

1

Community service is an important **component** of education here at our university. We encourage all students to volunteer for at least one community activity before they graduate. A new community program called "One On One" helps elementary students who've fallen behind. You education majors might be especially interested in it because it offers the opportunity to do some teaching—that is, **tutoring** in math and English. You'd have to volunteer two hours a week for one semester. You can choose to help a child with math, English, or both. Half-hour lessons are fine, so you could do a half hour of each subject two days a week. Professor Dodge will act as a **mentor** to the **tutors**—he'll be available to help you with lesson plans or to offer suggestions for activities. He has office hours every Tuesday and Thursday afternoon. You can sign up for the program with him and begin the tutoring next week. I'm sure you'll enjoy this community service and you'll gain valuable experience at the same time. It looks good on your resume, too, showing that you've had experience with children and that you care about your community. If you'd like to sign up, or if you have any questions, stop by Professor Dodge's office this week.

【生词摘录】

1. **component**: n. [C] one of several parts that together make up a whole machine or system (机器或系统的) 零件; 成分; 组成部分
2. **tutor**: n. [C] someone who teaches one pupil or a small group, and is directly paid by them 家庭教师, 私人教师 v. to teach someone as a tutor 给... 当家庭教师; 指导
3. **mentor**: n. [C] an experienced person who advises and helps a less experienced person 顾问, 指导人, 教练

I hope you've all finished reading the assigned chapter on **insurance** so that you're prepared for our discussion today. But, before we start, I'd like to mention a few things your text doesn't go into. It's interesting to note that insurance has existed in some form for a very long time. The earliest insurance policies were what we called **bottomry contracts**. They provided shipping protection for merchants as far back as 3000 B.C. In general, the contracts were often no more than verbal agreements. They granted **loans** to merchants with the **understanding** that if a particular shipment of goods was lost at sea, the loan didn't have to be repaid. **Interest** on the loans varied according to how risky it was to transport the goods. During periods of heavy **piracy** at sea, for example, the amount of interest and the cost of the policy went up considerably. So, you can see how insurance helped encourage international trade. Even the most **cautious** merchants became willing to risk shipping their goods over long distances, not to mention in **hazardous** weather conditions when they had this kind of protection available. Generally speaking, the basic form of an insurance policy has been pretty much the same since the Middle Ages. There are four points that were **salient** then and remain **paramount** in all policies today. These were outlined in chapter six and will serve as the basis for the rest of today's discussion. Can anyone tell me what one of those points might be?

### 【生词摘录】

1. **insurance**: n. [U] an arrangement with a company in which you pay them money each year and they pay the costs if anything bad happens to you, such as an illness or an accident 保险; the money that you pay regularly to an insurance company 保险费; the business of providing insurance 保险业
2. **bottomry**: n. 船舶抵押契约 (如船舶损失, 则债务取消), 冒险借贷
3. **contract**: n. [C] a formal written agreement between two or more people, which says what each person must do for the other 契约; 合同
4. **loan**: n. [C] an amount of money that you borrow from a bank etc (银行等的) 贷款
5. **understanding**: n. [C usually singular] a private, unofficial agreement (私底下、非正式的) 协议, 协定
6. **interest**: n. [U] a charge made for borrowing money (借贷的) 利息 [+on]
7. **piracy**: n. the crime of attacking and stealing from ships at sea 海上抢劫, 海盗行为
8. **cautious**: adj. careful to avoid danger or risks 小心的, 谨慎的, 慎重的
9. **hazardous**: adj. 危险的
10. **salient**: adj. *formal* the salient points or features of something are the most important or most noticeable parts of it 【正式】显著的, 突出的
11. **paramount**: adj. more important than anything else 至高无上的, 最重要的

Located at the NASA Research Center in Iowa is a 5,000-**gallon vat** of water, and inside the **tank** is an underwater **treadmill** designed by **Dava Newman**, an **aerospace** engineer. For four years Newman observed **scuba divers** as they **simulated** walking on the Moon and on Mars on her underwater moving belt. She wanted to discover how the gravity of the Moon and of Mars would affect human movement. To do this, Newman attached weights to the divers and then lowered them into the tank and onto the treadmill. These weights were carefully adjusted so that the divers could experience underwater the gravity of the Moon and of Mars as they walked on the treadmill. Newman concluded that walking on Mars will probably be easier than walking on the Moon. The Moon has less gravity than Mars does, so at lunar gravity, the divers struggled to keep their balance and walked awkwardly. But at **Martian** gravity, the divers had greater traction and stability and could easily adjust to a pace of 1.5 miles per hour. As Newman gradually increased the speed of the treadmill, the divers took longer, graceful **strides** until they comfortably settled into an even quicker pace. Newman also noted that at Martian gravity, the divers needed less oxygen. The data Newman collected will help in the future design of Martian space suits. Compared to lunar space suits, Martian space suits will require smaller air tanks; and, to allow for freer movement, the **elbow** and knee areas of the space suits will also be altered.

### 【生词摘录】

1. **gallon**: n. *AmE* a unit for measuring liquids, equal to 3.785 litres 【美】加仑（等于 3.785 升）
2. **vat**: n. [C] a very large container for storing liquids such as whisky or dye, when they are being made（酿酒、盛染料用的）大缸，大桶
3. **tank**: n. [C] a large container for storing liquid or gas（盛放液体或气体的）大容器
4. **treadmill**: n. [C] a mill worked in the past by prisoners treading on steps fixed to a very large wheel（过去用以惩罚犯人的）踏车
5. **aerospace**: adj. involving the designing and building of aircraft and space vehicles 航空和航天（器制造）的 n. [U] the industry that designs and builds aircraft and space vehicles 航空和航天工业，航天工业
6. **scuba diving**: n. [U] the sport of swimming under water while breathing through a tube connected to a container of air on your back 斯库巴潜泳，水肺潜泳（戴自携式潜水呼吸器潜泳）
7. **simulate**: v. to make or produce something that is not real but has the appearance of being real 模仿，模拟
8. **Martian**: adj. of or relating to the planet Mars 火星的
9. **stride**: n. [C] a long step 大步，阔步
10. **elbow**: n. [C] the joint where your arms bends 肘

**Dava Newman**

Professor of Aeronautics and Astronautics and Engineering Systems

Director of Technology and Policy Program

Mac Vicar Faculty Fellow



Welcome to Everglades National Park. The **Everglades** is a watery plain covered with **saw grass** that's home to numerous species of plants and wildlife. At one and a half million **acres**, it's too big to see it all today, but this tour will offer you a good **sampling**. Our tour bus will stop first at Taylor Slough. This is a good place to start because it's home to many of the plants and animals typically associated with the Everglades. You'll see many **exotic** birds and, of course, our world famous **alligators**. Don't worry, there's a **boardwalk** that goes across the marsh, so you can look down at the animals in the water from a safe distance. The boardwalk is high enough to give you a great view of the saw grass **prairie**. From there we'll head to some other marshy and even jungle like areas that feature wonderful tropical plant life. For those of you who'd like a closer view of the saw grass prairie, you might consider renting a **canoe** sometime during your visit here. However, don't do this unless you have a very good sense of direction and can **negotiate** your way through tall grass. We'd hate to have to come looking for you. You have the good fortune of being here in the winter—the best time of year to visit. During the spring and summer, the **mosquitoes** will just about eat you alive! Right now they're not so bothersome, but you'll still want to use an insect **repellent**.

