

理 科 适 用

# 英 语

第 二 册

北 京 大 学 西 语 系 编  
公 共 英 语 教 研 室

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(理科适用)

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北京大学西语系公共英语教研室编

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## CONTENTS

Lesson 1	Text: Gravity .....	1
	Grammar: I. 句子的种类	
	II. 状语从句 (一)	
Lesson 2	Text: The Sun, the Moon and the Stars .....	11
	Grammar: I. 形容词和副词的级	
	II. 状语从句 (二)	
Lesson 3	Text: The World's First Compass.....	19
	Grammar: 名词从句 (一)	
Lesson 4	Text: Criticize "Restraining Oneself and Restoring the Rites" .....	28
	Grammar: 名词从句 (二)	
Lesson 5	Text: The Wolf in Sheep's Clothing .....	34
	Grammar: 定语从句 (一)	
Lesson 6	Text: The Value of Water and Mineral Salts to the Body.....	45
	Grammar: 定语从句 (二)	
Lesson 7	Text: Radio and Television.....	54
	Grammar: 动词不定式 (一)	
Lesson 8	Text: Requirements for a Fire .....	62
	Grammar: 动词不定式 (二)	
Lesson 9	Text: Something about the Elements .....	70
	Grammar: 动名词	
Lesson 10	Text: Dr. Bethune at His Fighting Post .....	77
	Grammar: 分词 (一)	

Lesson 11	Text: How to Preserve Tomatoes .....	86
	Grammar: 分词 (二)	
Lesson 12	Text: What We Know about Mars .....	94
	Grammar: It 用法小结	
Lesson 13	Text: Humidity and Dew .....	103
	Grammar: 虚拟语气 (一)	
Lesson 14	Text: Friction .....	112
	Grammar: 虚拟语气 (二)	
Lesson 15	Text: An "Ox" for the People.. .....	120
	Grammar: 复习	
总词汇表	.....	127
附: 希腊字母读音表	.....	139

## Lesson 1

Text: Gravity

Grammar: I. 句子的种类

I. 状语从句 (一)

### Text

#### Gravity

If the earth is a ball, why don't we fall off? The reason is rather simple. It is because of gravity.

Gravity is a strange force. When you slip on something you never go up into the air, but instead, you always fall down to the ground.

Things fall to the earth because the earth pulls them to it just as a magnet pulls needles. The attraction of the earth for all bodies is called gravity.

You may throw a ball into the air, and if you are very strong it will go up high. But it won't stay there all the time. As gravity pulls it, it falls right back to the earth again. So wherever we go, gravity always keeps us on earth.

Because of gravity, water flows on the earth's surface. With gravity, we can walk, run and do lots of other things. So like air and water, gravity is indispensable to life.

### NEW WORDS AND EXPRESSIONS

1. gravity ['græviti] *n.* 地心引力; 重力

2. earth [ɜ:θ] *n.* 地球; 土地

3. ball [bɔ:l] *n.* 球

4. off [ɔ:f], [ɒf] *ad.* 离开  
to fall off 掉下
5. reason ['ri:zn] *n.* 理由; 原因
6. rather ['rɑ:ðə] *ad.* 相当, 有点; 宁可
7. simple *a.* 简单的
8. strange [streɪndʒ] *a.* 奇怪的
9. force *n.* 力; 力量
10. slip *vi.* 滑倒
11. air [eə] *n.* 空气
12. instead [in'sted] *ad.* 代替; 改换
13. ground [graʊnd] *n.* 地面; 土地
14. thing [θɪŋ] *n.* 东西; 事物
15. pull [pul] *vt.* 拉; 吸引; *n.* 拉力, 吸力
16. as *conj.* 因为; 当...时候;  
*prep.* 作为; 当作  
just as 正如; 正象...一样
17. magnet ['mæɡnɪt] *n.* 磁铁;  
磁石
18. needle *n.* 针
19. attraction *n.* 吸引; 吸力
20. body ['bɒdi] *n.* 物体; 身体
21. throw [θrou] *vt.* 扔; 投  
(threw [θru:], thrown [θroun])
22. high *a., ad.* 高; 高的
23. all the time 老是; 总是; 一直
24. right [raɪt] *a.* 正确的; 右的;  
*ad.* 一直, 笔直地; 恰好, 准确
25. again [ə'geɪn] *ad.* 再; 又
26. wherever [(h)wɛər'evə] *conj.*  
无论哪里(什么地方)
27. flow [fləʊ] *vi., n.* 流动
28. walk [wɔ:k] *vi., n.* 走; 步行
29. run *vi.* 跑  
(ran, run)
30. surface ['sɜ:fɪs] *n.* 表面
31. indispensable [ɪndɪ'spensəbl] *a.* (常与 to 或 for 连用) 不可少的, 必需的

