOKERIES, OTATIONS, OWABLEST, PARTICLE (ignored), TYPESTAR, UMBLINGS, USHINESS

**champion:** ATTERING? (10-12): **BATTERING**, **CATTERING** (d EDD), **FATTERING** (d EDD), **HATTERING** (1630q hatter), **JATTERING** (d EDD), **MATTERING**, **NATTERING**, **PATTERING**, **TATTERING**, **VATTERING?**, **WATTERING?**, **YATTERING**

**reserve champion:** LIGHTING (8): **ALIGHTING**, **BLIGHTING**, **CLIGHTING**, **ELIGHTING** (d), **FLIGHTING**, **PLIGHTING**, **SLIGHTING**, **YLIGHTING** (d)

**WORDS OF LENGTH 10**

**roots:** ENOPHOBIA, UMBLINGLY; AUNTINGLY, ENOGRAPHY, ILIFEROUS, LATTERING, ONOGRAPHS, ONOGRAPHY, RADIATION; ABBLEMENT, ARRINGTON, LITTERING and many more

**placename champion:** ARRINGTON (7): **BARRINGTON**, **CARRINGTON**, **DARRINGTON**, **FARRINGTON**, **HARRINGTON**, **TARRINGTON**, **WARRINGTON** (all in TIG)

**champion:** LITTERING (4): **CLITTERING** (d), **FLITTERING**, **GLITTERING**, **SLITTERING** (d)

**WORDS OF LENGTH 11**

**roots:** USTINESSES; ONOGRAPHED, ONOGRAPHIC; ADDISHNESS, ATTINESSES, EMOLOGICAL, ENOGENESIS, EROPHILOUS, ILLIONAIRE, LASTICALLY, SHARPMINOR (ignored), UMPINESSES, USHINESSES; EDUCTIVELY and many more

**champion:** EDUCTIVELY (3 d): **DEDUCTIVELY**, **REDUCTIVELY**, **SEDUCTIVELY**

**WORDS OF LENGTH 12**

**roots:** ONOGRAPHICS, ONOGRAPHIES, ONOGRAPHING; ANDLESSNESS, AINLESSNESS, EGENERATION, IGHTEFULNESS and many more

**champion:** ANDLESSNESS (16 d): **AANDLESSNESS** (vf), **BANDLESSNESS**, **CANDLESSNESS**, **DANDLESSNESS**, **FANDLESSNESS**, **HANDLESSNESS**, **KANDLESSNESS**, **LANDLESSNESS**, **MANDLESSNESS**, **NANDLESSNESS**, **PANDLESSNESS**, **RANDLESSNESS**, **SANDLESSNESS**, **VANDLESSNESS**, **WANDLESSNESS**, **ZANDLESSNESS**. All are derived except for B, H, and L...