

## Unit 1

### Page 9

1. on the seabed in Greece.
2. One such model was so large that it needed a room that was 167 square metres to accommodate it.
3. In 1958 CE, the computer chip was developed. The first computer game was produced in 1962 CE, followed two years later by the computer mouse. In 1971 CE, the floppy disk was invented. The first PC (personal computer) was produced in 1974 CE.

### Page 10

1. In 1958 CE, the computer chip was developed. The first computer game was produced in 1962 CE, followed two years later by the computer mouse.
2. from how we travel to how our homes are heated.
3. In 1971 CE, the floppy disk was invented, which mean that information could be shared between computers.
4. metal machine.
5. programs.
6. open answer.
7. open answer.

### Page 12

1. -Internet connects objects and these days, computers often communicate with each other.  
- for example, your TV automatically downloads your favourite TV show, or your 'sat nav' system tells you where you are.
2. communicate.
3. your sofa will tell you when you need to stand up and get some exercise!
4. worried people.
5. excite people: They say that our lives will be easier and more comfortable.  
Worried people: They want to keep control of their own lives and their own things. In addition, they wonder what would happen if criminals managed to access their passwords and security settings. The dream could easily become a nightmare!
6. open answer.
7. open answer.

Page 13

1. a / 2. C / 3. B / 4. D / 5. D / 6. B / 7. A / 8. D / 9. C

Page 14

1. c / 2. A / 3. A

1. b / 2. C

Page 15

1. d / 2. C / 3. C / 4. B

Page 16

1. d / 2. A / 3. B

1. b / 2. D / 3. C

Page 17

1. d / 2. C / 3. A / 4. B

1. d / 2. C / 3. A

Page 18

1. c / 2. B / 3. D / 4. C / 5. D / 6. C

Page 22

Said / needed / was / has been / have / carry / wear / will attach

Page 23

has been studying since 5:00 p.m.

1. Tala had taken several courses before she joined the club.

2. Before Rashed ate lunch, he had finished his work.

3. D                      4. B

Page 24

1. A new lesson is given every day (by the teacher).

2. The letter was written last night.

3. The operation has been made successfully.

4. Enough money has been saved to fund our university courses.

5. My laptop is usually discharged by Safwan.
6. All the food had been eaten.
7. The house is being painted.
8. Children's bicycles mustn't be left in the driveway.
9. A

### Page 25

#### Exercise 1

1. a / 2. D / 3. A / 4. B / 5. C / 6. A / 7. A

#### Exercise 2

have been using / were invented / bought / was produced / had sold / are sold / is estimated / will expand / are buying / will be

### page 26

Rami's computer might be broken down.

You mustn't smoke here.

You don't have to come.

1. c / 2. B / 3. C / 4. C

Rashed is going to study engineering at university.

### Page 27

1. Sami had his computer fixed.
2. My father has his old car repaired.
3. B
1. a / 2. C / 3. B

### Page 28

#### Exercise 1

1. Issa's phone might be broken.
2. My missing laptop has been found.
3. I had my computer fixed.
4. You don't have to switch off the screen.

5. You mustn't touch this machine.
6. If I were you, I would send a text message.
7. If you press that button, the picture moves.
8. Mohammad had checked his emails before he started work.

### Page 30

- 1- Maha had to visit Amra Castle with them.
- 2- she was the richest woman in town.
- 3- Children went to the parks with their parents.
- 4- he wanted to go home.
- 5- they didn't like watching TV.
- 6- she had waited for him till midnight.
- 7- he was going to fire all of them.
- 8- he had done his best.
- 9- he had to finish his work before he could play.
- 10- his father would get better with that medicine.
- 11- he didn't think he would be able to go with her the day after.
- 12- Salwa had been a very good teacher.
- 13- he had arrived late the night before.
- 14- He hadn't visited them the day before.
- 15- she wore her new dress.
- 16- he was writing a letter to his brother.
- 17- he had done the work well the day before.
18. D

### Page 31

Farida said that their teacher had told them about the dangers of the internet the day before. She had to write an essay about it that night. She thought she was going to need some help.

Saleem said that they had to give a talk about the advantages and disadvantages of the internet the week after, so he would need to prepare it that week.

