

Unit four



The unit's contents :

I)-Discovering language.

A) Grammar:

- If –conditional type zero.
- If - conditional type one (**revision**).
- The comparative adjectives (**revision**).

B) Pronunciation:

- Diphthongs.
- Stress in words ending in **gy**, **ical** and **ics**.
- Intonation in complex sentences.

C) Vocabulary:

- Formation of adjectives with suffixes.

II)-Developing skills.

A) Functions:

- Expressing condition.
- Making predictions.
- Giving warnings.
- Making promises.
- Making offers, issuing threats.
- Making and replying to suggestions.
- Agreeing and disagreeing.

B) Skills:

- Reading an expository text/report about an experiment.
- Listening for gist.
- Talking about dilemmas.
- Reporting results of a scientific experiment.
- Writing a caption.
- Writing an expository paragraph.
- Writing a letter asking for advice.
- Writing a letter giving advice.
- Writing a letter about a contingency plan.

Unit two

Second years

INTRODUCING THE UNIT.
INTRODUCING THE UNIT.



The Project outlines. (pages:36)

Project outcome	Writing reports on scientific experiments. <ul style="list-style-type: none">● For the "Scientific" streams.
	Writing an A B C of dreams. <ul style="list-style-type: none">● For the "Literary" streams.
	Further information is included on pages 51.



Think it over. (page:79)



Words to say. (page:79)

Unit four

Second Years

The General objective. **The General objective.**

By the end of unit two, students should be able to write reports about scientific experiments. Linguistically, the project language structures depend on the use of conditionals especially conditional type "zero" to express conditions, give warnings issuing threats and make promises and predictions.

- For extra information, here is a detailed planning of the project "writing reports on scientific experiments".



The unit Project planning.

- ✓ **Level:** Second years.
- ✓ **Unit:** Four. (Budding Scientist).
- ✓ **Topic:** Science and experiments.
- ✓ **Project:** Writing reports on scientific experiments. (Scientific stream)

I) - Aspects of the project: (suggested sub-themes).

A) – The experiment planned.

- What is it?
- What is it about?
- What tools do you need to carry it out?

B) – The steps of the experiment.

- Give a list of the steps of the experiment.
- What is done in each step?

C) – Carrying out the experiment.

- How is the experiment begun?
- Give the order of the following steps.
- Throughout the experiment, what observations can you make?

D) – Concluding the experiment.

- What is the last step of the experiment?
- Enlist your conclusions.

E) – The final report.

- Now having your experiment finished, organize your notes from step **A** to **D** and include your commentary in no more than 400 words maximum.



Remark:

If pupils level permits, some groups may be asked to perform their experiments in class in front of their mates following the same steps listed above.

II) – Main tools and language points to be re-invested in the project.

■ Possible tools.

- Tools used may vary from one group to another; they may include chemicals, liquids, electric wires, microscopes, water, plants, etc.

■ Language points.

- Use of conditionals especially conditional types "one" and "zero".
- Use of compound words like scientific terms by adding suffixes.
- Use of abbreviations denoting scientific measures, names, etc.
- Diverse tenses especially the present and future simple, perfect and continuous tenses.

III) -Table of selected activities.

Rubrics	Activities' number	Pages	Competences		
			Interacting orally	Interpreting O&W msgs	Producing O & W msgs
Discovering language	-Before you read.	80	✓	✓	✓
	-As you read.	80	✓		
	-Grammar desk.	81	✓	✓	✓
Practice	-Activity one.	82			✓
	-Activity two.	82	✓	✓	
	-Activity three.	82			✓
Write it right	-Activity one.	83			✓
Say it loud and clear	- Activity one.	84	✓	✓	
	- Activity three.	84	✓	✓	
	- Activity four.	84			✓
Working with words	- Activity one.	85			✓
Listening and speaking	- Activity one.	86	✓		
	- Activity two.	86	✓	✓	
	- Activity three.	86		✓	✓
Write it up	- Activity one.	88		✓	✓
	- Activity two.	88			✓

Reading and writing	- Activity one.	89	✓		
	- Activity two.	89		✓	✓
	- Activity three.	90	✓	✓	
	- Activity four.	90		✓	✓
Write it out	- Activity one.	91			✓

Unit four planning:(Budding Scientist)

♣ Preview. (Page: 78).

