

How to write in English

1. Verbs

How to write in English

- Verbs (tenses, active and passive and nouns)
- Word order in a sentence
- Use of articles
- Punctuation
- Useful words and expression
- Possessive case (explaining the owner)
- Dividing the text into paragraphs, sentences and clauses

I Numbers and tenses

Verbs

Remember two important rules when you use verbs:

1. The number of subject determines the number of verb
2. Do not mix inconsistent tenses

Number

- When the subject is singular third person (she/he/it), the verb needs suffix -s (in the present, positive sentence). The auxiliary verbs have their own special forms (is, can, has, does).
- Be careful with special phrases:
 - "A number of new experiments were done" (plural)
 - "Plenty of time was spent..." (singular)
 - "A few data points belong to cluster X" (plural)
- Notice: when the subject is composed of a singular and a plural noun by "or" or "nor", the verb agrees with the noun that is closer.
- If the number of the subject changes, retain the verb in each clause.
E.g. "The positions in a sequence were changed and the test rerun" →
"The positions in the sequence were changed, and the test was rerun."

Tense

Tenses (temporal forms)

- Default: the present
- Past or present perfect (but not both) when you describe previous research (literature review)
- Past tense to describe the experiments and their results

- In scientific writing, the default is present (is). With present, you can combine perfect (has been) (and future, will be) if needed, but not the other tenses.
- Use past tense (was) only for good reasons. It expresses that something belongs to the past and has already finished. E.g. when you report your experiments.
- Past perfect (had been) is seldom needed. It is used, when you describe something in the past tense, and you refer to something which has happened before it. E.g.
"We tested the system with data which had been collected in *Programming 1* course."

II Active and passive

Active or passive voice, which person?

Use of passive voice

- In active voice the actor is known, while in passive voice it is unknown.
- In the basic form of passive ("sg is done"), you can express also the actor ("sg is done by sy"). Expressing the actor is always more informative!
- It is often recommended to prefer active voice, but in scientific writing passive voice is sometimes convenient. It allows us to draw the reader's attention to the phenomenon or the event, instead of the actor. E.g. "The probabilities are updated by Bayes rule", "The values are recorded every minute", "The score is assessed on the basis of the training data."

II Active and passive

Use of passive voice

- Often the purpose determines the voice. Usually we want to begin with a familiar word and put the new information in the end. E.g. before an equation or a definition, we can say "The model is defined as follows."
- However, do not overuse passive, and do not chain passive expressions. As a rule of thumb, use only one passive per sentence

II Active and passive

- Example

I shall always remember my first visit to Boston.

This is much better than

My first visit to Boston will always be remembered by me.

The latter sentence is less direct, less bold, and less concise. If the writer tries to make it more concise by omitting "by me,"

My first visit to Boston will always be remembered,

it becomes indefinite: is it the writer, or some person undisclosed, or the world at large, that will always remember this visit?

II Active and passive

”It is” and ”There is/are”

- A formal subject ”it” is sometimes used in passive expressions: ”It is often recommended [reference] that...”
- Typical verbs in this expression are: say, suppose, consider, expect.
- ”There is/there are” is a similar expression, but now we don’t need the passive. This expression is used when the real subject (what is somewhere) comes later and we haven’t mentioned it before.

E.g. ”There was only one outlier in the data set 1” v.s. ”The outlier was in the data set 1.”

- The verb is nearly always ”be” (sometimes ”exist” or something else)
- Notice that the verb follows the real subject’s number.

E.g. ”There were a lot of outliers in the data set 1.”

II Active and passive

”It is” and ”There is/are”

- ”There is” expression is seldom needed in scientific writing, and often you can circumvent it:
”The data set 1 contained a lot of outliers.”

II Active and passive

Other passive expressions

- "We" can be used as passive. E.g. "In Chapter *X*, we define the basic concepts." However, it is better to say "The basic concepts are defined in Chapter *X*."
- "You" is sometimes used as passive, especially in manuals. Don't use it in scientific text!
- "People" when you refer generally to people. Quite a vague expression, not recommendable!

II Active and passive

Person?

- Basic rule: avoid the first person (no opinions, but facts). However, sometimes we can use "we" as a passive expression. Problem: whom you are referring to, if you write alone?
- Referring to yourself: you can talk about "the author". E.g. "All programs have been implemented by the author." Notice that I don't guarantee that your supervisor likes this! Some supervisors prefer "I".
- Gender-neutral language: when you refer to an unknown user, student, etc. try to use gender-neutral language.