1. she had some questions for her.
2. he had lived in Amman for six years.
3. the day before, she had bought all the ingredients for a chocolate cake.
4. he had really enjoyed the book that he had finished that morning.
5. his favourite subject that year was chemistry.

## Unit 2

### Page 42

1. These days, many family doctors study complementary medicine alongside conventional treatments, and many complementary medicine consultants also have medical degrees.
2. insomnia, arthritis and migraines, anxiety, depression and certain allergies.
3. complementary medicine.
4. Most doctors used to be sceptical about the validity of homoeopathy, acupuncture and other forms of complementary medicine.
5. immunisation.
6. open answer.
7. open answer.

True or False

1. F / 2. T / 3. F / 4. F

### Page 45

1. your blood pressure is raised and you can suffer from headaches, sleep problems and digestive problems.
  2. Some health professionals believe that bad lifestyle choices, such as smoking or lack of exercise, are the reason for heart disease and other illnesses, and not an individual's attitude.
  3. open answer.
  4. open answer.
1. your blood pressure is raised and you can suffer from headaches, sleep problems and digestive problems.
  2. positivity, a supportive network of family and friends, and an optimistic outlook on life.
  3. Some health professionals believe that bad lifestyle choices, such as smoking or lack of exercise, are the reason for heart disease and other illnesses, and not an individual's attitude.

4. feeling a bit blue.
5. The researchers
6. if we teach children to develop positive thinking, and to 'bounce back' after a setback.
7. open answer.
8. open answer.

#### Page 50

1. the growing popularity of fast food, lack of exercise and modern technology.
2. at least an hour a day.
3. No, "However, recent research shows that less than 50% of the British population manages this.
4. strenuous: needing or using a lot of effort.
5. You could get off the bus one stop earlier than usual, or stand up when you're on the phone! Most importantly, we should find a sport that we enjoy doing.

#### Page 51

1. b / 2. B / 3. A / 4. D / 5. B / 6. B / 7. B / 8. C / 9. b

#### Page 52

10. b / 11. B / 12. A / 13. A
1. I am wake up early in the morning to study.
2. my grandfather isn't used to having nothing to do all day.
3. B            4. C

#### Page 53

##### Exercise 1

1. used to            2. used to            3. is used to            4. am used to

##### Exercise 2

2. use to            3. used to            4. are used to            5. am not used to            6. use to

##### Exercise 3

1. used to            2. didn't use to            3. used to
4. are used to            5. used to            6. is now used to

#### Exercise 4

2. used to living      3. used to make      4. used to having      5. used to wearing

#### Unit 3

#### Page 59

- The boy caught Sheikh Hamdan's attention with his invention – a prosthetic limb for his father.  
- the tour that he is sponsoring for Adeeb will give the young inventor more self-confidence and inspire other young Emirati inventors.
- while he was at the beach with his family. His father, who wears an artificial leg, could not swim in the sea as he could not risk getting his leg wet.
- with relatives.  
- He will be working with a specialist doctor to build the appendage. He will also be attending a course on prosthetics and learning about different kinds of medical apparatus.
- To give protection against.
- In the case of an emergency, rescue services and the driver's family will be automatically connected with the driver through this special checking device. / To be near the heart.

#### Page 61

- Italian and Swiss scientists. / a prosthetic hand with a sense of touch.
- After losing his left hand in an accident.
- The old one because the equipment is not ready for general use yet and for safety reasons.
- Dennis
- prosthetic / artificial
- open answer

#### Page 62

1. b/ 2. C

#### Exercise 1

- will you be having
- won't be having / will be watching / will be preparing
- you will be doing / will you be working / will you be doing
- won't be working / will be still studying

## Exercise 2

1. will be staying   2. will help   3. will be boarding   4. will be watching   5. will miss

## Exercise 3

1. will be studying   2. will be having   3. will text   4. will be sleeping

## Page 63

1. c / 2. B

## Exercise 1

1. will have finished   2. will have been   3. won't have arrived   4. will/have visited

## Exercise 2

2. will stay   3. will have   4. is going to miss   5. is going to do   6. will tell

## Page 65

1. the sickness and hair loss.
2. dementia, a stroke or other brain injuries.
3. The new treatment works by blocking a protein which causes cancerous cells to grow.
4. scanner.
5. neuroscientists.

