

Unite One

1.1 The Sentence

❖ A sentence is a group of words that are put together to mean something. A sentence is the basic unit of language which expresses a complete thought. It does this by following the grammatical rules of syntax.

A complete sentence has at least a subject and a main verb to state a complete thought. The first word of a written sentence has a capital letter, and at the end of the sentence there is a full stop or full point.

The sentence consists of:

subject + verb + object or (preposition + noun)

1.2 Sentence Structure

❖ The basic unit of grammar is the clause. All clauses have at least two parts: a noun phrase (subject) and a verb phrase.

clause = subject + verb

We can join two or more clauses together to make a sentence.

Example:

Although the method improved accuracy, it caused a significant increase in
(subject)

computation time.

❖ There are two types of clause: main clause (independent clause) and subordinate clause (dependent clause):

(1) Main clause (Independent clause)

A main clause contains a subject and a verb that has a tense that expresses a complete thought. It can make sense as a sentence by itself as the underlined clause shows below.

A main clause is formed with subject + verb.

Example:

Although the method improved accuracy, it caused a significant increase in computation time.

(2) Subordinate clauses (Dependent clause)

A subordinate clause begins with a subordinator such as **when, although, if, that,** or **who**. A dependent clause does not express a complete thought and does not make sense as a complete sentence by itself, it supports the main idea in the main clause.

A subordinate clause is formed with subordinator + subject + verb.

Although the method improved accuracy, it caused a significant increase in computation time.

The difference between a clause and a sentence is that, a main clause makes sense as a complete sentence. A subordinate clause lacks some information to make it a complete sentence.

❖ Clauses are made up of phrases. A phrase is a group of words that does not have a subject and verb; for example, “in the morning”, “To improve writing skills” etc.

1.3 Types of Sentence Structure

There are three basic types of sentences:

(1) Simple sentence

A simple sentence has one main (independent) clause.

Example:

The earth shook.

(2) Compound sentence

A compound sentence has two main (independent) clauses joined by a coordinator or conjunctive adverb.

Examples:

(A) Coordinator

main clause

,coordinator

main clause

He borrow a book

,and

started reading it.

He worked hard

,but

he did not pass the exam.

Study hard

,or

you will fail.

- and: is used when the statements are similar.
- but: is used to connect statements that express opposite ideas.

(B) Conjunctive adverb

main clause

;conjunctive adverb,

main clause

Writing well is a difficult skill to develop

; however,

it is important for professional success.

- A conjunctive adverb is an adverb that connects two independent clauses. The conjunctive adverb shows cause and effect, sequence, contrast, comparison, or other relationships.

- The conjunctive adverbs are: accordingly, consequently, for example, furthermore, hence, in addition, in contrast, in fact, indeed, instead, moreover, nevertheless, otherwise, therefore, thus.

(3) Complex sentence

A complex sentence has one independent and one (or more) dependent clauses. There are three kinds of subordinate clauses:

- (A) Adverb clause,
- (B) Adjective clause and
- (C) Noun clause.

- In an adverb clause, the subordinate clause can be either in the beginning or end of the sentence. Words like **while, when, if, because, since, whereas, as,** etc. introduce subordinate adverb clauses.

Examples:

(A) Adverb clause

<u>subordinate clause (adverb clause)</u>	,	<u>main clause</u>
Because using multimedia is more interesting to students	,	they may be more motivated to learn.

<u>main clause</u>	No <u>comma</u>	<u>subordinate clause (adverb clause)</u>
They may be more motivated to learn		because using multimedia is more interesting to students.

(B) Adjective (relative) clause

<u>main clause</u>	<u>subordinate clause (adjective clause)</u>
Communicative teaching is done	which helps students to have more time to

using group work,

use the new language in conversation.

C) Noun clause

main clause

dependent clause (noun clause)

The teachers do not agree

that the teaching method is effective.

