单元八: 空气, 水, 与土地的互动	Unit 8: Interactions of air, water, and land
主要观念:	Key Ideas:
8.1: 观察,探讨,及纪录物理风化及化 学风化的例子	8.1:Observe, investigate, and record examples of physical and chemical weathering
8.2: 描述侵蚀的过程(例如,地心引 力,风,和水的活动)如何改变地球表 面	8.2: Describe how erosional processes (e.g., action of gravity, wind, and water) cause surface changes to the land
8.3: 探讨及观察地球物质的沉积	8.3: Investigate, measure, and observe the deposition of earth materials
8.4: 描述水在地球上的循环(如,地下水,水流)	8.4: Describe and illustrate the natural processes by which water is recycled on earth (e.g., ground water, runoff).
8.5:研究天灾对生物的正面及负面的影响:地震,火山,飓风,龙卷风,水 灾,火灾	8.5: Investigate the negative and positive impact of extreme natural events on living things: earthquakes, volcanoes, hurricanes, tornadoes, floods, fires
单元大纲	Unit Overview
什么叫做风化?风化对地球有什么影响?有多少种不同的风化?	What is weathering? What will weathering do to the earth? How many different types of weathering?
石头被风化以后侵蚀就产生了。什么叫 做侵蚀?侵蚀的原因是什么?	What happens after weathering breaks down rock into sediment? Erosion takes over. What is erosion? What causes erosion?
地球上到处都有河流。河一边流动,一 边把泥土和石头夹带著,沉积因此就产 生了。河流的沉积导致地形的产生,如 三角洲。	Rivers are found all over earth. As rivers flow, they carry soil and rock. As a river moves, deposition occurs. In deposition, rivers drop bits of rock and soil along the way. River deposition builds landforms such as deltas.
雨水落在地上的时候,有些被土壤吸 收,有些流到地底深处直到岩石层就不 能再流了,因此就积在那里。不久之后 就形成了地下水。没有被土壤吸收的水	When rain falls on land, some of it soaks into the soil, then moves deeper into the ground. It moves down until it gets to solid rock. Because the water cannot move

成为径流,径流流到小溪,然后流到河 里。	through the rock, it begins to collect there. After a while, a lot of collected water forms a body of groundwater. Rain that is not soaked up by the soil becomes runoff. The runoff flows into creeks and streams, which flow into rivers.
天灾通常给生物带来负面的影响,但是 有时也带来正面的影响。	Extreme natural events usually give negative impacts on living things but sometimes they give positive impacts.

单元八: 空气, 水, 与土地的互动	Unit 8: Interactions of Air, Water, and Land
关键问题:大自然的变化如何影响我们 的世界?	Essential Question: How do natural events affect our world?
主要观念 8.1: 观察, 探讨, 及纪录物理 风化及化学风化的例子	Key Idea 8.1: Observe, investigate, and record examples of physical and chemical weathering.
科学名词: 1.风化(把石头分解成小 块)2.矿物质(构成石头的物质)	<ul><li>Scientific Terms: 1. weathering (The breaking of rock into smaller pieces.)</li><li>2. minerals (Materials of which rocks are made.)</li></ul>
内容: 风化就是大自然把石头及山丘分解成小块的 过程。风化改变了地球表面的形状。水滴在 石头的缝里,水结冰了以后就膨胀,石头因 此裂开为多块,这种风化叫做物理风化。石 头变为许多小块以后只有大小及形状改变, 构成石头的物质仍是一样,没有改变。	Content: Nature's way of breaking up rocks and mountains is called weathering. Weathering helps to change the surface of the earth. Water drips into cracks in a rock. When the water freezes, it expands. The rock cracks and splits even more. This kind of weathering is called physical weathering. As the rock breaks into small pieces, only its size and shape change. The minerals that the rock is made of do not change.
你看过人行道上的石头被树根撑裂吗?植物 也会造成物理风化。植物的根钻过石头里的 小裂缝,根长大就把石头裂成小块。	Have you seen a sidewalk cracked by the roots of a tree? Plants also cause physical weathering. Plant roots work their way through small cracks in a rock. As the roots grow, they break the rock into smaller pieces.
化学风化不但把石头解体而且把石头里的矿 物质改变,增加或减少。含有铁的石头会变 成红色是因为铁会生銹,铁跟水碰在一起就 会生銹。	Chemical weathering not only breaks down rocks but also changes the minerals in the rock. It changes, adds to, or removes a rock's minerals. Rocks that contain iron can turn red. This is because the iron rusts. Rusting occurs when iron and water come in contact with each other.
另外一种化学风化是由二氧化碳而来。二氧 化碳是空气里的一种气体。它跟雨水混在一 起落在石头上。二氧化碳混了水就形成一种 微酸。这种微酸慢慢把石头溶掉,也改变了 构成石头的物质。	Another kind of chemical weathering is done by carbon dioxide. Carbon dioxide is a gas in the air. It mixes with rain and falls on rocks. The mixture of carbon dioxide and water makes a weak acid. The rocks are slowly worn away by this acid. The

