

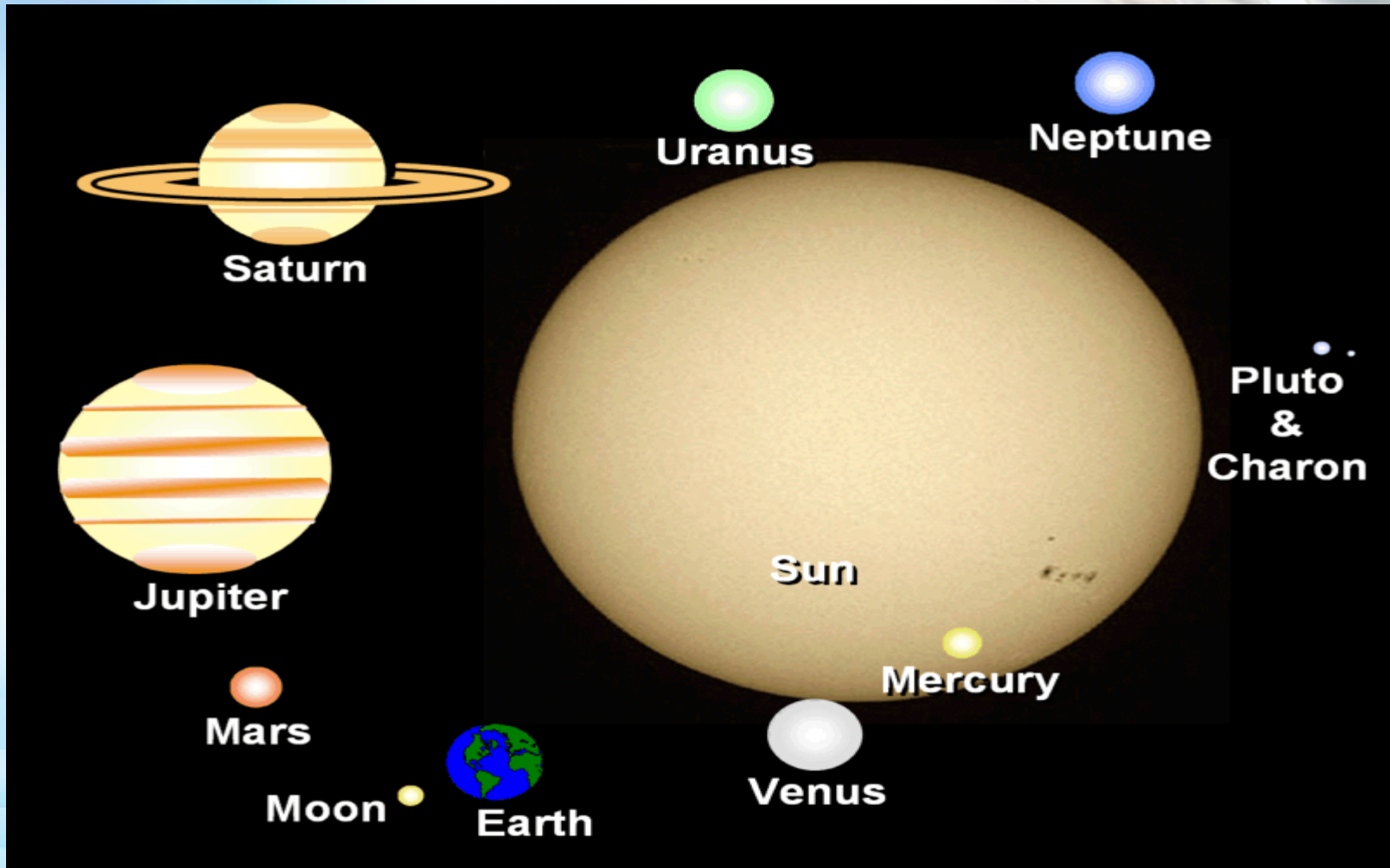


Science and Technology



View, Listen and Speak

Part One Viewing, Understanding and Speaking



Useful Expressions



- It became a milestone in Chinese aeronautics and aerospace history.
- I feel very confident of a successful mission.
- We have covered ten miles today.
- We've never seen anything like this before on Mars, have we?
- He seems to have passed out.
- Something must have gone wrong with the computer controls.
- This is definitely not a place for human beings to live.
- It looks like my mission will be a successful failure.