## NOTES TO THE TEXT

### 1. because of 与 because 的区别:

because 是连词, 后跟原因状语从句; because of 是介词, 后跟宾语。例如:

1) He didn't go out *because* it was raining. 他没有出去, 因为在下雨。

2) He didn't go out *because of* the rain. 他没有出去, 因为下雨。

### 2. When you slip on something you never go up into the air, but *instead*, you always fall down to the ground. 当你滑倒的时候, 你决不会跌向空中, 而总是跌倒在地上。

1) *instead* 是副词, 原意是“代替”, 而含有否定的意义, 所以必须明确它所否定的东西。在本句中是否定上文提到的“跌向空中”。

2) *instead* 常与 *of* 连用, 构成介词, 后跟宾语, 即它所否定的东西, 例如:

a) I don't want that book. Give me this *instead*. 我不要那本书, 换这本给我吧!

b) Give me this book *instead of* that. 给我这本书, 不要那本。

3. *With* gravity, we can walk, run and do lots of other things. 有了地心引力, 我们就能走, 能跑, 还能做许许多多其它事情。

介词 *with* 在这儿的意思是“由于(有)”, 例如:

*With* the sun, we have the source of most forms of energy.

有了太阳, 我们就有了大多数形式的能的来源。

*With* the PLA man's help, the old woman found her daughter.

由于解放军战士的帮助, 老太太找到了女儿。

## GRAMMAR

I. 句子的种类: 从结构上看, 句子可分为三类:

1. 简单句: 只有一个主、谓结构的句子, 叫做简单句。例如:

Chairman Mao is our great leader.

(主) (谓)

毛主席是我们的伟大领袖。

There are two maps in the classroom.

(谓) (主)

教室里有两张地图。

How long have you lived in the countryside?

(谓)(主)(谓)

你在农村住多久了?

[注]: 几个并列主语共一个谓语或几个并列谓语共一个主语的  
句子仍是简单句, 例如:

Li Ming and Wang Ping do morning exercises together.

↗ (并列主语) ↖ (谓)

李明和王平一起做早操。

They help each other and study hard for the revolution.

(主) ↗ (并列谓语) ↖

他们互相帮助, 并为革命努力学习。



2. 并列句: 由两个或两个以上的并列的简单句构成, 常用 and (并且), but (但是), or (要不然, 或者), yet (然而, 但是) 等词连接, 例如:

We study Chairman Mao's works hard and we often help each other. 我们努力学习毛主席著作, 并且我们常常互相帮助。

The classroom is not very big, but it is bright and clean. 教室不很大, 但它又明亮又干净。

Let's go to Master Wang for help, or we can't finish the work in time. 咱们去找王师傅帮助吧, 要不然咱们就不能按时完成这项工作了。

3. 主从句: 由一个主句和一个(或一个以上)的从句构成。从句起主句中某一成分的作用, 如主语、表语、状语等。常见的连词和关系词有 that, when, because, if, though, who, which... 等。例如:

● When water is heated, it will be changed into vapour. 当水加热时, 它就会变成水蒸汽。

由 when 引入的主谓结构是一个从句, 说明 will be changed, 所以是一个状语从句。

- II. 状语从句: 第一册我们学过 1) 副词、2) 词组、3) 介词短语都可以做状语, 本课讲的是 4), 用一个主谓结构表示的状语:

1) We work very well. 我们工作得很好。

2) We work day and night. 我们日夜工作。

3) We work for the revolution. 我们为革命工作。

4) We all love Peking because our great leader Chairman Mao lives and works here. 我们热爱北京, 因为我们伟大领袖毛主席在北京生活和工作。

