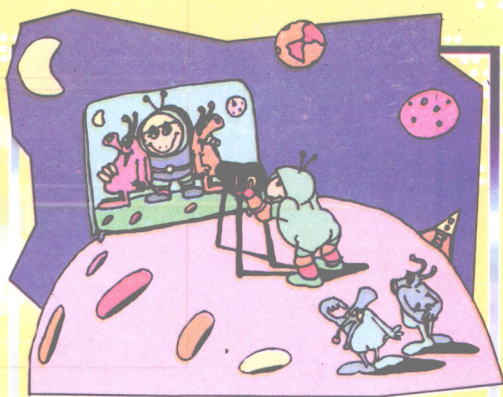


听书虫·英汉平行对照有声读物

蔚蓝的大海

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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注:带“☆”内容有录音



Questions About the Sea 海洋知识问答

① What is an ocean? What is the continental shelf?

An ocean is a vast body of water that connects other oceans to make up the world ocean. The world ocean covers about 71 % of the surface of the earth.

什么是海洋?
什么是大陆架?

一个海洋(形象地说)是水的巨大躯体,它连结其他的海洋而形成世界的海洋。地球上的海洋覆盖面积大约是71%。

The continental shelf is that part of the bottom of the ocean that extends from the shoreline to the continental slope. It slopes toward the sea.

大陆架是海洋海底的一部分,从海岸线一直到大陆线,大陆架向大海倾斜。

② How is water pressure related to depth?

There is a direct relationship between water pressure and

水压和深度有怎样的关系?

水压和深度二者间有着直接的关





depth. The greater the depth, the greater the pressure due to the added weight of the water from the top. As the depth increases, there is more weight on the bottom layers and more added pressure.

系。水越深,水压越大,这是因为来自上面的水增加的重量。当深度增加时,底层要承受更大的重量,就增加了更大的水压。

③ What is the difference between a neap tide and a spring tide?

小潮和大潮有什么区别?

A neap tide is when there is a narrow range between low and high tide. This occurs when the moon and sun are at right angles to each other. A spring tide is when there is a wide range between low and high tide. This occurs when the moon and sun's gravity is pulling on the earth from the same direction.

当高浪和低浪间的距离较小时是小潮,它的发生是在月亮和太阳处在相互垂直的角度时。当高浪和低浪间的距离较宽时是大潮,它的发生是当月亮和太阳的引力同一方向作用于地球时。

④ What instruments do oceanographers use to study the ocean? How do these instruments

海洋学专家用什么仪器研究海洋?这些仪器是怎样工





work?

Hydrometer, bathyscaph, nansen bottle, underwater camera.

The hydrometer measures the specific gravity of a solution and its density. The specific gravity is the relationship between the weight of the substance and the weight of an equal volume of water. A hydrometer placed in water will float at a certain height. It will float lower in liquids less dense than water and higher in liquids of greater density than water.

The bathyscaph is a deep diving device which carries men to great depths of the ocean. Inside the chambers of the bathyscaph, are oxygen tanks. In one chamber is gasoline. Since gasoline is

作的?

这些仪器有:液体比重计、南森瓶深海潜水器及水下摄影(像)机等。

液体比重计测量溶液具有的比重和它的密度。(物质的)比重是同体积的物质的重量和水的重量之间的关系。液体比重计在水中要浮在相应的高度。它浮在比水浓度低的液体的下面,而浮在比水的密度高的液体的上面。

深海潜水器是一种深海潜水装置,它可以载人去很深的海洋。在潜水器的里面,是氧气舱。一个房间里装着汽





lighter than water it provides lifting power for the mechanism. When gas is released from the chamber, the bathyscaph goes down. When weights from a special section are dropped, the vessel will rise.

油。因为汽油比水轻时,它为潜水器提供上升的力。当汽油从房间里释放时,潜水器便下沉;当有来自特殊部件的重量落下时,容器便上升。

Nansen bottles are lowered into the ocean to collect samples of ocean water from various depths.

南森瓶是放入海洋中收集深处海水样品的。

Underwater cameras can take pictures of the sea at various depths so that we can study sea life.