Exercise 1: The following sentences have been divided into two parts. The first part in each sentences is in list A and the second part is in list B. Write a complete sentence consists of the two parts:

List A

List B

- | | |
|---|---|
| 1. An elastic body returns to its original form | a. although it is in compression |
| 2. The modern building materials are deformed very slightly | b. Because it is subjected to a high pressure and temperature |
| 3. High temperature creep is developed in a boiler | c. when the deformed force is removed |

Unite Two

2.1 Articles

Articles are the forms **a**, **an**, and **the**, it is a part of speech that comes before a noun.

2.2 The Indefinite Articles (a/an)

- The form **a** is used before a word beginning with a consonant, or a vowel with a consonant sound:

a plane **a** one-way

- The form **an** is used before words beginning with a vowel (a, e, i, o, u) or words beginning with a silent **h**:

an iron **an** hour

- ❖ Use of the indefinite articles:

The indefinite articles (a/an) are used:

(1) Before a singular noun which is countable (i.e. of which there is more than one) when it is mentioned for the first time and represents no particular person or thing:

The four centers lie in **a** plane.

(2) With a noun complement:

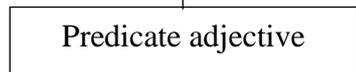
The noun complement is a word or phrase used to complete a grammatical construction. There are two kinds of noun complements; subject complement and object complement.

A subject complement is a predicative expression that follows a linking verb (the term linking verb is used to refer to verbs that describe the subject or link

the subject to some complement such as a predicate adjective or predicate noun) and that completes the subject of the sentence by either renaming it or describing it.

The subject complement is bold in the following examples:

The lake was a **tranquil** pool.

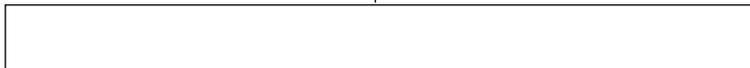


It was an **earthquake**.



The object complement is a noun, pronoun, or adjective which follows a direct object.

The advisor sent him a **paper**



2.3 The Definite Article (the)

The definite article **the** is used with countable nouns in the singular/plural and uncountable nouns in the meaning “mentioned earlier.”

❖ Use of the definite articles:

The definite article (the) is used:

- (1) In generalizations with singular countable nouns to refer to a class of things.

The brain is a complex biological system.

- (2) Before the superlative degrees of adjectives, ordinal numerals, and specifics (such as same, only, principal, etc.).

The best results were obtained during **the second** experiment.

Superlative degree of adjective

The only paper on this problem was published ten years ago.

(3) With the names of unique objects.

The Universe is thought to contain 10^{11} kilograms of matter.

(4) With the names of theories and devices modified by a proper name used as an adjective:

The Dirichlet problem, the Celsius scale

BUT: when a proper name is used in possessive form, no article is used:

Dirichlet's conditions

Note:

The definite article "the" is not used with the first mention of the constructions that denote part of a whole:

a molecule of hydrogen

Unit Three

3.1 Agreement of Subject and Verb

The subject and the main verb of a sentence (clause) must agree in number.

1. A singular noun, pronoun, or an uncountable noun is used with a singular verb. A plural noun or pronoun is used with a plural verb.

The water in the river is fresh and transparent.

1. After “**or**” or “**nor**” a verb agrees with the subject closest to it.

The chairman or the committee members decide when to meet next.

Neither Oxygen nor other air gases are visible.

2. The following singular expressions with plural nouns agree with plural verbs: a number of..., the majority of..., a couple of..., a lot of....

A number of researchers from your university are taking part in the conference.

Note:

The verb after **the number of** is singular.

For example: The number of earthquakes is not known.

3. The following nouns ending in -s agree with singular verbs: means, dynamics, physics (and other like subjects of study).

Physics is a natural science.

4. Names of quantities thought of as one unit have singular verbs.

Five miles is too much to walk.

5. The name of a book is singular.

“Grammar and Idiom” is a useful book.

Unite Four

4.1 The Parts of Speech

Part of speech is the common name for a word class--a category into which words are placed according to the work they do in a sentence.

