UNIT 3

Advances in Science and Technology

Ahmed: What does **OFWT** stand for?

Nabila: It stands for Observe, Form, Watch and Test.

Ahmed: I think these are the four steps scientists normally follow in their work, aren't they?

Nabila: Yes, they are.

Vocabulary: (p48) benefits = advantages events = happenings on your own = independently pseudo = false, fake, not genuine

One of the advantages of being scientifically literate is that you can ask and find answers to questions derived from curiosity about everyday happenings. Another advantage is that you can understand how the world works and think critically and independently. A third one is that scientific literacy allows us to identify pseudo scientific claims.

Yousra: In your opinion, which is the most significant **breakthrough** in technology? John: For me, the internet is the most significant one. I really can't do without it. breakthrough = advances

EXPRESSING PURPOSE

Structure

to + infinitive Souad goes jogging every morning to keep fit and healthy.

for + noun Akram met Mr. Johnson **for an interview**.

for +ing
in order to + infinitive
so that + modal

Posters and brochures are used <u>for</u> interviewing people to study.

Adults go to literacy classes **in order to** <u>learn</u> how to read and write.

He trains very hard **so that** he <u>can</u> be ready for the next Olympic Games.

so as to + infinitive She left home early **so as to** be on time for the interview.

We should all be scientifically literate so as to identify pseudo scientific claims.

Salma learnt Italian so as to get a better job.

Hicham likes to meet foreigners so as to practise his languages.

Journalists should be tactful so as not to offend readers.

They left home early **in order not to** miss the train.

Amina works very hard so as not to fail her exams.

I took off my shoes and walked upstairs so as not to wake my parents.

When I have a lot of homework, I sometimes do it immediately in order not to forget it.

He went out for a walk in order not to get sleepy.

Could you repeat the message slowly so that I can understand.

Other ways of expressing purpose:

An investigation is carried out for the purpose of determining the cause of the accident.

Research is being done with the aim of developing a cure to bird flu.

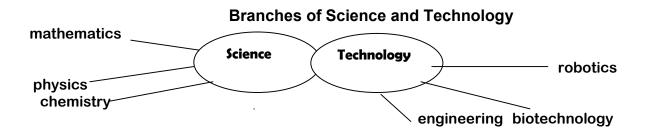
The association is raising money with the objective of building a street children center.

He went to the clinic with the intention of doing a general check-up.

<u>Vocabulary</u>: (p50) fundamental: important headways: progress, strides

Scientists are making headways in many technological fields such as biotechnology and cellular phones

technology.



Technology is applied science. It focuses on designing tools and systems for practical purposes **whereas** science focuses on general knowledge by investigating natural phenomena.

The Simple Past Tense: (review)

When I **returned** home from work, I **decided** to watch TV. I **took** the remote controller and **zapped** to my favourite channel. But, the electricity **went** off a short time later. I **took** my mobile phone and **called** my friend to help me fix the problem. He **was** busy on his computer sending and replying to e-mails or chatting. I **couldn't** use the vacuum cleaner to clean the carpet, so I **had** to take a brush and do it manually. I **couldn't** use the microwave oven to heat my dinner and **was obliged** to have cold. After dinner, I **couldn't** use the dishwasher and again, with my own hands, I **washed** all the dishes.

Making and responding to complaints about behavior

COMPLAINING	APOLOGIZING	ACCEPTING/REFUSING APOLOGIES
Sorry to say it, but you	I do apologise.	It's O.K
Enough is enough!	Sorry about that.	Never mind.
I'm not satisfied with the way you	I'm very sorry.	It's not important.
I've been patient long enough, but	I'm awfully sorry.	Don't worry about it.
I just don't know how to say it, but	I'm terribly sorry.	I see no reason why I should.
I'm afraid I have to make a serious complaint.	Sorry to hear that.	
Oh. I've got a bit of a problem here; you see	Oh, dear. I'm really sorry.	
Sorry to bother you, but	I just don't know what to say.	
Look, I'm sorry to trouble you, but	I'm sorry. I didn't realize.	
	I can't tell you how sorry I am.	

Rejecting a complaint	
-Well, I'm afraid there's nothing we can do about it actuallyI'm afraid there isn't much we can do about it.	

*Susan: I wish you wouldn't make so much noise when I'm busy working.

Tom: Oh, I'm terribly sorry! I didn't realize you were working.

*Hamid: I'm sorry to say this, but I really didn't like the way you talked to your mother.

John: Oh, I'm awfully sorry. I didn't realize I was so rude.

*Barbara: I was waiting for you in the coffee shop but you didn't come.

Steve: I'm awfully sorry, darling. I really forgot it.

Barbara: **Don't worry about it**. Steve: Another time perhaps.

At a hotel

*A: Excuse me, but there is a problem with the heating in my room.

B: Sorry to hear that – I'll get someone to check it for you.

*Man: I'm afraid I have to make a complaint. Some money has gone missing from my room.