说明: 在 4) 中, 以连词 because 引入的从句说明 love (主句谓语动词)。象这样以一个主谓结构表示的状语叫

状语从句。状语从句的位置可在主句之前（通常有逗号），也可以在主句之后。常见的状语从句有：

1. 表示时间的状语从句：常见的连词有 *when*（当…的时候）；*whenever*（无论…时候）；*as*（正当…的时候）；*before*（在…之前）；*after*（在…之后）；*since*（自从…以来）等。例如：

*When* coal is burned, the chemical energy is turned into heat energy. 当煤燃烧的时候，化学能就变成热能。

I will lend (*vt.* 借) you the dictionary (*n.* 词典) *whenever* you want it. 无论什么时候你要词典，我就借给你。

*As* we were talking about the film *Song of the Dragon River*, Master Wang came in. 我们正在谈电影《龙江颂》的时候，王师傅进来了。

She had worked in the countryside *before* she came to Peking University. 她来北大以前在农村劳动。

*After* Peking was liberated, the family's sufferings came to an end. 北京解放之后，这家的苦日子就结束了。

John thought, "They have eaten very little food *since* I lost my job." 约翰想：“自从我失业以来，他们就没有什么东西吃了。”

2. 原因状语从句：常见的连词有 *because*（因为）；*as*（因为，由于）；*since*（因为，既然）等。例如：

The big man said to John, "We shall pay you only three dollars *because* you are weaker." 那大汉对约翰说：“我们只能给你三块钱，因为你比较弱。”

*As it rained, we didn't do morning exercises yesterday.* 由于下雨, 昨天我们没做早操。

*Since all comrades are here, let's begin our meeting.*  
既然全体同志都来了, 咱们就开会吧。

3. 地点状语从句: 常见的连词有 *where* (…地方); *wherever* (无论…地方) 等。例如:

*We must go where we are wanted.* 我们应该到需要我们的地方去。

*Wherever we go, we should unite with the comrades there.* 无论我们到哪里, 我们都应当和那里的同志团结起来。

4. 条件状语从句: 常见的连词有 *if* (如果, 假若); *unless* (除非, 要是不) 等。例如:

*"If you want a job, we can dismiss one of them and give you his job," said the capitalist.* “如果你要找工作, 我们可以解雇一个工人, 把他的工作给你,” 那资本家说。

*There is no way out for the workers in capitalist countries unless they unite and fight against the capitalists system.* 资本主义国家的工人要是不团结起来同资本主义制度作斗争, 他们就没有出路。

5. 行为方式状语从句: 常见的连词有 *as* (如, 照); *just as* (正如) [*as* 的强调式] 等。例如:

*He did as the old worker had told him.* 他照老工人告诉他的那样去做了。

*Most plants need (vt. 需要) air just as they need water.* 大多数植物需要空气正象它们需要水一样。

6. 让步状语从句: 常见的连词有 *though* [= *although*] (虽然); *whether... (or)* (无论... [或者]; 不论... [还是]) 等。例如:

Before liberation *though* he worked for twelve hours every day, he could not keep his family from hunger and cold. 解放前虽然他每天干十二个钟头, 但他还是不能使家里人不挨饿受冻。

[注]: 在有 *though* 或 *although* 的主从句中, 主句不能用 *but*, 这点与汉语习惯不同。

All matter, *whether* it is solid, liquid or gas, is made up of atoms. 所有的物质, 不论是固体, 液体还是气体, 都是由原子构成的。

7. 结果状语从句: 常见的连词有 *so (+ad. 或 a.) ...that* (那样...以至于)。例如:

He spoke *so fast that* I could not understand (*vt.* 懂, 了解) him. 他说得那样快, 以致我不懂他的话。

8. 目的状语从句: 常见的连词有 *so that* (以便, 为了) (注意: *so that* 不能分开, 与 *so...that* 不同)。例如:

The old worker speaks slowly *so that* the students can understand him. 这位老工人说得慢, 以便学生们能听懂他的话。

## EXERCISES

I. 英译汉, 并说明哪些是简单句, 哪些是并列句, 哪些是主从句:

1. A PLA man came up and talked to her.
2. What are you doing now?
3. It is nine o'clock in the evening and no bus will go there after nine.
4. In the evening, the students and teachers study Chairman Mao's works or call on the old workers.