Ex. 2

- | | | | | |
|------|------|------|------|-------|
| 1. F | 2. T | 3. F | 4. F | 5. T |
| 6. T | 7. F | 8. T | 9. T | 10. F |

Part One Viewing, Understanding and Speaking



Ex. 3

1. Space Exploration

3. at this very moment

5. we don't have to

7. same problems

9. any signs of life

11. the technical problems

2. successful mission

4. have worked hard

6. passed out

8. your last breakdown

10. no oxygen

12. on your way

Part Two Listening, Understanding and Speaking



Listening I

Ex. 1:

1. C 2. B 3. A

Ex. 2:

1. D 2. G 3. C 4. E 5. A 6. F 7. B

Ex. 3:

Make a dialogue in pairs. One will be a representative of the young people who feel very comfortable with new technologies. The other will be one who finds new technologies frightening.

Part Two Listening, Understanding and Speaking



Listening II

Ex. 1:

- | | |
|------|------|
| 1. A | 2. C |
| 3. B | 4. B |



Part Two Listening, Understanding and Speaking



Listening II

Ex. 2:

1. Why scientific research
2. contribute something / help animals
3. more about the gut size
4. obtain data / our(my) publication
5. reference / publications



Part Two Listening, Understanding and Speaking



Listening II

Ex. 3:

Do you think it justified in killing animals in doing scientific research? Give reasons to illustrate your point.

Part Three More Listening



Practice One

Ex. 1:

1. B 2. D 3. D 4. A 5. D

Ex. 2:

1. only about 8 cm
2. A steel restraint bar
3. can be identified
4. is moved around ; is opened as normal
5. is shut; locks automatically

Part Three More Listening



Practice Two

Ex. 1:

1. B 2. D 3. C 4. B

Ex. 2:

1. comfortable

2. break-in

3. safe; simple; poor

4. hard

5. months

6. easily, worn

7. limited

Part Three More Listening



Practice Three

Ex. 1:

A D E F I

Ex. 2:

Step 2: deep breath

Step 3: Place; blowing out

Step 4: records; one second

Step 5: Move a switch; shown

Step 6: indication

Part Three More Listening



Practice Four

Ex. 1:

1. F 2. T 3. F 4. F 5. T 6. T

Ex. 2:

1. Plants have effective color vision
2. Plants have memories
3. Plants respond to carbon dioxide needed for growth

Part Four Testing Yourself



Section I

Exercise:

- | | |
|------------------|--------------------|
| 1. dramatic | 2. inventions |
| 3. varieties | 4. control |
| 5. lifesaving | 6. created |
| 7. breakthroughs | 8. disease-causing |
| 9. concerned | 10. individuals |

Part Four Testing Yourself



Section II

Exercise:

1. B 2. A 3. C 4. D 5. B

Part Four Testing Yourself



Section III

Exercise:

1. sad; celebrating
3. open
4. are gathering
5. universally; expensive; environmentally
6. speed
7. mirror
8. rockets

Part One Preparation



I. Brainstorming New Words

The past several decades has witnessed great changes in various fields, particularly in the field of science and technology. With such new inventions and discoveries, a sea of new words have come into being. Now would you like to think out any word or phrase describing something that has emerged in recent years with the improvement of science and technology, say, e-mail, surfing the net, search engine, cell phone, etc.?

Part One Preparation



I. Cloudy Days in Tomorrowland

Would you please discuss the predictions in pairs and compare each prediction with what actually happened?

