

A common way of making new words in English is by adding standard combinations of letters to existing words, either at the beginning (prefixes) or at the end (suffixes). By noting these carefully, you will find it easy to increase your vocabulary. A prefix is a syllable, 2 syllables, or sometimes even a word, put at the beginning of a word to change its meaning or to make another word. Prefixes are often used to give an adjective, a verb or a noun a negative meaning, but there are also lots of other prefixes with specific meanings.

Prefixes with the meaning not

The most common prefixes used to give a negative meaning to adjectives, and some verbs and nouns, are as follows:

prefix	use	positive	negative
<i>un-</i>	used with many different words	lucky friendly employed	<i>un</i> lucky <i>un</i> friendly <i>un</i> employed
<i>im-</i>	used before words beginning with <i>m</i> or <i>p</i>	possible mature	<i>im</i> possible <i>im</i> mature
<i>il-</i>	used before some words beginning with <i>l</i>	literate legible	<i>il</i> literate <i>il</i> legible
<i>ir-</i>	used before some words beginning with <i>r</i>	regular responsible	<i>ir</i> regular <i>ir</i> responsible
<i>in-</i>	used before a limited number of words	correct visible	<i>in</i> correct <i>in</i> visible
<i>dis-</i>	used before some adjectives and a few verbs	honest like	<i>dis</i> honest <i>dis</i> like

Unfortunately, there is no easy way of knowing which prefix any adjective will use to form its negative. So when you learn a new adjective, note down whether it has an opposite formed with a prefix and, if so, what it is.

The prefix in- This does not always have a negative meaning – often it gives the idea of 'inside or into', e.g. internal, insert, income.

Verb prefixes: un- and dis- These prefixes have two meanings. They can have a negative meaning (as above), but they can also mean 'the opposite of an action' or 'to reverse an action'. This meaning is used with certain verbs, e.g. to lock – to unlock, to pack - to unpack, to appear – to disappear, to get dressed – to get undressed.

Other prefixes with specific meanings

Many other prefixes are used in English. Below is a list of prefixes which are useful in helping you to understand unfamiliar words. Some of these words are used with a hyphen.

Prefix	Meaning or Function	Examples
<i>a-</i> (<i>an</i>)	not, not having	<i>atypical, anhydrous</i> (not containing water)
<i>aero-</i>	air	<i>aerospace</i>
<i>anti-</i>	against	<i>anti-toxin</i>
<i>auto-</i>	self, by itself	<i>autointoxication</i>
<i>bi-</i>	two	<i>bi-metallic</i>
<i>bio-</i>	life	<i>biology</i> (science of life)
<i>centi-</i>	100 or 1/100	<i>centimeter, Centigrade</i>
<i>co-</i>	together, with	<i>co-operation</i>
<i>contra-</i> <i>counter-</i>	against, opposite	<i>contra-rotating; counteract</i>
<i>de-</i>	taken away from	<i>dehydrated</i>
<i>deci-</i>	a tenth	<i>decimeter</i> (tenth of a meter)
<i>deka-</i>	ten	<i>dekameter</i> (ten meters)
<i>di-</i>	two, twice	<i>dioxide</i>
<i>hydro-</i>	(1) water (2) hydrogen	<i>hydrology</i> <i>hydrocarbon</i>
<i>hyper-</i>	over, excessive	<i>hypertension</i>
<i>hypo-</i>	below, less than usual	<i>hypotension</i>
<i>infra-</i>	below, under	<i>infra-red</i> (below the wavelength of red)
<i>inter-</i>	between	<i>interconnection</i>
<i>intra-</i>	inside	<i>intravenous</i>
<i>iso-</i>	equal	<i>isostatic</i>
<i>kilo-</i>	a thousand	<i>kilogram (me)</i> (1000 gram (me)s)

