

UNIT 6. SCIENCE AND TECHNOLOGY

I. TOPIC VOCABULARY IN CONTRAST

artificial / false	aim/cause/reason	progress / development
natural/physical	estimate/calculate	modern / new
true /accurate	electric / electronic	industry/factory
method/way	invent/discover	award / reward
engine / machine / motor	research / experiment	take place/occur

II. PHRASAL VERBS

break down stop working (for a machine, etc)	give off produce sth such as heat or a smell
carry out perform an experiment, etc	narrow down reduce the number of possibilities
come off succeed	plug in connect to the electricity supply
come on develop or make progress	put through connect by phone
come up with think of (an idea, a plan, etc)	turn into change into sth different
cut off stop the supply of sth	turn off stop a machine working
find out discover information, etc	work out find the solution to a problem, etc

III. PHRASES AND COLLOCATIONS

attempt	make an attempt (at sth/doing / to do) sth attempt to do sth in an attempt to do sth
average	on average
beginning	in the beginning at the beginning (of sth) beginning with
bottom	at/on the bottom (of sth)
cause	(be/find/look for/etc) the cause of sth
conclusion	come to/reach the conclusion (that) in conclusion
experiment	do/perform/carry out an experiment (on sth) experiment with sth/doing sth
fact	in fact as a matter of fact the fact (of the matter) is (that) face the facts

introduction	with the introduction of sth an introduction to sth/sb
phone call	make/receive/get a phone call
photo(graph)	take a photo (of sth/sb)
research	carry out / do research (on/into sth)

IV. WORD PATTERNS

cause sth (to do)	
consider sth/doing consider if/whether consider sb for sth consider it strange, etc (for sb to do)	
discuss sth/doing (with sb)	
explain that; explain sth (to sb)	
intend to do/doing	
know (about) sth/doing know of sb be known as sth	
look at/for sth/sb look forward to sth/doing	
manage to do	
plan sth plan to do	
possible (for sb) to do find sth possible find it impossible to do	
result of sth/doing result in sth; result in (your) doing result from sth/doing as a result of sth	
wonder about sth/doing wonder if/whether/why	

V. WORD FORMATION

Verb	Noun	Adjective/ Adverb
appear	appearance	apparently
build	builder building	
discover	discovery	
explain	explanation	
	importance	important, importantly unimportant
introduce	introduction	introductory
invent	inventor invention	
observe	observer observation	
	(im)possibility	possible impossible (im)possibly
	psychology psychologist	psychological(ly)
research	research researcher	
	revolution	revolutionary
	science scientist	(un)scientific(ally)
	technology technician technique	technological(ly) technical(ly)
	wood	wooden

PRACTICE

I. TOPIC VOCABULARY IN CONTRAST

A. Choose the correct answer.

Modern science

It seems entirely (1) _____ to us that there are teams of scientists in universities and other institutions around the world, attempting to (2) _____ the way the world works. However, it hasn't always been that (3) _____. Although the scientific method is now four or five hundred years old, the ancient Greeks, for

example, believed that they could work out the (4)_____ of natural events just by the power of thought. During the 17th century, more and more people began to realize that they could (5)_____ their scientific ideas by designing a relevant (6)_____ and seeing what happened. A lot of (7)_____ was made in this way by individual scientists. These men and women often worked alone, carrying out (8)_____ into many different areas of science, and they often received very little (9)_____ for their hard work. At the start of the 20th century, though, it became (10)_____ that science was becoming more complicated and more expensive. The individual scientist disappeared, to be replaced by highly qualified teams of experts. Modern science was born.

- | | | | |
|--------------------------|----------------------|---------------------|---------------------|
| 1. A. physical | B. natural | C. typical | D. real |
| 2. A. create | B. invent | C. construct | D. discover |
| 3. A. route | B. method | C. way | D. technique |
| 4. A. aims | B. reasons | C. causes | D. impulses |
| 5. A. calculate | B. estimate | C. measure | D. test |
| 6. A. experiment | B. research | C. attempt | D. analysis |
| 7. A. development | B. movement | C. progress | D. evolution |
| 8. A. research | B. experiment | C. discovery | D. education |
| 9. A. award | B. prize | C. gift | D. reward |
| 10. A. clear | B. true | C. accurate | D. actual |

B. Circle the correct word.

- Many materials have been used for **artificial** / **false** teeth, including wood.
- Be careful! You might give yourself an **electric** / **electronic** shock!
- I'm afraid the problem with your washing machine is the **engine** / **motor**.
- Many employers in the chemicals **industry** / **factory** object to the new law.
- My computing exam is **taking place** / **occurring** next week.
- Technology is a fundamental part of **new** / **modern** life.
- We had our car serviced and it seems there's a problem with the **engine** / **machine**.

