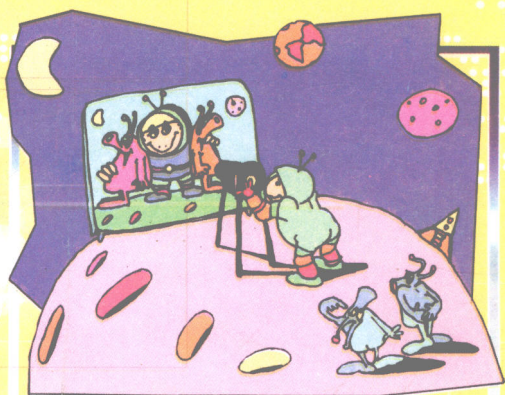


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# 太阳家族

# SPEAK CHINESE ENGLISH



CHINESE ENGLISH

英汉平行对照

# 趣味

# 科普知识

北京师联教育科学研究所 编译

学苑音像出版社

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# Contents

# 目 录

<i>Some Knowledge about</i> .....	.....	
<i>the Astronomy</i> .....	• 1 •	..... 天文知识
☆ <i>The Moonlight</i> .....	• 38 •	..... 月光
☆ <i>Jupiter and the Outer</i> .....		..... 木
<i>Planets</i> .....	• 42 •	星和外层行星
☆ <i>Comets</i> .....	• 47 •	..... 彗星
<i>Halley's Comet</i> ...	• 52 •	..... 哈雷彗星
<i>Our Place in Space</i> .....		..... 我们在
.....	• 64 •	宇宙中的位置
<i>The Earth's Family</i> ...	• 74 •	... 地球的家族
☆ <i>Our Own Planet</i> ...	• 86 •	... 我们的行星
<i>The Sun Was the Center</i> .....		..... 日
<i>and Copernicus</i> .....	• 95 •	心说与哥白尼
<i>Telescope and Galileo</i> .....		..... 望
.....	• 106 •	远镜与伽利略

注:带“☆”内容有录音



## Some Knowledge

## 天文知识

### About the Astronomy

① The true size of the earth was known seventeen and a half centuries before it was first circumnavigated. In 230 B. C., the Greek philosopher Eratosthenes worked out its circumference of 25,000 miles by studying shadows cast by the sun at different places on the same day.

早在第一次环球航行的 17 个半世纪前,人们就知道了地球真正的大小。公元前 230 年,希腊哲学家埃拉托色尼通过研究一天之中太阳在不同地方造成的阴影,计算出地球圆周长为 25,000 英里。

② If the earth were compressed to a sphere with a 2 inch diameter, its surface would be as smooth as a billiard ball's.

如果将地球缩小到直径只有 2 英寸,其表面会像台球那样光滑。

③ The speed of rotation of the earth's surface increases

地球表面自转的速度在两极为 0,均匀





steadily from zero at the poles to about 1,000 miles an hour at the equator. 上升,到赤道地区每小时约为1,000英里。

④ The earth rotates on its axis more slowly in March than in September. 地球绕地轴自转的速度3月份比9月份要慢。

⑤ The temperature of the earth's interior increases by 1 degree every 60 feet down. 深度每增加60英尺,地球内部的温度升高一度。

⑥ More than two-thirds of the earth's land surface lies north of the equator. 地球陆地表面的2/3以上位于赤道以北。

⑦ The largest desert in the world—the Sahara, the very word, in Arabic, for “desert”—is as large in area as the U.S. The Sahara wasn't always a desert. Twenty thousand years ago, glaciers covered much of Europe, and cool winds brought moisture to northern Africa. What is now desert was then a pleasant land with rivers and 世界上最大的沙漠撒哈拉,在阿拉伯语中意即“沙漠”,面积和美国一样大。但撒哈拉并非一直是沙漠。两万年前,冰川覆盖着欧洲大片地区,寒风将湿气吹到北非。现在沙漠的地方当时是一片有河流、湖泊、树林和草场的美好的地方。





lakes, forests and grasslands.