水下摄影(像)机能带回深海的照片,那样我们便能研究海洋的生物。

⑤ What effect does the wind have on wave motion and currents?

风对波浪运动和水流有什么影响?

As the wind moves the water, it cools the surface temperature and speeds up evaporation.

当风吹动水,水的表面温度下降并且加速蒸发。

Waves and ocean currents are

波浪和海流的





set in motion by winds. Wave size is related to the location of a wind storm. If it is very near the shore, the waves will be larger than if it is far from shore. The wind may change the course of a current or it may carry less water if the wind is not blowing so hard.

运动依赖风。波浪的大小跟风暴的位置有关系:如果风十分靠近海岸,波浪将比风远离海岸大得多。风能改变海流的方向,如果风吹得不是很厉害,它也能带走一些水。

⑥ If you could obtain sea water from the ocean for your aquarium, would it be better to use than artificial sea water?

如果你可以从海洋里弄些海水给养鱼池,是不是比用人工海水好?

Artificial sea water is better for an aquarium than water from the ocean because ocean water contains many organisms that can foul a small system like the area in a fish tank.

用于养鱼池的人工海水比海洋的水好,这是因为海水含有许多生物,它会污染像鱼塘这样的小组织的环境。

⑦ What is turbidity and how is it measured?

什么是混浊度,怎样测量它?

Turbidity is how cloudy the water is. This can be measured

混浊度是指水的不清程度。测量





6

with the secchi disc and Forel and Ule scales. The secchi disc is lowered into the water until the black color can no longer be seen. This distance is recorded and it is lowered further until the white color disappears. The ratio of the two distances is the turbidity index. Forel and Ule scales are color comparators that help the student to compare the coloration of water samples from lakes, estuaries, ponds, streams, and the ocean. These scales are often used in pollution studies.

它可以用 Secchi 盘、Forel 和 Ule 标尺(比色仪) Secchi 盘被放到水下直到黑色不再出现。这时的水深被记下来,再将 Secchi 盘放进更深的水中,直到白色消失。两个距离的比率便是混浊度指数。Forel 和 Ule 标尺进行颜色比较,帮助学生比较来自湖湾、池塘、溪流和海洋的水样的色彩。这两种标尺也时常用于对污染的研究。

⑧ What are some of the pollutants of the ocean and how does the ocean become polluted?

海洋污染有那些,是怎样形成的?

Some pollutants include sewage, detergents, pesticides, insecticides, fertilizers, mercury and

海洋污染包括:垃圾、清洁剂、农药、杀虫剂、肥料、水银



other chemicals. Pollution comes from towns, industry, boats that dump their wastes into the water without refining it first.

以及其他化学制品。污染来自城镇、工业、船只,他们将未处理的废弃物倾倒在海里。

⑨ What makes ocean water salty?

海水为什么是咸的?

The ocean contains common table salt (sodium chloride), plus other salts such as magnesium chloride, calcium chloride, strontium chloride, potassium chloride, and potassium bromide, to name a few.

海水里含有人们的餐桌上的盐(氯化钠),加上其他盐类,像氯化镁、氯化钙、氯化锶、氯化钾和溴化钾等等。

10 Discuss the food chain in the ocean.

说说海洋中的食物链。

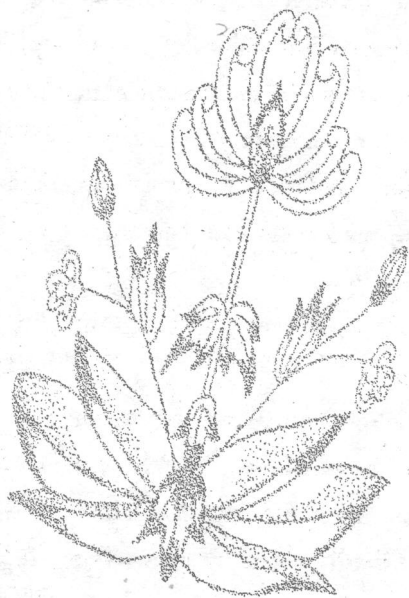
The phytoplankton are eaten by the zooplankton, which are eaten by larger fish and the larger fish are finally eaten by man. The phytoplankton are the primary producers, the animals are the consumers. When plants and animals