	acid changes the minerals that the rock is made of.
复习: 1. 物理风化与化学风化的不同在哪里? 2. 空气里的气体如何把石头分解成小块? 3. 在石头里的水结冰以后石头会如何改 变?	<ul> <li>Review: <ol> <li>What is the difference between physical weathering and chemical weathering?</li> <li>How do gases from the air help break down rocks?</li> <li>How do rocks change when the</li> </ol> </li> </ul>
	water in them freezes?

甲兀八: 空气, 水, 与土地的互动	Unit 8: Interactions of Air, Water, and Land
关键问题:大自然的变化如何影响我们	Essential Question: How do natural events
的世界?	affect our world?
主要观念 8.2: 描述侵蚀的过程(例如,	Key Idea 8.2: Describe how erosional
地心引力,风,和水的活动)如何改变	processes (e.g., action of gravity, wind, and
地球表面	water) cause surface changes to the land.
科学名词: 1. 侵蚀 2. 内陆 3. 沙洲 4. 障	Scientific Terms: 1. erosion 2. inland
壁岛	3. bars 4. barrier islands
内容:	Content:
侵蚀是地球表面的物质,如石头和土壤,被	Erosion is the moving and breakdown of
风和水移动及分解。	earth materials, such as rocks and soil by
	wind and water.
水和风在移动的过程由接触到地面的物质	Water and wind move earth materials
渐渐改变了地的形状。地心引力使石斗指茨	around and change the shape of the land
的时候也呈致地面的侵蚀	they touch Even gravity causes erosion of
	land and earth materials when earth and
	rocks fall.
风可以改变地球表面的外貌。在十燥的地方	Wind can affect the way Earth's surface
及沿海的沙岸,土壤非常的十燥及松动,也	looks. In dry areas and along sandy coast,
没有什么植物。风就把它们吹起米带走。	soil is dry and loose. There aren't many
	plants. Wind lifts particles and carries
	them.
风把沙吹到多石的表面,沙就把石头的表面	Wind carries sand into rocky surfaces. The
吹得坑坑洞洞。风也把沙带到沙丘上。	wind-blown sand makes pits and grooves
	in rock. Wind also carries sand and
	deposits it in dunes.
海浪也冲击岩岸的石头。当岸上的石头被冲	
倒以后岩岸就移往内陆,被海浪冲出的石头	Waves break down rocky cliffs. As the
拱门及石柱就被留下。海往内陆移动, 这些	cliffs crumble, they move farther inland.
拱门及石柱就留在岸边。	Structures such as stone arches and pillars
	are left behind. As the sea moves inland,
	the structures are left offshore.
海道电栅冰串的形体步速 之的栅冰井 ^	Waves also change the shape of sandy
一	coastlines. They remove sand from some
地力,件到为一个地力,这个沙的侵蚀及沉淀 就进出了海滩,冰湖以五河 出的座座鸟	areas and deposit it in other places. This
<b>纵垣</b> 成 J <b>海</b> 滩, 沙洲以及沿 <b>斥</b> 的厚壁岛。	erosion and deposition of sand creates
	beaches, and bars, and barrier islands along
	the shore.