Part One Preparation



II. Making Your Own Predictions

Work in groups to predict what changes might take place in the next 50 years.

- 1) Medicine
- 2) Computer technology
- 3) Education
- 4) Traffic
- 5) Living environment

Part One Preparation



III. Show Time – Technology & Our Life

Work in groups to present a short play of one scene of life:

- 1) The fire in the cave went out. Dad, Mum and son are discussing who will go to another cave for fire. It takes five days to get there.
- 2) An evening before electric light was invented
- 3) An evening before TV was invented
- 4) An evening after the widespread use of TV
- 5) An evening after the widespread use of computers

Part Two Reading-Centered Activities



Pre-reading Questions:

1. Is science and technology developing too fast?
2. Do you think that it is increasingly difficult for us to adapt to this fast-developing world where new things emerge every day?
3. Is science a monster or an angel? In what sense is science a monster? And in what sense is it an angel?

Outline of Text



1. Change comes so fast that working people can become obsolete because their occupations vanish in the middle of their lives. Some occupations have become history and exist only in literature.



- It is certain that technology, especially computer technology, will rule our lives to a greater and greater degree.
- Questions for discussion:
- Can you give some examples of how computer is ruling our life to a greater degree?
- Do you have a phobia for machines?



- But there is a limit to everyone's ability to adapt.
- Questions for discussion:
- Has there been a moment in your life when you feel the pain of change is too big to stand?
- Have you refused any change in your life?



- There is often a great lag between scientific discovery and cultural acceptance.
- Example: Charles Darwin's theory of evolution



- To question is the nature of science. Science is a method of looking at the world, a method that requires an open mind, objectivity, and proof based upon observation or experimentation. Science can tell us how to make a bomb, but not whether or not to drop one.



- Since future will be even more revolutionary than the past, will we, as a species, survive the revolutions that have begun?
- We know how to make agriculture miracles. What we need are the time and money to make the technology available to everyone.



- Science was not a monster; we were the monster.
- Question for discussion:
- Do you agree with the above statement?



- Despite all the problems of the modern world, however, most people would not choose to live in any of the less scientific ages that have preceded ours.

Language Points



out of the ordinary (*1.2*): unusual or unexpected

*The juggler was **out of the ordinary** because he could juggle with his feet as well as his hands.*

out of the blue; out of the way; out of the question;
out of the fun: out of tune; out of place; out of use;
out of keeping (unsuitable), etc.

Language Points



a batch of (I.12): a group of

A new batch of students are enrolled in this optional course.

Synonyms .:

an array of (flowers);

a bunch of (keys/bananas);

a cluster of (buildings);

a bundle of (newspapers);

a body of (research/evidence)

Language Points



dawn (/ˌ.13)

1) *v.* begin, start

A new age for mankind is dawning.

2) *v.* It dawns on/ upon sb. that ...: It occurs to sb. that ...

It dawned upon Fred that he would fail the course if he did not study harder.

3) *n.* beginning

The war ended and we looked forward to the dawn of happier days.

Language Points



to a greater and greater degree (*1.29*): increasingly;
more and more

Expressions like “to some degree”, “to a large/
great degree” and “to a certain degree” are used to
show that something is partly true.

*These statements are, to some degree, all
correct.*

I agree with you to some degree.

Language Points



in effect (*1.30*): in actual fact; in reality; in practice

Their response was in effect a refusal.

The old system is still in effect.

Language Points



“can’t wait/ can hardly wait (for ...) to do something” (*1.32*) is used to emphasize that one is very excited about something that one is eager to do.

We can’t wait to get started about our project.

Language Points



(be) in the nature of (1.48): (be) a characteristic of;
belong to that group

It is not in her nature to be rude; she is polite in nature.

It was in the nature of a debate rather than an argument.

Language Points



convert (1.63)

1) convert ... to/ into ...: change ... into ...