4.2 Noun (n.): A noun is a word that names or identifies a person, place, thing, quality, or activity.

- Physical objects: hammer, Earth, atom, stones, etc.
- Actions: diffusion, explosions, electrification, etc.
- Qualities: length, weight, roundness, symmetry, etc.
- Ideas: mathematics, resistance, etc.
- The usages of noun:
 - a. As a subject:

e.g. **Prevention** is better than cure.
 - b. As an object (after a verb and preposition):

e.g. He shows **interest** in reading books.
I have something of **importance** to say.
 - c. After an adjective:

e.g. Columbus is a famous **discoverer**.

Note:

A plural noun is used after the following words: these, those, several, a lot of, a few, many, one of, some, various, all...

e.g. After several **trials** the scientist succeeded in his experiment.

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4.3 Pronoun (pron.): A pronoun is a word which is often used in order to avoid repeating a noun that has already been mentioned (i.e. a pronoun is used instead of a noun).

- Types of pronouns

(a) Personal pronouns

The personal pronouns refer to people apart from **it** which refers to a thing, and **they** which can refer to people or things.

(i) Subject pronouns

The subject pronouns are used as the subject of a sentence. The subject pronouns are:

I, you, he, she, it, we, they

The subject pronouns are used before the verb.

For example: He is a clever student.

(ii) Object pronouns

The object pronouns are used as the object of a verb or preposition. The object pronouns are:

me, you, him, her, it, us, them

The object pronouns are used after the verb or preposition.

For example: Take these books and put them on the desk.

He gave it to them.

(b) Possessive adjectives

Possessive adjectives describe to whom something belongs. The possessive adjectives are:

my, your, his, her, its, our, their

(c) Possessive pronouns

The possessive pronouns show who something belongs to or is connected with. The possessive pronouns are:

mine, yours, his, hers, its, ours, theirs

e.g. This is your project. Where is mine?

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Notes:

- (1) A possessive adjective is used as an adjective and modifies a noun or a noun phrase.
- (2) The possessive adjectives are followed by a noun.
- (3) After the preposition “of” a possessive pronoun always comes.
e.g. I go to the library with a friend of mine.

4.4 Verb (v.): The part of speech (or word class) that describes an action or indicates a state of being.

Action

We **study** different topics

State of being

We **are** postgraduate students

- Types of verb:

(1) A main verb: is any verb that isn't an auxiliary verb, it conveys a real meaning and doesn't depend on another verb.

e.g. He studied geometry last year.

(2) An auxiliary verb (also known as a helping verb): determines the tense of another verb in a phrase.

The primary auxiliaries are **be, have, and do**. The modal auxiliaries include **can, could, may, must, should, will, and would**.

e.g. Mechanics is a branch of physics.

(3) A finite verb: expresses tense and can occur on its own in a main clause:
e.g. The foundation settled.

(4) Regular verbs and irregular verbs

A regular verb forms its past tense and past participle by adding -d or -ed to the base form:

e.g. We **finished** the project.

An irregular verb doesn't form the past tense by adding -d or -ed.

4.5 Adjective (adj.): Adjectives are words that are used to describe nouns and pronouns and to quantify and identify them.

- Placement of adjectives:

There are certain rules regarding the placement of different kinds of adjectives in a sentence. The two basic positions for adjectives in a sentence are:

1. Adjective after verb (be + adjective): An adjective can come after some verbs, like be. Even when an adjective comes after the verb it always refers to and qualifies the subject of the sentence, not the verb.

For example: A doctor's job **is stressful**.

2. Adjective before noun (adjective + noun): Adjectives usually precede the nouns they modify.

For example: A doctor has **a stressful job**.

- Write the sentence in a different way:

A lawyer's job is interesting.

"A lawyer has an interesting job."

