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SELECTED STORIES
OF SOME
FOREIGN SCIENTISTS

英 汉 对 照

外国科学家故事选读



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出版说明

为帮助广大中学生和业余英语爱好者巩固英语基础知识，提高英语阅读和写作能力，进一步学习外国的先进科学技术，为实现四个现代化服务，本社将陆续出版一套英语学习小丛书。

《外国科学家故事选读》是英语学习丛书的一种。书中注译的十四篇短文，选自近年来国内外英语期刊和各种读本。这些短文，用生动的语言描绘了高斯、牛顿、瓦特、居里夫人、伽俐略、爱因斯坦、米丘林等十多位著名科学家为人类文明和进步，不迷信权威，勤于实践，善于思索，敢攀高峰的事迹，对于鼓舞广大青少年爱科学、学科学、用科学，能起到积极作用。

《外国科学家故事选读》的文字浅显，常用短语和句型较多，为方便读者学习，编者将原文译成了中文，并对每篇文章的部分单词注音，对常用习语和重要的语法结构加以注解，并附有若干例句。

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1 THE STORY OF LITTLE GAUSS¹

A class of small boys in a German school had been making a lot of noise, so their teacher decided to punish them. He kept them in the class-room after the other boys had gone, and told them to add all the numbers from 1 to 100 together.

The boys sadly took out their exercise books and began to write the numbers down—all of them except one boy, who had been in that school only for a few days². This boy looked out of the window for a few moments, wrote a number in his exercise book and put up his hand.

"May I go home when I've found the answer, sir?" he asked.

"Yes, you may," answered the teacher.

1. Gauss: 高斯 (姓). 下文 Karl Friedrich 是名字. 全称是 Karl Friedrich Gauss ['kɑ:l'fri:drik 'gɔ:s], 卡尔·弗里德里克·高斯(1777—1855), 德国数学家、物理学家及天文学家, 对超几何级数、复变函数论、统计数学、椭圆函数论有重大贡献.

2. who had been in that school only for a few days: 是非限

1 小高斯的故事



在德国的一所学校里，有一个班的小男孩吵吵嚷嚷闹个不停。于是老师决定处罚他们。当其他孩子放学回家以后，他把他们留在教室里，并叫他们把1到100的数加起来。

孩子们愁眉苦脸地拿出练习本来，开始抄写那些数字——大家都这么做，只有一个孩子例外。他到这个学校才几天。这孩子朝窗外看了一会儿，在练习本上写下一个数字，便举起手来。

“我得出答案以后可以回家吗，先生？”他问道。

“可以。”老师回答。

限制性定语从句，修饰前面的 boy。非限制性定语从句和它所修饰的词之间往往用一个逗号分开。下文中 which is 5050及 who was a plumber 也是非限制性定语从句。few 表示“几乎没有”；a few 是“少数”，“一些”，一般用在可数名词前。for a few days 几天；for a few moments 一些时间，一会儿。

"Well, I've found it, sir," said the boy.

The teacher and the other boys were very surprised.

"Bring it here," said the teacher.

The boy brought it. It was quite correct, so the teacher had to let the boy go home.

The next morning, the surprised teacher asked the new boy how he had found the answer so quickly.

"Well, sir," he said, "I thought that there might be a quick way of finding the answer¹, and I found one. You see, if you add 100 to 1, you get 101, and if you add 99 to 2, you also get 101. 98 to 3 is 101 too, and if you go on until you reach 51 and 50, you have 101 fifty times², which is 5050."

After this, the teacher gave the boy different work from the other boys in the class. His name was Karl Friedrich, and when he grew up, he became a famous professor of mathematics.

This happened more than a hundred years ago. How was little Gauss able to do it? For one thing³, he was a hardworking boy, and then,

1. there might be a quick way of finding the answer: 可能有一种快速求得答案的方法。

2. you have 101 fifty times: (就得 101 的 50 倍。) 这里 (包括

“好啦，我得出答案了，先生。”这孩子说。

老师和其他孩子都感到很惊奇。

“交上来吧。”老师说。

这孩子把答案交了上去。答案很正确。于是老师只好让他回家。

第二天早晨，那位感到惊奇的老师问这新来的孩子，怎么那样快就得出答案来。

“噢，先生，”他说，“当时我想，这道题可能有快速求解的方法，我找出了一种。你瞧，1加100，得101，2加99，也得101，3加98还是101。这样加下去直到50加51，就得50个101，也就是5050。”

从此，老师给这孩子布置的作业跟班上其他孩子的不一样。他的名字叫卡尔·弗里德里克。卡尔·弗里德里克长大以后，成了著名的数学教授。

这故事发生在一百多年以前。小高斯是怎么能够那样快就算出来的呢？首先，因为他是个勤奋的孩子，其次，他的成功还多亏他那当管子工的父亲。父亲常常教给他一些和生产有联系的简易计算方法。

本句前面几个) you 不具体指明任何人。

3. for one thing: 原因之一。

he owed his success to his father, who was a plumber. His father had often taught him simple methods of calculation related to production¹.

From what Gauss did², people have found the rules for adding consecutive³ numbers, that is:

If the number of items is even, any consecutive numbers can be added like this:

$$(1st\ item + last\ item) \times (number\ of\ items \div 2) = total.^4$$

And if the number of items is odd⁵, it can be done this way:

$$(1st\ item + last\ item) \div 2 \times number\ of\ items = total.$$

But as the first item plus the last item divided by two is just equal to the middle item, the second formula⁶ can then be simplified as follows:⁷

1. methods ['meθədz] n. 方法; 方式; calculation [ˌkælkjuˈleɪʃən] n. 计算; 考虑.

related to production (与生产有关) 这个过去分词短语在此作定语, 修饰methods.