### 【生词摘录】

1. **Everglades National Park**: 大沼泽地国家公园
2. **saw grass**: 克拉莎草; 加州砖子苗
3. **acre**: n. [C] a unit for measuring area, equal to 4,047 square metres 英亩
4. **sampling**: n. items selected at random from a population and used to test hypotheses about the population 取样, 抽样, 采样
5. **exotic**: adj. *approving* seeming unusual and exciting because of being connected with a foreign country 【褒义】异国风情的, 外国情调的: exotic birds 外国的奇异鸟类
6. **alligator**: n. [C] a large animal with a long mouth and sharp teeth that lies in the hot wet parts of the US and China 短吻鳄
7. **boardwalk**: n. [C] *AmE* a raised path made of wood, usually built next to the sea 【美】(常在海滨)用木板铺成的小道
8. **prairie**: n. [C] a wide open area of land in North America which is covered in grass or wheat (北美洲的)大草原
9. **canoe**: n. [C] a long light boat that is pointed at both ends and which you move along using a paddle 独木舟, 小划子
10. **negotiate**: v. <口> 成功通过, 顺利越过
11. **mosquito**: n. [C] a small flying insect that sucks the blood of people and animals 蚊子
12. **repellent**: n. [C,U] a substance that keeps insects away 驱虫剂

Thank you. It's great to see so many of you interested in this series on "Survival in Outer Space." Please excuse the cameras; we're being **videotaped** for the local TV stations. Tonight I'm going to talk about the most basic aspect of survival—the space suit. When most of you imagine an astronaut, that's probably the first thing that comes to mind, right? Well, without space suits, it would not be possible for us to survive in space. For example, outer space is a **vacuum**—there's no gravity or air pressure; without protection, a body would explode. What's more, we'd cook in the sun or freeze in the **shade** with temperatures ranging from a **toasty** 300 degrees above to a cool 300 degrees below zero **Fahrenheit**. The space suit that NASA has developed is truly a **marvel**. This photo **enlargement** here is a **life-size** image of an actual space suit worn by astronauts on the last space **shuttle mission**. This part is the **torso**. It's made of seven extremely **durable** layers. This thick **insulation** protects against temperature **extremes** and radiation. Next is what they call a "**bladder**" of oxygen that's an **inflatable sac**, filled with oxygen, to simulate atmospheric pressure. This bladder presses against the body with the same force as the Earth's atmosphere at sea level. The **innermost** layers provide liquid cooling and **ventilation**. Despite all the layers, the suit is flexible, allowing free movement so we can work. Another really sophisticated part of the space suit is the **helmet**. I brought one along to show you. Can I have a volunteer come and **demonstrate**?

### 【生词摘录】

1. **videotape**: v. to record a television programme, film etc on a videotape 把（电视节目、电影等）录在录像（磁）带上
2. **vacuum**: n. [C] a space that is completely empty of all gas, especially one from which all the air has been taken away 真空
3. **shade**: n. [U] slight darkness or shelter from the direct light of the sun made by something blocking it 荫，背阴处
4. **toasty**: adj. *AmE informal* warm and comfortable 【美，非正式】暖烘烘的，温暖舒适的
5. **Fahrenheit**: n. [U] a scale of temperature in which water freezes at 32° and boils at 212° 华氏温度
6. **marvel**: n. [C] something or someone surprisingly useful or skillful, that you like and admire very much 十分有用（灵巧）的物（人）
7. **enlargement**: n. [C] a photograph that has been printed again in a larger size 放大的照片
8. **life-size**: 又作 life-sized, adj. a picture or model of something or someone that is life-size is the same size as they are in real life 与实物（真人）大小一样的
9. **shuttle**: n. [C] a spacecraft that can fly into space and return to Earth, and can be used more than once （可以多次使用的）航天飞机，太空穿梭机

10. **mission**: n. [C] an important job done by a member of the airforce, army etc, especially an attack on the enemy 任务, 使命
11. **torso**: n. [C] your body, not including your head, arms, or legs (头和四肢除外的) 人体躯干
12. **durable**: adj. staying in good condition for a long time even if used a lot 耐用的
13. **insulation**: n. [U] material used to insulate something, especially a building (尤指建筑物的) 绝缘材料; the act of insulating something or the state of being insulated 隔绝
14. **extreme**: n. [C] something that goes beyond normal limits, so that it seems very unusual and unacceptable 极端
15. **bladder**: n. [C] a bag of skin, leather, or rubber, for example inside a football, that can be filled with air or liquid (可充气或充水的) 囊; 袋
16. **inflatable**: adj. an inflatable object has to be filled with air before you can use it 须充气方可使用的, (需) 充气的
17. **sac**: n. *technical* a part inside a plant or animal that is shaped like a bag and contains liquid or air 【术语】(动物或植物的) 囊; 液囊
18. **innermost**: adj. *formal* furthest inside 【正式】最里面的
19. **ventilation**: n. [U] 通风 (ventilate: v. to let fresh air into a room, building etc 使通风)
20. **helmet**: n. [C] a strong hard hat worn for protection by soldiers, motorcycle riders, the police etc 头盔, 钢盔, 安全帽
21. **demonstrate**: v. to show or prove something clearly 证明, 论证, 证实; to show or describe how something works or is done 示范, 演示; to march through the streets with a large group of people in order to publicly protest about something (为公开抗议某事) 游行, 示威; to show that you have a particular skill, quality, or ability 展示, 表露出 (某种技能、品质或能力)

Good evening. My name is Pam Jones, and on behalf of the Modern Dance club, I'd like to welcome you to tonight's program. The club is pleased to **present** the TV version of The Catherine Wheel, Twyla Tharp's rock **ballet**. This video version of the ballet has been even more successful with audiences than the original theater production. It includes some **animation**, slow motion, and stop-action freezes that really help the audience understand the dance. The title of the piece refers to Saint Catherine, who died on a **wheel** in 307 A.D. Nowadays, a Catherine wheel is also a kind of **firework**. It looks something like a **pinwheel**. Anyway, the dance is certainly full of fireworks! You'll see how Twyla Tharp explores one family's attempt to confront the violence in modern life. The central symbol of the work is a **pineapple**, but exactly what it represents has always created a lot of **controversy**. As you watch, see if you can figure it out. The music for this piece is full of the **rhythmic** energy of rock music. It was composed by David Byrne. Of the rock band Talking Heads? And the lead dancer in this version was Sara Rudner, who is perfectly suited to Tharp's **adventurous choreography**. Following the video, dance teacher Mary Parker will lead a discussion about the **symbolism** Ms. Tharp used. We hope you can stay for that. So, enjoy tonight's video and thank you for your support.

### 【生词摘录】

1. **present**: v. to give a performance in a theatre, cinema, etc, or broadcast a programme on television or radio 上演; 演出; 表演; 播出 (电视或广播节目)
2. **ballet**: n. [C] a performance in which a special style of dancing and music tell a story without any speaking 芭蕾舞剧; 芭蕾舞曲
3. **animation**: n. [U] the process of making animated films 动物片的制作
4. **wheel**: n. [C] one of the round things under a car, bus, bicycle etc that turn when it moves (汽车、公共汽车、自行车等的) 车轮
5. **firework**: n. [C usually plural] a small container filled with powder that burns or explodes to produce coloured lights, noise, and smoke 烟火, 烟花, 焰火
6. **pinwheel**: n. [C] a toy consisting of a stick with curved pieces of plastic at the end that turn around when they are blown 玩具风车 (windmill, *BrE*)
7. **pineapple**: n. [C,U] a large yellow-brown tropical fruit or its sweet juicy yellow flesh 菠萝, 凤梨
8. **controversy**: n. [C,U] a serious argument or disagreement, especially about something such as a plan or decision, that continues for a long time 争论; 辩论; 争议
9. **rhythmic**: 又作 *rhythmical*, adj. having rhythm 有节奏的
10. **adventurous**: adj. 又作 *adventuresome*, *AmE* 【美】eager to go to new places and do exciting or dangerous things 喜欢冒险的, 有冒险精神的; not afraid of taking risks or trying new things 敢作敢为的, 大胆创新的
11. **choreography**: n. [U] the art of arranging how dancers should move during



a performance 编舞（艺术）；舞蹈设计

12. **symbolism**: n. [U] the use of symbols to represent something 象征主义（手法）

In our lab today, we'll be testing the **hypothesis** that babies can count as early as five months of age. The six babies here are all less than six months old. You'll be watching them on **closed circuit** TV and measuring their responses. The experiment is based on the **well-established** observation that babies stare longer if they don't see what they expect to see. First, we're going to let two dolls move slowly in front of the babies. The babies will see the two dolls disappear behind a screen. Your job is to record, in seconds, how long the babies stare at the dolls when the screen is removed. In the next stage, two dolls will again move in front of the babies and disappear. But then a third doll will follow. When the screen is removed, the babies will only see two dolls. If we're right, the babies will now stare longer because they expect three dolls but only see two. It seems remarkable to think that such young children can count. My own research has convinced me that they have this ability from birth. But whether they do or not, perhaps we should raise another question. Should we take advantage of this ability by teaching children mathematics at such a young age? They have great **untapped** potential, but is it good for parents to pressure young children?