At this stage, the teacher makes students aware of the unit's topic and its project in addition to the principal objectives of the unit. It also includes a discussion about any necessary changes or recommendations.

♠ Think it over. (Page: 79).

Students are encouraged to observe, analyze and diagnose the drawings and to react to them. With the aid of the teacher, they are supposed to know that these two pictures refer to Arab science during the "the Abbasids period". The teacher and pupils discuss the Abbasids Arab science either depending on students' knowledge or on the extra reading passage on page 100 in the course book.

❖ Aims:

- 1) *To familiarize pupils with the topic of unit four.*
- 2) *To introduce the unit implicitly.*
- 3) *To recognize the general notes that the project work would include.*

♠ Words to say. (Page 79).

A list of words is provided on the right side of the page. The words are mostly science-related concepts. The teacher reads each word individually focusing on the stress and intonation. It is possible, in the meanwhile, that students repeat along with the teacher, and later encourages individual readings with a discussion of the meaning.

❖ Aims:

- 1) *To familiarize students with specific spoken English sounds.*
- 2) *To make pupils aware of stress patterns in spoken English.*



PART ONE.

Unit four

Second years

DISCOVERING LANGUAGE

-  **Pre-reading.** (page:80)
-  **As you read.** (page : 80)
-  **Post reading “*Grammar Desk*”.** (page:81)
-  **Practice.** (pages:82 / 83)
-  **Write it right.** (page:83)
-  **Say it loud and clear.** (page:84)
-  **Working with words.** (page:85)



Discovering language.

(Page: 80).

♣ Before you read.

The geometrical figure on page 80 represents different angles that students, belonging to a scientific stream, are supposed to recognize easily. The activity gives them a chance to recognize the names of different angles in English, and to get some of the key words and vocabularies used in the forthcoming activities of reading comprehension rubric. Therefore, the teacher encourages them to exchange roles (question vs. answer) to make comparisons between the drawings and their measures.

◆ **The task:** Look at the picture and listen to your teacher reading the names of the angles. Then ask and answer questions about how many degrees each of the angles has.

❖ Aims:

- 1) *Motivating the oral and free expression of pupils in a precise context.*
- 2) *To familiarize pupils with geometry-related vocabularies.*
- 3) *Use and practice of comparatives.*



Suggested answers to pre-reading stage: Students will come to the following conclusions by the end:

- The "**acute angle**" has less than 90 degrees.
- The "**reflex angle**" has more than 180 degrees.
- The "**right angle**" has exactly 90 degrees.
- The "**obtuse angle**" has more than 90 degrees.
- The "**straight angle**" has 180 degrees.

♣ As you read.

① **Activity one:** Read the text and check your answers to the previous questions.

Pupils read the text silently and compare their answers to the questions of pre-reading stage with the correct notes given in the text.

❖ Aims of activity one:

- 1) *Confirming pupils' answers to the questions.*

② **Activity two:** Read the text and again and complete the sentences next to each of the questions below (answer the questions).

❖ Aims of activity two:

- 1) *To make students able to look for specific notes in the text.*
- 2) *To identify the main and secondary ideas of the reading passage.*
- 3) *To provide students with the correct methodology of answering questions.*

✓ Answers to activity two:

01. Yes, there is a difference. In geometry, the point has no dimension. That is length and thickness. Whereas a dot has length, width and thickness.

02. The author's emphasis is shown by the word {**have**}.

He says, "A straight line that we draw on paper with a pencil have (not has) width and thickness".

03. The teacher advises his students to revise today's lesson so that they would have good marks in next week's exam.

♣ After reading. (The grammar desk, p81).

With the guidance of the teacher pupils do all the activities in the computer screen-shaped square on page 81.