河水往下流,在流的时候就带著泥土及石 块。这些石块打松了河流两旁的石头。河流 因此侵蚀了土地。经过长时间,河流就深深 的切入石头里。科罗拉多河流经大峡谷就形 成了峡谷。	Rivers flow downhill. They carry along soil and pieces of rock. These pieces of rock hit and loosen other rocks along the sides of the rivers. Rivers erode the land. After a long time, rivers can cut very deeply into
	rock. The Colorado River flows through
	the Grand Canyon and forms the canyon.
复习:	Review:
1. 什么叫做侵蚀?	1. What is erosion?
2. 海滩如何形成?	2. How are beaches created?
3. 大峡谷的形成是因为地心引力,或	3. What action formed the Grand
是风,或是水的活动所造成的?	Canyon? The gravity? Or the wind?
	Or water?

单元八: 空气, 水, 与土地的互动	Unit 8: Interactions of Air, Water, and Land
关键问题:大自然的变化如何影响我们 的世界?	Essential question: How do natural events affect our world?
主要观念 8.3: 探讨及观察地球物质的沉积	Key Idea 8.3: Investigate, measure, and observe the deposition of earth materials.
科学名词: 1. 沉积(地球物质的沉下或 留下) 2. 淤泥	Scientific Terms: 1. Deposition (the dropping or settling of earth materials) 2. silt
内容: 下雨天的时候你会看到在人行道上的一滩滩 的水。通常这些都是泥水。雨水把土带到水 滩里。等到雨停了,水蒸发以后,土就留了 下来。沉积就是空气,水,与土的相互影响 的结果。	Content: During rain, you may have watched runoff water collect in puddles on the sidewalk. Often the water in puddles is muddy. The rainwater picks up soil and carries it to the puddle. After the rain stops, the water evaporates, but the dirt carried into it is left behind. This is what happens during deposition. Deposition results from the interaction among air, water, and land.
流得很快的水流从山坡上流下来,有时还会 把大块石头夹带下来。这些大块石头被激流 冲击就互相碰撞,因此造成许多小块破片。 时间一久,水就把石头磨成沙子。沙子再渐 渐磨成淤泥。土壤就是由沙子,淤泥及其它 地里的小碎片组成的。有些在土壤里的东西 是由生物的遗体分解而成的。	Runoff water moving downhill flows fast. Fast-flowing rivers may move even large rocks. Driven by rushing water, rocks bash into each other. Small chips of rock break off. Over time, water grinds rocks into sand. Sand wears into tiny pieces called silt. Soil is made up of sand, silt, and other broken-down pieces of earth material. Some material in soil was broken down from the bodies of living things.
水流和风慢下来以后,它们所携带的沙子, 淤泥,和泥土就被留下来,这就是沉积。沉 积以后,这些小块的东西就形成了土壤,远 远离开了它们原来的地方。	When moving water and wind slow down, they drop the pieces of sand, silt, and earth that they are carrying. After this deposition, these tiny pieces of earth form soil miles from where they were picked up or broken down.
土壤形成以后,它们可能又会被侵蚀,然后 沉淀在别的地方。石头与沙子被激流挟带, 冲刮地面。急流把细的土壤从山上冲到河 里。同时,风也把乾的土壤从地上吹起来带 到远处。	After forming, soil can erode and be deposited elsewhere. Carried by a fast- flowing river, rocks and sand scrape and batter the land. Rushing water washes the finest soil from mountains into rivers. Meanwhile, wind picks up dry soil from the land and carried it for miles.

复习:		Review:
1.	什么是沉积?	1. What happens during deposition?
2.	土壤是由什么组成的?	2. What is soil made of?

