

Republic of Iraq

Ministry of Education

General Directorate of Vocational Education

English
for Schools of Agriculture
Book 3

Written by:

Dr. Khudayir Abbas Jadou'a

Dr. Muayyad Naji Ahmed

Dr. JameelaKh Abbas

Abdul-Razzaq Daghir Baqir

Kamil Kareem Atti

Shayma'a Musaddaq Yahya

Ramah Muhee Majeed

Jabbar Ahmed Jasim

2023 -1445

الطبعة السادسة

Published by the General Directorate of Vocational Education,

Ministry of Education, Baghdad, Iraq, 2013

Third Published, 2018

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

IN THE NAME OF ALLAH,

THE MOST GRACIOUS,

THE MOST MERCIFUL.

Contents

Subject Page

Introduction:

Unit One: Poultry	10
Unit Two: Goldfish Breeding	23
Unit Three: Soil Fertilizers	39
Unit Four: Revision One	52
Unit Five: Technology in the Classroom	57
Unit Six: Dairy Products	68
Unit Seven: Agricultural Marketing	80
Unit Eight: Revision Two	95
Mini Dictionary	99

English for Schools of Agriculture

Book 3

Introduction

Aim:

The general aim of this course is to develop learners' language skills; listening, speaking, reading and writing. It supplements what they have learnt in the previous years with more specification in conformity with the other subject matters in the curriculum, and to be able to use the English language communicatively in the future.

Objectives:

By the end of the three-book series, learners are supposed to:

1. develop knowledge of the basic elements of English language: vocabulary, pronunciation and grammar,
2. develop understanding of oral and written language skills.
3. be aware of the specific vocabulary and expressions relevant to their study; i.e. poultry, fish breeding, fertilizers, dairy products, marketing, etc,
4. develop aesthetic and cultural creative sense in order to appreciate English for specific purposes (ESP) topics and literature,
5. participate in everyday-life communicative dialogues, discussions and interactions,
6. understand instructions and read manuals, booklets and magazines in the field of agriculture,
7. develop receptive skills, i.e. listening and reading, by practising certain activities in this respect,
8. promote productive skills, i.e. speaking and writing, by fulfilling meaningful and authentic activities,
9. be capable of using specific language in their future career,

10. practise language learning skills such as speed reading skills, i.e. scanning, guessing, etc,
11. practise language learning autonomy strategies such as note-taking, summarizing, etc,
12. become active participants and language users, and
13. be involve in co-operative learning.

Syllabus Design

Each book of the series has the following activities format: vocabulary, speaking, reading, pronunciation, grammar and writing. This is to ensure its communicative purposes within the activity sequence and to motivate learners to participate effectively. Listening is achieved indirectly by exposing learners to the model, i.e. the teacher.

Language Activities

a- Vocabulary

New words are introduced at the beginning of the units in the form of activities so as to be familiar to students when they appear again in the reading text. Teachers are supposed to encourage students to work out the activities as a warm up.

b- Speaking

There are speaking activities in every unit. They include dialogues which will equip students with the basic expressions needed to cope with everyday conversations in English concerning their field of study and future career. These activities will give them both practice and confidence in using what they learn.

c- Reading Comprehension

Each unit has one main reading text preceded by lead in questions and activities to give students reason to read and to predict what they will be reading about in the text. At the same time, it is a kind of brainstorming to what they already know about the world (prior knowledge) or about English. The reading texts are supplemented with various activities to help students discover and learn new vocabulary and expressions.

d- Pronunciation

This activity provides practice in English pronunciation with sufficient illustrations. The presentation of the English sound system needs to be enriched by other examples and/or activities on the part of the teacher and the learners respectively.

e- Grammar

The main grammatical points are almost given according to their occurrence in the reading passages. They contain activities which promote practising the main structure item. They are also reviewed in the **Revision** units for reinforcement and ease in using them again.

f- Green Fingers

This activity introduces some tips of advice regarding agricultural topics to promotes memorization.

g-Writing

Writing is promoted by exposing learners to activities that include practising certain writing skills and sub-skills. Sometimes if activities are new, instructions are presented to the learners where they are required to follow these step by step.

Revision Units

Revision is crucial in language learning. There are two revision units. Each one is situated after every three units. Language and structures are recycled throughout various activities in order to help students reinforce what they have learned, especially new items and vocabulary.

Working in Pairs or Small Groups:

The learner is the core of the learning process. It means he/she must have an active role whether individually or in pair/group work.

The activities are either oral or written. The oral ones are done in pairs, groups, or whole class participation, and even assigned by the teacher to be practised at home. As for the written activities, they are done by learners at school or home for reinforcement and practice. In pair or group activities, teacher should make sure that students do understand the aims of the activity.

Pair or group work is not easy to organize in every class, and there may be a noise problem to deal with. However, it is worth trying occasionally. Working in pairs or groups encourages students to share ideas, practise and help each other, to broaden their communicative skills.

Teachers monitor the class in order to:

- aid the flow of conversation when necessary,
- identify any common errors or areas of breakdown,
- offer encouragement, and
- recognize when best to change the pairs or the groups.

Assessment Procedures

1. Oral Assessment

As officially recommended, **30** marks are dedicated for oral assessment. These marks are to be distributed according to the activities shown in the table below:

Activity	Mark
Reading	10
Comprehension Questions	5
Pronunciation	5
Topic Discussion	5
Vocabulary	5

2. Written Assessment

The rest **70** marks go to assess learners' achievement in the written test which includes every feature described in this prescribed textbook.

Activity	Mark
Reading Comprehension	10
Grammar	10
Pronunciation	10
Vocabulary	10
Language Functions	10
Writing	10
Testing Oral Activities Through Written Exams	10

UNIT ONE

POULTRY



Vocabulary

1.1 Fill in each blank with the suitable word from the list in the box:

Turkeys consumption chicken broilers ducks chickens promising
unviable breeds slaughtered

1. Poultry includes , and
2. are the most numerous birds in the world.
3. Poultry had increased dramatically in the world.
4. Meat chickens are commonly called
5. The outlook for the poultry industry is
6. Flocks are considered and after approximately 12 months of egg production.
7. Some commercial of hen can produce over 300 eggs a year.

Speaking

1.2 Discuss the answers of the following questions with your classmates.

1. What does the term 'poultry' refer to?
2. What are the most numerous birds in the world?
3. When did the domestication of the turkey occur?
4. What does poultry include?
5. How many eggs do you eat every week?
6. Is the poultry industry simple or complicated? Why?
7. Do you prefer meat chickens or red meat? Why?
8. When do commercial hens usually begin laying eggs?
9. What are the developments that may play a prominent role in the poultry industry?
10. Do you think that the outlook of the poultry industry promising? Why?

Reading

1.3 Before you read the text below, state whether the following statements are true or false and correct the false ones.

1. Poultry includes wild and domesticated birds.
2. Meat chickens are commonly called broilers.
3. Normally, egg production occurs at any time of the year.

4. The consumption of poultry products, with the exception of eggs, has increased dramatically.
5. Genetic improvement is a development in the future growth of poultry industry.
6. Unviable flocks are slaughtered after approximately 12 months of egg production.
7. Iraq is one of the exporters of poultry products in the world.



1.4

POULTRY



The term poultry refers to domesticated fowl raised for meat or eggs. Poultry includes chicken, turkeys, ducks, geese, emus, ostriches and game birds. Chickens are the most numerous birds in the world. The chicken is believed to have been domesticated nearly 5000 years ago from wild birds in South East Asia. On the other hand, the domestication of the turkey poultry occurred recently by the American Indians in prehistoric times. The turkey was introduced into Europe in the sixteenth century by returning Spanish explorers. The poultry industry has largely grown from backyard operations which provided supplemental income for the family to a vertically integrated industry.

Poultry consumption in the U.S. had increased from 1900, when chicken was eaten only on Sunday, to making poultry on every day item today. Meat chickens, commonly called broilers, are floor – raised on litter such as wood shavings or rice hulls, indoors in climate – controlled housing. Commercial hens usually begin laying eggs at 16-20 weeks of age, although production gradually declines soon after from approximately 25 weeks of age. This means that in many countries, by approximately 72 weeks of age, flocks are considered economically unviable and are slaughtered after approximately 12 months of egg production, although chickens will naturally live for 6 or more years. Normally, egg production occurs only in the warmer months. Some commercial breeds of hen can produce over 300 eggs a year. The outlook for the poultry industry is promising.

The consumption of poultry products, with the exception of eggs, has increased dramatically. Chicken broiler and layer operations have generally already achieved economies of scale. The prediction of continued growth in this industry is based in part on the promise of realizing more technological advances in the future. Some of the developments which will play a prominent role in this future growth will be made in mechanization, genetic improvement, better health and changes in nutrition.

Activities

1.5 Change the verbs in the table below into nouns by adding the suitable suffixes. You may need to change the spelling.

Verb	Noun
domesticate	domestication
include	
occur	
introduce	
provide	
decline	
consider	
produce	
achieve	
improve	



1.6 Match the words in column A with the corresponding information in column B.

Column A	Column B
1. poultry	a. broiler
2. meat chicken	b. warmer months
3. egg production	c. hen
4. breeds	d. ducks
5. indoor	e. hulls
6. rice	f. slaughtered
7. unviable flocks	g. controlled housing
8. outlook	h. poultry products
9. consumption	i. continued growth
10. poultry industry	j. promising

Pronunciation

1.7 The Suffix: 's'

The letter 's' when added to the end of a word, has three different sounds /s/ , /iz/ , /z/ as follows :

A- If the letter (s) is added to a word that ends with the sounds : /t/, /θ/, /f/, /k/, /p/, it is pronounced /s/ .

Examples:

want : wants ; post : posts ; rent : rents ; street : streets ; adopt : adopts

hate : hates ; date : dates ; write : writes.

month : months ; breath : breaths ; depth : depths , smith : smith's ;

cloth : cloths.

roof : roofs ; laugh : laughs ; cough : coughs ; Ralph : Ralph's.

look : looks ; bank : banks ; walk : walks ; remark : remarks ;

drink : drinks ; cake : cakes ; ache : aches.

rock : rocks ; kick : kicks ; clinic : clinics.

stop : stops ; map : maps ; lamp : lamps ; cup : cups , shop : shops Philip : Philip's ; pipe : pipes ; wipe : wipes ; hope : hopes.