#### 【生词摘录】

1. **hypothesis**: n. *plural* hypotheses, [C] an idea that is suggested as a possible way of explaining a situation, proving an idea etc, which has not yet been shown to be true 假设, 假说
2. **closed circuit television (TV)**: a system in which cameras send pictures to television sets that is used in many public buildings to protect them from crime 闭路电视
3. **well-established**: adj. established for a long time and respected 历史悠久且享有盛誉的
4. **untapped**: adj. an untapped resource, market etc has not yet been used (资源、市场等) 未开发的; 未利用的

Before starting our tour of **Monticello**, I'd like to give you some historical facts that might help you **appreciate** what you see today even more. Monticello was the very much loved home of Thomas Jefferson for over fifty years. Jefferson, who was, of course, President, was also a great reader and language **enthusiast**. He read widely on different subjects, including architecture. He wasn't formally trained in architecture, but as a result of his study and observation of other buildings, he was able to help design and build the house. He chose the site himself, naming the **estate** "Monticello," which means "little mountain" in Italian. In fact, many of the ideas behind the design also came from the Italian architect Andrea Palladio, who lived in the sixteenth century and who had a great influence on the architecture of England. Jefferson, however, ignored one of Palladio's principles, that is, not to build in a high place. Monticello's **elevation** made the transportation of what was needed at the house—for example, food—especially difficult. But the view from the estate would not be as **spectacular** if Jefferson had followed Palladio's advice; there really is no boundary between the house and the nature around it, and so Jefferson was able to look out on his beloved state of Virginia from his wonderful **vantage point**. Now we'll go on to Jefferson's library.

#### 【生词摘录】

1. **Monticello**: 蒙提切娄
2. **appreciate**: v. to understand how good or useful someone or something is  
欣赏, 赏识, 鉴赏
3. **enthusiast**: n. [C] someone who is very interested in a particular activity or subject 热衷于...的人
4. **estate**: n. [C] a large area of land in the country, usually with one large house on it and one owner (在乡村附有宅地的) 一大片私有土地, 庄园
5. **elevation**: n. [singular] a height above the level of the sea 海拔
6. **spectacular**: adj. very impressive and exciting 壮观的, 精彩的, 引人注目的
7. **vantage point**: a good position from which you can see something (能观察某物的) 有利位置

Now that we've all introduced ourselves to the new members, let's get down to work. As the committee in charge of this year's tree-planting project, we have several **items** on our agenda. First, we have to review the budget. The president has informed me that the **trustees** have set aside \$3,000 for the purchase of trees and our environmental T-shirt sale **netted** a profit of \$1,500. Second, we have to **finalize** the choice of trees. As you know, we're working with Richardson's Nursery again this year since everyone seemed pleased with the work he did for us last year. Mr. Richardson has presented us with several choices within our price range that he thinks would meet our needs. He's sent us pictures of the trees for us to look at, but he wanted me to tell you that we're welcome to visit the **nursery** if we want to see the trees themselves. Lastly, we need to plan some kind of ceremony to commemorate the planting. Several ideas, including a garden party of some sort, have been suggested. So let's get on with it and turn to the first order of business.

### 【生词摘录】

1. **item**: n. [C] a single thing, especially part of a list, group, or set (尤指清单上、一群或一组事物中的) 一项; 一件; 一条
2. **trustee**: n. [C] a member of a group that controls the money of a company, college, or other organization (公司、学院等的) 理事, 董事会成员
3. **net**: v. *especially AmE* to earn a particular amount of money as a profit after tax has been paid 【尤美】获得净收入, 净赚
4. **finalize**: v. to finish the last part of a plan, business deal etc 使(计划、交易等) 确定, 最后定下
5. **nursery**: n. [C] a place where plants and trees are grown and sold 苗圃 (garden center, BrE)

Welcome to the Four Winds Historical Farm, where traditions of the past are preserved for visitors like you. Today, our master **thatchers** will begin giving this **barn** behind me a sturdy thatched roof, able to **withstand** heavy winds and last up to a hundred years. How do they do it? Well, **in a nutshell**, thatching involves covering the **beams** or **rafters**, the wooden **skeleton** of a roof with **reeds** or **straw**. Our thatchers here have harvested their own natural materials for the job, the bundles of water reeds you see lying over there beside the barn. Thatching is certainly uncommon in the United States today. I guess that's why so many of you have come to see this demonstration. But it wasn't always that way. In the seventeenth century, the **colonists** here thatched their roofs with reeds and straw, just as they had done in England. After a while, though, they began to replace the thatch with wooden **shingles** because wood was so plentiful. And eventually, other roofing materials like stone, **slate**, and **clay tiles** came into use. It's a real shame that most people today don't realize how strong and long lasting a thatched roof is. In Ireland, where thatching is still practiced, the roofs can survive winds of up to one hundred ten miles per hour. That's because straw and reeds are so flexible. They bend but don't break in the wind like other materials can. Another advantage is that the roofs keep the house cool in the summer and warm in the winter. And then, of course, there's the roofs' **longevity**—the average is sixty years, but they can last up to a hundred. With all these reasons to start thatching roofs again, wouldn't it be wonderful to see this disappearing craft return to popularity?

### 【生词摘录】

1. **thatcher**: n. [C] someone skilled in making a roof from plant stalks or foliage 盖屋顶者
2. **barn**: n. [C] a large farm building for storing crops, or for keeping animals in 谷仓, 粮秣房, 仓库, 牲口棚; *informal* a large, plain building 【非正式】空荡荡的大房子
3. **withstand**: v. to be strong enough to remain unharmed by something such as great heat or cold, great pressure etc 耐得住, 承受住 (酷热、严寒、高压等)
4. **in a nutshell**: *spoken* used when you are stating the main facts about something in a short, clear way 【口】一言以蔽之, 简括地说, 用一句话概括
5. **beam**: n. [C] a long heavy piece of wood or metal used in building houses, bridges etc 梁, 横梁
6. **rafter**: n. [C usually plural] one of the large sloping pieces of wood that form the structure of a roof 椽
7. **skeleton**: n. [C] the most important parts of something, to which more detail can be added later 骨架, 框架; 梗概, 纲要
8. **reed**: n. [C] a type of tall plant like grass that grows in wet places 芦苇
9. **straw**: n. [U] the dried stems of wheat or similar plants that are used for animals to sleep on, and for making things such as baskets, mats etc 秸秆

(如麦秆等)

10. **colonist**: n. [C] someone who settles in a new colony 开拓殖民地的居民, 拓殖者
11. **shingle**: n. [C] one of many small thin pieces of building materials, especially wood, used to cover a roof or wall (覆盖屋顶或墙用的) 木瓦; 屋面板; 墙面板
12. **slate**: n. [U] a dark grey rock that can easily be split into flat thin pieces 板岩, 板石
13. **clay**: n. [U] heavy sticky soil that can be used for making pots, bricks etc 黏土
14. **tile**: n. [C] a flat square piece of baked clay or other material, used for covering roofs, floors etc (屋顶、地板等上用的) 瓷砖, 地砖
15. **longevity**: n. [U] *formal* long life 【正式】 长寿; *technical* the length of a person or animal's life 【术语】 (人或动物的) 寿命

A lot of people in the United States are coffee drinkers. Over the last few years, a trend has been developing to introduce **premium**, specially **blended** coffees, known as "**gourmet** coffees" into the American market. Boston seems to have been the **birthplace** of this trend. In fact, major gourmet coffee merchants from other cities like Seattle and San Francisco came to Boston, where today they're engaged in a kind of "coffee war" with Boston's merchants. They are all competing for a significant share of the gourmet coffee market. Surprisingly, the competition among these leading gourmet coffee businesses will not hurt any of them. Experts predict that the gourmet coffee market in the United States is growing and will continue to grow, to the point that gourmet coffee will soon capture half of what is now a 1.5-million-dollar market and will be an 8-million-dollar market by 1999. Studies have shown that coffee drinkers who convert to gourmet coffee seldom go back to the regular brands found in supermarkets. As a result, these brands will be the real losers in the gourmet coffee competition.