⑧The Cape of Good Hope 好望角并不是非洲的最南端。好望角以东 160 公里有个厄加勒斯角,比好望角还要往南 65 公里。  
is not the southernmost tip of Africa. About 160 kilometers east of the Cape of Good Hope is Cape Agulhas, which extends 65 kilometers farther south than Hope.

⑨Frigid, unattractive Patagonia, the narrowing southern tip of South Africa, is the only populated continental land area south of 40° South Latitude. By comparison, most of Europe, Asia, and two-thirds of North America are north of 40° North Latitude. 位于南非洲狭长的南端,寒冷而没有吸引力的巴塔哥尼亚,是南纬 40 度以南唯一有人居住的大陆地区。相比之下,欧洲和亚洲的大部分地区及北美洲 2/3 的土地,都在北纬 40 度以北。

⑩The lowest point that a person can get on this planet, unless he descends in a submarine device or a mine shaft, is where the Jordan River enters the Dead Sea—1,290 feet below sea level. 人在地球上能达到的最低点——除非乘潜水艇或下矿井——是约旦河流入死海之处,那儿的高度低于海平面 1,290 英





low sea level.

尺。

⑪ Antarctica is the only continent that does not have land areas below sea level.

南极洲是世界上唯一没有低于海平面的陆地的洲。

⑫ All continents, with the exception of Antarctica, are wider in the north than in the south.

除了南极洲外,所有的大陆都是北宽南窄。

⑬ About 3.9 million square miles of the earth's land surface (about 10 percent of the whole) is under a permanent ice cover. Eighty percent of all the world's ice is in Antarctica; 12 percent more is in Greenland. The remaining 8 percent is distributed among various polar islands and mountain peaks.

地球上大约有 390 万平方英里的陆地(约占全部陆地的 10%) 的表面永远为冰所覆盖。世界上 80% 的冰在南极洲,还有 12% 在格陵兰,剩下的 8% 分布在北极诸岛和各个山峰。

⑭ Continental snow cover would advance to the equator, and the oceans would eventually freeze, if there were a perma-

假如到达地球的能量持续减少哪怕 1.6% ~ 2%,陆地上的积雪就会扩展到赤





ment drop of just 1.6 to 2 percent in energy reaching the earth. 道,海洋最终会冰封。

⑮ If the 23 million cubic kilometers of ice in the world melted at the same time, the volume of the oceans would increase only 1.7 percent, but this would be enough for the sea level to raise about 180 feet. The Empire State Building would be in water to nearly the twentieth floor. 如果地球上2,300万立方公里的冰同时融化,海洋的体积也只会增加1.7%,但这将足以使海平面升高180英尺,帝国大厦将有20层淹在水中。

⑯ There are small ice-free patches of land in Antarctica. Altogether, it comes to an area of 2,900 square miles or 0.06 percent of Antarctica's area. The patches are kept bare by the wind. 南极洲有几小块地方没有冰,其总面积为2,900平方英里,相当于南极洲面积的0.06%。那些地方因风大,冰存不住。

⑰ Glaciers occupy 5.8 million square miles, or 10 percent of the world's land surface. 冰川占地580万平方英里,即地球陆地面积的10%,相当于





face, an area as large as South America. 南美洲那么大。

⑮ There is only one river in the world that has its source near the equator and from there flows into a temperate zone: the Nile. For some little-understood reason, the flow of most rivers is in the opposite direction.

世界上只有一条河流发源于赤道附近流向温带:尼罗河。不知什么原因,大多数河的流向都与之相反。

⑯ Excavations at Ur in Iraq show that the flood recorded in the Bible may have been a flood that occurred along the Tigris and Euphrates Rivers in an area about 400 miles long and 100 miles wide. The water rose high enough to submerge whole cities and deposit a layer of clay eight feet deep. To the survivors, it must have seemed that the entire world had been inundated.