- The general order of the adjectives:

1. Determiners: These are the various articles (the, a, an), demonstratives (this, that, these, those), possessives (my, mine, your, yours, etc.), quantifiers (all, many etc.), numerals (one, twenty, thirty-seven etc.) and distributive (each, every, neither, either).
2. Observations (quantity and opinion): Then come the adjectives that give a quantity (also known as post-determiners) and subjective opinion to the noun.

few, most, one, three/ beautiful, difficult etc.

The beautiful house.

3. Size: The position after observations is for the adjectives that tell about the size of the noun, they can be used for an object as well as living thing.

huge, little, bulky, thin, tiny, lean etc.

The beautiful little house.

4. Age: Then is the turn of the adjectives that tell about the age of a noun either by itself or in relation to another noun.

old, recent, bygone etc.

The beautiful little old house.

5. Shape: Next are the adjectives that tell about the shape or appearance of the noun.

circular, triangular, oval, wavy, straights etc.

The beautiful little old square house.

6. Colour: After that are the adjectives that tell the shade and hue of a noun.

pastel, red, blue, brown, colorless, translucent etc.

The beautiful square brown colored house.

7. Origin: Next are the adjectives that show the different geographical locations associated with a noun.

southern, northern, English etc.

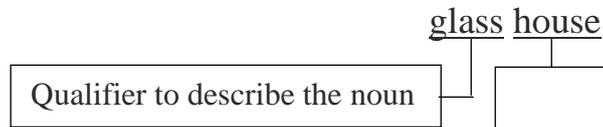
The beautiful brown colored English house.

8. Material: Next are the adjectives that talk about the raw material or texture of the objects or the behavior of the living nouns.

wooden, plastic, steely, metallic, etc.

The beautiful English limestone house.

9. Qualifier: Lastly, the qualifier or the grammatical modifier comes, which an additional word or phrase is provided to change the meaning of the noun in a sentence.



Note: Long strings of cumulative adjectives tend to be awkward. As a rule, use no more than two or three of them between the article and the noun modified

Exercise 2: Complete these sentences with the correct adjective form of the words in parentheses.

1. Drawing is important in (structure) design.
2. The behavior of spring is always (elasticity).
3. The amount of deformation produced in a body is directly (proportion) to the applied force.

4.6 Adverb (adv.): The part of speech (or word class) that is primarily used to modify a verb, adjective, or another adverb.

- **Functions of an Adverb:**

Adverbs typically add information about time (rarely, frequently, tomorrow), manner (slowly, quickly, willingly), or place (here, there, everywhere) in addition to a wide range of other meanings.

- An adverb (such as slowly or quickly) that describes how the action of a verb is carried out called an adverb of manner.
- An adverb (such as here, there, everywhere) that describes where the action of a verb is carried out called an adverb of place.

- **Forms of an Adverb:**

Many adverbs, especially adverbs of manner, are formed from adjectives by the addition of the ending -ly, for example:

easily adv., at easy (adj); dependably adv., at dependable (adj)

- **Uses of Adverb:**

(1) An adverb usually modifies a verb or a verb phrase.

An adverb that modifies a verb is generally flexible. It may appear before or after the verb it modifies (“quickly tested” or “tested quickly”), or it may appear at the beginning of the sentence (“quickly he tested the pile”). The position of the adverb may have an effect on the meaning of the sentence.

(2) Adverbs can also modify adjectives and other adverbs.

An adverb that modifies an adjective or another adverb appears immediately in front of the word it modifies.

For example:

You are quite right. (The adverb quite modifies the adjective right.)

He spoke very loudly. (The adverb very modifies another adverb-loudly.)

- Adverbs of frequency:
- We use some adverbs to describe how frequently we do an activity. The adverbs of frequency are often used with the present simple. The common adverbs of frequency are:

Always, usually, generally, often, sometimes, hardly ever, never

e.g. Do you ever have an experiment in the laboratory?

- The frequency adverbs can be placed at various points in the sentence, but are most commonly used before the main verbs and after be verb.

1. An adverb of frequency comes before a main verb (except with be).

Subject + adverb + main verb

e.g. I **always** remember to do my homework.