浮游植物被浮游动物吃掉。浮游动物被大鱼吃掉,而大鱼最终被人吃掉。浮游植物是第一个生产者,动物是消费者。当植物和动物





die, the decomposers (bacteria). 死后,身体组织分解
change the organic matter into (细菌)成化合物,使
compounds that the plants can 植物能再次被浮游
once again use for photosynthesis. 植物享用。食用链
The food chain is really an energy 其实是个能(量)链,
chain that loses energy in order to 每环失去能量是为
transfer. 了互相传递。





The Sea

海洋

What do you know about the sea? We have seen it. Some of us have swum or bathed in it. We know that it looks very pretty when the sun is shining on it. We also know that it can be very rough when there is a strong wind. What other things do we know about it?

关于海洋,你知道些什么? 我们见过海洋。我们中有些人在大海里游过泳或者洗过海水澡。我们知道,太阳明亮地照耀在海面上的时候,大海是非常美丽可爱的。我们也知道,如果刮大风,海洋就变得非常狂暴。除此以外,大海的情况我们还知道些什么呢?

The first thing to remember is that the sea is very big. When you look at the map of the world you will find there is more sea

首先要记住的是,海洋是十分大的。如果你瞧瞧世界地图,你就发现海





than land. The sea covers threequarters of the world!

洋比陆地多。海洋占地球表面的 $\frac{3}{4}$ 啊!

The sea is also very deep in some places. It is not deep everywhere. Some parts of the sea are very shallow. But in some places the depth of the sea is very great. There is one spot, near Japan, where the sea is nearly 11 kilometres deep! If the highest mountain in the world were put into the sea at that place, there would be 2 kilometres of water above it! What a deep place!

其次,海洋的某些地方很深,但并不是到处都很深。海洋中有的部分相当浅。在某些地方,海洋的深度很大。靠近日本的一个地方,海水的深度几乎达到 11,000 米!世界上最高的山脉放到刚才提到的那个位置的海里,在山顶上部还会有 2000 米深的水!这个地方该多深啊!

If you have swum in the sea, you know that it is salty. You can taste the salt. Rivers, which flow into the sea, carry salt from the land into the sea. Some parts of

如果你在海里游过泳,你就知道水是咸的。海水的咸味你尝尝就知道了。流入海洋的河流把



the sea are more salty than other parts. There is one sea, called the Dead Sea, which is very salty. It is so salty that swimmers cannot sink! Fish cannot live in the Dead Sea! What a strange sea!

陆地上的盐带到了海里。海洋中某些部分会比另一些部分要咸一些。有一个海,叫死海,那真是咸得很。这个海咸到这样的程度,游泳者沉不下去!鱼活不下去!真是一个奇异的海!

In most parts of the sea, there are plenty of fishes and plants. Some live near the top of the sea. Others live deep down. There are also millions of tiny living things that float in the sea. These floating things are so small that it is hard to see them. Many fish live by eating them.

在大部分海域,生活着大量的鱼类和水生植物。有的生活在靠近水面的浅层海水中。有的生活在下面的深水中。在海水中,还浮游着无数的微生物。这些浮游的微生物极小,很难看出它们来。有许多鱼是靠吃这些微生物维持生存的。





The sea can be very cold. Divers, who dive deep down in the sea, know this. On the top the water may be warm. When the diver goes downwards, the sea becomes colder and colder.

海洋会很冷的。潜入海洋深入的潜水员知道这一点。在表面的海水可能是暖和的。可是，潜水员越往深处游，海水越来越冷。

Another thing happens, when the diver goes deeper, the water above presses down on him. It squeezes him. Then the diver has to wear clothes made of metal. But he cannot go very deep. Some people who wanted to go very deep used a very strong diving ship! They went down to the deepest part of the sea in it. They went down to a depth of eleven kilometres!

潜水员在游入深处时，会发生另一种情况。上面的海水都向他身上压下来，朝着他挤。于是，潜水员必须穿上金属做的衣服。然而，潜水员无法潜得很深。人们想到达很深的海水中，就使用一种很牢固的潜水船。他们乘着这种潜水船到达了海水最深的地方。他们竟到达了 11,000 米的深度！