#### 【生词摘录】

1. **premium**: adj. of high quality 高级的, 优质的
2. **blended**: adj. combined or mixed together so that the constituent parts are indistinguishable 混合的
3. **gourmet**: n. [C] someone who knows a lot about food and wine and who enjoys good food and wine 美食家
4. **birthplace**: n. [C usually singular] the place where someone was born, especially someone famous (尤指名人的) 出生地; the place where something first started to happen or exist 发源地, 发祥地

You may remember that a few weeks ago we discussed the question of what photography is. Is it art, or is it a method of reproducing images? Do photographs belong in museums or just in our homes? Today I want to talk about a person who tried to make his professional life an answer to such questions. Alfred Stieglitz went from the United States to Germany to study engineering. While he was there, he became interested in photography and began to **experiment** with his camera. He took pictures under conditions that most photographers considered too difficult. He took them at night, in the rain, and of people and objects reflected in windows. When he returned to the United States he continued these revolutionary efforts. Stieglitz was the first person to photograph **skyscrapers**, clouds, and views from an airplane. What Stieglitz was trying to do in these photographs was what he tried to do throughout his life: make photography an art. He felt that photography could be just as good a form of self-expression as painting or drawing. For Stieglitz, his camera was his brush. While many photographers of the late 1800's and early 1900's thought of their work as a reproduction of **identical** images, Stieglitz saw his as a creative art form. He understood the power of the camera to **capture** the moment. In fact, he never **retouched** his prints or made copies of them. If he were in this classroom today, I'm sure he'd say, "Well, painters don't normally make extra copies of their paintings, do they?"

### 【生词摘录】

1. **experiment**: v. to try various ideas, methods etc to see whether they will work or what effect they will have 试验; 试用
2. **skyscraper**: n. [C] a very tall modern city building 摩天大楼
3. **identical**: adj. exactly the same 完全相同的 [+to]
4. **capture**: v. to succeed in showing or describing a situation or feeling using words or pictures (用语言或图片) 记录下
5. **retouch**: v. to improve a picture or photograph by painting over marks or making other small changes 描绘, 润色 (图画、照片)



So, uh . . . as Jim said, James Polk was the eleventh President, and . . . uh . . . well, my report's about the next President—Zachary Taylor. Taylor was elected in 1849. It's surprising because . . . well, he was the first President that didn't have any previous political experience. The main reason he was chosen as a candidate was because he was a war hero. In the army, his men called him "**Old Rough and Ready**". I guess because of his . . . "**rough edges**." He was kind of **blunt** and he didn't really look like a military hero. He liked to do things like wear **civilian** clothes instead of a **uniform**, even in battle. And he was so short and **plump** he had to be lifted up onto his horse. But he did win a lot of battles and he became more and more popular. So, the Whig party decided to **nominate** him for the **presidency**, even though no one knew anything about where he stood on the issues. I couldn't find much about his **accomplishments**, probably because he was only in office about a year and a half before he died. But one thing, he pushed for the development of the **transcontinental** railroad because he thought it was important to form a link with the West Coast. There was a lot of wealth in California and **Oregon** from commerce and minerals and stuff. Also, he established an agricultural **bureau** in the Department of the Interior and promoted more government aid to agriculture. Well, that's about all I found. Like I said, he died in office in 1850, so his Vice President took over, and that's the next report, so . . . thank you.

### 【生词摘录】

1. **rough and ready**: crude but effective for the purpose at hand 马虎的（粗犷而有能力的，大致不差的）
2. **rough**: adj. having an uneven surface（表面）粗糙的，不平的
3. **edge**: n. [C] the part of an object that is furthest from its center 边，边缘
4. **blunt**: adj. speaking in an honest way even if this upsets people（说话）不客气的，直言不讳的
5. **civilian**: n. anyone who is not a member of the army, navy, airforce, or police 非军人，文职人员；平民，百姓
6. **uniform**: n. a particular type of clothing worn by all the members of a group or organization such as the police, the army etc（警察、军人等穿的）制服
7. **plump**: adj. a word meaning pleasantly fat, often used when you want to avoid saying the word fat 丰满的，胖乎乎的
8. **nominate**: v. to officially suggest someone for an important position, duty, or prize 提名，推荐
9. **presidency**: n. [C] the job of president 总统（主席，校长等）的职位
10. **accomplishment**: n. [C] something successful or impressive that is achieved after a lot of effort and hard work; achievement 成就，成绩
11. **transcontinental**: adj. crossing a continent 横贯大陆的
12. **Oregon**: 俄勒冈
13. **bureau**: n. especially AmE a government department or a part of a government department 【尤美】（政府部门的）司；局；处；署

I want to welcome each and every **balloon enthusiast** to **Philadelphia**. Thank you for coming here this morning to **commemorate** the first balloon voyage in the United States. On January 9, 1793, at ten o'clock in the morning, a silk balloon lifted into the skies above this city, which was, at the time, the capital of the country. According to the original records of the flight, the voyage lasted forty-six minutes, from its departure in Philadelphia to its landing across the Delaware River in New Jersey. Though our pilots today will try to **approximate** the original landing site, they're **at the mercy of** the winds, so who knows where they'll drift off to. Even the **balloonist** in 1793 experienced some uncertain weather that day. There were clouds, fog, and mist in various directions. Our **reenactment** promises to be **nothing less than** spectacular. The yellow balloon directly behind me is five stories high. It's **inflated** with **helium**, unlike the original, which was filled with hydrogen and, **unbeknownst** to the pilot, potentially explosive. Gas-filled models are pretty uncommon now because of the extremely high cost, so the eighty other balloons in today's launch are hot air, heated by **propane burners**. These balloons are from all over the country.