B- If the letter (s) is added to a word that ends with the sounds /s/, /z/, /tʃ/, /dʒ/, /ʒ/, /ʃ/, it is pronounced /iz/.

Examples:

watch : watches ; reach : reaches ; teach : teaches ; catch : catches ;
match : matches ; beach : beaches ; branch ; branches. Judge : judges ;
change : changes ; cage : cages ; wage : wages ; page : pages ;

George : George's ; manage : manages ; bridge : bridges ;

orange : oranges; garage : garages

wash : washes ; brush : brushes ; push : pushes ; rush : rushes.

bus : buses ; case : cases ; gas : gases ; glass : glasses ;

box : boxes ; fix : fixes ; face : faces ; race : races ;

Alice : Alice's .

C- If the letter (s) letter is added to a word that doesn't end with the
above mentioned sounds , it is pronounced /z/ .

Examples:

rob : robs ; feel : feels ; pen : pens ; burn : burns ; appear : appears road
: roads ; find : finds , tube : tubes ; hide : hides ; feeling : feelings bang :
bangs ; army : armies ; baby : babies ; lady : ladies

fly : flies ; cry : cries ; day : days ; valley : valleys ; Sunday : Sundays

Now give more examples on each sound?

Grammar

1.8 Conjunctions

A conjunction is a word that joins two parts of a sentence.

Here are some conjunctions :

Coordinating Conjunctions	Subordinating Conjunctions
and , but , or , nor , for , yet , so	although , because , since , unless

Conjunctions have two basic functions:

- Coordinating conjunctions are used to join two parts of a sentence that are grammatically equal. The 7 coordinating conjunctions are short and simple words. They have only two or three letters. There is an easy way to remember them – their initials spell:

F A N B O Y S

For And Nor But Or Yet So

The two parts may be single words or clauses. for example:

- Ahmed and Hassan went up the hill.
- The water was warm, but I didn't go swimming.
- Subordinating conjunctions are used to join a subordinate clause to a main clause.

Examples:

Adverbial clause: Before you go, sign the log book.

Nominal clause: He asked if he could leave early.

adjectival clause: That is the place where he was last seen.

Common subordinating conjunctions are :

(after , although , as , because , before , how , if , once , since , then, that , though , till , until , when , where , whether , while).

Activities:

1.9 Choose the correct conjunctions:

1. I was waiting, I heard a strange voice.
a. after b. while c. so d. for
2. We will visit Japan New Zealand during our next holiday.
a. and b- but c. after d. though
3. I had a toothache, I made an appointment to go to the dentist.
a. or b. so c- but d- yet
4. The tennis match was almost finished the score was 40 all.
a. yet b. and c. because d. once
5. I like tea coffee.
a. nor b. but c. and d. until
6. Hussein likes tea, Yousif like coffee.
a. before b. and c. but d. if

7. Ali has lived in Baghdad he was 13.

- a. since b. for c. after d. until

8. I went to Australia, I'd never seen a Koala.

- a. after b. so c. before d. until

9. it was getting late, I decided I should go home.

- a. since b. as c. once d. whether

Green Fingers

1.10. A-If you have a flock of chickens raised at a corner of your garden, how do you make them clean, healthy and productive?

Read the following pieces of advice, close your book and then try to remember what you have read.

1. Keep the backyard clean and sterilized .
2. Feed your flock with concentrates rich of protein and essential elements.
3. Consult the veterinarian in case of any diseases.
4. Make sure that the backyard is well protected against environmental changes.
5. Vaccination of chicken is very necessary.

B. Examine the following chart and then try to make an experiment



Writing

1.11 Write a short paragraph on (Poultry Industry in Iraq). Make use of the following questions:

1. What does poultry industry mean?
2. Is this industry simple or complicated?

3. Where can you find poultry farms?
4. Does Iraq export or import chicken products?
5. Is there a good potential to improve this industry?
6. What are the major problems of this industry in Iraq?
7. What do you prefer local or imported chicken? Why?
8. Is the outlook of this industry in Iraq promising?

Unit Two

Goldfish Breeding

Vocabulary

2.1 Match the following words with the pictures below.

1. fish egg 2. net 3. fins 4. goldfish 5. fish bait 6. aquarium



.....



.....



.....



.....



.....



.....

2.2 Complete the following text with words from the box below.

digestive	mixture	dried-food	diet	vegetables	source
balanced	upside-down	disorder	fish -flakes	food	



Goldfish Food

Most aquarium goldfish do not have a varied It's normal for the owners to feed them man-made These contain varied dry foods, bulking agents, minerals and a of vitamins. This is not a diet and goldfish are not getting enough fiber.

If you exclusively feed to your goldfish, you can expect to see constipation type problems. The Swim bladder is when the goldfish swims at the surface and hangs there.

A goldfish has a high need for fresh , fruit and live food like daphnia or fresh water shrimp. You can feed your goldfish flakes but not as a main of food. To keep their tract clear you need to give them extra vegetables.

Speaking

2.3 Share answers to the following questions with your classmates.

Q1. Is a goldfish expensive or rather cheap? Does the price depend on the type of a goldfish?

Q2. Can you afford buying a goldfish?

Q3. Do you or any of your friends keep an aquarium at home?

Q4. How many goldfish are there in the aquarium? Mention the number and describe the fish or fishes.

Q5. How often do you clean your aquarium?

Q6. How many times do you feed a goldfish?

Q7. What kind of food do you give to your goldfish?

2.4 Look at the following picture carefully and answer the questions below.



Q1. What animals do you see in this picture?

Q2 Do cats love swimming in the water?

Q3. What brought the cat close to the fish aquarium then?

Q4. Is the cat attacking the fish or trying to escape now?

Q5. Does the goldfish seem friendly or rather angry?

Q6. In your opinion, who is going to win the fight: the goldfish or the cat?
Why?

Reading

2.5 Read the text below to answer the following questions.

1. Is it easy or difficult to breed goldfish?
2. Does a goldfish prefer to live alone or in groups?
3. Do goldfish spawn in at a specific time in the wild? When?
4. Why does a male fish push the female fish against plants during spawning?
5. Why do fish breeders remove the parent fish after they complete spawning?
6. What kind of food do breeders give to the little fish?
7. When do the little fish gain their adult color?

2.6 Goldfish Breeding

Goldfish are generally easy to breed. They are very social animals and do well when kept in groups.

Goldfish typically shoal, forage and feed in groups and are likely to breed as well. It is best to add oxygenating plants in the aquarium for the spawning process and for eggs to adhere to.

To induce spawning, the temperature can be slowly dropped to around 11° C (60° F) and then slowly warmed until they spawn. This is done to mimic the conditions found in nature when spring comes which is the only time they will spawn in the wild. Feeding lots of high protein food such live brine shrimp and worms during this time will also induce spawning.

Before spawning as the temperature increases, the male will chase the female in a non-aggressive way around the aquarium. This can last for several days. The colors of both fish will intensify the male some what more than the female. During spawning the male will push the female against the plants while both fish gyrate from side to side. This stimulates the female to drop tiny eggs which the male will then fertilize. The eggs will stick to the plants by sticky threads. Spawning can last for two or three hours and can produce up to 10,000 eggs. The parents, when finished will then eat as many eggs as they can find.

For this reason it is best to remove the parents after spawning is complete. You will need to feed the little fish one of the various specialty

fry foods until they become big enough to eat flake or brine shrimp. At first the fry are a dark brown or black color in order to better hide and not be eaten by larger fish. They gain their adult color after several months and can be put in with larger fish once they reach about 1 inch long.

Activities:

2.7 Complete the following sentences with words from the text above.

1. It is best to add plants in the aquarium for the process and for eggs to adhere to.
2. Feeding the fish lots of high food such live brine and worms during this time will spawning .
3. Before spawning as the temperature, the male will chase the in a non-aggressive way around the aquarium.
4. During spawning , the colors of both and female fish will, the male somewhat more than the female.
5. Spawning can last for two or three and can produce up to 10,000 eggs.
6. When spawning is over , the parent fish will then eat as many as they can find.
7. You will need to feed the little fish one of the various foods until they become big enough to eat or brine shrimp.

2.8 Re-read the text to find out the opposite of the following words.

difficult	
dropped	
male	
aggressive	
unsociable	
light brown	
low protein	
appear	
incomplete	
lose	

Pronunciation

2.9 Pronunciation of Regular Verbs in the Past (-ed)

The final -ed of the regular verbs in the past form are pronounced in three different ways in their past form; /t/, /d/, /id/.

Examples

worked /t/

loved /d/

wanted /id/

1. / t /

After sounds such as / p, k, f, s, ʃ, tʃ / , the final -ed is pronounced like /t/ as in the word 'cat'. Note that the -e remains silent.

asked, baked, cooked, cracked, crashed, brushed, washed, finished, dressed, dropped, escaped, finished, fixed, guessed, helped, laughed, washed .

2. / id /

After /t/ and /d/, the final (-ed) are pronounced /id/ as in:

attended, arrested, collected, contacted, counted, decided, defended , demanded , divided, ended, expanded, expected , exported , flooded , graduated , hated , hunted , included, invited , invented, landed, needed, painted, planted, printed, presented , pretended, protected, provided , rented, repeated , reported , respected , rested, scolded, started, shouted , treated , visited, waited, wanted, wasted .

3. / d /

Verbs ending with voiced sounds in the infinitive form are followed by the sound /d/ in the past. Read the following verbs:

Examples:

advised, lived, agreed, measured, arrived, opened, believed, played, burned, called, realized, carried, rained, cleaned, repaired, closed, saved, changed, shared, delivered, signed, died, slammed, dried, stayed, earned,

enjoyed, studied, explained, tried, explored, travelled, followed, turned, happened, used, interviewed, whispered, imagined, worried, listened.

Activity

2.10 Classify the verbs into their appropriate column.

/t/	/d/	/id/

ended , lived , asked , listened , wanted, fixed ,dressed, enjoyed , shouted , painted , crashed , included , divided , studied ,washed , damaged , saved , followed , faced , happened , called , baked , cooked , needed, escaped , repeated , cleaned , hunted , changed, finished .

Grammar

2.11 Passive Voice

We use the passive when we are interested in the object or when we do not know who caused the action.