II Active and passive

- The most common way is to say "she/he" or "he or she". Some authors are careful about the order of her/him, as well! E.g. you can use every second time "she or he" and every second time "he or she". Remember to put the other pronouns in the same order ("She/he tries her/his best")
- "One" is neutral, but sounds often awkward. "The learner can define one's own learning goals"
- Sometimes you can avoid the problem by using plural.

Other notes

- Do not use short forms "isn't, can't, doesn't", but "is it, cannot, does not".
- "be verb+ing" form when something is currently happening or takes some time. E.g. "Thread 2 can be started in the same time when thread 1 is still running"
- Some verbs require that the following verb is in -ing form:

{enjoy, avoid, succeed in, finish, keep, mind, practice, risk, continue} + verb + ing
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E.g. "Students enjoyed learning new things"

"Continue splitting until criterion X has been reached."

- Similarly some phrases: "it is worth remarking that..."

II Active and passive

A common fault is to use as the subject of a passive construction a noun which expresses the entire action, leaving to the verb no function beyond that of completing the sentence.

A survey of this region was made in 1900.

This region was surveyed in 1900.

Mobilization of the army was rapidly carried out.

The army was rapidly mobilized.

Confirmation of these reports cannot be obtained.

These reports cannot be confirmed.

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III Noun Syndrome

"Noun syndrom" = use of common verbs {be, do, have, make, ...} + a noun

E.g. "We can get better understanding...", "Different people have different responses to the methods"

⇒ Prefer illustrative verbs!

Task: How would you correct the previous sentences?

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⇒ Prefer illustrative verbs!

Task: How would you correct the previous sentences?

We can get better understanding ☐ We can better understand

Different people have different responses to the method ☐

Different people respond differently to the method

III Noun Syndrome

Useful verbs:

represent, analyze, apply, compare, demonstrate, illustrate, summarize, optimize, minimize, maximize, conclude, list, define, report, model, implement, design, consider, involve, simplify, generalize, perform, reduce, obey, fit, contain, consists of, scale up to, be based on sg., take into account sg., depend on sg, increase, decrease, evaluate, predict, assign, require, satisfy, ...

Examples:

"As k increases, the model allows for quite flexible functional forms."

"Data obeys the assumed functional form."

"Data increases exponentially with dimensionality."

"We will discuss examples of each of these approaches."

III Noun Syndrome

Task: What is the difference between the following concepts? Give examples when they are used!

evaluate – assess

compute – calculate

derive – infer

approximate – estimate

discover – find

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Evaluate vs Assess

- **Evaluate:** To form an idea about the amount, number or value
- **Evaluate:** To find a numerical expression or equivalent for...
- Example: It is important to **evaluate** the results of surgery (**measure** heart pressure, analyze blood, get numbers and values)

VS

- **Assess:** Estimate the nature, quality or ability
- **Assess:** To form an opinion of...
- Example: The committee must assess the relative importance of the issues (study and form an impression)

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- **Calculate:** Determine the amount or number mathematically
- **Calculate:** To apply arithmetic process
- Example: The program can calculate the number of words that will fit in the space available

VS

- **Compute:** To determine by the use of computer
- **Compute:** To follow a well defined model (algorithm, protocol, equations, functions, etc...)
- Example: The hire charge is computed on a daily basis

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- **Derive:** To obtain something from a source or origin
- **Derive:** To base a concept on an extension or modification of another
- Example: Cheese is a food derived from milk

VS

- **Infer:** To deduce or conclude something from evidence
- **Infer:** To suggest, hint or speculate
- Example: From these facts we can infer that crime has been increasing

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- **Approximate:** To come close or be similar to something in quality, nature or quantity
- **Approximate:** To simulate and imitate closely
- Example: The motion of the stars can be **approximated** in a planetarium

VS

- **Estimate:** To roughly calculate or judge the value, number or quantity
- Example: The aim of this study is to **estimate** the effects of macroeconomics policy on the economy

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discover – find

- **Discover:** Find unexpectedly or during research
- **Discover:** To notice or realise
- Example: Firemen discovered a body in the debris

VS

- **Find:** To locate or obtain by effort
- **Find:** To ascertain by study or calculation
- Example: Find the sum of several numbers