Receptionist: We're terribly sorry, sir.

Expressing Certainty and Uncertainty (p56)

EXPRESSIONS OF CERTAINTY	EXPRESSIONS OF UNCERTAINTY
undoubtedly – crystal clear – no one can deny –	may -could - might - unlikely - probably - I doubt
won't be – are sure – certainly – must be	if It's improbable thatI think /guess etc

Expressing certainty:

Here are some phrases you can when you are sure that something will not happen in the future. For example, to the question "Do you think that scientists will find a cure to AIDS in the near future?", you may respond as follows:

V	I'm	absolutely sure quite sure certain positive	they will.
Yes	definitely. certainly. of course.		

NI-	I'm	absolutely sure quite sure certain positive	they won't.
No,	definitely not. certainly not. absolutely not.		

Expressing uncertainty:

When you are not sure whether something will happen in the future, you can use these useful phrases:

Well,	it's possible. there might be. it could happen. it's not possible.	t be.	but	I wouldn't like to say for certain. I'm not really sure. I doubt it. I have my doubts. it's doubtful. it's highly unlikely.
	you never know of course. no one can say for certain.			it's improbable.

Functional meaning of modals:

must: certainty, obligation, (100% necessary to do something.) mustn't: prohibition (100% necessary not to do something.) may: possibility – probability (it's about 50% possible)

might: possibility (less than 50% possible)

needn't: (lack of necessity) should: advice (it's a good idea)

shouldn't: (it's a bad idea)

can't: impossibility

When I leave school, I may go to a university of science or I can even get a job at a laboratory.

This **must be** the laboratory – there are instruments and products of scientific research.

I'll probably come back to see the manager next week if I am free.

I think / guess they are going to offer me a job as I have the ideal profile.

They will certainly interview me about my past experience as they usually do.

I guess / think their wages are high and their technology is advanced.

I certainly will enjoy myself working in this laboratory; I am fond of science and technology.

Computers are likely to replace teachers in a few years' time.

It's positive that the problem of unemployment will be solved if drastic measures are taken.

I bet the rate of illiteracy in our country will decrease in the next decade.

We needn't raise taxes. We have made a lot of money out of phosphates sales this year.

PAST TENSE: simple and continuous (review)

I was having lunch in a small restaurant near the office. She was sitting at a table near the window. I wondered why she was looking at me. Did she know me? I didn't think I had ever seen her before.

Suddenly she **stood** up and **walked** slowly towards me. I still remember my feeling exactly. I **wanted** to run away, but I **knew** I **couldn't**. She **stopped** by my table and **smiled** down at me. She **had** on a purple dress. I think it **had** a flower pattern and she **was** amazingly beautiful. 'Excuse me,' she **said**. 'Have you got a pen?'

Phrasal verbs (pages 56,57)

bump up: increase

turn down: (1) refuse an offer, reject an application. She turned down the new job because she

didn't want to move.

turn down: (2) lower the volume or intensity of a TV, radio, or other machine. → I'm studying!

Please turn down the TV.

put down: insult, make someone feel stupid

ease off: reduce pressure

look forward to: be excited about the future

Phrasal verbs 2 (p58)

progress \rightarrow along, behind, through, on communication \rightarrow across, through, over, between relationships \rightarrow together, up getting involved in an activity \rightarrow in, into ignoring problems \rightarrow around, aside, off

My project work is **coming along** nicely.

I've fallen behind with my work.

We sailed through our exams. We learnt a lot before the exams.

Just keep on. You have been doing a good job.

Let's all join in when I sing the Moroccan National Anthem.

When I can get into my work, I really enjoy it.

I can't work round this problem.

We need to put aside our differences.

I laughed off his criticism.

We got together in our first year at this school.

The whole group rallied together to protest against child labour.

Two students from each class pair up to produce a short play.

I don't seem to be able to **get through** to them.

The message came over clearly.

Something interesting passed between them.

She eased off the accelerator to let the car slow down.

Reading: (pages 60,61)

A: What did Graham Bell invent?

B: He invented the telephone.

To do any job well requires hard work, **perseverance** and the ability to focus on your aims without being distracted.

perseverance: determination

Abdellah: What would you like to be in the future?

Habiba: I'd like to be a laboratorial.

CONDITIONAL TYPE 3 + WISHES

Rule: Conditional type 3

FORM	USE	EXAMPLE
If + past perfect + would have + past participle	To describe hypothetical conditions in the past and the results that the speaker imagines were possible	If the leaders had been wiser, the war wouldn't have broken out.

Rule: Wishes

FORM	USE	EXAMPLE
I wish / wished / If only + past participle	To express past wishes	My grandfather wishes he had had a cell phone in his childhood.
	To express regret	If only there hadn't been many victims in the second world war.