### 【生词摘录】

1. **balloon**: n. a large bag of strong light cloth filled with gas or heated air so that it can float in the air 热气球
2. **enthusiast**: n. [C] someone who is very interested in a particular activity or subject 热衷于…的人
3. **Philadelphia**: 费城
4. **commemorate**: v. to do something to show that you remember and respect someone important or an important event in the past 庆祝, 为…举行纪念活动
5. **approximate**: v. to be close to a particular number 接近
6. **at the mercy of**: unable to do anything to protect yourself from someone or something 任凭…的摆布(而无力保护自己)
7. **balloonist**: n. [C] someone who flies a balloon 气球驾驶者
8. **reenactment**: n. 重新制定(法律等), 重新颁布(法令等); 再次扮演, 再次演出; 再次展现(相同的事件)
9. **nothing less than**: 只不过是, 正是, 无非是
10. **inflate**: v. if you inflate something, or if it inflates, it fills with air or gas so that it becomes larger (使)充气, (使)膨胀
11. **helium**: n. [U] a gas that is lighter than air, often used in balloons 氦(气)
12. **unbeknownst**: adj. 又作 unbeknown, unbeknownst to somebody, without that person knowing about it 不为某人所知的
13. **propane**: n. [U] a colorless gas used for both cooking and heating 丙烷(气)
14. **burner**: n. [C] *AmE* the part of an oven or heater that produces heat or a flame 【美】炉头, 火眼

I'm glad you brought up the question of our investigations into the **makeup** of the Earth's interior. In fact, since this is the topic of your reading assignment for next time, let me spend these last few minutes of class talking about it. There were several important discoveries in the early part of this century that helped geologists develop a more accurate picture of the Earth's interior. The first key discovery had to do with **seismic** waves. Remember they are the **vibrations** caused by earthquakes. Well, scientists found that they traveled thousands of miles through the Earth's interior. This finding enabled geologists to study the inner parts of the Earth. You see, these studies revealed that these vibrations were of two types: **compression** or P waves and **shear** or S waves. And researchers found that P waves travel through both liquids and solids, while S waves travel only through solid matter. In 1906, a British geologist discovered that P waves slowed down at a certain depth but kept traveling deeper. On the other hand, S waves either disappeared or were reflected back, so he concluded that the depth marked the **boundary** between a solid **mantle** and a liquid **core**. Three years later, another boundary was discovered, that between the mantle and the Earth's **crust**. There's still a lot to be learned about the Earth. For instance, geologists know that the core is hot. Evidence of this is the **molten lava** that flows out of volcanoes. But we're still not sure what the source of the heat is.

### 【生词摘录】

1. **makeup**: n. [singular] a particularly combination of people or things that form a group or whole (人或物的) 组成, 构成
2. **seismic**: adj. *technical* connected with or caused by earthquakes or powerful explosions 【术语】地震的; 地震引起的
3. **vibration**: n. [C,U] a continuous slight shaking movement 颤动, 振颤, 震动
4. **compression**: n. an increase in the density of something 压缩
5. **shear**: n. 【地】切变
6. **boundary**: n. [C] the official line that marks the edge of a town, country etc 分界线, 边界 [+between]
7. **mantle**: n. [C] *technical* the part of the Earth around the central core 【术语】地幔
8. **core**: n. [C] the central part of the Earth or any other planet 地心; (天体的) 核心
9. **crust**: n. [C,U] a thin hard dry layer on the surface of something (某物的) 硬薄外层 (the Earth's crust 地壳)
10. **molten**: adj. molten metal or rock has been made into a liquid by being heated to a very high temperature 溶化的, 熔融的 (molten lava 熔岩)
11. **lava**: n. [U] hot liquid rock that flows from a volcano (火山喷出的) 岩浆, 熔岩

Today we're going to practice **evaluating** the main tool used when **addressing** groups—the voice. There are three main elements that combine to create either a positive or negative experience for listeners. They can result in a voice that is pleasing to listen to and can be used effectively. Or they can create a voice that doesn't hold attention, or even worse, causes an **adverse** reaction. The three elements are volume, **pitch**, and pace. When evaluating volume, keep in mind that a good speaker will adjust to the size of both the room and the audience. Of course, with an amplifying device like a microphone, the speaker can use a natural tone. But speakers should not be dependent on microphones; a good speaker can speak loudly without shouting. The second element, pitch, is related to the highness or lowness of the sounds. High pitches are, for most people, more difficult to listen to, so in general speakers should use the lower **registers** of their voice. During a presentation, it's important to vary pitch to some extent in order to maintain interest. The third element, pace, that is how fast or slow words and sounds are articulated, should also be varied. A slower pace can be used to emphasize important points. Note that the time spent not speaking can be meaningful, too. Pauses ought to be used to signal transitions or create **anticipation**. Because a pause gives the listeners time to think about what was just said or even to predict what might come next, it can be very effective when moving from one topic to another. What I'd like you to do now is watch and listen to a **videotape** and use the forms I gave you to **rate** the speaking voices you hear. Then tonight I want you to go home and read a passage into a tape recorder and evaluate your own voice.

### 【生词摘录】

1. **evaluate**: v. to carefully consider something to see how useful or valuable it is 评估, 评价
2. **address**: v. **address a meeting/crowd/conference etc** to make a speech to a large group of people 在会上/对人群/在大会上等发表演说
3. **adverse**: adj. not favorable 不利的; 反对的; 相反的
4. **pitch**: n. [C] the highness or lowness of a musical note 音调; 音高
5. **register**: n. [C] *technical* the range of musical notes that someone's voice or a musical instrument can reach 【术语】(人声或乐器的)音域
6. **anticipation**: n. [U] the act of expecting something to happen 预期, 预料, 期望
7. **videotape**: n. [C,U] a long narrow band of magnetic material in a flat plastic container, on which films, television programs etc can be recorded 录像(磁)带
8. **rate**: v. to think that someone or something has a particular quality, value, or standard 对...作评估, 评价

Let's proceed to the main exhibit hall and look at some of the actual vehicles that have played a prominent role in speeding up mail delivery. Consider how long it used to take to send a letter across a relatively short distance. Back in the 1600's it took two weeks **on horseback** to get a letter from Boston to New York, a distance of about 260 miles. Crossing a river was also a challenge. **Ferry** service was so irregular that a **carrier** would sometimes wait hours just to catch a ferry. For journeys **inland**, there was always the **stagecoach**, but the ride was **by no means** comfortable because it had to be shared with other passengers. The post office was pretty **ingenious** about some **routes**. In the nineteenth century, in the Southwestern desert, for instance, camels were brought in to help get the mail through. In Alaska, **reindeer** were used. This practice was **discontinued** because of the **disagreeable temperament** of these animals. We'll stop here a minute so that you can enter this **replica** of a railway mail car. It was during the Age of the Iron Horse that delivery really started to pick up, in fact, the United States transported most **bulk mail** by train for nearly 100 years. The first airmail service didn't start until 1918. Please take a few moments to look around. I hope you'll enjoy your tour. And as you continue on your own, may I suggest you visit our **impressive philatelic** collection. Not only can you look at some of the more unusual stamps issues, but there is an interesting exhibit on how stamps are made.

### 【生词摘录】

1. **on horseback**: riding a horse 骑着马
2. **ferry**: n. [C] a boat that carries people or goods across a river or a narrow part of a sea 渡船; 渡轮
3. **carrier**: n. [C] a company that moves goods or passengers from one place to another 运输公司
4. **inland**: adv. in a direction away from the coast and towards the center of a country 向内陆, 在内地
5. **stagecoach**: n. [C] a closed vehicle pulled by horses that in former times carried passengers who paid to go to a particular place (旧时的) 驿站马车
6. **by no means**: definitely not 决不
7. **ingenious**: adj. an ingenious plan, idea, invention etc is the result of clever thinking and new ideas, and works well (计划、主意、发明等) 巧妙的, 精妙的
8. **route**: n. [C] the way from one place to another, especially a way that is regularly used and can be shown on a map (尤指经常使用, 可在地图上显示的) 路线
9. **reindeer**: n. [C] a large deer with long wide horns 驯鹿
10. **discontinue**: v. to stop doing or providing something that you have regularly done or provided until now 中止, 中断, 终止
11. **disagreeable**: adj. not at all enjoyable or pleasant 令人不快的, 不合意的, 讨厌的; unfriendly and bad-tempered 不友好的, 脾气坏的

12. **temperament**: n. [C,U] the emotional part of someone's character, especially how likely they are to be happy, angry etc 气质, 性情, 性格, 禀性
13. **replica**: n. [C] a very good copy, especially of a painting or other work of art (尤指艺术) 复制品
14. **bulk mail**: the posting of large amounts of mail for a smaller cost than usual 大宗邮件寄送
15. **impressive**: adj. something that is impressive seems very good, large, important etc so that you admire it 给人深刻印象的
16. **philatelic**: adj. of or relating to philately or of interest to philatelists 集邮的

Most people think of astronomers as people who spend their time in cold **observatories peering** through telescopes every night. In fact, a typical astronomer spends most of his or her time analyzing data and may only be at the telescope a few weeks of the year. Some astronomers work on purely **theoretical** problems and never use a telescope at all. You might not know how rarely images are viewed directly through telescopes. The most common way to observe the skies is to photograph them. The process is very simple. First, a **photographic plate** is **coated** with a **light-sensitive** material. The plate is **positioned** so that the image received by the telescope is recorded on it. Then the image can be developed, enlarged, and published so that many people can study it. Because most astronomical objects are very remote, the light we receive from them is rather **feeble**. But by using a telescope as a camera, long time exposures can be made. In this way, objects can be photographed that are a hundred times too faint to be seen by just looking through a telescope.