Example: *Attention should be paid in wall painting.*

We can only form a passive sentence from an active sentence when there is an object in the active sentence.

Examples

Active	Samir	buys	a fish bait .	Simple Present
Passive:	A fish bait	is bought	by Samir.	

Active:	Samir	bought	a fish bait.	Simple Past
Passive:	A fish bait	was bought	by Samir.	

Active:	Samir	has bought	a fish bait.	Present Perfect
Passive:	A fish bait	has been bought	by Samir.	

Active:	Samir	will buy	a fish bait.	will-future

Passive:	A fish bait	will be bought	by Samir.	
Active:	Samir	can buy	a fish bait.	Modals
Passive:	A fish bait	can be bought	by Samir.	

Activities:

2.12 Read the paired sentences aloud. Write (A) in the blank beside the sentence in the active voice, (P) in the blank beside the sentence in the passive voice.

- _____ Ahmed cleaned the barn.
- _____ The barn was cleaned by Ahmed.
- _____ The wall was mended by our neighbour.
- _____ Our neighbor mended the wall.

2.13 Change the following sentences into the active voice.

- The cows are milked by the farmer.
- The garden was watered by his uncle.
- The apples were eaten by the children.
- Our horses are trained by the new trainer.

2.14 Fill in the 'Past' column with the suitable form of the verb.

Present	Present Participle	Past	Past Participle
ask	asking		asked
dig	digging		dug
pay	paying		paid
become	becoming		become
read	reading		read
put	putting		put
sell	selling		sold
eat	eating		eaten
say	saying		said
attack	attacking		attacked
cut	cutting		cut
meet	meeting		met
take	taking		taken
wear	wearing		worn
tell	telling		told
win	winning		won
break	breaking		broken
think	thinking		thought
stand	standing		stood
write	writing		written
fall	falling		fallen
choose	choosing		chosen

Punctuation

2. 15 Full Stop, Question Mark and Exclamation Mark

1. Use a full stop

- at the end of a **sentence**:

- *The child was hungry.*
- *He ate all the food.*

- at the end of a **command**.

- *Wash your hands before you sit at the table.*
- *Give me the shovel now.*

- at the end of an **indirect question**.

- *The farmer asked why Sabah had left the cows under the rain.*
- *My father used to wonder why Samir's field was so dry.*

- with **abbreviations**:

Dr. Basim arrived from Washington, D.C., at 9 p.m.

2. Use a question mark

- at the end of a **direct question**.

- *What is the price of the new product?*
- *How much sugar do you want in your tea?*
- *Did you enjoy the meal?*

- at the end of a **tag question**.

- *He should read for the exam, shouldn't he?*
- *He shouldn't have yelled at his boy, should he?*
- *They're not picking apples, are they?*
- *He won the prize, didn't he?*
- *She cooks very well, doesn't she?*
- *Majid may leave the room, mightn't he?*
- *There were too many books on the shelf, weren't there?*

3. Use an exclamation mark to indicate strong feelings or a raised voice in speech:

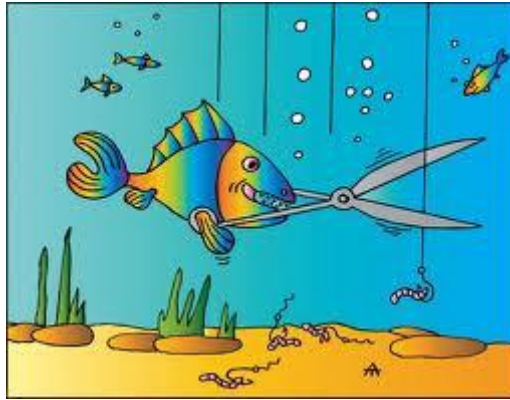
- *She warned her little daughter, "Don't touch the pot! It is hot!"*
- *He exclaimed: "What a nice car!"*
- *"Help! The house is burning!"*

Many interjections need an exclamation mark:

- *"Hi! What are you doing?"*
- *"Oh! When is he leaving the hospital?"*
- *"Wow! What a big fish!"*

Activity:

2.16 Rewrite and punctuate the paragraph below.



bait fishing is one of the easiest ways to catch fish the approaches to catching fish are many--fly fishing, spinner fishing, jig fishing, trolling, and snagging to name a few bait fishing is a good method for the beginning fisherman or fisherwoman bait fishing offers both simplicity and effectiveness for anglers it is simple in that one only has to bait up a hook and throw the line in the water and it is effective because the presence of live bait is a temptation that no fish can resist

Writing

2.17 Re-write the following tips in the passive voice.

- Feed your goldfish once a day.
- Feed your goldfish fruit and veggies regularly (every 2 days)
- Make sure that all hard vegetables like carrots, beans, rice are cooked, peeled and finely chopped up .

- Feed larvae, shrimp or daphne only as occasional treats, they are protein rich and can cause constipation
- Keep an eye on your goldfish and notice how healthy they are. If they are floating at the top of the tank, you need to take steps and deal with the Swim bladder.

Unit Three

Soil Fertilizers



Vocabulary

3.1 Fill in the blanks with the suitable word from the list.

(composed of, nutrients, soil, leaf, mixture, potassium, plants, improving)

1. Garden fertilizers are just one aspect of the subject of soil.
2. Fertilizer is macronutrients and micronutrients.
3. obtain the primary and secondary nutrients and some micronutrients solely from the soil.
4. Soil stores plant and water.
5. Nitrogen, phosphorus and..... are the three most important nutrients for plant growth.

6. Testing, amending and feeding the..... should come before you even think about planting.

7. *All soils are composed of a..... of clay, silt and sand.*

8. Plants can absorb nutrients more efficiently through their surfaces than through their roots.

3.2 How can you differentiate between the following words: ground, soil, land and earth?

ground - This is the actual surface of the earth and it tends to be used when a destination (on the ground) or an electrical termination, or when discussing firmness, stability, or territory in dispute.

soil - This is more specific, and usually refers to quality, or type of ground; it tends to be used most when describing growing things .

land - This is more general, we get the impression of a wider view of the place, the general landscape; it tends to describe boundaries and scenery.

earth – This can be used to discuss growing things, but is usually used when referring to the entire planet .

Now fill the blanks with: ground, soil, land, or earth.

1. *After a week at sea, the sailors saw*

2. *After a week in space, the spacecraft returned to*

3. *The price of in London is high.*

4. *The horse fell to the*

5. That's a productive
6. The is a moving object in orbit around the sun.
7. Plants, animals, fungi, bacteria, and humans affect formation.

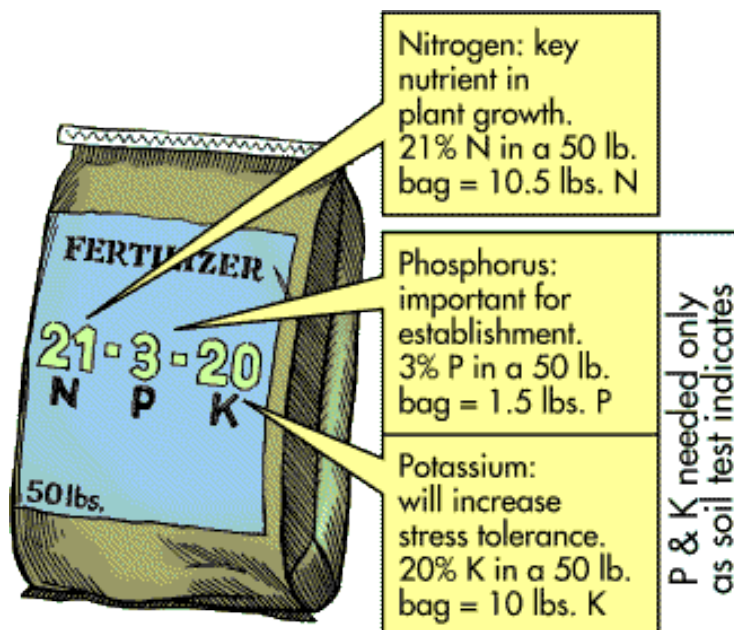
Speaking

3.3

A. Fertilizers are important in agriculture and they promote plant growth in a number of ways. The fertility of the soil largely depends on the amount and rate of fertilizers provided to it.

Mention how fertilizers aid the soil in growing plants.

B. Examine the following chart and then explain to your classmate its content.



Reading

3.4 Try to answer the following questions before you read the text below.

1. Do you think that fertilizers make plants grow faster or slower?
2. Mention some of the common fertilizers.
3. What do fertilizers provide the soil with?
4. What are the four basic nutrients that plants need for good plant growth?

3.5

Soil Fertilizers



Soil fertilizers are usually directly applied to soil and these are soil amendments applied to promote plant growth. Growing plants are nourished by certain constituents which they absorb from the soil and air. The chief elements drawn from the soil are potassium, calcium, sulphur, phosphorus, and nitrogen; other elements such as silicon, iron, sodium, magnesium, and chlorine are taken up to a less degree.

Nearly all soil needs regular additions of soil fertilizers to remain healthy. Soil fertility is constantly changing due to digging or tilling the soil, plants using up nutrients and leaching from rainfall.

Crop fertilization can be achieved by using chemical or organic fertilizers. Most chemical fertilizers are composed of a combination of phosphorus, potassium and nitrogen, the farmers put them on the fields before they plant crops, and when the crops are growing. Organic fertilizers include composite, manure, grass clippings or decaying leaves. A benefit of chemical fertilizers is that they work quickly, while organic fertilizers may be better for the environment.

There are four basic nutrients that plants need for good plant growth: Nitrogen, Phosphorus, Potassium and Calcium.