This sofa can be converted into a bed.

2) (from, to) persuade somebody to accept a particular religion, belief, etc.

John was converted to Buddhism.

My daughter has converted me to pop music.

Group Discussion



Would you rather live in the future or are you happy to be living now? Why?

Reading Comprehension



- Understanding the main idea of the passage:
 1. before
 2. automobiles
 3. iceman
 4. occupations
 5. increases
 6. space
 7. resist/refuse
 8. ability
 9. acceptance
 10. possible
 11. innovations
 12. miracles/achievements
 13. properly
 14. scientific

Reading Comprehension



- Understanding Specific Information

1. C

2. C

3. D

4. D

5. C

6. C

7. C

8. A

Vocabulary



1. invent	avail	innovate	adapt
discover	accept	evolve	objective
observe	experiment	prosper	disaster

1) observation

2) available

3) discoveries

4) acceptance

5) experimentation

6) Inventions

7) evolution

8) adaptable

9) innovations

10) objectivity

Vocabulary



2. 1) out of the ordinary

2) preceded

3) To be exact

4) contradict(ed)

5) prosperity

6) gave birth to

7) catch our breath

8) had in mind

9) proposed

10) converted

11) disastrous

12) negative

Vocabulary



3. 1) She had hardly sat down

2) especially if/when you want to reserve a seat

3) is not necessarily the most useful

4) What sort/kind of person do you have in mind

5) There's a limit on the time

Vocabulary



3. 6) spent part of his childhood

7) three times as many girls as boys

8) as do most of the people who live in this village

9) but on the other hand it would be sad to lose the family atmosphere

10) Despite/In spite of international pressure

After-Class Reading- Passage I



Work together with a partner and answer the following questions.

1. Who is Joe?
2. What is Joe capable of?
3. What is Joe asked to do by his boss?
4. How does Joe start his task?
5. What does Joe do next?
6. Why does Milton bring in holographs of the beauty contest winners?
7. What does Milton ask Joe to do after he meets all the 8 women?
8. Who does Joe find in the end matching Milton's requirement?
9. What happens to Milton before Valentine's Day?
10. What will Joe say to Charity?

After-Class Reading



Passage II

1. If you were given an opportunity, would you have your body frozen when you suffer from a presently incurable disease, waiting for a cure to be available some day in the future?
2. Suppose that in 50 years' time, cryonics will be possible. Since the cost of preserving a body for 50 years is very high, only 5 people can be chosen to be preserved and revived in the future. What kind of people would you choose? Explain your choice.

Part Three Further Development



Think different.

Part Three Further Development



2. What Do You Think about Living in the 21st Century?

Read the Newsweek poll “living in the 21st century” (p. 369), and work in pairs to exchange your views on each of the items in the poll.

Survey



- How do you feel about living in the 21st century
- Living environment
- Education
- Transport
- Communication
- Job security

Part Three Further Development



Enriching Your Word Power:

1. B

2. A

3. B

4. C

5. B

6. C

7. C

8. B

9. A

10. A

11. B

12. C

Part Four Writing and Translation



Translation Practice:

因为 2000 年和 2001 年连续的旱灾，2002 年 1 月德比镇遭受

了严峻的缺水问题。德比郡会已经把解决这个问题放在首位，以便今后不再出现这种情况。郡议会早在 90 年代中期就在这一地区筑坝进行过调查，但是由于当时公众对调查结果不满意使计划受阻，需要进一步的环境调查以确定筑坝对周围农场的长期影响。一系列的调查已于 2003 年 12 月完成。调查结果显示对环境和经济没有明显的负面影响。2004 年郡议会提议施行可行性研究的最后阶段，整个研究的结论和建议将在拟定于 2005 年 1 月 12 日举行的议会计划委员会会议上提交。这份可行性研究报告将帮助议会对改善该郡的水供应状况作出最后决定。