2. An adverb of frequency comes after the verb be.

Subject + be + adverb

e.g. They are **never** pleased to see it.

3. When we use an auxiliary verb, the adverb is placed between the auxiliary and the main verb.

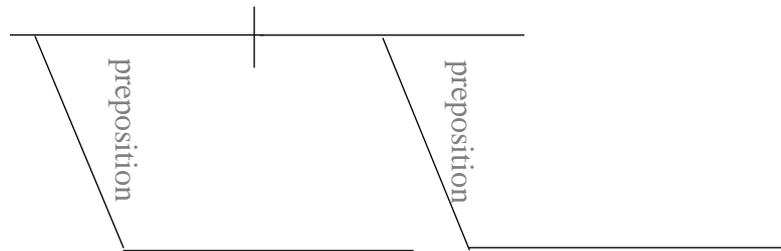
Subject + auxiliary + adverb + main verb

e.g. They have **never** seen each other again.

Notes:

1. We can use the following adverbs at the start of a sentence: usually, often, frequently, and sometimes.
2. We cannot use the following adverbs at the beginning of a sentence: always, hardly ever, never.
3. We use hardly ever and never with positive, not negative verbs:
e.g. I never have breakfast on weekends.

4.7 The prepositions (prep.): Prepositions are words that show the relationship between a noun or a pronoun and some other words or element in the rest of the sentence. The sentence diagram below shows how the parts of sentences are related. In the sentence diagram, the preposition hooks nouns (called objects of the preposition) to the rest of the sentence.



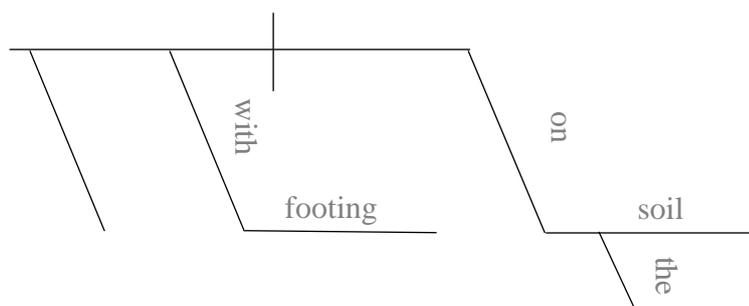
Prepositional phrases:

A phrase is a group of words that lacks either a subject or a verb and functions as a single part of speech.

A prepositional phrase consists of a preposition plus a noun or pronoun (the object of the preposition).

For example: The structure **with footing** rests **on the soil**.

In this example, the prepositional phrase “with footing” include only the necessary ingredients (preposition + object of the preposition). The prepositional phrase “on the soil” starts with preposition and ends with noun, but it also contains adverb. The sentence diagram of the above example as shown (the prepositional phrases are in grey).



Unite Five

5.1 The Simple Present Tense

The simple present is used to make statements about the present time.

- Form
 1. The base form of the verb functions as the present tense, e.g. study
 2. The simple present verb takes 's' or 'es' when the subject is the third person singular.
 3. The auxiliary verbs 'do' and 'does' followed by the infinitive without 'to' are used for negative statements.
- The simple present tense used to express scientific laws and facts

Gas expands on heating.

The boiling point of water changes with pressure.

Notes:

1. To express future action in subordinate clauses, use the simple present, e.g.

When a metal is heated, it will expand.

2. Use the simple past to describe the different steps in making an experiment.

Unit Six

6.1 The Passive Voice

The passive voice is commonly used in scientific writing. It is used with verbs that take objects. When the doer of the action is the subject of the verb, the sentence is active, e.g.

In the chemistry lab, we measure the volume of liquids.

The passive voice is formed by making the object the subject of the sentence and using the right tense of 'to be' followed by the past participle. Therefore, in the passive voice the object of the action is the subject of the sentence, e.g.

In the chemistry lab, the volume of liquids is measured.