伊拉克乌尔地区的挖掘表明,《圣经》中记载的大洪水,可能是发生在底格里斯河和幼发拉底河流域大约400英里长、100英里宽的地区的一次洪水。那次洪水很大,足以淹没整个城市,留下一层8英尺厚的粘土。在幸存下来的人看来,肯定像是整个世界都被淹没了。

⑰ An island 100 miles

一个长 100 英里、





across with an area of over 15,000 square miles sits smack in the mouth of the Amazon River. The island, Marajo, lies right on the equator, and hardly anyone lives there. (Its area is one-third that of New York State.)

② One of the twenty-five highest mountains on earth, nineteen are in the Himalayas.

② The oldest rocks in the world, the so-called St. Peter and St. Paul stones in the Atlantic Ocean, are 4 billion years old.

③ Nearly 94 percent of the volume of the earth's crust is taken up by oxygen. The "solid" earth is a well-packed set of oxygen anions (negatively charged ions), crowded closely together, with the small cations

世界上最高的 25 座山之中有 19 座在喜马拉雅山脉。

世界上最古老的岩石是大西洋中被叫作圣彼得和圣保罗的岩石,已有 40 亿年的历史。

地壳将近 94% 的体积由氧占据着。“固体”地球是一团压得很紧的氧离子(负离子),各处缝隙中夹杂着一些小块的另外 7 种元素的阳离子(正离子)。





(positively charged ions) of the other seven elements tucked here and there in the interstices. Even the Rock of Gibraltar is a heap of oxygen and a little more other elements.

②④ The Amazon River pushes so much water into the Atlantic that, more than a hundred miles at sea, off the mouth of the river, one can dip fresh water out of the ocean and drink it.

②⑤ Approximately 70 percent of the earth is covered with water. Only 1 percent of this water is drinkable.

②⑥ Approximately three thousandths of all the water on the surface of the globe evaporates each year.

②⑦ The oceans of the world are so vast and deep that if the

连直布罗陀的岩石也只是一堆氧加上一点其他成分。

亚马逊河将大量的水送入大西洋,在其河口 100 英里外的海面上,仍可以从海里舀到能喝的淡水。

地球约有 70% 为水所覆盖。其中只有 1% 可以饮用。

每年地球表面的水大约有 3‰ 蒸发成水蒸气。

地球上的海洋浩瀚而深邃,如果地壳的





earth had an absolutely level crust, the sea would form an envelope over 8,800 feet deep.

②⑧ If the water from all the world's oceans were formed into one sphere, that sphere would be almost one-third as large as the moon.

②⑨ The salt in seawater comes primarily from the fresh water that flows into the sea. As streams and rivers flow across the land they absorb a great deal of salt from rocks and the earth, and they carry this salt out to sea. There the fresh water evaporates and leaves the salt deposits behind.

③⑩ It has been estimated that if all the seas of the earth dried up, they would leave about 4,419,330 cubic miles of rock salt. This would be enough salt

表面完全是平的,地表将淹没在 8,800 英尺深的海洋中。

如果将全世界海洋的水组成一个球体,这个球体可有月球的  $1/3$  大。

海水中的盐主要来自流入大海的淡水。大小河流流经陆地时,从岩石和泥土中吸取了大量的盐,并将这些盐带入海中。海里的淡水蒸发掉而盐分却留了下来。

据估计,如果地球上的海水全部干涸,将会留下约 4,419,330 立方英里的岩盐。这些盐足够覆盖全美国





to cover the entire United States 1.5 英里厚。  
with a layer 1.5 miles deep.

③① Every cubic mile of sea- 每立方英里海水  
water holds over 150 million 里含有 1.5 亿吨矿  
tons of minerals. There are 350 物。地球上共有 3.5  
million cubic miles of seawater 亿立方英里的海水。  
on the planet.