单元八:空气,水,与土地的互动	Unit 8: Interactions of Air, Water, and
	Land
关键问题:大自然的变化如何影响我们 的世界?	Essential Question: How do natural events affect our world?
主要观念 8.4: 描述水在地球上的循环	Key Idea 8.4: Describe and illustrate the
(如,地下水,水流)	natural processes by which water is
	recycled on earth (e.g., ground water, runoff).
科学名词: 1. 降雨(量)(从大气层降	Scientific Terms: 1. precipitation (Water
下来的水以雨,雪,或冰雹的形式出	that falls from the atmosphere in the form
现)2.蒸气(在水蒸发的时候所形成的	of rain, snow, hail, or sleet.) 2. vapor (A
一种无色,无味的气体)	colorless, odorless gas that forms when
中穷	water evaporates.)
內谷: 水被大阳珊执以后谢恋成——种丢不见的与休	When water is heated by the sun it slowly
山做水蒸气。水蒸气比空气轻. 所以就升到	turns into an invisible gas called water
空中。这个过程叫做蒸发。	vapor. The vapor is lighter than air, so it
	rises high up into the sky. This process is
	called evaporation.
蒸发:从液体转变为气体的过程。	Evaporation: The process of changing from
	a liquid into a gas (or vapor).
当执的装气升到窍由。	
当然的感 (万到工个, 行动工术, 采成7)水 占或雪片, 然后形成了云。这个讨程叫做冷	As the heated vapor rises into the sky, it
凝。	snowflakes and forms clouds. This is
	called condensation.
冷凝:从气体转变成固体或液体的过程。	Condensation: The process of changing from a gas (or vapor) into a solid or liquid
	from a gas (or vapor) into a sond or inquid.
越来越多的小水点集中在云里, 云就越来越	As more droplets join the clouds, the
重。很快地在云里的水就成为雨点落下。在	clouds get heavier and heavier. Soon, the
很冷的地方,雨冰冻起来,成为雪,雨雪,	water begins to fall from the clouds as
或冰雹。	freezes and turns to snow sleet or hail
	neezes and turns to show, seet, or nun.
地底下的水集中在山洞里,其中一大部分继	Underground water can collect in caverns,
续往下渗透, 直到被一层坚硬的固体挡住。	but most of it seeps down until it reaches a
这水就留在沙粒的空隙或石头的裂缝里,形	The water then fills the spaces between
成了一层地底下的水叫做地下水。	grains of sand and cracks in rocks. forming
	an underground layer of water called an
	aquifer.

地下水: 在地底下被水泡透的沙及石头, 是 井的源头。	Aquifer: The underground layer of water- soaked sand and rock that acts as a water source for a well.
留在地面的水会往湖里,小溪里及河川里 流。最后,大部分在地面上的水及地底下的 水都会流回海洋。	A lot of the water that stays on the surface runs off into lakes, streams, and rivers. Eventually, most of the water that falls to earth makes its way to the oceans. Even the water that goes underground finds its way to the oceans.
我们可以从地下水或湖泊及河流里取得所需 要的水。	One place we get our water from is the aquifer – underground water. The other place is from lakes and rivers.
一个供给给乡镇或城市所需的水的湖叫做水 库。水库贮藏水。	A lake that supplies water to a town or city is called a reservoir. A reservoir is where water is stored until it is needed.
水被使用过以后就流到下水道。在下水道的 水接著就流到废水处理厂用化学物质处理并 清洁,这种水叫做处理过的废水。处理过的 废水再被送回河流,湖泊及海洋,重新再一 次被蒸发,冷凝,降雨的过程。	After we use the water, it goes down the drain into the sewer. The sewage water then goes to a treatment plant where it is cleaned and treated with chemicals. This is called reclaimed wastewater. Most of the reclaimed wastewater is sent back into rivers, lakes and oceans, where it can go through the whole water-cycle process of evaporation, condensation, and precipitation all over again.
水的循环:一个连续不断的过程。在这个过程里,水从地面被蒸发,在空气中被冷凝, 再以雨,雪,冰雹的形式回到地面。	Water cycle: A continuous process during which water evaporates from the earth, condenses in the air, returns to earth in the form of precipitation, evaporates again, and so on.
<ul> <li>复习:</li> <li>1. 什么叫做蒸发?</li> <li>2. 什么叫做冷凝?</li> <li>3. 井水是从哪里来的?</li> <li>4. 处理过的废水被送去哪里?</li> </ul>	Review: 1. What is evaporation? 2. What is condensation? 3. Where does well water come from? 4. Where does reclaimed wastewater go?