Nitrogen



- promotes leaf and stem growth
- gives plant the green colour
- controls oxygen levels in plants
- leaches with rainfall

Signs of deficiency:

- leaves are yellowing and falling off
- stunted growth

Phosphorus

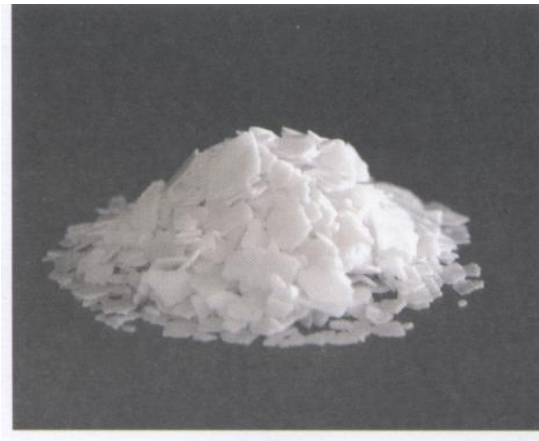


- promotes seed germination, fruit growth, flowering and healthy roots
- gives winter hardiness to fall plantings

Signs of deficiency:

- dull green leaves with purplish tints
- stunted growth

Potassium (Potash)



- promotes young leaves and buds, root growth and seed production
- improves the flavor of fruit and vegetables

Signs of deficiency:

- loss in color particularly in the vein structure
- brown spotted on the underside of leaves
- short and stocky plants

Calcium



- not regarded a true fertilizer
- is a soil conditioner usually applied in the form of lime
- corrects an acidic soil
- speeds up the decay of organic matter in the soil
- makes phosphates in the soil available to plants
- improves soil structure (when added to clay soil will improve drainage)

Signs of deficiency:

- poor plant growth
- plants are diseased and often dying

Activities:

3.6 Read the text again and answer the following questions.

1. What are the most chemical fertilizers composed of?
2. When do farmers apply chemical fertilizers to the field?
3. How many nutrients do plants need for good growth?
4. What make the leaves yellow and fall off?
5. Is Calcium important to the soil? Why?

3.7 Complete the following text with words from the list.

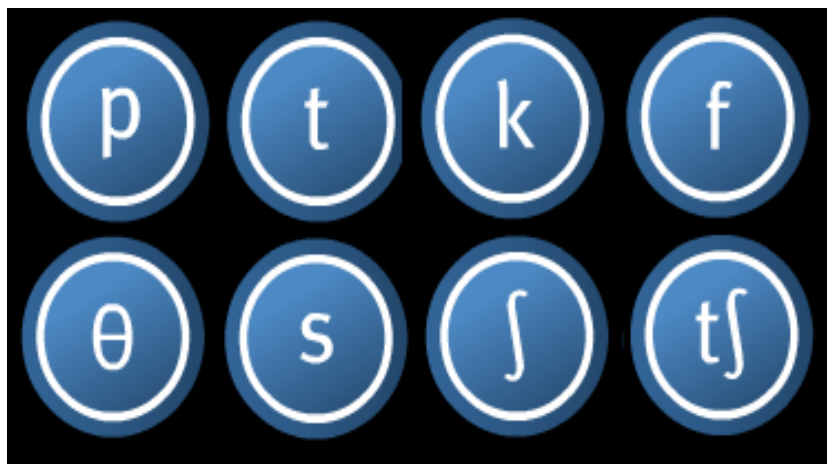
garden fertilized food tissues soil grew replenish

Plants need to bebecause most soil does not provide the essential nutrients required for optimum growth. Even if you are lucky enough to start with greatsoil, as your plants grow, they absorb nutrients and leave theless fertile. Remember those tasty tomatoes and beautiful roses youlast year? It took nutrients from the soil to build those plant..... By fertilizing your garden, you..... lost nutrients and ensure that this year's plants have thethey need to flourish.

Pronunciation

3.8 Voiceless Consonant Sounds

/p/ **please** , /f/**five** , /θ/ **thirty**, /t/ **ten**, /s/ **sir**, /ʃ/**she** , /tʃ/**cheers** , /k/ **king**



Give the phonetic symbol for the voiceless consonant sound(s) in each of the following words.

dropped washed watched book could tie fan
cash cheap teeth push laugh seats

Grammar

3.9 Time Clauses

We use these words (*before, after, as soon as, till, until, while and when*) to introduce time clauses to tell when something happens.

Expressing past time using time clause

- a. *When I went to Basrah*, I visited my aunt.
- b. I visited my aunt *when I went to Basrah*.

when I went to Basrah = a time clause

I visited my aunt = a main clause

(a) and (b) have the same meaning.

A time clause can:

- 1. come in front of a main clause, as in (a);
- 2. follow a main clause, as in (b).

- 1. My brother went to the movies ***after*** *he ate dinner*.
- 2. The phone rang ***while*** *I was having a shower*.
- 3. ***Before*** *I went to bed*, I finished my homework.

Expressing future time using time clause

{Present forms are the simplest way of expressing future time in many cases}

1. I'll cook supper *as soon as I come home*.
2. I'll do it *when I come back home*.
3. You must wait here *until your father comes*.

Activities

3.10 Complete the sentences with the correct forms of the verbs in brackets.

1. He will wash up before he (go) to bed.
2. When it (get) cold I'll light the fire.
3. I'll email you as soon as I (arrive).
4. She (give) the children their dinner before he comes home.
5. I will pay you when I (get) my salary.
6. Nada washed the floor while her husband (watch) the soccer match.
7. We waited until he (finish) his homework.
8. I had finished my work before we (go) out.
9. While they (have) dinner, the baby woke up.
10. When he (return) I'll give him the key.

Green Fingers

3.11 How to use fertilizers safely?



1. Avoid burning plants by using too much fertilizer. The burn results from only one thing: the incorrect application of fertilizer.
2. Give the plants what they need when they need it.
3. Your garden is only as lush as your soil is rich.
4. Make sure to use enough amounts of composite every time you plant anything.
5. Pay attention to the type of the fertilizer that you should be used on.
6. Mow the lawn before fertilizing, and let fertilizer sit for about a week before mowing the lawn again.

Writing

3.12 Write a short paragraph on "A Good Soil" by rearranging the following sentences.

1. your plants need a good soil .
2. without a good soil .
3. in order to grow successfully .
4. valuable time and investment will probably be lost .
5. determining a soil type and fertilizing it .
6. most soils need some amount of improvement by .
7. this includes the right drainage, pH balance, and best conditions .

Unit Four

Revision One

1. Fill the blanks with:

(although, and, because, but, or, since, so, unless, until, when).

1. Things were different _____ I was young.
2. She will die _____ the doctors operate immediately.
3. Let us wait here _____ the rain stops.
4. You cannot be a lawyer _____ you have a law degree.
5. That was years _____ years ago.
6. She has not called _____ she left last week.
7. I saw him leaving an hour _____ two ago.
8. This is an expensive _____ a very useful book.
9. We were getting tired _____ we stopped for a rest.
10. He was angry _____ he heard what happened.
11. Walk quickly _____ you will be late.
12. He had to retire _____ of ill health.
13. We will go swimming next Sunday _____ it's raining.
14. I heard a noise _____ I turned the light on.

15. Would you like a coffee _____ tea?
16. Do you know _____ she will arrive?
17. _____ the car is old, it still runs well.
18. Do you want a pen _____ a bit of paper?
19. I would like to go _____ I am too busy.

2. Look at the following chart and try to find the types of soil fertilizers and their dictionary Arabic meaning.

Fertilizers



Compost



Blood meal



Dolomitic limestone



Manure



Alfalfa meal



Chelated iron



Bone meal



Liquid seaweed



Commercially prepared blends

3. Change the following sentences into passive voice.

1. Many people begin new projects in January
2. You must wash that shirt for tonight's party.
3. They make shoes in that factory.
4. The manager will meet the visitors at the airport.
5. She showed her relatives the new house.
6. Nobody can beat a tiger.
7. They also speak German at the meetings.
8. The police locked up the criminals.
9. The spider scared her.
10. The guide will show us the Natural History Museum in the afternoon.

4. Play the following game with your classmates.

Directions: Each student needs a marker and one coin for the group. Throw the coin if you get heads advance one square, tails advance two squares. Say a sentence with the word in the square.



As soon as

go back two
spaces

Whenever

While



lose a turn

advance one
space

As soon as

Before

As soon as

While

While



Whenever

Whenever

After

Before



5. Join each pair of the following sentences with the word given between brackets.

1. I finish writing the reports. I will go out with my friends. (when)
2. I go to Lebanon. I'll book a room at the hotel. (before)
3. My father will buy a new car. He saves enough money. (after)
4. I arrive to Paris. I will phone you. (as soon as)

Unit Five

Technology in the Classroom

Vocabulary

5.1 Match the pictures below with the following names.

- a. laptop computer b. VCR (video cassette recorder) c. projector
d. television e. overhead projector f. DVD (digital video disc)













5.2 Match the words in List A with their functions in List B.

List A	List B
computer	uses science for particular purposes
projector	increases loudness of sound
software	projects pictures or films on to a screen or wall
sound amplifier	stores and arranges information
technology	operates a computer

5.3 Identify other products and then write sentences using the adjectives below.

1. long-lasting 2. fragile 3. easy-to-use 4. convenient 5. useful
6. comfortable 7. reliable 8. inexpensive 9. up-to-date 10. out-of-date
11. efficient 12. Fast 13.compact 14. multi-functioned 15. safe

Example: My refrigerator is long-lasting. I've had it for 10 years.

Speaking

5.4 Share answers to the following questions with your classmate.

1. What springs to your mind when you hear the word 'technology'?
2. Is technology a good or a bad thing?
3. What new technologies could you not live without?
4. Do you like reading about technology? Why?
5. Do you like using technology to learn? Why?
6. How has technology changed society?

7. Has technology made us more impatient?
8. Do you think we have become obsessed with technology?
9. What do you think very old people think of modern technology?

Reading

5.5 Try to answer the following questions before you read the text.

1. Why is technology used in the classroom?
2. What are the different types of technology devices in your classroom?
3. What does technology encourage students to do?

5.6 Technology in the Classroom



As new technology continues to emerge, schools must adapt and use this technology in the classroom such as high-tech equipment, tools, or operating methods designed to make work more efficient. Therefore, most of the things that teachers use in the classroom are considered technology. There are different types of technology which can be used in the classroom. They are becoming popular with the educational system today, such as:

Whiteboard. It is one of the most basic types of technology at school. It makes education an interactive process. It is an easy-to-use device that can be used in combination with computer and a projector. The board can be viewed by the whole class.



Projector. It has wide applications in the classroom. A teacher can present a lesson using meaningful and colourful transparencies that grab the attention of the students immediately. The teacher shows students many documentaries, short study films, or PowerPoint presentations that contribute to increase retention.