③② The amount of gold dis- 溶在海洋中的黄  
solved in the oceans is nearly 9 金总量几乎达 900 万  
million tons, about 180 times 吨,约为人类有史以来  
the total amount of gold dug out 开采的黄金的 180 倍。  
of mines in the entire history of 但海洋中的黄金太分  
humanity. The gold in the 散,提炼赚不了钱。  
oceans is too diffuse to be ex-  
tractable at a profit.

③③ The Pacific Ocean fills 太平洋几乎占据  
nearly a complete hemisphere of 了地球表面的一半。  
the earth's surface.

③④ The bottom of the Arctic 北冰洋海底已测  
Ocean - depths of 2.8 miles 到最深处为 2.8 英  
have been recorded - is nearly 里,离地心的距离比世  
9 miles closer to the center of 界最深的、海平面以下  
the earth than the bottom of the 6.8 英里的棉兰老海



world's deepest trench, Mindanao, which is 6.8 miles below sea level. Sea level at the latitude of Mindanao is almost 13 miles above the polar sea level, making the greatest depth of the trench still about 6.1 miles above the polar sea level.

③⑤ Tidal waves move faster than any wheeled vehicle on earth. On the open seas they sometimes approach speeds of more than 500 nautical miles per hour.

③⑥ Immanuel Kant suggested, in the eighteenth century, that tidal friction slowed the rotation of the earth. He was correct, but it could not be demonstrated for another century. As the tidal bulge travels about the planet, it scrapes against shallow sea bottoms—especially the

沟还要近几乎9英里,棉兰老海平面高度比北冰洋海平面几乎高出13英里,所以那条深沟仍比北冰洋海平面高出6.1英里。

海浪运动的速度超过地球上的任何车辆。在公海上海浪的时速有时可以接近500海里。

伊曼纽尔·康德在18世纪提出,海浪的摩擦使地球自转变慢。他是正确的,可是他的理论在一个世纪后才得以证明。上涨的海潮在地球上运动时,在海下括过浅海的海底——尤其是白令海和





Bering Sea and the Irish Sea—爱尔兰海——被摩擦  
and the energy of the Earth's 热耗费掉的地球自转  
rotation is dissipated in friction- 能量足以使其转动变  
al heat enough to slow rotation 慢,每 10 万年每天会  
and lengthen the day by one 增加 1 秒钟。几十亿  
second every 100,000 years. 年来,一天变长了几个  
Over billions of years, the day 小时。  
has, perforce, lengthened a total  
of many hours.

③⑦ An iceberg larger than 有人曾于 1956 年  
Belgium was observed in the 在南太平洋观察到一  
South Pacific in 1956. It was 座冰山比比利时还要  
208 miles long and 60 miles 大。该冰山长 208 英  
wide—the largest ever seen. 里,宽 60 英里,是人们  
见过的最大的冰山。

③⑧ The African climate is 非洲的气候也不  
not always warm. The Nile has 总是暖和的。尼罗河  
frozen over at least twice in 至少在公元 829 年和  
829 A.D. and in 1010. 1010 年冰封过两次。

③⑨ The energy contained in 海洋中的狂浪拥  
a breaking ocean wave is im- 有巨大的能量。计测  
mense. Measurements made with 海浪动力所得的结果  
wave dynamometers have shown 表明,有些海浪拍打的



some waves striking with a force equal to a pressure of 6,000 pounds per square foot. The energy content of a four-foot swell moving along a hundred mile front would supply power to a city the size of Seattle for almost twenty-four hours.

④① If all the water vapor in the earth's atmosphere were condensed to liquid water at the same time, there would be enough water to cover the United States (including Alaska and Hawaii) with a layer of water twenty-five feet deep.

④② Because air is denser in cold weather, a wind of the same speed exerts 25 percent more force during the winter than it does during the summer.

④③ When the hot wind

当被叫作“沙拉