单元八: 空气, 水, 与土地的互动	Unit 8: Interactions of Air, Water, and Land
关键问题:大自然的变化如何影响我们 的世界?	Essential Question: How do natural events affect our world?
主要观念 8.5:研究天灾对生物的正面及 负面的影响:地震,火山,颶风,龙卷 风,水灾,火灾	Key Idea 8.5: Investigate the negative and positive impact of extreme natural events on living things: earthquakes, volcanoes, hurricanes, tornadoes, floods, fires.
科学名词: 1. 地壳 2. 岩浆	Scientific Terms: 1. earth's crust 2. lava
内容: 地震是一个突然而强烈的地壳移动。	Content: An earthquake is a sudden, strong movement of earth's crust.
火山是地壳的开口,地底下的蒸气,灰烬, 气体,熔岩从开口处喷出来。	A volcano is an opening in earth's crust from which underground steam, ash, gas, and hot liquid rock escape.
颶风是一个带有强风的热带暴风。	A hurricane is a tropical storm with strong winds.
龙卷风是一个漏斗状会旋转的云。	A tornado is a cloud shaped like a funnel that spins.
水灾是大量无法控制的水流。	A flood is an overflowing body of water.
地底下的移动会造成地震。剧烈的震动使建 筑物及桥梁都倒下。滚烫的岩浆,蒸气,及 灰烬都从火山喷出来。岩浆及灰烬可以把在 火山附近的生物烧毁或掩埋。但是世上有一 些最美丽的山及岛屿都是火山爆发以后才產 生的。还有,岩浆形成的土壤很肥沃,可以 种植农作物。	Underground movements can result in earthquakes. Violent shaking topples buildings and bridges. Hot lava, steam, and ash from underground can erupt from volcanoes. The lava and ash can burn or bury living things near the volcano. Yet some of earth's most beautiful mountains and islands have been created by erupting volcanoes. The soil formed from lava is rich in nutrients and good for crops.
颶风可以吹过几百几千哩。它的风没有龙卷 风那样强烈,但是颶风可以有几百哩宽,可 以吹好几天。狂风把树连根拔起,把建筑物 夷平。暴雨可能把整个社区冲走。许多生物 都会被毁灭。	Hurricanes can travel hundreds or thousands of miles. Their winds are less violent than those of tornadoes, but hurricanes may be hundreds of miles wide and may last for several days. Terrific winds uproot trees and level buildings. Heavy rainfall may wash whole neighborhoods away. Many living things are destroyed.

龙卷风从夹有雷电的乌云里呈漏斗状延伸出 来。强风在一个圆圈里快速地旋转。当一个 龙卷风吹过一个城镇,它所接触到的一切都 可能被毁。	The tornado's whirling funnel of air extends down from the thundercloud. Winds spin in a tight circle at terrific speeds. When a tornado whirls through a town, it may destroy everything it touches.
大自然不停的运转。有时大自然的变化强 烈,对生物可能有非常大的影响。在有些情 形之下太多的好东西反而造成天灾。例如 说,所有的生命都需要雨水,但是太多的雨 水就造成水灾。水灾会淹死生物,摧毁房 屋,把土壤冲走。太多的雨水会把地上的物 质从山上滑下,把房屋及生物毁灭。但是水 灾有时也带来好处。有的时候农夫要靠河水 淹过河岸及周围的山谷来灌溉,也靠河里沉 积的土来种植。	Natural processes take place all the time on earth. Sometimes natural events may be extreme with major impacts on living things. In some cases, extreme natural events are caused by too much of a good thing. For example, all life depends on rain, but too much rain can cause a flood. Floods can drown living things, destroy their homes, and wash away soil. Too much rain can bring tons of earth material sliding down a hill, crushing homes and living things beneath it. Yet floods can be helpful at times too. Along some rivers, farmers count on the rivers to flood their banks and the surrounding valley. The floods water the land and deposit silt for farming.
<ul> <li>复习:</li> <li>1. 颶风為什么危险?</li> <li>2. 水灾的正面影响是什么?</li> <li>3. 火山的正面及负面影响是什么?</li> </ul>	<ul> <li>Review:</li> <li>1. What makes a hurricane dangerous?</li> <li>2. What is the positive impact of a flood?</li> <li>3. What are the negative and positive impacts of a volcano?</li> </ul>