<i>macro-</i>	large, on a large scale	<i>macromolecule</i>
<i>mega (lo)-</i>	very large, a million	<i>megawatt</i> (a million watts)
<i>meta-</i>	change	<i>metamorphic</i>
<i>micro-</i>	small, on a small scale	<i>microorganism</i>
<i>milli-</i>	a thousandth	<i>milligram (me)</i> (1000th of a gm)
<i>mis-</i>	badly, mistakenly	<i>miscalculated</i>
<i>mono-</i>	one, single	<i>monochrome</i> (of only one colour)
<i>multi-</i>	many	<i>multilateral</i> (with many sides)
<i>neo-</i>	new	<i>neoclassical</i>
<i>non-</i>	not	<i>non-conductor</i>
<i>out-</i>	(1) more than (2) beyond, outside	<i>outwear</i> (wear or last longer than) <i>outlying</i> (beyond the main body)
<i>over-</i>	(1) more than, excessive (2) on top of, above	<i>overproduction</i> <i>overlie</i> (to lie on top of)
<i>para-</i>	similar to, irregular	<i>paratyphoid</i> (disease similar to typhus but of different origin)
<i>pent (a)-</i>	five	<i>pentagon</i> (5 –sided figure)
<i>phot (o)-</i>	light	<i>photosynthesis</i>
<i>poly-</i>	many	<i>polymorphous</i>
<i>pre-</i>	before, previously	<i>prearranged</i>
<i>proto-</i>	first, original	<i>prototype</i>
<i>quadri-</i>	four	<i>quadrivalent</i> (having a valency of 4)
<i>re-</i>	(1) again, back (2) together, mutually	<i>re-combine</i> (to combine again after being separated) <i>react</i> (to act on each other)
<i>self-</i>	by itself	<i>self-regulating</i>
<i>semi-</i>	half, imperfect	<i>semi-conductor</i>
<i>sub-</i>	under, below, less than	<i>sub-atomic</i>
<i>super- (supra)-</i>	above, beyond, more than	<i>supersonic</i>
<i>syn- (m)-</i>	with, together	<i>synthesis</i>
<i>tetra-</i>	four	<i>tetrad</i> (element having valency of 4)
<i>therm-</i>	heat	<i>thermodynamics</i>
<i>tri-</i>	three	<i>triangle</i>
<i>ultra-</i>	beyond, more than usual	<i>ultraviolet</i>
<i>under-</i>	(1) less than, insufficient (2) below, lower than	<i>underpressure</i> <i>undersea</i>
<i>uni-</i>	one	<i>unicellular</i>

Suffixes

A suffix is a syllable or syllables put at the end of a word to change its word-class and / or its meaning. Suffixes can briefly be divided into noun suffixes adjective suffixes verb suffixes

Noun suffixes

Verb + suffix. Many nouns are formed by adding a suffix to a verb. The most common suffixes of this type are as follows:

Verb	Suffix	Noun
enlarge	-ment	enlargement
elect	-(t)ion	election
inform	-ation	information
write	-ing	writing
dance, manage	-er	dancer, manager
direct	-or	director

* Note: sometimes there is a spelling change. The most common is the omission of the final e before the suffix -ion or -ation: translate / translation.

Noun + suffix. -ist is a common suffix added to existing nouns to describe people and their jobs : ecologist, journalist, artist

Adjective + suffix. Nouns are also formed by adding a suffix to an adjective. Two suffixes often added to adjectives to form nouns are -ness and -ity.

adjective	suffix	noun
rich	-ness	richness
stupid	-ity	stupidity

Adjective suffixes

Noun or verb + suffix. Adjectives can be formed from nouns or verbs by adding these suffixes

noun or verb	suffix	adjective
fame	-ous	famous
industry	-al	industrial
sun	-y	sunny
create	-ive	creative

Suffixes can change word class, e.g. from verb to noun, or noun to adjective, but they can also change meaning. The suffixes -able and -ible quite often have the meaning of can be done, e.g. something that is comprehensible can be comprehended.

Words ending in -ible often add the prefix in- for their negative forms: incomprehensible. The suffix -ful often means 'full of': colourful = full of colours. The suffix -less means 'without': odourless = without odour

Here is a list of common suffixes in alphabetical order, their meaning or function and some examples

TASK1: Combine the prefixes super-, extra-, ultra-, and over- with the following word bases to fill in the gaps in the sentences below: large (2) production (1) fast (2) long (2) pricing (1) cold (2) high (2) sensitive (2) positive (1)

- Because they are run on your pc rather than across the Internet they do not require a powerful computer and _____ connection. (*super-fast*)
- There will be new forms of military remote sensing equipment, and low cost instruments for analysing _____ chemical and biochemical reactions. (*ultra-fast*)
- Critique of what is claimed to be a new, _____ stereotype of ageing which denies its problems. (*over-positive*)
- Hotronic says the batteries were developed for _____ conditions. (*extra-cold*)
- Researchers at the University of Innsbruck have done just that with _____ lithium atoms, chilled to within 200 millionths of a degree of absolute zero. (*super-cold*)
- Using an _____ Spf sunscreen that -according to conventional reason-can stave off skin tumours. (*extra-high*)
- Terrestrial television transmission is _____ frequency (uhf). (*ultra high*)
- Kipnis and Tsang (1984b) analysed the S&P500 index for the period from April 1982 to January 1983 and, after allowing for transaction costs, found a considerable number of departures from the no-arbitrage condition, with both _____ and under _____ being present. (*over-pricing*)
- This will be captured on _____ photographic film. (*extra-sensitive*)
- naSa's _____ gamma-ray detector will ride on its Gamma-ray Large Area Space Telescope. (*ultra-sensitive*)
- This was achieved by building an _____ cavern in Norway goes back to the early 1970s. (*extra-large*)
- They jumped in size from 200 000 to 300 000 and even 400 000 tonnes, earning the title ulccs, for _____ crude carriers. (*ultra-large*)
- This helped the animal to be active and healthy despite being handicapped by _____ feathers. (*extra-long*)
- naSa's _____ Duration Balloon (uldb) project. (*Ultra-Long*)
- Oestrogen has a negative feed-back effect on the pituitary gland thus checking _____ of fSh-rh. (*over-production*)

Writing in English A Practical Handbook for Scientific and Technical Writers

Task 4

The prefixes "en-" and the suffixes "-ise" can be used to form verbs. The general meaning is "to transform – to change - to make something have this feature". Examples: to enforce ...to modernise

Supply the required verb form.