访问

5. Master Li had to work for a landlord (地主) when he was only ten years old.
6. The teacher wrote some new words on the blackboard and read them aloud (*ad.* 大声地).
7. He didn't come to class yesterday because he was ill.
8. The sun is the source of most forms of energy, but so far only a small part of its energy has been used by man.
9. We'll wait for you if you come before six o'clock.
10. Before liberation Wang Ping's mother and elder brother fell ill, but the family could not send them to hospital, and they both died.

I. 用连词 when, where, after, before, if, because, as, just as 填空; 然后译成汉语:

1. \_\_\_\_\_ molecules in matter are not close together, and can freely fly about, the matter is called a gas.
2. The ice will be changed back into water \_\_\_\_\_ it is taken into a warm room.
3. \_\_\_\_\_ he was a child, he couldn't go to school \_\_\_\_\_ he was poor.
4. \_\_\_\_\_ your daughter hasn't come, I'll take you home.
5. \_\_\_\_\_ the earth pulls things to it, they fall to the earth.
6. We shall do \_\_\_\_\_ the Party teaches us.
7. We must go \_\_\_\_\_ the work is hard.
8. They had finished the work \_\_\_\_\_ I came back.
9. \_\_\_\_\_ my home town was liberated, I went to school.
10. I will come to your school \_\_\_\_\_ I have time.

II. 将括号内的汉语译成英语, 完成下列各句:

1. I will give you the spade (无论什么时候要它).
2. Electrical energy can be changed into light, heat and sound energy (当它用于不同目的时).
3. Hundreds of factories have been set up (自从我家乡解放以来).
4. He had worked in a chemical plant (他来北大以前).
5. You may join the scientific experiment group (在你们回来以后).
6. Let's begin our meeting (既然李同志也来了).
7. He will be very happy (如果他知道这件事).

8. In China, I can see happy children (无论我走到哪里)。
9. You must do the work (按照李师傅告诉你的)。
10. The film will begin at eight thirty (因为电影前有一场演出)。

IV. 英译汉, 注意斜体字部分:

1. *Because of* hard work, they finished their work in the morning.
2. *Because of* gravity, we are always kept on earth.
3. John did not take the job *because* he did not want to give the capitalist a bigger profit. <sup>完全</sup>
4. We respect him, *because* he works hard for the revolution. <sup>尊重</sup>
5. *As* he was busy, his brother went to the city *instead*.
6. John didn't take the job, *instead*, he went away in great indignation. <sup>气愤</sup>
7. *With* a microphone, hundreds of people can listen to a report at the same time.
8. *With* his help, I have learned all the new words in Lesson 5.
9. Matter *like* water is called a liquid.
10. *Like* a magnet, the earth always pulls things to it.

V. 汉译英:

1. 东西总是落在地上, 因为地球有引力。
2. 冬天来的时候, 水会变成冰。
3. 他来北京前在一个无线电厂工作。
4. 如果你向空中扔一个球, 它会落回地面。
5. 我们不论到什么地方, 都应当为人民服务。
6. 地球吸引一切物体, 正象磁石吸引针一样。
7. 由于他有会, 他不到我们学校来。
8. 如果你滑倒了, 你总是跌在地上。
9. 月亮 (the moon) 围着 (round) 地球转, 正象地球围着太阳转一样。
10. 虽然王平的父亲很老了, 他还是在矿上努力工作。

VI. 英译汉:

There are two kinds of matter, elements and compounds. If a substance contains only one element, it is not a compound. When two or more elements are combined, a compound is formed. Water is a compound, because it is made up of two elements, hydrogen and oxygen. Although the number of the com-

pounds is very great, there are only 105 elements up to now. 94 of the elements exist in nature. The rest are man-made. Under ordinary temperature and pressure, an element exists in one of the three states: solid, liquid or gas.