### 【生词摘录】

1. **observatory**: n.[C]a special building from which scientists watch the moon, stars, weather etc 天文台；观象台；气象台
2. **peer**: v. to look very carefully or hard, especially because you are having difficulty in seeing （尤指因看起来费劲而）凝视，盯着看
3. **theoretical**: adj. of, relating to, or based on theory 理论的
4. **photographic**: adj. connected with photographs, using photographs, or used in producing photographs 摄影的，摄影用的
5. **plate**: n. [C] *technical* a thin sheet of glass used especially in the past in photography, with chemicals on it that are sensitive to light 【术语】（尤指过去摄影用的）感光片
6. **coat**: v. to cover something, especially food, with a thin layer of liquid or another substance 给（某物，尤指食物）涂上（覆盖上）一层…
7. **light-sensitive**: adj. sensitive to visible light 光敏的
8. **position**: v. to put something in a particular position 把（某物）放在（某个位置），安置
9. **feeble**: adj. extremely weak 极其虚弱的，非常无力的

Before we start our first lab, I'd like to tell you a little bit about the **workbook** we'll be using. The first thing I'd like to point out is that the workbook contains a very large amount of material, far more than you could ever handle in a single semester. What you're supposed to do is choose the experiments and activities that you want to do—within a certain **framework**, of course. Part of my job is to help you make your choices. Next, I'd like to mention that in each workbook chapter, there are usually two **subsections**. The first is called "Experiments" and the second is called "Activities." In the "Experiments" section, the workbook gives full instructions for all the experiments, including **alternate procedures**. Choose the procedure you wish—there's plenty of equipment available. In the "Activities" section, you will find suggestions for projects that you can do on your own time. You'll see that there are usually no **detailed** instructions for the activities—you're supposed to do them your own way. If there are no questions, let's turn to Chapter One now.

### 【生词摘录】

1. **workbook**: n. [C] a school book containing questions and exercises (包含问题与练习的) 作业本; 练习本
2. **framework**: n. [C] a set of facts, ideas etc from which more complicated ideas are developed, or on which decisions are based 体系, 体制; 参照标准; 准则; 框架
3. **subsection**: n. [C] a part of a section 分部; 小节, 小段
4. **alternate**: adj. *especially AmE* used instead of the one that was intended to be used (尤美) 可替换的, 可供选择的
5. **procedure**: n. [C] the correct or normal way of doing something (正确的或通常做事的) 步骤, 手续
6. **detailed**: adj. including a lot of information and detail 详细的, 详尽的



Do you have trouble sleeping at night? Then maybe this is for you. When you worry about needing sleep and **toss and turn** trying to find a comfortable position, you're probably only making matters worse. What happens when you do that is that your heart rate actually increases, making it more difficult to relax. You may also have some bad habits that contribute to the problem. Do you rest frequently during the day? Do you get virtually no exercise, or do you exercise **strenuously** late in the day? Are you **preoccupied** with sleep, or do you sleep late on weekends? Any or all of these factors might be leading to your **insomnia** by disrupting your body's natural rhythm. What should you do, then, on those sleepless nights? Don't bother with sleeping pills. They can actually cause worse insomnia later. The best thing to do is drink milk or eat cheese or **tuna** fish. These are all rich in **amino acids** and help produce a neurotransmitter in the brain that induces sleep. This **neurotransmitter** will help you relax, and you'll be on your way to getting a good night's sleep. Until tomorrow's **broadcast**, this has been another in the series "**Hints** for Good Health."

#### 【生词摘录】

1. **toss and turn**: keep changing your position in bed because you cannot sleep 辗转反侧
2. **strenuously**: adv. in a strenuous manner; strongly or vigorously 使劲地
3. **preoccupied**: adj. thinking about something a lot, with the result that you do not pay attention to other things 全神贯注的, 入神的 [+with]
4. **insomnia**: n. [U] the condition of not being able to sleep 失眠
5. **tuna**: n. [C] a large sea fish caught for food 金枪鱼 (一种食用海鱼)
6. **amino acid**: one of the substances that combine to form proteins 氨基酸
7. **neurotransmitter**: n. [C] transmits nerve impulses across a synapse 神经传递素
8. **broadcast**: n. [C] a programme on the radio or on television (电台或电视的) 广播节目; 播送节目
9. **hint**: n. [C] a useful piece of advice about how to do something 有益的建议

Today we'll examine the role that private transportation, **namely**, the **automobile** plays in city planning. A number of sociologists blame the automobile for the decline of the downtown areas of major cities. In the 1950's and 1960's the automobile made it possible to work in the city and yet live in the suburbs many miles away. Shopping patterns changed: instead of **patronizing** downtown stores, people in the suburbs went to large shopping malls outside the city and closer to home. Merchants in the city failed; and their stores closed. Downtown shopping areas became **deserted**. In recent years there's been a **rebirth** of the downtown areas, as many **suburbanites** have moved back to the city. They've done this, of course, to avoid highways **clogged** with commuters from the suburbs. I've chosen this particular city planning problem—our dependence on private transportation to discuss in groups. I'm hoping you all will come up with some innovative solutions. Oh, and don't approach the problem from a purely sociological perspective; try to take into account environmental and economic issues as well.

### 【生词摘录】

1. **namely**: adv. used to introduce additional information which makes it clear exactly who or what you are talking about 即，也就是（说）
2. **automobile**: n. [C] *AmE* a car 【美】汽车
3. **patronize**: v. *formal* to use or visit a shop, restaurant etc 【正式】光顾，惠顾（商店、餐馆等）
4. **desert**: v. to leave someone alone and refuse to help or support them any more 遗弃，抛弃，离弃；to leave a place so that it is completely empty 舍弃，离开（某地）
5. **rebirth**: n. *formal* a change by which an important idea, feeling, or organization becomes active again 【正式】（思想、感情、组织的）再生，复兴
6. **suburbanite**: n. [C] someone who lives in a suburb 郊区居民，住在郊区的人
7. **clog**: v. if something clogs a road, pipe etc, or a road or a pipe clogs, it gradually becomes blocked and no longer works properly 阻塞，塞在

Word comes from California of a new weapon in the war on **household pests**. Two scientists working for a firm in Anaheim, California, have developed a method to eliminate insects without using dangerous chemicals. The new poison? Hot air. The basic idea is that insects cannot adjust to temperatures much above normal. In laboratory experiments, **cockroaches** and **termites** can't survive much more than a quarter of an hour at 125 degrees Fahrenheit, or about 50 degrees **centigrade**. The new method involves covering a house with a huge tent and filling it with air heated to around 65 degrees centigrade. Hot air is forced in with fans, and the tent keeps the heat inside the house. Since termites try to escape by hiding in wooden **beams**, the heat treatment must be continued for a full six hours. But when it's all over, and the insects are dead, there are no **toxic residues** to endanger humans or pets, and no funny smells. Scientists claim that there is no danger of fire, either, since very few household materials will burn at 65 degrees centigrade. In fact, wood is prepared for construction use by drying it in **ovens** at 80 degree centigrade, which is **substantially** hotter than the air used in this procedure.