❖ Aims:

01) *To identify the conditional clause.*

02) *To recognize the construction and building of the conditional sentences ;(if clause/main clause – main clause/if clause).*

03) *To discriminate and between the usage of the two different types of conditional: Type (I) and type (II)*

✓ Answers to "the grammar desk":

a). The result clause of sentence (1) is in the future simple: ...**will get** ..., whereas the result clause of sentence (2) is in the present simple: ...**are**

b). The condition of sentence (2) is always correct. It is a general fact, but the condition of sentence (1) not always correct; pupils may revise their lessons but fail to get good marks it is only a prediction.

c). The "**if**" that can be replaced with **when** are the one of sentence (2) and sentence (4).

2/2 - **When** two lines cross, the opposite angles are always equal.

4/2 - **When** there are two points, the shortest distance between them is called a straight angle.

d). The order of sentences according to the degree of certainty is the following:

* Sentences (2 and 4) on the same level.

* Sentences (1 and 3) on the same level.

2- If two lines cross, the opposite angles are always equal.

4- If there are two points, the shortest distance between them is...

1- If you revise today's lesson, you'll get a good mark.

3- If you don't revise your lessons, you may fail.



Practice.

(Pages : 82 / 83).

1 **Activity one:** Put the verbs between brackets into the correct tense.

❖ **Aims of activity one:**

01) *To practise the use of the conditional clause in context.*

02) *To enable pupils differentiate between the two types of conditional: Type (1) and (0).*

✓ **Answers to activity one:**

a. We **shall get** wet if it **rains**.

b. If you **boil** water at 100 degrees centigrade, it **evaporates**.

c. If you **throw** water on fire, it **will stop** burning.

d. If you **take** an aspirin, you **will feel** better.

e. She **will feel** sick if she drinks from that polluted water.

2 **Activity two:** Put the verbs between brackets in the sentence of column 'A' into the right tense. Then match each sentence with its function in column 'B'.

❖ **Aims of activity two:**

01) *To give pupils additional chances to practise the conditional.*

02) *To make pupils aware of the diverse functions a conditional sentence may have.*

✓ **Answers to activity two:**

A: Sentences	B: Functions
1. If you buy two, you will get one free.	F) Promise.
2. I shall help you do the exercise if you want.	B) Offer.
3. If you do not stop making noise, I will switch off the TV.	D) Threat.
4. He will understand if you just explain why you came late.	E) Advice.
5. If you touch that electric wire, you will get an electric shock.	C) Warning.
6. If this jacket is the correct size, it will fit you.	A) Prediction.

- By the end of this activity, the teacher encourages pupils to write other sentences of their own to express (some) of the functions above.

- In preparation and as warming up for the following task, the teacher makes pupils aware of the different degrees of certainty that the modals '**can**', '**may**', and '**will**' express.

5 **Activity five:** Make the result clauses in the sentences below sound less categorical by using the auxiliaries 'may' or 'can'. Then write similar sentences as the ones you have obtained.

❖ **Aims of activity five:**

- 01) *To differentiate between conditional sentences with 'may' and 'can'.*
- 02) *To recognize the difference in the degree of certainty of conditional sentences using 'may' and 'can'.*
- 03) *To reinforce the use of 'may' and 'can' in a given language context.*

☑ **Answers to activity five:**

- a. If you fall down, you **may** break your arm.
- b. That boiler **can** explode if you put too much pressure on it.
- c. He **may** hurt himself if he has mixes chemical products carelessly.
- d. They **can** fail their mathematics and physics exams if they didn't learn their theorems.

Later, pupils try to write similar examples of their own to make sure they can distinguish conditionals using the three modals 'will', 'can' and 'may'. Some of the best examples could be chosen and written on the chalkboard to encourage creativity.

● **For example:**

- a- You **may** have an accident if you drive too fast.
- b- If you don't pay your taxes on time, you **can** have a fine.
- c- You **can** ran out of money if you spend too much of it.
- d- If you overuse your old car, it **may** break down one day.

Unit four planning:(Budding Scientist)

Write it right.

Inasmuch as the topic is the changes occurring on water, the topic is expected to be familiar to pupils. This makes the up coming task easier. However, the teacher explains what exactly the task is, and then tells pupils to write a descriptive essay using the notes given and fuse them depending on conditionals with the three modals they have learnt.