## Page 66

1. In order to cope with the increase in demand for treatment.
2. they are attracted by its excellent reputation, lower costs, and cultural and language similarities.
3. the journey to and from the hospital is often difficult.
4. In the near future, King Abdullah University Hospital in Irbid hopes to set up radiotherapy machines.

## Unit 4

## Page 74

1. Jabir ibn Hayyan.
2. because of his beautiful voice.
3. laboratory.

4. He is the person who established the first music school in the world in Cordoba, Al-Andalus, teaching musical harmony and composition. He revolutionized musical theory, and is also the person who introduced the oud to Europe.

5. Al-Kindi

6. his work in arithmetic and geometry

7. Al-Kindi was a physician, philosopher, mathematician, chemist, musician and astronomer – a true polymath.

8. his scales could weigh items over 6,000 times smaller than a kilogram.

#### Page 75

1. He designed water pumps and irrigation systems.

2. irrigate.

3. the land became wonderfully fertile and produced more than enough food for the fast-growing population.

4. what someone leaves to the world after their death.

5. The first paragraph/ Ibn Bassal was a writer, a scientist and an engineer.

6. open answer.

#### Page 76

1. Ibn Bassal was a writer, a scientist and an engineer.

2. the land became wonderfully fertile and produced more than enough food for the fast-growing population.

3. His great passions were botany, which is the study of plants, and agriculture.

4. legacy.

5. Ibn Bassal

6. open answer.

7. open answer.

#### Page 78

1. The person who won the competition last week was Rawan.

2. The place where I lived two years ago was Spain.

3. The subject which I like most of all is English.

4. The year when Queen Rania opened the Children's Museum of Jordan was 2007.
5. The thing that makes travelling an exciting experience is meeting new people.
6. A    7. B

#### Page 79

1. It was Spain where I lived two years ago.
2. It was at 5:00 pm when I stopped working.
3. It was the heat which made the journey unpleasant.
4. It was his final book that made him famous all over the world.

London, which is the capital of the U.K, is a big city.

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1. d / 2. C / 3. B / 4. B / 5. A / 6. A / 7. B / 8. C / 9. B

#### Page 80

##### Exercise 2

- The person who invented the mechanical clock in the twelfth century was Al-Jazari.
- The thing that Al-Jazari invented in the twelfth century was the mechanical clock.
- The time when Al-Jazari invented the mechanical clock was the twelfth century.

##### Exercise 3

1. The person who contributed to the invention of the oud was Al-Kindi.
2. The country where Jabir ibn Hayyan did his research in a laboratory was Iraq.
3. It was Ali ibn Nafi ' who established the first music school in the world.
4. It was Jabir ibn Hayyan who also invented ink that can be read in the dark.
5. It is for his work in geometry that Al-Kindi is especially famous.

#### Page 81

2)

1. which/that            2. Which            3. Where            4. Who

3)

1. It was Queen Rania who opened the Children's Museum of Jordan in 2007 CE.
2. The year when Petra was made a World Heritage Site was 1985 CE.

3. It was 11 pm when I stopped working.
4. The person who has influenced me most is my father.
5. The subject that I like most of all is Geography.
6. It was the heat which made the journey unpleasant.

5)

1. who
2. Which
3. Which
4. Who
5. When

### Page 83

1. motorways, airports, stations, tunnels, bridges, to entire city complexes.
2. advantages: it will be the world's first carbon-neutral, zerowaste artificially-created city.

Disadvantages: It is felt that, instead of building an artificial sustainable city, sustainability should be made a priority of existing cities.

3. yes, because it will be the world's first carbon-neutral, zerowaste artificially-created city.
4. advantages: to encourage economic growth and bring new benefits to cities.

Disadvantages: their negative effects on a community or the environment.

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1. Masdar City will be a car-free zone, designed to be pedestrian and cycle-friendly. Electric, driverless cars will operate as public transport vehicles.

2. to encourage economic growth and bring new benefits to cities.

3. to be more important than something else.

4. The current residents of Masdar City are all students at the Masdar Institute of Science and Technology, a university whose students are fully committed to finding solutions to the world's energy problems.

5. many megaprojects

### Page 87

1. d / 2. C / 3. A / 4. D / 5. C / 6. D