---

kind [kaind] *n.* 种, 种类  
compound ['kɒmpaund] *n.* 化合物  
substance ['sʌbstəns] *n.* 物质  
contain [kən'tein] *vt.* 包含;  
含有  
combine [kəm'beɪn] *vt.* (使)  
结合; 化合  
hydrogen ['haɪdrɪdʒən] *n.* 氢  
oxygen ['ɒksɪdʒən] *n.* 氧

number *n.* 数目, 数  
up to now *ad.* 到目前为止  
exist [ɪg'zɪst] *vi.* 存在  
nature ['neɪtʃə] *n.* 自然界  
the rest *n.* 其余的  
man-made *a.* 人造的  
under *prep.* 在...下  
ordinary ['ɔ:dɪnəri] *a.* 普通的,  
通常的  
pressure ['preʃə] *n.* 压力

## Lesson 2

Text: The Sun, the Moon and the Stars

Grammar: I. 形容词和副词的级

I. 状语从句 (二)

### Text

#### The Sun, the Moon and the Stars

The sun looks like a shiny gold plate, but it is really a big ball. It is always glowing. Its flames are very much hotter and bigger than any fire on earth. The sun has a family. It is the biggest member in the family.

The moon is a ball, too, like the sun and the earth. Sometimes it looks as round as a plate, sometimes it looks like half a plate, or like a thin slice of yellow melon. But whether you can see all of it or not, the moon is always round. Part of it looks dark because it is turned away from the sun. The moon has no light of its own. Moonlight is only sunlight shining on the moon.

The moon is much smaller than the sun, even smaller than the stars. As the moon is nearer, it looks bigger. All day the stars are in the sky, but the light from the sun is so bright that you cannot see them. Stars look as tiny as pinheads, but some are even bigger than the sun. The sun looks big because it is closer than the other stars. Big things look little when they are far away.



## NEW WORDS AND EXPRESSIONS

- |   |  |
|---|--|
| <p>1. moon [mu:n] <i>n.</i> 月亮, 月球</p> <p>2. star <i>n.</i> 星</p> <p>3. shiny <i>a.</i> 发光的</p> <p>4. gold [gould] <i>n.</i> 黄金; <i>a.</i> 金黄色的</p> <p>5. plate <i>n.</i> 金属板; 盘, 碟</p> <p>6. really ['ri:əli] <i>ad.</i> 真正地, 实在地</p> <p>7. glow <i>vi.</i> 发光; 发热</p> <p>8. flame <i>n.</i> 火焰</p> <p>9. hot <i>a.</i> 热的</p> <p>10. than [θæn] <i>conj.</i> (用在比较级之后) 比</p> <p>11. fire [faɪə] <i>n.</i> 火</p> <p>12. sometimes <i>ad.</i> 有时</p> <p>13. round <i>a.</i> 圆的; <i>ad.</i> 在…周围; <i>prep.</i> 围绕</p> <p>14. thin [θin] <i>a.</i> 薄的</p> <p>15. slice <i>n.</i> 薄片</p> | <p>16. yellow ['jeləu] <i>a.</i> 黄色的</p> <p>17. melon ['melən] <i>n.</i> 甜瓜</p> <p>18. whether ['(h)weðə] <i>conj.</i> 不管; 无论; 是否; 会不会<br/>whether...or (not) 不论…还是…</p> <p>19. dark <i>a.</i> 黑暗的</p> <p>20. own [oun] <i>a.</i> 自己的</p> <p>21. moonlight <i>n.</i> 月光</p> <p>22. sunlight <i>n.</i> 日光, 阳光</p> <p>23. shine <i>vi.</i> 照耀<br/>(shone, shone)</p> <p>24. even <i>ad.</i> 甚至, 即使</p> <p>25. near <i>ad.</i> 近; 附近</p> <p>26. sky <i>n.</i> 天空</p> <p>27. so...that... <i>conj.</i> 如此…以致</p> <p>28. tiny <i>a.</i> 微小的</p> <p>29. pinhead ['pinhed] <i>n.</i> 针头</p> |
|---|--|

## NOTES TO THE TEXT

1. ...sometimes it looks like *half* a plate. 月亮有时看起来象半个盘子。

half 用作形容词, 放在 “a” 前, 如:

half a mile 半哩, 半英里

half an hour 半小时

但其他情况则为:

two miles and a half	} 两哩半
two and a half miles	
a full half hour 整整半小时	

2. The moon has no light of *its own*. 月亮自己没有光。

反身代词所有格, 是由人称代词所有格加 “own” 构成的。例如:

1) This is *his own* bike. 这是他自己的自行车。

2) This bike is *his own*. 这辆自行车是他自己的。

3) He has a (no) bike of *his own*. 他自己有(没有)一辆自行车。