❖ Aims:

01) To practise the use of conditional with 'may', 'can' and 'will'.

02) To write a descriptive essay using given notes.

03) To improve pupils' writing skills.

A possible description:

Like air, water is found almost everywhere. It is familiar to us in different forms, as drinking water, water vapour, ice and snow.

Water has some surprising qualities. For example, most liquids freeze and become denser, but water becomes lighter. When you fill a pan of water, with ice cubes, you note that unmelted particles remain on the surface. The reason is that frozen water is lighter than water in liquid form. When water expands, it becomes ice and it exerts pressure. If you fill a glass bottle and put it in the freezer, the bottle breaks. As the frozen water expands, it exerts pressure on the glass bottle.

Water molecules have a strong attraction to each other. The force of attraction is called cohesion. If you moisten two pocket mirrors and stick them together, you will not be able to pull them apart. The water molecules on the surface of the pocket mirrors attract each other. But it is not difficult at all to separate dry mirrors because...

Unit four planning:(Budding Scientist)



Say it loud and clear. (Page: 84)

1 **Activity one:** Listen to your teacher and mark the intonation at the end of the sentences with an arrow (↗ or ↘).

❖ **Aims of activity one:**

- 01) To make the learner aware of the musicality of spoken English.
- 02) To learn the intonation in the interrogative form.
- 03) To learn the use of "should" for giving advice.



Answers to activity one:

This is a dialogue between a car owner and a mechanic.

Car owner: What I should do ↘ if the engine fails to start? ↗

Mechanic: Check if there is fuel in the tank. ↘

Car owner: And if there is fuel in the tank? ↗

Mechanic: Then you should check ↘ if the battery is all right. ↘

3 **Activity three:** Listen to your teacher reading the words in the table. Then mark the primary stress with a prime ('). The secondary stress is already marked.



Answers to activity three:

A) Words	Pronunciation	B) Words	Pronunciation
-Psychology	/saɪ'kɪlədʒi/	-Solution	/sə'lju:ʃən/
-Democracy	/dɪ'mɒkrəsi/	-Television	/telɪ'veɪʃən/
-Philosophy	/fɪ'lɒsəfi/	-Realistic	/ri'li:stɪk/
-Responsibility	/rɪspɒnsə'bɪlətɪ/	-Static	/'stætɪk/
-Technological	/tek'nɒlədʒɪkl/	-Aeronautics	/erə'nɒtɪks/

4 **Activity four:** Now discuss the following points and draw punctuation rules.

❖ **Aims of activity three and four:**

- 01) To raise pupils' awareness about spoken English sounds.
- 02) To discriminate between primary and secondary stress in words.
- 03) To learn the stress pattern in words ending with specific suffixes: *gy, cy, phy, ity, cal, tion, sion, ic and ics.*

Answers to activity four:

A. The number of syllables in words in column 'A' in the previous activity differs. They are between four syllables minimum and six syllables maximum. If we take a closer look, we'll notice that the second syllables

from the end are always stressed. That is because they (the 02nd syllables from the end) include the sounds: / d i, s i, f i, t r, and k l/.

B. The number of syllables in words in column 'B' in the previous activity differs. They are between two syllables minimum and four syllables maximum. If we take a closer look, we'll notice that the second syllables from the end are always stressed. That is because they (the 02nd syllables from the end) include the sounds: / n, n, i k, and i k s/.



The rules of stress patterns

Having said all that we can, finally, conclude the following rules for the Primary stress:

1. Stress on first syllable

Most two-syllable nouns and adjectives have stress on the first syllable.

2. Stress on last syllable.

Most two-syllable verbs have stress on the last syllable.

3. Stress on penultimate syllable (second from the end)

Words ending in 'ic', 'tion', and 'sion'

4. Stress on ante-penultimate syllable (third from the end)

Words ending in 'cy', 'ty', 'phy'; 'gy'

5. Polysyllabic words (words with many syllables)

These usually have more than one stress, i.e., primary and secondary stress. Often such words contain a prefix (as with 'inter' and 'anti' in international and antibiotic). This is common with many long technical words.