Exercise 3: Put the following sentences into the passive voice

1. Engineers make engines and machines to perform work.
2. Scientists have broken the atom.
3. Strong attractive forces hold the molecules together.

Unit Seven

7.1 Simple past statements with regular and irregular verbs

- In general, the past tense is used to talk about something that started and finished at a definite time in the past.

The form of the simple past tense is:

(verb + ed) or irregular verb

- Uses of the simple past:
 1. Completed action in the past.



Use the simple past to express the idea that an action started and finished at a specific time in the past, for example:

I **watched** a movie yesterday.

I **didn't study** yesterday.

Sometimes, the speaker may not actually mention the specific time, but he does have one specific time in mind.

She **stayed** at the laboratory.

You **didn't** watch the experimental.

2. A series of completed actions.



Use the simple past to list a series of completed actions in the past. These actions happen 1st, 2nd, 3rd, and so on.

I **finished** lecture, **walked** to the library, and found a useful book to **read**.

3. Duration in the past



The simple past can be used with a duration which starts and stops in the past. A duration is a longer action often indicated by expressions such as: for five minutes, all day, all year, for two years, etc.

She **studied** English for four years.

He **didn't stay** out the entire time.

4. Habits in the past.



The simple past can also be used to describe a habit which stopped in the past. To make it clear that we are talking about a habit, we often add expressions such as: always, often, usually, never, etc.

They never **went** to school, they always **skipped** class.

He **didn't play** the piano.

5. Past facts or generalizations.



The simple past can also be used to describe past facts or generalizations which are no longer true.

People **paid** much more to make cell phone calls in the past.

He **didn't like** cauliflower before.

Note: didn't = did not

7.2 Spelling of the regular past

- The regular past always ends in -d: e.g. arrive/arrived.
- Verbs ending in -e add -d: e.g. smile/smiled. This rule applies equally to agree, die, lie, etc.
- Verbs not ending in -e add -ed: e.g. ask/asked, follow/followed, video/videoed.
- Verbs spelt with a single vowel letter followed by a single consonant letter double the consonant: beg/begged.
- In two-syllable verbs the final consonant is doubled when the last syllable contains a single vowel letter followed by a single consonant letter and is stressed: pre'fer/preferred, re'fer/referred.
- When there is a consonant before -y, the "y" *changes* to "i" before we add -ed: e.g. carry/carried.

Unit Eight

8.1 Punctuation

- **full stop:** It is round dot written at the end of sentence and indicates the end of a complete thought.

There are several techniques available for enhancing the stability of embankments.

- **commas:** A comma has many uses:

1. Commas are used to separate a list of words or groups of words.

You will need pencils, paper, and compass.

Note that the last two words are joined by 'and' and not a comma.

2. Commas are used to separate introductory words.

When the rain stops, they will go out into the site.

3. Commas are used with words or phrases that give more information about another word.

Therefore, in order to represent structural problems realistically, some forms of nonlinear relation must be used.

- **Semi-colons:** It can be used to separate sentences that are close in meaning, instead of a full stop.

He ran down the stairs; he reached the door; he opened it.

- **colons:** Colons are used to introduce a list, especially after words such as: **as follows** or **the following**.

8.2 Prefixes and their meanings

Use prefixes to help you understand the meaning of a word. Some prefixes give a word the opposite meaning. For example:

- **dis-** gives the noun advantages the opposite meaning:

However, there were some disadvantages.

- **un-** gives the adjective helpful the opposite meaning:

The people were very unhelpful.

Look at these other prefixes and their meanings.

anti- (against) - anticlockwise

sub- (under) - subway

super- (above, large) - supervisor, supermarket

pre- (before) - predict

multi- (many) – multimedia

Unite Nine

9.1 Writing an article

(1) Sentences

- write short, clear sentences.
- join ideas and sentences using linking words, for example, however, after, etc.
- punctuate correctly using capital letters, full stops, question marks. and exclamation marks.