- When other analgesics have failed, morphine is used to..... pain in terminal cancer, (minimum)
- Research in physics and chemistry in the US was considerably..... by the arrival of European refugees in the 1930s, (rich)
- The seating capacity and wingspan of the new Airbus has been considerably..... (large)
- Plants that have been..... can be found in Precambrian coal, (fossil)
- The firm has..... in the manufacture of heat resistant polymers. (special)
- It is the investment in research and development since the war that has..... French manufacturing exports to expand at such an enormous rate, (able)
- Huntingdon's disease is..... by uncontrolled movements, dementia, and death within 20 years of onset, (character)
- The most urgent question is how to..... that nuclear weapons do not spread, (sure)

1. minimise 2. Enriched 3. enlarged 4. fossilised 5. specialised 6. enabled 7. Characterised 8. Ensure

Rules for noun formation – suffixes

ADJ/VERB + -th/-t(+ VOWEL CHANGE) depth • height • long / length • weight • width

ADJ + -ness hardness • heavy / heaviness • nearness • thickness

VERB + -ment to develop/development - measurement • movement

Rules for forming verbs NOUN/ADJ + 0(NO CHANGE)

to narrow * to thin • to range /to span /to extend to reach • to rate / to check / to monitor • to record / to plot

>- The trajectory of the missile was plotted on a graph.

NOUN/ADJ + -en to deepen • to lengthen • to shorten • to thicken • to widen

>• The river widens when it leaves the canyon.

NOUN/ADJ + adv particle

to check up • to level off • to slow down * to speed up • to step up • to work out

>- The speed of the neutrons is slowed down by the beryllium moderator.

Task 5

As we have seen in the above points, suffixes can be used to transform adjectives into nouns and verbs. Complete the columns using the suffixes: -ment • -th • -ness • -en • 0.

Adjectives	Nouns	Verbs
1. The road is not wide enough.	The main problem is the of the road.	Why don't they the road?
2. We need better measuring techniques.	All the were wrong.	We require techniques to more accurately.
3. A lack of vitamins can have wide- ranging effects.	The of potential diseases is considerable.	Lack of vitamins causes illnesses which from goitre to anaemia.

4. Cotton is a textile with short fibres.	It is cheap because of the of the fibres.	Genetically modified cotton can the growing season.
5. There is a weak attractive force between the molecules.	Because of the of attraction, the molecules can be separated.	Raising the temperature the molecular attraction.
6. The deluxe model is well- equipped .	The car has got first class	It has been with the latest gadgets.
7. When the eye becomes red , it is a symptom of bacterial infection. of the eye is a symptom of conjunctivitis.	The eye as the bacteria spread.
8. How is a horse?	The of a horse can attain roughly 1,000 kg.	A horse can weigh almost 1,000 kg.

1. wide/width / widen 2. measuring / measurements / measure 3. ranging / range / range
4. short / shortness / shortens 5. weak/weakness/weakens 6. equipped / equipment / equipped
7. red / redness / reddens 8. heavy / weight / weigh

Task 6

As we have already seen, the lexis can be extended by the use of prefixes and suffixes. Insert the following negative prefixes into the sentences: anti- • dis- • im- • in- • ir- • un-.

- In fact, Tycho Brahe did not accept the Copernican system. He thought that the Earth was mobile.
- The coriolis force, which explains the direction of wind patterns, is clockwise in the northern hemisphere and clockwise in the southern hemisphere.
- Many people who are colour blind are aware of it.
- Crime statistics are frequently accurate as so many crimes are never reported.
- The typicalabilities of Alzheimer's disease include loss of memory, anxiety and social withdrawal.
- There is no way of proving it, but it is highly probable that the sun will not rise tomorrow.
- Before changing any of the components, all electrical equipment should be connected.
- The development of electronic communication is making distance relevant.
- According to Greek legend, Odysseus attached himself to his ship because the songs of the Sirens were resistible.
- Glycol is an freeze, that is to say, it lowers the freezing point.

1. immobile 2. anticlockwise 3. unaware 4. inaccurate 5. disabilities 6. improbable 7. disconnected
8. irrelevant 9. irresistible 10. antifreeze