### 【生词摘录】

1. **household**: adj. connected with looking after a house and the people in it 家庭的, 家用的, 家务的
2. **pest**: n. [C] a small animal or insect that destroys crops or food supplies (毁坏庄稼或食物的) 有害小动物 (昆虫); 害虫
3. **cockroach**: n. [C] a large black insect often found in old or dirty houses 蟑螂
4. **termite**: n. [C] an insect that eats and destroys wood from trees and buildings 白蚁
5. **centigrade**: n. 摄氏度
6. **beam**: n. [C] a long heavy piece of wood or metal used in building houses, bridges etc 梁, 横梁
7. **toxic**: adj. containing poison, or caused by poisonous substances 有毒的; 由有毒物质引起的
8. **residue**: n. [C] *technical* a substance that is left after a chemical process 【术语】(化学) 残余物, 渣滓
9. **oven**: n. [C] a thing inside which food is cooked, shaped like a box with a door on the front 烘箱; 烤箱, 烤炉
10. **substantially**: adv. when considering the most important parts 主要地; 大体上, 基本上

I'm sure you realize that your research papers are due in six weeks. I've looked at your proposed topics and made comments about them. The most frequent problem was proposing too broad a topic. Remember, this is only a fifteen-page paper. As I return your topic papers, I'd like to look over the schedule which sketches out what we'll do during the next two weeks. Today is Monday; by Friday, I want your **preliminary outline**. Please be sure to **incorporate** the suggestions I've made on your topics in your outlines. Next week I'll have a conference with each of you. I've **posted** a schedule on my office door. Sign your name to indicate the time you're available for an **appointment**. In the conference, we'll discuss your preliminary outline. Then you can make the necessary revisions and hand in your final outline, which is due two weeks from today. Use the outline style in your textbook and remember it should be no more than two pages long. Be sure to begin with a thesis **statement**, that is, with a precise statement of the point you intend to prove and include a conclusion. Have you got all that? Your two-page preliminary outlines are due at the end of this week and the final outlines are due after your conferences. Follow the textbook style and include a thesis statement and a conclusion.

#### 【生词摘录】

1. **preliminary**: adj. happening before something that is more important, often in order to prepare for it 初步的, 预备的
2. **outline**: n. the main ideas or facts about something, without the details 纲要, 梗概, 要点
3. **incorporate**: v. to include something as part of a group, system, plan etc 把(某物)并入, 包含; 吸收
4. **post**: v. 又作 post up, to put up a public notice about something on a wall or notice board 张贴(公告)
5. **appointment**: n. [C] an arrangement for a meeting at an agreed time and place, for some special purpose 约定, 预约
6. **statement**: n. [C] something you say or write publicly or officially to let people know your intentions or opinions, or to record facts 陈述; 声明

Before we begin our tour, I'd like to give you some background information on the painter Grant Wood. We'll be seeing much of his work today. Wood was born in 1881 in Iowa farm country, and became interested in art very early in life. Although he studied art in both Minneapolis and at the Art Institute of Chicago, the strongest influences on his art were European. He spent time in both Germany and France and his study there helped shape his own **stylized** form of **realism**. When he returned to Iowa, Wood applied the stylistic realism he had learned in Europe to the rural life he saw around him and that he remembered from his childhood around the turn of the century. His **portraits** of farm families **imitate** the **static formalism** of photographs of early settlers **posed** in front of their homes. His paintings of farmers at work, and of their tools and animals, demonstrate a serious respect for the life of the Midwestern United States. By the 1930's, Wood was a leading figure of the school of art called "American **regionalism**." In an effort to **sustain** a strong Midwestern **artistic** movement, Wood established an institute of Midwestern art in his home state. Although the institute failed, the paintings you are about to see preserve Wood's vision of **pioneer** farmers.

### 【生词摘录】

1. **stylized**: adj. drawn or written in an artificial style, that does not include natural detail (绘画或写作) 程式化的
2. **realism**: n. [U] the style of art and literature in which everything is shown or described as it really is in life 现实主义, 写实主义 (艺术、文学上的风格)
3. **portrait**: n. [C] a painting, drawing, or photograph of a person (人的) 画像; 照片; 肖像 [+of]
4. **imitate**: v. to copy something because you think it is good (认为是好的因而) 仿效 (某物)
5. **static**: adj. not moving, changing, or developing, especially when movement or change would be good 不动的; 不变化的; 不发展的; 静 (止) 的
6. **formalism**: n. [U] a style or method in art, religion, or science that pays too much attention to established rules (艺术、宗教或科学的) 形式主义
7. **pose**: v. to sit or stand in a particular position in order to be photographed or painted, or to make someone do this (为照相或画像而) (使) 摆好姿势
8. **regionalism**: n. [U] loyalty to a particular region of a country and the desire for it to be more politically independent 地方分权主义
9. **sustain**: v. to make something continue to exist over a period of time 保持; 维持; 使...持续
10. **artistic**: adj. connected with art or culture 美术的, 艺术的
11. **pioneer**: adj. one of the first people to do something that other people will later develop or continue to do 先驱, 先锋, 创始人

In today's class we'll be examining some nineteenth-century **pattern books** that were used for building houses. I think it's fair to say that these pattern books were the most important influence on the design of North American houses during the nineteenth century. This was because most people who wanted to build a house couldn't afford to hire an architect. Instead, they bought a pattern book, picked out a plan, and took it to the builder. The difference in cost was **substantial**. In 1870, for example, hiring an architect would've cost about a hundred dollars. At the same time, a pattern book written by an architect cost only five dollars. At that price, it's easy to see why pattern books were so popular. Some are back **in print** again today, and of course they cost a lot more than they did a hundred years ago. But they're an **invaluable** resource for **historians**, and also for people who **restore** old houses. I have a modern **reprint** here that I'll be passing around the room in a moment so that everyone can have a look.

### 【生词摘录】

1. **pattern book**: 样书
2. **substantial**: adj. large enough in amount or number to be noticeable or to have an important effect 大量的；重大的；有重要影响力的
3. **in print**: printed in a book, newspaper etc 已印出来，已发表出来
4. **invaluable**: adj. extremely useful 极有价值的
5. **historian**: n. [C] someone who studies or writes about history 历史学家，史学工作者
6. **restore**: v. to repair an old building, piece of furniture, or painting etc so that it is in its original condition 修复（建筑物、家具、画作等）
7. **reprint**: v. an act of printing a book again because all the copies of it have been sold 再版，重印

When I was in British Columbia last July working at the department's **archaeological dig**, I saw the weirdest **rainbow**. At first I couldn't believe my eyes because the **bands** of color I saw weren't in a single half circle **arc** across the sky. Instead, I saw a full circle of rainbow **hues** hanging in the sky just above the sea. Inside the circle there was a big white **disc** and above the circle there was another round band of colors forming a **halo**. There were curved legs of **multicolored** light coming off the sides of the circles. It was an incredible sight. I ran back to our main camp and tried to get our cook to come with me to see my fantastic find before it disappeared. He just laughed at my excited story and told me that what I saw was nothing special, just some "sun dogs." He said I'd be sure to see many more before I left. And sure enough, I did. When I got back from the dig, I asked Professor Clark about the "sun dogs," and she's going to tell us more about them.

