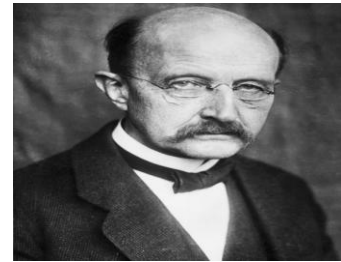


<https://www.britannica.com/biography/Max-Planck>



**Unit 1      2<sup>nd</sup> English**

**READING PASSAGE**

**Max Planck**

**Max Planck**, in full **Max Karl Ernst Ludwig Planck**, was born April 23, 1858, Kiel, Schleswig [Germany]—and died October 4, 1947, Göttingen, Germany, was German theoretical physicist who originated quantum theory, which won him the Nobel Prize for Physics in 1918.

Planck made many contributions to theoretical physics, but his fame rests primarily on his role as originator of the quantum theory. This theory revolutionized our understanding of atomic and subatomic processes, just as Albert Einstein's theory of relativity revolutionized our understanding of space and time. Together they constitute the fundamental theories of 20th-century physics. Both have forced humankind to revise some of the most-cherished philosophical beliefs, and both have led to industrial and military applications that affect every aspect of modern life.

# FAROUK-LADJAILIA

## Grammar

### I-tenses

#### 1-Present:

<b><u>Tenses</u></b>	<b><u>Rules</u></b>	<b><u>Examples</u></b>	<b><u>Words used</u></b>
Simple Present	I,you,we,they-V1.  He,she,it-V+s.	I go to work at 7 clock  She cooks nice meals	Always-usually-often-sometimes-never-every
Present Continuous	I-am-V-ing . You,we,they-are-V-ing.. He,she,it-is-V-ing.	I am studying English now . they are watching TV.	Now-look-listen-at the moment-at the present time
Present Perfect	I,you,we,they-have-V3. He,she,it-has-V3	I have finished my homework yet. Ali has not come yet	Already-just-yet-recently-never-even
Present Perfect Cont	I,you,we,they-have-been-V-ing. He,she,it-has-been-V-ing	I have been working here since 2023. He has been living in Kuwait for ten years.	For –since.

#### 2-Past:

<b><u>Tenses</u></b>	<b><u>Rules</u></b>	<b><u>Examples</u></b>	<b><u>Words used</u></b>
Simple Past	I,you,he,she,it,we,they-V2. (went-bought-played	Ali bought a new car three days ago. We played tennis last Friday	Yesterday-ago-once-last-this morning-in the past-in 2020
Past Continuous	I,he,she,it-was-V-ing. You,we,they-were-V-ing.	I was playing football. We were studying	While , when , as
Past Perfect	I,you,he,she,it,we,they-had-V3.	He had booked a room. I had written my homework.	After , before , until , as soon as, when.

#### 3-Future:

<b><u>Tenses</u></b>	<b><u>Rules</u></b>	<b><u>Examples</u></b>	<b><u>Words used</u></b>
Future Simple	I,you,he,she,it,we,they-will-V1	I will travel to London next year. We will go to the club tomorrow.	Tomorrow , soon , next, this evening, in the future, shortly, in 2024
Future Perfect	I,you,he,she,it,we,they-will-have-V3	By the end of this month we will have finished the exams	By this...  By the end of....

## II-Interrogative tools list:

words	In arabic	words	In arabic
where	أين	How much	كم السعر
when	متى	How many	كم العدد
what	ماذا	How long	كم المدة
why	لماذا	How often	كم مرة
who	من	How far	كم يبعد
which	أي	How old	كم عمر
whose	لمن	how	كيف

## III-pronunciation :

The letters “ sure “ are pronounced “jr”: example:

words	In arabic	words	In arabic
measure	يقيس	closure	اغلاق
pleasure	مسرور	leisure	راحة
treasure	عزير	usurer	مراب

[https://en.wikipedia.org/wiki/L%C3%A9on\\_Brillouin](https://en.wikipedia.org/wiki/L%C3%A9on_Brillouin)



## Unit 2      2<sup>nd</sup> English

### READING PASSAGE

### Léon Nicolas Brillouin

**Léon Nicolas Brillouin** (French pronunciation: [\[leɔ̃ nikɔla bʁijwɛ̃\]](#)); was born August 7, 1889 – and died October 4, 1969, was a [French physicist](#). He made contributions to [quantum mechanics](#), [radio wave propagation](#) in the atmosphere, [solid-state physics](#), and [information theory](#).