Sound Amplifiers. Such amplifiers are useful as they make the teacher audible to all students, especially in large classes.



Software and Hardware. Both of them teach students through games, pictures, charts, and graphs. Such things hook the interest of students for a longer time and make even the boring subject an interesting one.



These are some of the types of technology in the classroom, that are easy to use. These technologies are beneficial as students can use them for learning, practicing, and expanding what they have learned. The advanced technology allows students to access a course material or a syllabus easily, encourages the participation of each student in the learning process, which is crucial for better understanding of the subject.

Activities:

5.7 Read the text again and complete the following sentences.

1. The use of the whiteboard makes teaching -----.
2. The teacher can use the projector to -----.
3. The sound amplifiers are useful as they -----.
4. Many schools use ----- where students can ask the question without having to shout.
5. The software and the hardware help teaching students through -----, ----- and -----.

5.8 State whether each of the following sentences is true or false.

1. The whiteboard is not a basic type of technology at school because it cannot be viewed by all the students in the classroom.
2. Sound amplifiers are useful and are widely used in classrooms.
4. Software and computers hook the interest of a student for a longer time and make the boring subject an interesting one.
5. Not all the things that teachers use in the classroom are considered technology.

5.9 Complete the following table by adding the suitable suffixes to the nouns to change them into adjectives. You may need to change the spelling.

Noun	Adjective
technology	
emergency	
efficiency	
interactivity	
education	

Pronunciation

5.10 English Voiced Consonants

There are fifteen English consonants which are called ‘voiced’.
These are pronounced with some vibration in the vocal cords .

1. /b/: bet bed baby rebel cab grab
2. /d/: dawn ladder breeding bed laid
3. /g/: get group singer longue sing rang
4. /ð/: the than father mother smooth leather
5. /v/: very voice seven love wave
6. /z/: zero lazy dozen prize quiz
7. /ʒ/: pleasure measure usurer exposure visual
8. /dʒ/: jump join enjoy major injure
9. /m/: moon money lamp family home
10. /n/: now near any man can

11. /ŋ/: long bring angry English single

12. /l/: luck let world mile ball

13. /r/: red rob free very forest

14. /w/: we quick twice why quiet

15. /j/: yet you year young yesterday

Activities:

5.11 Identify the initial sound in the following words.

(write twice once Linda July these germ goat)

5.12 Identify the last sound in the following words.

(sing weave pencil wise dreamed stage fog)

Grammar

5.13 The Relative Clauses

A relative clause (also called an adjective or adjectival clause) should meet three requirements.

1. It contains a subject and a verb.
2. It begins with a relative pronoun (*who, whom, whose, that, or which*) or a relative adverb (when, where, or why)
3. It functions as an adjective answering the questions *What kind, How many, or Which one.*

This can be explained by the following table.

Pronouns	Use	Examples
who	subject or object pronoun for people	I told you about the woman who lives next door.
which	subject or object pronoun for animals and things	Do you see the cat which is lying on the roof?
which	referring to a whole sentence	He couldn't read which surprised me?
whose	possession for people animals and things	Do you know the boy whose mother is a nurse.
whom	object pronoun for people, especially in non- defining relative clauses (in defining relative clauses we colloquially prefer <i>who</i>)	I was invited by the professor whom I met at the conference.
that	subject or object pronoun for people, animals and thing in defining relative clauses (<i>who</i> or <i>which</i> are also possible)	I don't like the table that stands in the kitchen.

Notes:

1. If the relative pronoun is followed by a verb, it is a subject pronoun. Subject pronouns must always be used .

Ex: The apple which is lying on the table is green.

2. If the relative pronoun is not followed by a verb (but by a noun or pronoun), the relative pronoun is an object pronoun .

Ex: The apple which he lays on the table is green.

Object pronouns can be dropped in the defining relative clauses, which are then called **contact clauses**.

Ex: The apple he lays on the table is green.

Activities

5.14 Decide whether the relative pronoun is a subject or an object pronoun.

1. Do you know the girl whom I danced with?
2. Do you know the girl who danced with me?
3. The apples that are lying on the table are bad.
4. The apples that we bought in the shop are bad.
5. We will stay at a hotel which is not far from the beach.
6. We will stay at the hotel which my friend has recommended to us.
7. That is the museum which I like very much.
8. That is the museum which lies at the heart of the town.
9. This is the man whom Nada visited in Basrah.
10. This is the man who lives in Scotland.

5.15 Decide whether the relative pronoun is correct or not.

1. The post man which works in this village is very old.
2. The egg which is on the nest is brown.
3. Where is the bed who was in the attic.
4. The bottles that are lying on the floor are filled with milk.
5. The cowboy who is wearing the red shirt is very funny.

Writing

5.16 Write a short paragraph on "*Educational Technologies*" by answering the following questions.

1. What educational technologies are available in your school?
2. How do teachers make use of these technologies?
3. How can these technologies help improve your skills?
4. How can you participate in taking care of these technologies?
5. Can these technologies improve the teaching method? How?

Unit Six

Dairy Products



Vocabulary

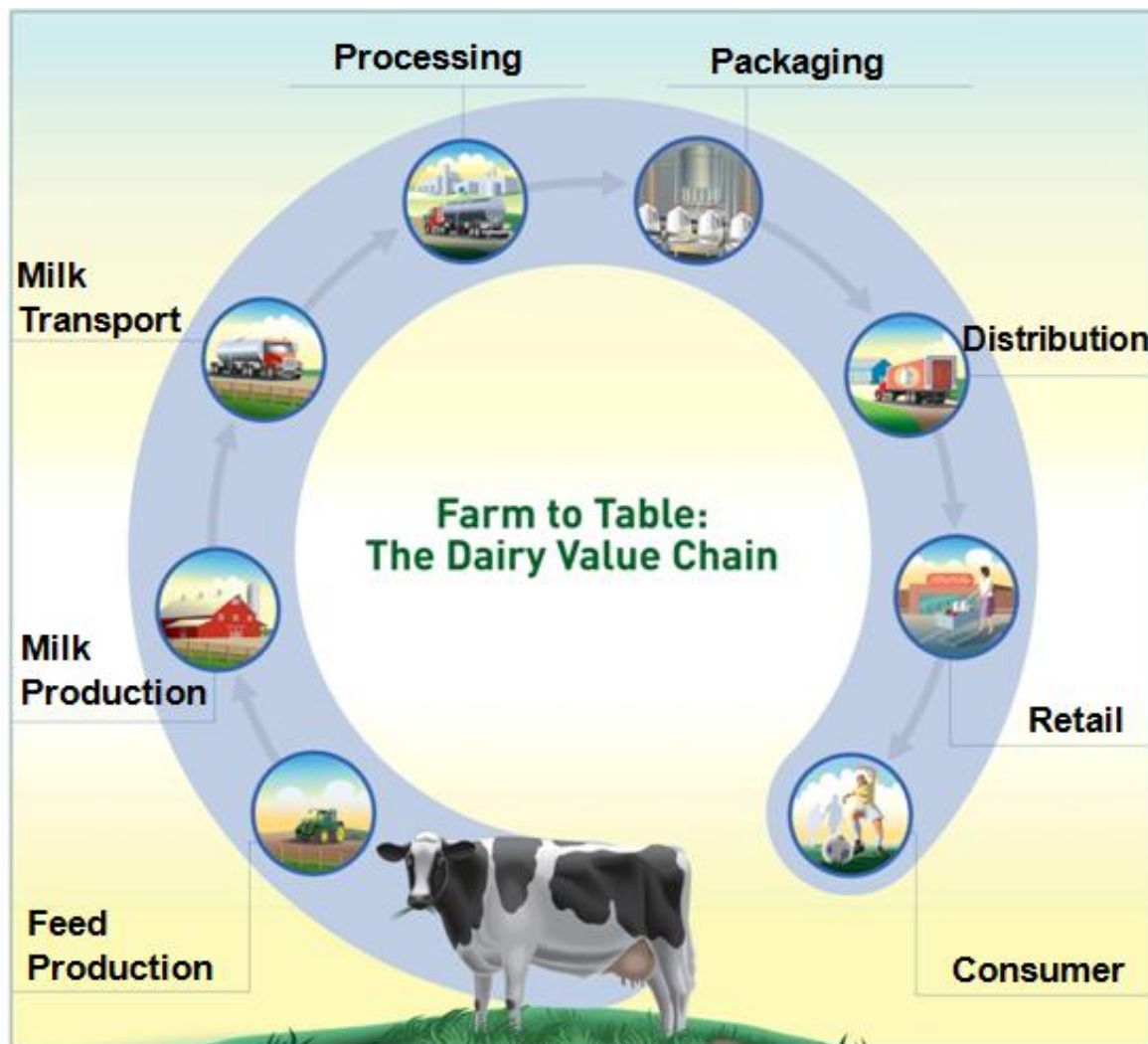
6.1 Look at the puzzle below.

There are 5 words which are related to dairy products. They can be read from left to right, right to left, top to bottom, bottom to top or diagonally.

Try to find them.

A	N	R	Q	P	Y	Y	C	O	I
C	I	N	T	T	O	Z	G	M	L
U	W	C	E	B	G	O	O	B	k
P	A	D	E	S	H	C	k	Z	F
N	M	L	O	C	U	H	F	G	L
B	U	T	T	E	R	E	V	K	A
A	X	Q	U	Y	T	E	L	L	V
S	D	P	W	J	K	S	A	I	C
B	C	E	H	N	T	E	R	M	D

6.2. Look at the table below, close your book and then explain the dairy products circle.



Speaking

6.3. A. Read the following dialogue , then exchange roles with your classmates.

Student A: Do you think dairy products are good for health?

Student B: Yes, of course they are.

Student A: Tell me about some of their benefits?

Student B: They supply the body with the necessary proteins, carbohydrates, vitamins, fat and calcium.

Student A: Do these products sometimes have some bad effects on health?

Student B: Yes, they do.

Student A: What are some of these effects?

Student B: If you take too much of them, you may put much weight on. On the other hand, some people might be allergic to dairy products, so if they take them, they may have bad effect on their health.