II. PHRASAL VERBS

C. Complete using the correct form of the words in the box.

plug • turn • carry • narrow • put • work • come • break

- A lorry had _____ down on the motorway and we had to wait for over an hour.
- I have _____ it down to two computer games, but I still can't make up my mind.
- I wish you would _____ the TV off and go outside and get some exercise.
- Scientists are trying to _____ out ways to reduce pollution from aircraft.
- Tomorrow, we will be _____ out an experiment to test this theory.

6. Who _____ up with the idea of the ball-point pen?
7. I'll just _____ you through to our research department. Please hold on.
8. No wonder the vacuum cleaner isn't working. You haven't _____ it in!

D. Match to make sentences.

1.	2.	3.
4.	5.	6.

1. Alex's electricity was cut	A. off because she forgot to pay the bill.
2. Wear a mask because these chemicals give	B. metals such as lead into gold.
3. I'm writing an essay and I need to find	C. out who discovered penicillin.
4. I was pleased that our gamble came	D. on in physics over the last year.
5. Alchemists spent years trying to turn	E. off fumes that can be harmful.
6. Your teacher says you've really come	F. off and the experiment was a success.

III COLLOCATIONS AND PHRASES**E. Choose the correct answer.**

1. I don't think people should be allowed to perform experiments _____ animals.
A. for B. over C. on D. to
2. There was an explosion in technology _____ the beginning of the 20th century.
A. in B. at C. through D. on
3. Let's face _____ - we are destroying the environment and we need to do something now.
A. truth B. facts C. things D. information
4. The distance from the Earth to the Sun is, _____ average, about 149 million kilometers.
A. by B. on C. from D. in
5. It's amazing that creatures survive _____ the bottom of the ocean.
A. in B. by C. at D. to
6. Fox Talbot _____ the first photograph in 1835.
A. gave B. did C. drew D. took
7. Researchers have _____ to the conclusion that your personality is affected by your genes.
A. come B. got C. reached D. arrived
8. Do you mind if I just _____ a quick phone call from here?
A. do B. take C. have D. make
9. Many lives were saved _____ the introduction of antibiotics.
A. into B. at C. with D. in
10. The _____ of the nuclear accident is still unknown.
A. reason B. cause C. base D. motive

11. My father works at the university, doing research _____ weather control.
A. on **B.** to **C.** of **D.** from
12. The telescope will photograph distant galaxies, _____ an attempt to understand their past.
A. on **B.** for **C.** with **D.** in

IV. WORD PATTERNS

F. Find the extra word in each line.

The future

1. _____ We were discussing about the future in class today. Some people were
2. _____ wondering it whether we would have to live in space when we destroy
3. _____ our own planet. I explained them that the answer lies in technology because
4. _____ scientists are intend to develop forms of energy that will not damage the
5. _____ environment. The problems caused as being a result of technology will be
6. _____ solved by technology. I am look forward to our next discussion.

G. Complete each second sentence using the word given, so that it has a similar meaning to the first sentence. Write between two and five words in each gap.

1. The mistake by scientists caused a massive explosion. **in**
 The mistake by scientistsa massive explosion.
2. Dr. Atherton finally succeeded in discovering the secret formula. **managed**
 Dr. Atherton finally.....secret formula.
3. Another name for iron oxide is 'fool's gold'. **as**
 Iron oxide 'fool's gold'.
4. Many local residents intend to protest about the nuclear power plant. **plan**
 Many local residents about the nuclear power plant.
5. We are thinking of appointing Dr. Knight to the position of Professor. **considering**
 We.....the position of Professor.
6. We cannot live in outer space without special equipment. **us**
 It.....to live in outer space without special equipment.

V. WORD FORMATION

H. Use the word given in capitals at the end of each line to form a word that fits in the gap in the same line.

REVOLUTION, POSSIBLE, APPEAR, INTRODUCE, EXPLAIN, SCIENCE, INVENT, DISCOVER

Qualcomp Powertop

Qualcomp have just brought out their (1) _____ new handheld computer, the Powertop. It's (2) _____ not to love it, with its smooth, shiny (3) _____ and its bright screen. It might not be the best (4) _____ to handheld computing because it is quite advanced, but you'll find an (5) _____ of all the features in the detailed manual. The Powertop has been (6) _____ designed to fit a lot of computing power in your palm. The (7) _____ of a unique wireless Internet connection means there's a world of (8) _____ just waiting for you. We give the Powertop nine out of ten.

I. Complete the sentences by changing the form of the word in capitals when this is necessary.

1. Did you know that George Washington had _____ (**WOOD**) teeth?
2. The old astronomer patiently made his _____ (**OBSERVE**) and wrote down what he saw.
3. _____ (**RESEARCH**) have announced that a major breakthrough has been made.
4. I'm planning to train as a _____ (**PSYCHOLOGY**) when I grow up.
5. That red _____ (**BUILD**) over there is the Science Department.
6. The scientist said she had an announcement of international _____ (**IMPORTANT**).
7. *Science Weekly* has a special _____ (**INTRODUCE**) offer - the first issue is free!
8. If there are aliens out there, do you think they are much more _____ (**TECHNOLOGY**) advanced than we are?