2. From what Gauss did: 根据高斯的算法.

3. consecutive [kən'sekjutiv]: 连贯的, 顺序的.

4. If the number of items is even, ...=total: item ['aɪtəm] 项, 项目, even ['i:vən] 偶数的; total ['təʊtl] 总数.
加、减、乘、除算式的读法:

1+2=3 One and two is three. 或,

从高斯的计算，人们发现了加连续数的公式，那就是：

如果项数是偶数，则任何连续数相加可以这样计算：

$$(\text{首项} + \text{末项}) \times (\text{项数} \div 2) = \text{总数}。$$

如果项数是奇数，求连续数的总和可以用这样的方法：

$$(\text{首项} + \text{末项}) \div 2 \times \text{项数} = \text{总数}。$$

但因为首项加末项除以 2 恰好等于中项，所以第二式可以简化为：

$$\text{中项} \times \text{项数} = \text{总数}。$$

举例说，如果我们想把 1 到 11 这些数字加起来，我们可以很容易地计算出来：

One plus [plʌs] two is three.

9-4=5 Nine minus [ˈmaɪnəs] four is five.

3×5=15 Three times five is fifteen.

21÷3=7 Twenty-one divided by three is seven.

divide [dɪˈvaɪd] v. 分，除。

5. odd[ɒd]: 奇数的。

6. formula [ˈfɔ:mju:lə]: 公式 (复数 formulae [ˈfɔ:mju:lɪ:]).

7. Can be simplified as follows: 可以简化如下, as follows 如下。

Middle item \times number of items = total.

For example, if we want to add all the numbers from 1 to 11, we can do it very easily:

$$\begin{aligned}1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 + 11 \\&= 6 \times 11 \\&= 66.\end{aligned}$$

Now set yourself a few questions and work them out¹ according to² these formulae.

1. work out: 作出; 计算出。

$$\begin{aligned} &1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 + 11 \\ &= 6 \times 11 \\ &= 66 \end{aligned}$$

现在请你给自己出几道题，并按上述公式把题解出来。

2. according [ə'kɔ:diŋ] to: 按照, 根据.

2 JAMES WATT¹ AND THE TEAKETTLE

James Watt, when a little boy, used to sit in his grandmother's kitchen wondering about the causes of things². One day, while he was sitting there, his attention was attracted by a teakettle hanging over the fire. The water in the kettle was beginning to bubble³, and a thin cloud of steam⁴ was rising from the spout. Soon the lid began to rattle and shake, and the steam began puffing out at a furious rate⁵. James took off the lid and looked into the kettle; but, besides water, he could find nothing in it.

"Grandma, what's in the teakettle?" he asked.

"Water, my child—nothing but water."

"But I know there is something else. There is something that lifts the lid and makes it rattle."

The grandmother laughed. "Oh, that is only

1. James Watt ['dʒeɪmz wɒt]: 詹姆斯·瓦特 (1736—1819), 英国科学家、发明家, 发明蒸汽机, 对当时的蒸汽机技术有重大贡献, 使蒸汽机在工业上得到广泛应用。

2. used to sit...things: used to do something 表示过去常常做某事。wondering about...是现在分词短语, 作状语用, 意思是“对…

2 瓦特和水壶



瓦特小的时候，常常坐在他祖母的厨房里，对那里的什么事情都想问个为什么。有一天，当他坐在厨房里的时候，他的注意力被那吊在火炉上的水壶吸引住了。水壶里的水开始冒泡，一股水蒸汽从壶咀喷出来。

接着，水壶盖咔嗒咔嗒抖动起来，蒸汽一个劲地往外猛喷。瓦特揭开壶盖往里看，可是，除了水以外，没有发现别的东西。

“奶奶，水壶里是些什么？”他问道。“是水，我的孩子。除了水，没有别的。”

“但是，我看壶里还有一点别的什么东西，是它把水壶盖掀起来，弄得卡嗒卡嗒响。”

祖母笑了起来：“哦，那不过是蒸汽罢了。你可

感到疑惑”。

3. kettle [ˈketl]: n. (烧水用的) 水壶，水锅 (teakettle 水壶)。

bubble [ˈbʌbl]: v. 冒泡，沸腾。

4. a thin cloud of steam: 一小股蒸汽。

5. at a furious rate: 以急促的速度。

steam," she said. "You can see it coming out of the spout and puffing up under the lid."

"But you just said there was nothing but water in the kettle. How did the steam get under the lid?"

"Why, my dear, it comes out of the hot water. The hot water makes it."

The boy lifted the lid and looked inside again. He could see nothing but the bubbling water. The steam could not be seen until¹ it was quite out of the kettle.

"How queer!" he said. "The steam must be very strong to lift the lid. And if the steam from so little water is so strong, why would not the steam from much more water be much stronger? Why couldn't it be made to lift a much greater weight?"

The grandmother made no reply².

"That child's a little queer?" she thought.

"Always asking questions that no one can answer."

And she went about³ her work, leaving James alone⁴ to study the teakettle.

Day after day James thought of the questions

1. could not be seen until...: 直到...才看得见。

2. made no reply: 不回答。