Brillouin was born in [Sèvres](#), near Paris, France. His father, [Marcel Brillouin](#), grandfather, [Éleuthère Mascart](#), and great-grandfather, [Charles Briot](#), were physicists as well.

## Grammar

### I-Transition from active voice to passive voice:

- We put the full object at the beginning of the sentence and do not mention the subject unless it is necessary.
- We put “ **is** “ for the singular and “ **are** “ for the plural of **the present simple**.
- We put “ **was** “ for the singular and “ **were** “ for the plural of **the past simple**.
- put “ **be** “ after: **to, shall, should, must, may, might, will, would, can, could.**
- put “ **been** “ after: **have, has, had.**
- put “ **being** “ after: **am, is, are, was, were.**
- Converts : “ **Have** “ to “ **Has** “ and “ **are** “ to “ **is** “ and “ **were** “ to “ **was** “.

If the infinitive is singular, and vice versa, if the object is plural

<b>Tenses</b>	<b>Active voice</b>	<b>Passive voice</b>
Present Simple	He receives a letter	A letter is received by him
Present Continuous	He is receiving a letter	A letter is being received by him
Present Perfect	He has received a letter	A letter has been received by him
Past Simple	He received a letter	A letter was received by him
Past Continuous	He was receiving a letter	A letter was being received by him
Past Perfect	He had received a letter	A letter had been received by him
Future Simple	He will receive a letter	A letter will be received by him

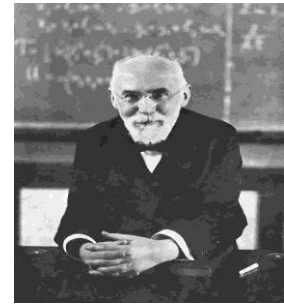
### II-Silent letters rules:

Silent letter	Example	Silent letter	Example
Gh	Hight, light, weight,	ue	Mosque, dialogue
H	Wheat, wheel, where	w	Write, wrong, wright
H	Hour, honor, honest	e	Life, make, love
K	Know, knee, knife	B	Comb, lamb, tomb
P	Psychology	L	Half, could, would

### III-Use: any:

words	In arabic	words	In arabic
anyway	على أي حال	anytime	في أي وقت
anything	أي شيء	anyhow	بأية حال
anyone	أي شخص	anywhere	في أي مكان

[https://simple.wikipedia.org/wiki/Hendrik\\_Lorentz](https://simple.wikipedia.org/wiki/Hendrik_Lorentz)



**Unit 3      2<sup>nd</sup> English**

**READING PASSAGE**

**Hendrik Antoon Lorentz**

**Hendrik Antoon Lorentz** was born 18 July 1853 –and died 4 February 1928 was a Dutch physicist. In 1902, he was awarded the Nobel Prize in Physics together with Pieter Zeeman for the discovery and theoretical explanation of the Zeeman effect. He also derived the transformation equations that were later used by Albert Einstein to describe space and time.

## Grammar

### I-Tenses :

1/ The verb 'To have' in the present simple, examples

Ask a question	Answer	Negation
Do you have a car ?	I have a car	I don't have a car
Do they have a car ?	They have a car	They don't have a car
Do we have a car ?	You have a car	You don't have a car
Does Ali have a car ?	Ali has a car	Ali doesn't have a car

2/ The must position of the verb 'to have' to change the position, and become 'have to'

Ask a question	Answer	Negation
Do you have to go ?	I have to go	I don't have to go
Does he have to go ?	He has to go	He doesn't have to go

### II- Word's meaning:

#### 1/ -and:

word	In arabic	word	In arabic	word	In arabic
And	واو العطف	Hand	يد	Stand	يقف
Land	اليابسة	Band	رباط	Demand	مطالبة
Sand	رمل	Grand	فخم	Expand	يتمدد

#### 2/ Modal verbs :

CAN	MUST	WILL	NEED	HAVE TO	SHOULD
MAY	SHALL	OUGHT TO	BE TO	WOULD	USED TO

### III- Position of Things :

Word	In arabic	word	In arabic	word	In arabic
BEHIND	خلف	UNDER	تحت	IN Front of	أمام
BESIDE	بجانب	BETWEEN	بين	NEAR	بالقرب
ON	على	IN	في	ABOVE	في الاعلى