答案	:	Answer Key		
单元八		Unit 8		
8.1 1.	风化就是大自然把石头及山丘分成 小块的过程。水滴在石头的缝里, 水结冰了以后就膨胀,石头因此裂 开為多块,这种风化叫做物理风 化。石头变为许多小块以后只有大 小及形状改变,构成石头的物质仍 是一样,没有改变。化学风化不但 把石头解体而且把石头里的矿物质 改变,增加或减少。含有铁的石头 会变成红色是因为铁会生銹,铁跟 水碰在一起就会生銹。	<ul> <li>8.1</li> <li>1. Nature's way of breaking up rocks and mountains is called weathering. Water drips into cracks in a rock. When the water freezes, it expands. The rock cracks and splits even more. This kind of weathering is called physical weathering. As the rock breaks into small pieces, only its size and shape change. The minerals that the rock is made of do not change. Chemical weathering not only breaks down rocks but also changes the minerals in the rock. It changes, adds to, or removes a rock's minerals. Rocks that contain iron can</li> </ul>		
2.	二氧化碳是空气里的一种气体。它 跟雨水混在一起落在石头上。二氧 化碳混了水就形成一种微酸。这种 微酸慢慢把石头溶掉,也改变了构 成石头的物质。 水滴在石头的缝里,水结冰了以后 就膨胀,石头因此裂开為多块。	<ul> <li>turn red. This is because the iron rusts.</li> <li>2. Carbon dioxide is a gas in the air. It mixes with rain and falls on rocks. The mixture of carbon dioxide and water makes a weak acid. The rocks are slowly worn away by this acid. The acid changes the minerals that the rock is made of.</li> <li>3. Water drips into cracks in a rock. When the water freezes, it expands. The rock cracks and splits even more.</li> </ul>		
8.2 1. 2. 3.	侵蚀是地球表面的物质,如石头和土 壤,被风和水移动及分解。 2.海浪把沙从一个地方冲到另一个地 方,这个沙的侵蚀及沉淀就造成了海 滩。 水,因为河水往下流,在流的时候就 带著泥土及石块。这些石块打松了河 流两旁的石头。河流因此侵蚀了土 地。经过长时间,河流就深深的切入	<ul> <li>8.2</li> <li>1. Erosion is the moving and breakdown of earth materials, such as rocks and soil by wind and water.</li> <li>2. Waves remove sand from some areas and deposit it in other places. This erosion and deposition of sand creates beaches.</li> <li>3. Water, because rivers flow downhill, they carry along soil and pieces of rock. These pieces of rock hit and loosen other rocks along the sides of</li> </ul>		