B. Complete this chart with information about yourself. Give reasons.

Two dairy products I like most
Two kinds of food I like best
Two sports I'd like to learn
Two kinds of drinks I'd prefer to have

Reading

6.4 Before you read the passage in 6.5, try to answer these questions.

1. Is milk a dairy product or not?
2. Do you drink milk every morning?
3. Name some of the dairy products you would like to take.
4. When would you like to take them?
5. Do you think they are good for your body? How?
6. Is it enough just to eat good food? Why?

6.5

Dairy Products



Dairy products are generally defined as food produced from the milk of mammals. They are usually high energy-yielding food products. A production station for milk processing is called dairy factory. Apart from breastfed infants, the human consumption of dairy products is sourced primarily from the milk of cows, goats, sheep or camels, and other mammals are other sources of dairy products consumed by humans. Dairy products are commonly found in European, Middle Eastern and Indian cuisine, whereas they are almost unknown in East Asian cuisine.

There is a large variety of dairy products available nowadays. The obvious ones that first come to mind are milk and cheese. There is also yoghurt, ice cream, butter, cream, etc. In reality, if you were to name off each type of cheese, milk, ice cream, yoghurt, etc. the list would definitely number in the hundreds. **Milk** is a white liquid produced by mammals. It is the primary source of nutrition for young mammals before they are able to digest other types of food. It is an essential food because it contains the

necessary elements of minerals, vitamins, proteins, fat and carbohydrates. There are many kinds of milk such as full cream milk, powdered skim milk, condensed milk, etc.

Cheese is a solid food made from milk (often cow's, goat's or sheep's) that is allowed to thicken due to bacteria (naturally occurring or added) until it separates into liquid and semi-solids. It is usually yellow or white in colour, and can be soft or hard.

The whey is drained and the curds are pressed into shapes; this is fresh or unripened cheese (varieties include cottage cheese, cream cheese, ricotta, etc.). The other general type of cheese is ripened or aged cheese, in which the curd is then cured by a variety of processes including heat, bacteria, soaking, with the addition of herbs, spices, and in the case of most cheddars, added dyes. After curing, the cheese is stored and aged. Ripened cheeses are further classified by texture or process:

Hard (Parmesan), Semi-firm (cheddar), Semi-soft, Soft-ripened (brie), Blue-veined (blue), mozzarella. The reduced-fat cheeses are made from reduced fat milk and additives, and these cheeses have less flavour and do not melt well as a result.

Yoghurt is a thick liquid food that tastes slightly sour and is produced through the fermentation of milk by lactic acid bacteria. The milk is firstly heat treated, homogenized and is then cooled to allow the addition of bacteria or starter culture.

Given the right conditions, i.e., correct temperature and moisture, the bacteria is able to ferment the milk sugar (lactose), producing lactic acid. The milk proteins then coagulate and set, to form yoghurt. Yoghurt can be made from different types of milk, including skimmed, semi-skimmed, whole, evaporated or powdered forms.

The market now offers a vast variety of yoghurts to suit all palates and meal occasions. They come in a variety of textures (e.g. liquid, set, smooth), fat contents (e.g. luxury, low-fat, virtually fat-free) and flavours (e.g. natural, fruit, cereal), can be consumed as a snack or part of a meal, as a sweet or savoury food and are available all year-round.

Fermenting milk with different micro-organisms has also provided an opportunity to develop a wide range of products with different flavours, textures, consistencies and, more recently, health attributes. These include live, periodic, and bio yoghurts.



Butter is a yellow solid dairy made from milk or cream by churning fresh or fermented cream or milk. It is generally used as a spread and a condiment, as well

as in cooking, such as baking, sauce making, and pan frying. Butter consists of butterfat, milk proteins and water.

Most frequently made from cows' milk, butter can also be manufactured from the milk of other mammals, including sheep, goats, buffalo and yaks. Salt, flavorings and preservatives are sometimes added to butter. Rendering butter produces clarified butter or *ghee*, which is almost entirely butterfat.

Butter is a water-in-oil emulsion resulting from an inversion of the cream, an oil-in-water emulsion; the milk proteins are the emulsifiers. Butter remains solid when refrigerated, but softens to a spreadable consistency at room temperature, and melts to a thin liquid consistency at 32–35 °C.

Activity

6.6 Answer the following questions.

1. What are dairy products?
2. Are they high or low energy-yielding food products?
3. What's the human consumption of dairy products sourced primarily from?
4. Are there many kinds of dairy products?

5. Why is milk necessary for health?
6. What's cheese made from?
7. What happens to cheese after curing?
8. What can bacteria do when making yoghurt?

6.7 Complete the following sentences.

1. Dairy products are in European, Middle Eastern and Indian cuisine.
2. Milk is a produced by mammals.
3. Cheese is a solid food milk (often cow's ,goat's or sheep's).
4. The market now offers to suit all palates and meal occasions.
5. Given the right conditions, i.e.,, the bacteria are able to ferment the milk sugar (lactose), producing lactic acid.

Grammar

6.8 Adverbial Clause of Result

When you want to indicate the result of an action or situation , you can use a result clause . Result Clauses are introduced by conjunctions such as:

So + adjective/adverb + that

- Their dog was so fierce that no one dared to come near to it.
- I was so excited that I couldn't sleep last night.
- The snow fell so fast that their footsteps were soon covered up.
- His speech went on so long that people began to fall asleep.

- Our neighbourse plays their radio so loudly that we can't sleep.

So + many/little/much / few + adjective/adverb + that

- There was so much dust that we couldn't see what was happening.
- He makes so many mistakes that I'm really disappointed.
- He makes so few mistakes that we are all surprised.
- She has so little patience that she becomes nervous quickly.

Such + adjective + Noun + that

- They had such a fierce dog that no one dared to go near their house.
- They spoke for such a long time that people began to fall asleep.
- They are such careful students that they rarely make mistakes.
- He writes with such a great care that he rarely makes mistakes.

Such + a/an + adjective + Noun + that

- Nada is such a clever girl that she always gets high marks .
- He was such an unworkable boy that he failed the exam .

Therefore, Thus, So, In consequence, Consequently, For this , That reason, As a result

- I was very tired last night. Therefore , I went to bed early.
- The test was very hard .For that reason ,I failed.
- I played very well, as a result, I won the game.

- I've forgotten my password, so I can't read any material.

We sometimes can use *-ing* clause of result.

- The government increased the duty on some goods ,resulting in a fall in demand.

Activities:

6.9 A. Join each pair of the following sentences using the given conjunctions.

1. The basketball player is very tall. He can score points easily. (so ... that)
2. I have few opportunities to speak Italian. I will never be able to learn it. (so that)
3. There was a lot of material to cover. I found it difficult to keep up with the studies. (such ... that)
4. The lecture was boring. Some of the students fell asleep. (As a result)
5. It is a good weather. I will go out for a walk. (such that)
6. The kitchen was flooded. We had to go to a restaurant. (so)

B. Fill in the blanks with 'so' or 'such'.

- | | |
|-------------------------|-----------------------|
| 1. nice people | 2. many flowers |
| 3. a tall building | 4. much noise |
| 5. a little girl | 6. few customers |

Pronunciation

6.10 Vowel Sounds (Revision)

The following are the vowel sounds that you have studied before.
As a reminder, we list them as follows.

1. / **i** / city little lovely pink symbol ladies lazy spinach women
2. / **i:** / wheel feel heal kneel these we've wean deal eel police oblique
3. / **a** / fat cat can mat rat sat that glad black man am back fact racket
4. / **a:** / father are car part smart calm half dark
5. / **e** / said ebb web where steady healthy friend says bury leisure
6. / **u** / foot stood could would should wood sugar bosom pull book full
7. / **u:** / root fool cool route ooze routine pool few through future boot
8. / **o** / on off long quality quantity want false wash watch adopt top
9. / **o:** / corn horn fought thought caught court war board talk walk
10. / **ʌ** / mud love blood flood won come rough cough couple son trouble
11. / **ə** / about ago again among along culture measure future picture
12. / **ɜ:** / early third bird germ work worse journey

Activity

6.11 Write the phonetic symbols for the vowel sounds in the following words.

uncle farm word all fill seed look away world fed bat put

Health Tips

6.12 Read the following tips about your meals and try to memorize them.

Every meal you take should contain some of the following elements which are certainly good for the health.

1. Vitamins A , B , C , D , etc.
2. Carbohydrates 3. Fats 4. Minerals 5. Proteins

Writing

6.13 Write a paragraph on ‘Dairy Products’. Make use of the information given in 6.1 , 6.2 and 6.5.

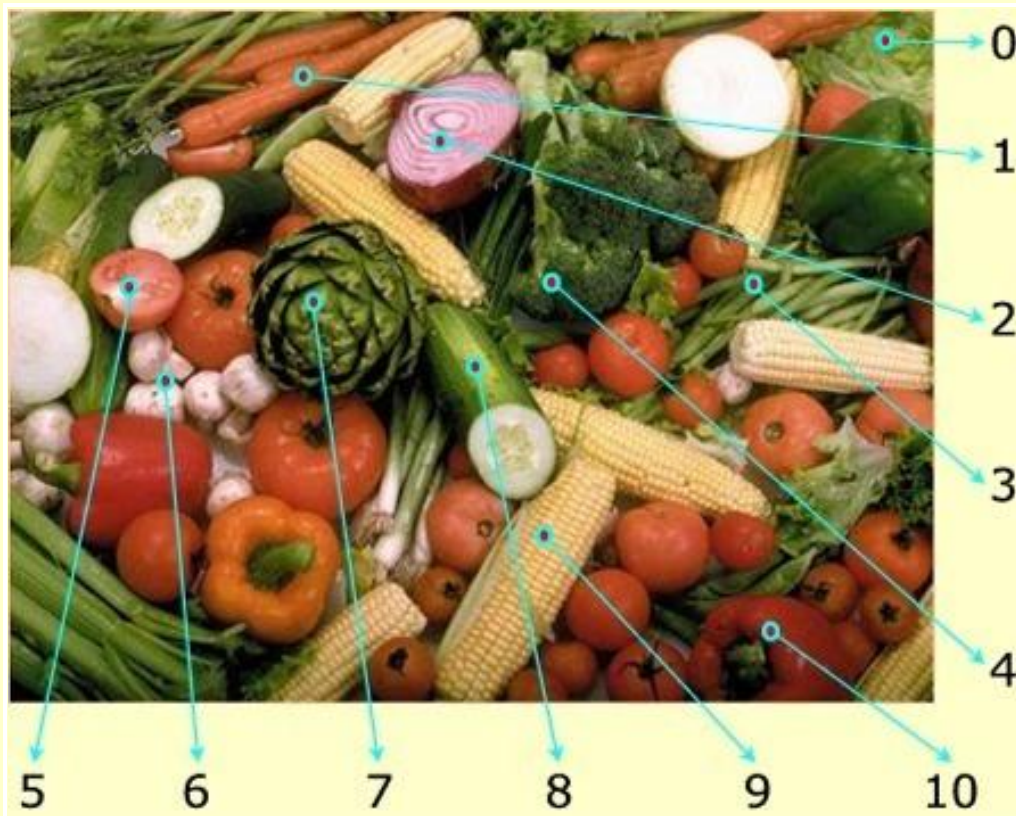
Unit Seven

Agricultural Marketing

Vocabulary

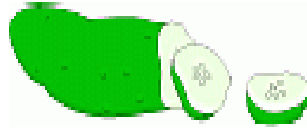
7.1 Match the words with the numbers below.