6. Compound words (words with two parts)

- If the compound is a noun, the stress goes on the first part: eg; greenhouse, blackbird. If the compound is an adjective, the stress goes on the second part; e.g., bad-tempered, old-fashioned.

- If the compound is a verb, the stress goes on the second part, e.g., understand, overlook.



Working with words. (Page: 85).

① **Activity one:** Make a chart of adjectives using the suffixes in the box. Illustrate the use of the adjectives in sentences of your own.

❖ **Aims of activity one:**

01) *To learn some suffixes their meanings and use.*

02) *To create new and different adjectives using specific nouns and suffixes.*

- This activity can be assigned as homework. It is to be done in pairs or in small groups. Later, the homework will be checked in class and the final product can be a classroom wall sheet. The teacher can add another activity to consolidate further the use of the suffixes.

Unit four planning:(Budding Scientist)

Part two.

Unit four

Second years

Developing skills

-  **Listening and speaking.** (page: 86)
-  **Your turn.** (page: 87)
-  **Write it up.** (page: 88)
-  **Reading and writing.** (pages: 89 -90)
-  **Write it out.** (page: 91)
-  **Putting things together.** (page: 93)
-  **Where do we go from here?** (page: 94)



Listening and speaking. (page:86)

1 Activity one: Skim through the advertisement below and answer the following questions.

❖ Aims of activity one:

01) To familiarize learners with the form and language items of advertisements.



Answers to activity one:

- a. The advertisement addresses high school graduates.
- b. "Open Day" means the day during which the university allows high school graduates who are interested in university studies to visit the university.



2 Activity two: Listen to your teacher reading a dialogue and check your answers to question 1 above.

❖ Aims of activity two:

01) To introduce the listening passage to the pupil.

02) To allow pupils' self evaluation about their guesses about activity one.



3 Activity three: Listen again to your teacher reading the dialogue and answer the questions below.

❖ Aims of activity three:

01) Training pupils to look for specific details (the correct answers) while listening to a read passage.



Answers to activity three:

- a. The speakers are Maya and Jamel.
- b. Jamel first suggested visiting the university.
- c. Jamel started making his suggestion by saying, "I feel like going to".
- d. Jamel wants to visit the faculty of medicine.
- e. Maya wants to visit the faculty of civil engineering because she is not interested in visiting the faculty of medicine.

The listening text is a dialogue between two high school graduates; Jamel and his friend Maya. They are speaking on the eve of the University Opening Day. Here is what they said:

Listening script of unit four.

Jamel: Tomorrow is University Opening Day. I feel like going to the university to see how things work there. How about you?

Maya: Yeah, why not? We only have one year to go before we take our baccalaureate exam. Which faculty do you suggest we visit?

Jamel: Let me think. Mm ... Why don't we visit the Faculty of Medicine? It is the faculty that students visit most on Open Day.

Maya: Sorry, I don't intend to pursue my studies in medical sciences. If I pass my baccalaureate, I'll apply for registration in civil engineering; you know that, don't you? So I'd prefer to visit the Faculty of Civil Engineering instead.

Jamel: Well, we have the whole day for us tomorrow, so we could visit both. The campus of the Faculty of Medicine is quite close to that of the Faculty of Civil Engineering.

Maya: Fine. How shall we go there?

Jamel: I suggest we go by bus. It's cheaper.

Maya: That's a good idea. What time shall we meet?

Jamel: ...

* **The source:** Pupil's course book; "*Getting Trough*", Year two. Page, 182.

- **The tip box on top of page 87** illustrates the giving and/ asking for advice. The class should go through it before moving to the following rubrics in order to a further consolidation for the use of some language exponents such as ; how about...., why don't you/we ...?

Write it up. (Page: 88).

Similarly, before starting the first activity of this rubric, pupils should read the tip box notes on page 88. The note is about the reaction of most English people to problems. Among the solutions they recommend is to write a letter to an "*agony aunt*" for help and advice. The note also clarifies how the letter is constituted. Consequently, pupils will get a hand to begin their own 'supposed' letters to the agony aunt.

① **Activity one:** Imagine you are in a dilemma; write a letter to an agony aunt to ask for advice. Use the notes given in the tip box.