Text: If I had time, I would have done it

"My brother Jamal won a national award for his latest scientific invention. We celebrated it last night. A lot of people came. We had a lot of food. Unfortunately, I ate so much that I had a stomach-ache. I couldn't get up in the morning because I didn't sleep early. I didn't go to school. I missed several lessons. I didn't do the test. The teacher gave me a bad mark because I forgot to do my homework."

If Jamal hadn't eaten a lot, he wouldn't have had a stomach-ache.

If he had slept early, he could have got up in the morning.

He wouldn't have missed several lessons if he had gone to school.

If he had gone to school, he would have done the test.

The teacher **wouldn't have given** him a bad mark **if** he **had done** the homework.

I wish I hadn't eaten so much last night. I felt terrible then.

If I hadn't eaten so much last night, I wouldn't have felt terrible.

I wish my father **had bought** me computer last year. I could be a programmer then.

If my father had bought me a computer last year, I could have been a programmer then.

Health authorities wish people got immunized. They could improve their health then.

People could have improved their health if they had got immunized.

Nabil **wishes** his satellite receiver **hadn't stopped** working. He could watch the live conference about the nuclear danger on the environment.

Nabil **could have watched** the live conference about the nuclear danger on the environment **if** his satellite receiver **hadn't stopped** working.

Dialogue:

Student: Could you give me an idea about biotechnology, please?

Teacher: Yes, of course. Biotechnology (or bioengineering) **refers to** any change of an organism's genes for practical purposes like disease control, better crops, cloning of plants and animals,... Biotechnology **is** closely **related to** genetics which **can be defined as** the scientific study of genes, i.e. variations in the characteristics – resemblances and differences – of organisms and how these characteristics are inherited from generation to generation. Modern genetics is as much concerned with the organism level of this process as it is with cellular and molecular levels.

Thanks to biotechnology, farmers are able **to get rid of** unwanted characteristics of plants and keep the ones that they desire. One example of these is the new type of potatoes that resist invasion by dangerous insects.

Advances in genetic engineering **have made it possible** to decrease the need for fertilizers by breeding plants that produce their own form of efficient fertilizers... **However**, there are some negative **side effects** that must be worked out. **An example of this**, is a decline in the quality of taste, which would definitely outweigh the benefits of a long shelf life or resistance to insects!

Student: Is it used to control some of the human diseases?

Teacher: Yes. The use of genetic engineering in humans promises some extraordinary benefits, one of which is

cure and prevention of many types of diseases that come from faulty genes.

Student: Thank you very much, sir.

Teacher: Not at all.

Expressions of concession and addition:

Link your Sentences

When diplomats met to form the United Nations in 1945, one of the things they discussed was settling up a global health organizations. As a result, World Health Organisation was set up on 7 April 1948- a date we now celebrate every year as World Health Day. WHO is responsible for providing leadership on global health matters. It also accounts for shaping the health research agenda such as setting norms and standards, providing technical support to countries, monitoring and assessing health trends. Since health is a shared responsibility, WHO's job is to provide equitable access to essential care and collective defence against transnational threats. In brief WHO's greatest concern must always rest with disadvantaged and vulnerable groups; that is to say, the groups who often live in remote rural areas or shanty towns and have little political voice.

<u>Although</u> the school is far away, Zahra attends all afternoon classes.

Although he is rich, Adil does not give alms to the poor.

<u>Although</u> international organizations work hard, they can't solve all the problems.

Although globalization has a positive impact on Moroccan women's situation, there is still fear of losing local tradition.

Although it was raining, we went out.

Though the school is very far from her village, Fatima insists on attending all her lessons. **In spite of** his wealth, Adil does not give alms to the poor.

In spite of the fact that he is wealthy, Adil does not give alms to the poor.

She gets higher marks despite studying in difficult conditions.

In spite of being illiterate, some women use the magazine's pictures as resources for dressmaking.

In spite of the rain, we went out.

In spite of the fact that it was raining, we went out.

Despite spending much time at work, working women are able to perfectly manage their households.

It's true that a lot of women and girls have access to education. **Yet**, their situation is far from perfect.

Along with being busy with his professional career, Rachid is a good father.

Zahra has got an award from the UNESCO <u>because</u> she was the first to fight illiteracy in her village.

Her parents were illiterate. <u>Consequently</u>, they didn't send her to school when she was young. Fouad is **not only** good at volleyball **but** he is **also** a fantastic handball player.

Helen Keller was a woman of luminous intelligence, high ambition and great accomplishment. **In addition**, she devoted her life to helping others.

Moroccan women need education as well as health care.

Women have demonstrated considerable leadership in community, **as well as** in public office. **However**, they still suffer from negative stereotyping.

UNESCO works to promote fields of interest <u>such as</u> education, science, and culture.

Greenpeace works to preserve the environment. **Besides**, it is an non-profit organization.

Some Moroccan women are illiterate. However, they benefit from pictures in magazines.

Educated women have a big influence on society. **Moreover**, they contribute to the welfare of their families.

Educated women look after their houses. They also work outside their homes.