(bean, carrot, cucumber, mushroom, artichoke, broccoli, onion, red pepper, tomato, corn)



7.2 Fill in the blanks with the names of the following vegetables.

























Notice the difference between (a) and (b) below:

a. produce (n) = fresh fruits and vegetable grown for the market

b. produce (v) = cultivate by growing, often involving improvements by means of agricultural techniques

Speaking

Deliveries and Suppliers

7.3 Share the following conversation with your classmate.

Mustafa: Abdurrahman, can I talk with you for a moment?

Abdurrahman: What can I do for you Mustafa?

Mustafa: I'm concerned about the delays we're experiencing with some of our suppliers.

Abdurrahman: We're doing everything to get back on schedule.

Mustafa: Could you give me an approximate timeline?

Abdurrahman: A number of deliveries are arriving tomorrow. Unfortunately, this time of year is often troublesome.

Mustafa: That's not good. We can't make excuses to our clients. Are all shipments affected?

Abdurrahman: No, but it is summer and some companies are cutting back until September.

Mustafa: Where are most of our suppliers located?

Abdurrahman: Well, most of them are in China, but there are a few in California.

Mustafa: How does that affect deliveries?

Abdurrahman: Well, there are weather delays and shipment delays due to reduced production. Sometimes, larger packages are delayed because of a bottleneck at the distribution point.

Mustafa: Is there any way around these delays?

Abdurrahman: Well, we often work with other delivery services for our most urgent shipping. They guarantee door-to-door deliveries within 48 hours.

Mustafa: Are they expensive?

Abdurrahman: Yes, they're very expensive at that cuts into our bottom line.

7.4 Choose the suitable answer.

1. What is Abdurrahman concerned about?
 - a. delaying shipments to suppliers .
 - b. experiencing delays from suppliers .
 - c. being back on schedule.
2. What are Mustafa and Abdurrahman doing?
 - a. trying to get back on schedule .
 - b. not worrying about the problem .
 - c. taking legal action against the suppliers .

3. Which excuse does Mustafa give?
 - a. The suppliers are unreliable.
 - b. They changed suppliers.
 - c. The time this year is often troublesome.
4. Where are most of the suppliers located?
 - a. in California .
 - b. in Japan .
 - c. in China .
5. Which of the following is not a reason given for the delays?
 - a. weather delays
 - b. reduced production
 - c. payment difficulties
6. How do Mustafa and Abdurrahman sometimes resolve these problems?
 - a. by changing suppliers .
 - b. by using delivery services .
 - c. by manufacturing their own products .

Reading

7.5 Agricultural Marketing



The term 'agricultural marketing' is composed of two words: 'agriculture' and 'marketing'. Agriculture means activities aimed at the use of natural resources for human welfare, and marketing connotes a series of activities involved in moving the goods from the point of production to the point of consumption. Agricultural marketing includes marketing functions, agencies, channels, efficiency and cost, price spread and market integration, producers surplus, etc. The agricultural marketing system is a link between the farm and the non-farm sectors.

Agricultural marketing involves buying and selling of agricultural produce. In modern times, marketing of agricultural produce is different from that of old days. In modern marketing, agricultural produce has to undergo a series of transfers or exchanges from one hand to another before it finally reaches the consumer.

The objectives of an efficient marketing system are:

1. to enable the primary producers to get the best possible returns,
2. to provide facilities for lifting all produce to sell at an incentive price,
3. to reduce the price difference between the primary producer and ultimate consumer, and
4. to make available all products of farm origin to consumers at reasonable price without impairing on the quality of the produce.

Activity:

7.6 Complete the following statements with information from the text above.

1. Agriculture means
2. Marketing refers to
3. Agricultural marketing involves
4. The objectives of an efficient marketing system are

Pronunciation

7.7 Diphthongs

Try to pronounce the following words.

rain kite toys coat cow ear chair

In each of these words, there is a diphthong sound which refers to two adjacent **vowel** sounds occurring within the same **syllable**. These eight diphthong sounds are found in English:

1. /eɪ/	<i>face, day, break</i>
2. /aɪ/	<i>price, high, try</i>
3. /ɔɪ/	<i>choice, boy, noise</i>
4. /əʊ/	<i>goat, show, no</i>
5. /aʊ/	<i>mouth, now, sound</i>
6. /iə/	<i>near, here, dear</i>
7. /eə/	<i>square, fair, various</i>
8. /ʊə/	<i>poor, jury, cure</i>

Activities:

7.8 Write the word that matches the phonetic transcription.

/dei/ ----- /nain/ ----- /boi/ ----- /nəʊ/ -----
/nau/ ----- /hiə/ ----- /heə/ ----- /duə/ -----

7.9 Give other words that have diphthong sounds.

Grammar

7.10 Clauses of Contrast

Read the following examples:

Though he is poor, he is honest.

Although he is poor in English, he does not work hard.

However steep the hill may be, we will be able to climb it.

Strong **as** he was, he could not beat his opponent.

Whatever his intentions are, he welcome us cordially.

He is poor; **all the same**, he is content with his lot.

He is hard up; **at the same time**, he is generous.

Even if he is wrong, you shall not treat him like that.

He is very rich; **nonetheless**, he is miserly.

Contrast may be expressed in several ways. For example, we can use **though** or **although**. Other words or expressions that can be used to express contrast include **notwithstanding**, **as**, **however**, **whatever**, **even if** and **at the same time**.

Activities:

7.11 Complete the following sentences by matching each beginning with the correct ending.

List A	List B
1. Although she didn't study hard,	he didn't go to bed, though.
2. In spite of being new,	we didn't miss the train.
3. They gave me the job,	he doesn't eat much.
4. He was really tired,	in spite of his illness.
5. Although the taxi was late,	he opened all the windows.
6. Even though he seems a good person,	in spite of the rain.
7. He went on working,	she passed the exam.
8. Despite the cold,	although my English was bad.
9. Despite being very fat,	I don't like him very much.
10. We decided to go out	her house looks quite old.

7.12 Choose the correct conjunction.

1. I bought the CD you recommended, **however** / **in spite of** I didn't like it.
2. **Although** / **In spite of** we told her the truth, she didn't believe us.
3. **Although** / **In spite of** their poor game, they won the match.
4. The winner managed to overcome his rival **in spite** / **although** he was stronger.
5. He kept using cars **although** / **however** it caused much pollution.

6. **However / Despite** feeling cold, they didn't turn on the heater.

7. **Despite / Although** having all the necessary books, he doesn't use them for studying.

7.13 Use the appropriate conjunction: *although, however, in spite of/despite.*

1. ----- she works a lot, she doesn't deserve a raise.

2. ----- not being prepared for the test, she had to take it.

3. She was ill, ----- she had to go to school.

4. Everybody knows he is a liar; -----, he has not been dismissed yet.

5. ----- it was sunny, there was nobody at the beach.

6. Thomas will do the job ----- he is on holiday.

7. ----- arriving later, he finished work earlier than the others.

8. The new waitress seems honest and diligent, ----- the boss doesn't like her.

7.14 Rewrite as follows.

1. Muna was not feeling well, however she went to school.

Although -----

In spite of -----

2. Tariq was seriously advised by his teacher, but he insisted on disturbing the class.

Although -----

In spite of -----

3. I tried several times, but I couldn't find a taxi.

Although -----

In spite of -----

4. Although he felt tired, he stayed up to keep us company.

Despite -----

5. They didn't have much time, however they came to visit us.

In spite of -----

6. He is too old, but he still does his gymnastic every morning.

Although -----

In spite of -----

Green Fingers

7.15 The Farmer's Market

Read the following tips of advice and then summarize what you comprehend.

Many people come to the farmer's market to buy vegetables. You can sell a lot of vegetables, so you need to bring enough vegetables. You have to look for a market that is:

- 1- in a busy area
- 2- well known by a lot of customers
- 3- clean and well managed

Here are some ideas to help make your booth a successful display:

1. Make the area around your booth attractive
2. Customers like a large display to choose from. Put as many of your vegetables out as you can while still keeping them fresh in shade.
3. Put your crops up on shelves, not on the ground.
4. Put each of your crops in a group to make large blocks of color. Green vegetables, especially, catch the customer's eye.
5. Make signs for all your crops with each name and price.

Now state whether the following grocery display satisfies each of the above ideas.



Writing

7.16 Answer the following questions in one paragraph.

1. What is the best time of marketing the produce?
2. Where can a farmer sell his produce as a whole?
3. How can he transport his farm products to markets?
4. What makes his produce quickly bought?
5. What kinds of farm supplies would he buy in return?

Unit Eight

Revision Two

1. Look at the following chart and then explain orally what it represents.

	Subject	object	genitive
people	who	who/whom	whose
things	which	which	whose
Places		where	

2. Fill in the blanks with so or such:

1. The weather was cold that we cancelled the trip.
2. The book is good that I can't put it down.
3. There was a long queue that we couldn't get into the cinema on time.
4. There was heavy traffic that we arrived late.
5. It was a great book that I read it twice.
6. He's got many friends that he's always out.

3. Combine the following sentences using so...that:

Example:

The exam was hard. I'm sure I won't pass.

The exam was so hard that I'm sure I won't pass.