(2) Paragraphs

To help your writing flow:

- group ideas on the same topic together in a paragraph.
- make sure there is a clear link between the content of one paragraph and the next.

The paragraph purpose is:

Each paragraph in a text has a clear purpose. For example:

- The first paragraph introduces the topic, states the purpose of the text, or describes a problem or situation.
- The body paragraphs develop arguments, try to persuade, suggest solutions, or describe developments.
- The final paragraph concludes, evaluates, or discusses consequences.

(2) Interesting writing often contains a variety of tenses.

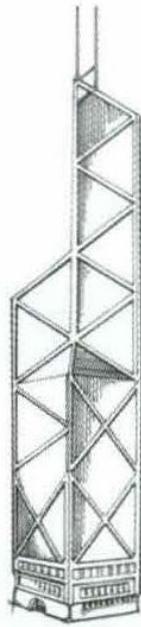
9.2 Writing a formal email

- Write an email using some of the words and phrases:
 - (1) I am writing
 - (2). I have pleasure
 - (3) I would like
 - (4) Please find attached
 - (5) I look forward

- The email includes these points:
 - (1) Address the person.
 - (2) Tell him/her why you are writing.
 - (3) Give details of attachments
 - (4) Briefly summarize the subject.
 - (5) Close the email appropriately.

Unite Ten

10.1 Describing buildings



height = _____ m.

floors = _____

The structure was built between 1982 and 1990. It is a very tall skyscraper with 70 floors. It is 367 meters high. The style of the building is modern and it symbolizes strength and growth. The building is very light inside because it is made of glass and steel. There is a small viewing platform, which is open to the public. The platform is on the 42nd floor, so visitors can have a panoramic view of the whole city. It is one of the tallest buildings in the city and is used for offices.

- **Reason clauses - because**

Use because to join sentences. It tells you the reason (why/why something happens. Look at sentences a and b. Underline because

a. The building gets very hot in summer. It is made of glass.

b. The building gets very hot in summer because it is made of glass.

- **Result clauses - so**

Use so to join sentences. It tells you the result of something. Look at sentences a and b. Underline so, and circle the comma.

- a. The building is made of glass. It gets very hot in summer.
- b. The building is made of glass, so it gets very hot in summer.

10.2 Writing a description of a process

- When describing a process or a scientific experiment, it is important to write in a neutral style, as an observer. To do this, you can use the passive voice.

The Present Simple Passive is often used in descriptions of processes:

is / are + past participle

The Past Simple Passive is often used to talk about inventions and discoveries:

was/ were+ past participle

- To describe a process clearly:
 - (1) divide the process into steps.
 - (2) make notes on each step.
 - (3) expand your notes into full sentences using the passive form.
 - (4) mark each step by using sequencing words (Firstly, Next, Then After that, Finally).

10.3 Writing a summary

- To write a summary of a text:

(1) First, identify the main ideas in the paragraph or text.

(2) Then organize these ideas into a logical order.

(3) Finally, rewrite these ideas in simple sentences, using linking words.

- Tunnels and buildings

Which simple sentence, a or b, summarizes the sentences and paragraphs 1-3?

1. One serious problem of long tunnels is the somniferous effect. That is to say that the lighting systems and general nature of the tunnels encourage a feeling of sleepiness, and drivers can fall asleep at the wheel.
 - a. The lighting systems in tunnels can cause problems.
 - b. Long tunnels can make drivers go to sleep.
- 2 The tallest buildings in the world, that is, the tallest buildings at the time of writing, are the Petronas Towers, which dominate the skyline of Kuala Lumpur.
 - a. The Petronas Towers are the highest buildings in the world at the moment.
 - b. The Petronas Towers dominate the skyline of Kuala Lumpur.
- 3 Man has built on the land, under the land, on the sea, and under the sea, so perhaps the next choice for construction will be in space. This would offer the possibility of exploiting limitless areas.
 - a. Man has built in many different areas.
 - b. Man may build in space.