石头里。科罗拉多河流经大峡谷就形 成了峡谷。	the rivers. Rivers erode the land. After a long time, rivers can cut very deeply into rock. The Colorado River flows through the Grand Canyon and forms the canyon.
<ul> <li>8.3</li> <li>1. 沉积就是空气,水,与土的相互影响的结果。下雨天的时候在人行道上有一滩滩的水。通常这些都是泥水。雨水把土带到水滩里。等到雨停了,水蒸发以后,土就留了下来。</li> </ul>	<ul> <li>8.3</li> <li>1. Deposition results from the interaction among air, water, and land. During rain, runoff water collects in puddles on the sidewalk. Often the water in puddles is muddy. The rainwater picks up soil and carried it to the puddle. After the rain stops, the water evaporates, but the dirt carried into it is left behind. This is what happens during deposition</li> </ul>
<ol> <li>水流和风慢下来以后,它们所携带 的沙子,淤泥,和泥土就被留下 来,这就是沉积。沉积以后,这些 小块的东西就形成了土壤,土壤就 是由沙子,淤泥及其它地里的小碎 片组成的。</li> </ol>	<ol> <li>When moving water and wind slow down, they drop the pieces of sand, silt, and earth they are carrying. After this deposition, these tiny pieces of earth form soil. Soil is made up of sand, silt, and other broken-down pieces of earth material.</li> </ol>
<ul> <li>8.4</li> <li>1. 蒸发就是从液体转变為气体的过程。 水被太阳晒热以后就变成一种看不见的气体叫做水蒸气。水蒸气比空气轻,所以就升到空中。这个过程叫做蒸发。</li> </ul>	<ul> <li>8.4</li> <li>1. The process of changing from a liquid into a gas (or vapor). When water is heated by the sun, it slowly turns into an invisible gas called water vapor. The vapor is lighter than air, so it rises high up into the sky. This process is called evaporation.</li> </ul>
<ol> <li>冷凝就是从气体转变成固体或液体的 过程。当热的蒸气升到空中,冷却下 来,集成小水点或雪片,然后形成了 云。这个过程叫做冷凝。</li> </ol>	2. The process of changing from a gas (or vapor) into a solid or liquid. As the heated vapor rises into the sky, it cools, collects into tiny droplets or snowflakes, and forms clouds. This is called condensation.
<ol> <li>地底下的水集中在山洞里,其中一大 部分继续往下渗透,直到被一层坚硬 的固体挡住。这水就留在沙粒的空隙 或石头的裂缝里,形成了一层地底下</li> </ol>	<ol> <li>Underground water can collect in caverns, but most of it seeps down until it reaches a layer of solid material it can't to through. The water then fills the spaces between</li> </ol>

4.	的水。在地底下被水泡透的沙及石 头,是井的源头。 处理过的废水再被送囘河流,湖泊及 海洋,重新再一次被蒸发,冷凝,降 雨的过程。	4.	the grains of sand and cracks in rocks forming an underground layer of water called an aquifer. The underground layer of water-soaked sand and rock acts as a water source for a well. Most of the reclaimed wastewater is sent back into rivers, lakes and oceans where it can go through the whole water-cycle process of evaporation, condensation, and precipitation all over again.
85		8.5	
8.5	颶风可以吹过几百几千哩。它的风没 有龙卷风那样强烈,但是颶风可以有 几百哩宽,可以吹好几天。狂风把树 连根拔起,把建筑物夷平。暴雨可能 把整个社区冲走。许多生物都会被毁 灭。	1.	Hurricanes can travel hundreds or thousands of miles. Their winds are less violent than those of tornadoes, but hurricanes may be hundreds of miles wide and last for several days. Terrific winds uproot trees and level buildings. Heavy rainfall may wash whole neighborhoods away. Many living things are destroyed.
2.	水灾有时也带来好处。有的时候农夫 要靠河水淹过河岸及周围的山谷来灌 溉,也靠河里沉积的土来种植。	2.	Floods can be helpful. Along some rivers, farmers count on the rivers to flood their banks and the surrounding valley. The floods water the land and deposit silt for farming.
3.	地底下的移动会造成地震。剧烈的震动使建筑物及桥梁都倒下。滚烫的岩浆,蒸气,及灰烬都从火山喷出来。 岩浆及灰烬可以把在火山附近的生物 烧毁或掩埋。但是世上有一些最美丽 的山及岛屿都是火山爆发以后才產生 的。还有,岩浆形成的土壤很肥沃, 可以种植农作物。	3.	Underground movements can result in earthquakes. Violent shaking topples buildings and bridges. Hot lava, steam, and ash from underground can erupt from volcanoes. The lava and ash can burn or bury living things near the volcano. Yet some of earth's most beautiful mountains and islands have been created by erupting volcanoes. The soil formed from lava is rich in nutrients and good for crops.