1. It was very cold. We had to stop the game.
2. It was
3. He is terribly rich. He can afford to buy almost anything.
4. He is
5. The speech was really long. Everybody was bored.
6. The speech was

4. Combine the following sentences using such...that:

Example:

I'm having a wonderful time. I don't want to leave.

I'm having such a wonderful time that I don't want to leave.

1. Swimming was a good experience. I decided to do it again.
Swimming was
2. She's got an excellent English accent. Everybody thinks she is British.
She's got.....
3. Thailand has got beautiful temples. Millions of tourists go there every year.
Thailand has got

5. Transform the sentences in the way shown below:

Example:

The film was so boring that we left early.

It was such a boring film that we left early.

1. This book is so good that I can't put it down.

This is such that I can't put it down.

2. He eats such a lot of food that he is getting really fat.

He eats so that he is getting really fat.

3. She buys such a large amount of magazines that she cannot read them all.

She buys so that she cannot read them all.

4. Nadal is such a good tennis player that he wins all his matches.

Nadal plays tennis so that he wins all his matches.

5. I haven't played chess for so long that I can't remember how to do it.

I haven't played chess for such that I can't remember how to do it.

6. Join each pair of the following sentences with the word given below.

1. She knew how to cook. She said she didn't.

Although

2. Anwar arrived two hours late. She didn't apologize.

Despite

3. Anmar doesn't need any money. He still works.

Although

4. My uncle had money. He didn't buy the kids ice-creams.

In spite of

5. Sam had an accident due to speed. He didn't give up his habit.

Though

6. Mom needed help. She didn't ask for any.

Although

7. It was 3 am. The girls went on chatting.

Although

8. Abdul Hadi had fallen off his bike twice. He won the race.

Although

9. Taha Hussein was blind. He finished university in the first place.

Despite

Mini Dictionary

Unit One

poultry	دواجن	refers to	يشير إلى	term	مصطلح
domesticate	يدجن	fowls	طيور	raise	يربي
geese	الإوز	ducks	بط	ostriches	نعام
game birds	طيور الصيد	emus	أمو: طائر يشبه النعام	wild	بري
recently	حديثاً، مؤخراً	prehistoric	ما قبل التاريخ	introduce	استقدم
Spanish	أسباني	explorer	مكتشف	integrated	متكاملة
consumption	استهلاك	item	فقرة	litter	فضلات
hulls	قشور الرز	flock	قطيع	slaughter	يذبح
breed	يكثر، نسل	promising	واعد	exception	استثناء
prediction	تنبؤ	realize	يدرك	prominent	واضح
mechanization	مكننة	nutrition	تغذية		

Unit Two

goldfish	سمكة زينة	breeding	تربية، تناسل، تفقيس	net	شبكة
fins	زعانف	fish-bait	طعم لاصطياد السمك	aquarium	حوض سمك
digestive	هضمي : متعلق بالهضم	mixture	خليط	dried-food	طعام مجفف
diet	حمية غذائية	upside-down	مقلوبا " رأسا " على عقب	disorder	اعتلال : اضطراب
fish-flakes	رقائق السمك	varied	متنوع	normal	طبيعي
owner	مالك	feed	يطعم	man-made	من صنع الإنسان
dry food	طعام مجفف	bulking	يعظم : يضخم	minerals	أملاح معدنية
fiber	الياف	exclusively	حصريا	expect	يتوقع
constipation	امساك	hang		shrimp	الروبيان
tract	قناة	depend	يعتمد على	afford	يتحمل كلفة
close to	قريبا " من	friendly	ودود	prefer	يفضل
spawn	يفرخ	female	أنثى	parent	والد
remove	يزيل	breeders	مربوا الأسماك	gain	يحصل على
fresh water	الماء العذب	shoal	يحتشد	forage	يبحث عن الطعام
adhere to	يلتصق ب	induce	يسبب : يحدث	temperature	حرارة
dropped	تقل : تنزل	mimic	يقلد	wild	البرية
worms	ديدان	male	ذكر	increase	يزداد
chase	يطارد	Non-aggressive	سلمي: غير عدواني	last	يدوم
intensify	يزداد كثافة او حدة : يقوي	gyrate	يدور حول نقطة أو محور	tiny	صغير
fertilize	يخصب : يلقح	sticky	لزج	threads	خيوط
brine	مالح : مياه مالحة	hide	يختبأ	aggressive	عدواني
add	يضيف	over	ينتهي	unsociable	غير اجتماعي
barn	حظيرة	mend	يصلح	milk	يحلب
train	يدرّب	trainer	مدرب	dig	يحفر
abbreviation	مختصر	pot	إناء	approaches	طرق

Unit Three

soil	تربة	fertilizers	أسمدة	composed of	يتكون من
nutrients	مواد مغذية	leaf	ورق نبات	mixture	مزيج
improve	يحسن	aspect	سمة	macronutrients	مواد مغذية كبيرة
micronutrients	مواد مغذية دقيقة	obtain	يحصل على	solely	لمجرد
growth	نمو	testing	إختبار	amending	يحسن
feeding	تغذية	clay	طين	silt	طمي، غرين
sand	رمل	efficiently	بكفاءة	surface	سطح
roots	جذور	differentiate	يميز	ground	أرض، قاع
tends to	يتجه إلى	destination	غاية	termination	نهاية
specific	محدد، خاص	refers to	يشير إلى	quality	نوعية
impression	إنطباع	landscape	منظر طبيعي	boundaries	حدود
scenery	مشهد جميل	sailor	بحار، ملاح	spacecraft	سفينة فضائية
productive	منتج	affect	يؤثر في	promote	يرقي
common	شائع	provide with	يزود بـ	applied to	تنطبق على
amendments	تحسينات	constituents	عناصر	absorb	يمتص
regular	منتظم	additions of	إضافات	constantly	باستمرار
digging	حفر	tilling	حرث	leaching	ترشيح
compost	خليط	manure	سماد، يسمد	decaying	تعفن
environment	بيئة	flourish	يتأنق	germination	تنشئة
reasonable	معقول	amounts	كميات	purplish	إرجواني
deficiency	عجز	stunted	معوق النمو	stocky	قصير
optimum	الأفضل	speeds up	يسرع	required for	مطلوب لـ

Unit Five

particular	خاص	purpose	الغرض	increase	يزداد
screen	شاشة	store	يخزن، مخزن	arrange	يرتب
operate	يشغل	long-lasting	يدوم طويلا	fragile	سريع الكسر
easy-to-use	سهل الاستخدام	convenient	ملائم	useful	مفيد
comfortable	مريح	reliable	موثوق	inexpensive	رخيص
up-to-date	حديث	out-of-date	قديم	efficient	فعال
spring	يقفز	impatient	غير صبور	obsessed	يقلق
devices	وسائل	encourage	يشجع	high-tech	عالي التقنية
equipment	معدات	popular	شعبي	interactive	تفاعلي
in combination with	سوية مع	can be viewed	يمكن مشاهدته	applications	تطبيقات
transparencies	شفافيات	grabs the attention	يخطف الانتباه	documentaries	وثائق
presentation	تقديم	contribute to	يسهم ب	increased retention	تذكر متنامي
boring	ممل	exciting	مثير، يثير	beneficial	نافع
expanding	توسيع	access	دنو، ولوج	advanced	متقدم
syllabus	منهج	participation	مشاركة	understanding	فهم
emergency	طارئ	conference	مؤتمر	attic	بيتونه
available	متوفر	make use	يستخدم	take care of	يهتم ب
enrich	يقني، يخصب				

Unit Six

dairy	ألبان	products	منتجات	fermentation	تخمير
state	حالة	variety	تنوع	undergo	يتحمل
organic	عضوي	definitely	بالتأكيد	digestible	سهل الهضم
homogenized	متجانسة	coagulate	يتخثر	collection	مجموعة
additives	مطيبات	breastfed	الصغار الرضع	cheddars	أجبان صفراء
coagulate	يثخن	cuisine	نوع من الطبخ	curds	روائب
herbs	أعشاب	drain	يصفي	flavour	نكهه
luxury	رفاهية	mammals	الثدييات	lactic acid	حامض
nutrition	تغذية	palate	طعم	mozzarella	نوع من الأجبان
plant	معمل، مصنع	savoury	رائحة نفاذة	periodic	منتظم، على فترات
soak	ينقع	sour	لاذع	skimmed milk	بيض مخفوق
variety	تنوع	whey	مصل اللبن	texture	لمس
yoghourt	لبن			yield	ينتج، يؤدي إلى

Unit Seven

agricultural	زراعي	marketing	تسويق	bean	فاصوليا، لوبيا
carrot	جزر	cucumber	خيار	mushroom	نبات الفطر
artichoke	خرشف	broccoli	القنبيط	onion	بصل
red pepper	فلفل أحمر	corn	نبات الذرة	improvements	تحسينات
cultivate	يصلح، يحرث	involve	يتضمن	delivery	تسليم البضائع
suppliers	مجهزون	by means of	بواسطة	techniques	تقنيات
I'm concerned about	أنا قلق بشأن	delays	تاخيرات	we're experiencing	نحن نواجه
approximate timeline	الموعد التقريبي	unfortunately	لسوء الحظ	troublesome	شاق
cutting back	نقص	bottleneck	ازدحام	distribution point	نقطة التوزيع
composed of	تتألف من	aim at	تهدف إلى	resources	مصادر
connotes	يتضمن معنى	involved in	مشاركة في	consumption	استهلاك
agencies	وكالات	channels	قنوات	efficiency	كفاءة
cost	كلفة	market integration	تكامل السوق	surplus	الفائض
undergo	يتحمل	exchanges	تبادلات	returns	عائدات
facilities	تسهيلات	incentive price	أسعار تنافسية	ultimate consumer	المستهلك الأخير
to make available	لتوفير	reasonable price	سعر معقول	without impairing on	بدون التأثير على
though	برغم ذلك	although	برغم أن	however	مع ذلك
whatever	مهما يكن	miserly	بخيل	at the same time	بنفس الوقت
even if	ولو أنه	nonetheless	برغم ذلك	notwithstanding	بالرغم من
content with his lot	مقتنع بقسمته	overcome his rival	يتغلب على خصمه	deserve a raise	يستحق علاوة
dismiss	ينصرف	diligent	مجتهد	disturb	يزعج