❖ **Aims of activity one:**

01) *To learn how letters of seeking advice are written regarding both; the form and contents.*

02) *To use the conditional for expressing predictions.*

Answers to activity one: This is a suggested letter to an agony aunt.

December 25th, 2007.

Dear Dr. Wells,

I'm writing to you to seek advice. My name is Omar and I'm a secondary School student. I can't make up my mind about a personal problem.

I'll sit for the baccalaureate exam soon. I'll certainly succeed, but my parents are old and are in need of financial help. I would really like to help them. However, if I do so, I will have to give up my dream of becoming a doctor. In short I am in a dilemma. On the one hand, if I decide to help, I will have to renounce to my registration at the university. On the other hand, if I don't, I'll feel guilty of not helping my family. I have no one to turn to. What should/can I do?

Sincerely,
Signature:

2 **Activity two:** Now, imagine you are an agony aunt. Read your partner's letter and reply by suggesting a solution to his/her problem. Keep to the following plan:

- Expression of sympathy.
- Analysis of your partner's problem.
- Recommendations / suggestions.

❖ **Aims of activity two:**

01) *To know how to write responses to a letter of complaint expressing sympathy.*

02) *Making written suggestions and recommendations using specific language items.*

♣ Pupils can suggest different pieces of advice as an answer to activity two. The class is going to agree on the best ones out of which a letter is written on the chalkboard collectively.

Unit four planning:(Budding Scientist)



Discovering Language

(Page: 89).

1 Activity one: Read and answer the questions in the caption attached to "figure1" below.

The drawings on top of page 89 represent two scientific experiments. The students may recognize what they are about without necessarily reading the text.

2 Activity two: Read the first part of the text and check your answers to question 1 in the exercise above. Then discuss the following questions.

❖ Aim of activity one and two:

01) To make pupils aware of the importance of using illustrations, drawings and background knowledge to understanding a text before reading it.



Answers to activity two:

- a. Yes, it does. Because it shows the two balloons moving away from one another.
- b. Yes, I have used my knowledge of physics. Most of the times using background knowledge helps understanding text from the very beginning.
- c. Answers may vary from a pupil to another. Either; yes, I can or No, I can't. But surely the author does answer the question in text.
- To give pupils a chance to autocorrect themselves and correct their probable false answers, activity three on 90 asks them to resume reading and compare their answers with the text. The text here illustrates the result of the experiment: Unlike charges attraction, the balloons are attracted to the rod. They are negatively charged whereas the rod is positively charged as figure 2 shows.

4 Activity four: Read the last paragraph of the text above and write captions for figures 3 and 4 to illustrate the explanations.

❖ Aim of activity four:

01) Reporting experiments' summaries.

02) Drawing conclusions and main ideas of long reading texts.



Answers to activity four:



Writing the captions of "figures 03 and 04".

- Figure 03: A negatively charged balloon adheres to an uncharged wall.
- Figure 04: A positively charged balloon also adheres to such a wall.

- By the end of this rubric, pupils have a look at the tip box that highlights the strategies that help understanding texts very well.

 **Write it out.** (Page: 91).

 **Activity one:** Read the notes below and do the following activity.

- A friend of yours has written to you a letter because s/he is anxious to know what you'll do if you pass or fail the baccalaureate exam. Reply to him/her by revealing to him/her your contingency plan just to relieve him/her of his/her anxiety.

❖ **Aim of activity one:**

01) Writing a letter of prediction 'contingency plans' using the conditional type (I).

 Using the letter form given on page 91, pupils try to fill the form with the right notes. Their predictions must be both positive and negative including the results expected each time. They are also encouraged to exchange drafts to check one another's mistakes. The final product is later evaluated by the whole class and the best one will be written on the chalkboard.



Final Remark:

- If time is available for the following rubrics, the teacher chooses some activities to deal with the support texts. Otherwise, it is time for concluding the unit with projects' discussion and evaluations in addition to remedial works.
- Pupils are strongly recommended to evaluate their learning outcomes depending on the "self-assessment" sheet on page 94.

Unit four planning:(Budding Scientist)

The End

Teacher: *Mr.Salem Zemali*