### 【生词摘录】

1. **archaeological**: adj. related to or dealing with or devoted to archaeology 考古学的, 考古学上的
2. **dig**: n. [C] the process of digging in an ancient place in order to find objects for study (为找到研究对象而对古代遗址的) 发掘
3. **rainbow**: n. [C] a large curve of different colors that can appear in the sky when there is both sun and rain 彩虹, 虹
4. **band**: n. [C] a thick colored line 条纹
5. **arc**: n. [C] a curved shape 弧(状)
6. **hue**: n. [C] a color or kind of color 颜色; 色调; 色度
7. **disc**: n. [C] 又作 disk, a round, flat shape or object (扁平的) 圆盘形状; 圆盘状物
8. **halo**: n. [C] a bright circle of light 光环, 晕, 晕圈
9. **multicolored**: adj. having many different colors 有多种不同颜色的, 杂色的

It seems like only yesterday that I was sitting where you are, just finishing my first year of medical school and wondering if I'd ever get a chance to use all my new knowledge on a real **live** patient! Well, I have good news for you! You don't have to wait until your third or fourth year of medical school to get some **hands-on** experience! The dean has invited me here to tell you about the university's rural opportunity program. If you **enroll** in this program, you can have the opportunity this summer, after your first year of medical school, to spend from four to six weeks observing and assisting a real **physician** like me in a small rural community. You won't have to compete with other students for time and attention, and you can see what life as a country doctor is really like. The program was designed to encourage medical students like yourselves to consider careers in rural communities that are still **understaffed**. It seems that medical students are afraid to go into rural family practice for two reasons. First, they don't know much about it. And second, specialists in the cities usually make more money. But, on the **up-side**, in rural practice, doctors can really get to know their patients and be respected members of the community. I participated in the program when it first started and spent six weeks in a small rural town. Let me tell you, it was really great! I got to work with real patients. I watched the birth of a child, assisted an accident **victim**, and had lots of really practical hands-on experience—all in one summer. And to my surprise, I found that country life has a lot to offer that city life doesn't—no pollution or **traffic jams**, for instance! My experience made me want to work where I'm needed and **appreciated**. I don't miss the city at all!

### 【生词摘录】

1. **live**: adj. not dead or artificial; living 活的; 非人造的; 有生命的
2. **hands-on**: adj. providing practical experience of something by letting people do it themselves 实际操作的, 亲身实践的
3. **enroll**: v. to officially arrange to join a school, university or course, or arrange for someone else to 招(生), 吸收(成员); 注册(学习)
4. **physician**: n. [C] *AmE formal* a doctor 【美, 正式】(内科) 医生
5. **understaffed**: adj. not having enough workers, or fewer workers than usual 人员(配备)不足的, 人手不够的
6. **up-side**: n. *especially AmE* the positive part of a situation that is generally bad 【尤美】(不利局面中) 好的一面, 积极面
7. **victim**: n. [C] someone who has been attacked, robbed, or murdered 受害者; 牺牲者
8. **jam**: n. [C] a situation in which it is difficult or impossible to move because there are so many people, things, cars etc close together 拥挤; 堵塞
9. **appreciate**: v. to understand how good or useful someone or something is 欣赏; 赏识; 鉴赏



In the few minutes that remain of today's class, I'd like to discuss next week's schedule with you. Because I'm presenting a paper at a conference in **Detroit** on Thursday, I won't be here for either Wednesday's or Friday's class. I will, however, be here for Monday's. Next Friday, a week from today, is the midterm exam, marking the halfway point in the semester. Professor Andrews has agreed to **administer** the exam. In place of the usual Wednesday class, I've arranged an **optional** review session. Since it is optional, **attendance** will not be taken; however, attending the class would be a good idea for those worried about the midterm. So, remember: optional class next Wednesday; midterm, Friday.

### 【生词摘录】

1. **Detroit**: the largest city in Michigan and a major Great Lakes port; center of the United States automobile industry; located in southeastern Michigan on the Detroit river across from Windsor 底特律
2. **administer**: v. to organize the way a test or punishment is given, or the way laws are used 执行, 实施
3. **optional**: adj. if something is optional, you do not have to do it or use it, but you can choose to if you want to 可选择的, 非强制的
4. **attendance**: n. [C,U] the number of times that you go to a meeting, class etc that is held regularly 出席率, 到场次数

Today's lecture will center on **prehistoric** people of the **Nevada** desert. Now, most of these prehistoric desert people moved across the countryside throughout the year. You might think that they were wandering aimlessly—far from it! They actually followed a series of carefully planned moves. Where they moved depended on where food was available—places where plants were **ripening** or fish were **spawning**. Now often when these people moved, they carried all their **possessions** on their backs, but if the journey was long, extra food and tools were sometimes stored in caves or beneath rocks. One of these caves is now an exciting **archaeological site**. Beyond its small opening is a huge underground **grotto**. Even though the cave's very large, it was certainly too dark and **dusty** for the travelers to live in, but it was a great place to hide things, and tremendous amounts of food supplies and **artifacts** have been found there. The food includes dried fish, seeds, and **nuts**. The artifacts include stone **spear** points and knives; the spear points are actually rather small. Here's a picture of some that were found. You can see their size **in relation to** the hands holding them.

### 【生词摘录】

1. **prehistoric**: adj. connected with the time in history before anything was written down 史前的, 有历史记载以前的
2. **Nevada**: a state in the western United States 内华达州 (美国西部内陆州)
3. **ripen**: v. to become ripe or to make something ripe (使) 成熟
4. **spawn**: v. if a fish or frog spawns it produces eggs in large quantities together (鱼、蛙等) 大量产 (卵)
5. **possession**: n. [C usually plural] something that someone owns and keeps or uses themselves 所有物; 财产
6. **archaeological site**: 考古遗址
7. **grotto**: n. [C] a small natural cave, or one that someone has made in their garden 天然小洞穴; (花园中的) 人造洞室
8. **dusty**: adj. covered with dust 布满灰尘的
9. **artifact**: n. [C] an object such as a tool, weapon etc that was made in the past and is historically important 人工制品 (有史学价值的武器、工具等); 手工艺品
10. **nut**: n. [C] a dry brown fruit inside a hard shell, that grows on a tree 坚果; 坚果仁
11. **spear**: a pole with a sharp pointed blade at one end, used as a weapon in the past 矛, 梭镖, 标枪
12. **in relation to**: used to talk about something that is connected with or compared with the thing you are talking about 关于; 与…相比

To us, the environment in which fish dwell often seems cold, dark, and mysterious. But there are advantages to living in water, and they have played an important role in making fish what they are. One is that water isn't **subject** to sudden temperature changes. Therefore it makes an excellent habitat for a **cold-blooded** animal. Another advantage is the water's ability to easily support body weight. **Protoplasm** has **approximately** the same density as water, so a fish in water is almost **weightless**. This "weightlessness" in turn means two things: One, a fish can get along with a light weight and simple bone structure, and two, **limitations** to a fish's size are practically removed. Yet there is one basic difficulty to living in water—the fact that it's **incompressible**. For a fish to move through water, it must actually **shove** it aside. Most can do this by **wiggling** back and forth in **snakelike** motion. The fish pushes water aside by the forward motion of its head, and with the curve of its body and its flexible tail. Next, the water flows back along the fish's narrowing sides, closing in at the tail, and helping the fish **propel** itself forward. The fact that water is incompressible has **literally** shaped the development of fish. A flat and **angular** shape can be moved through water only with difficulty. And for this reason, fish have a basic shape that is beautifully adapted to deal with this **peculiarity**.

【生词摘录】

1. **subject**: adj. likely to be affected by something, especially something unpleasant 易受…（不快事物）影响的；易患…的 [+to]
2. **cold-blooded**: adj. a cold-blooded animal, such as a snake, has a body temperature that changes with the temperature of the air or ground around it （动物）冷血的（如蛇）
3. **protoplasm**: n. [U] *technical* the colorless substance that forms the cells of plants and animals 【术语】原生质，原浆
4. **approximately**: adv. (of quantities) imprecise but fairly close to correct 近似地，大约
5. **weightless**: adj. having no weight, especially when you are floating in space or water（尤指在空中或水中）失重的；没有重量的
6. **limitation**: n. [C usually plural] a limit on how good someone or something can be, what they are able to do etc（某人或物）局限，不足之处
7. **incompressible**: adj. impossible to compress; resisting compression 不能压缩的
8. **shove**: v. to push someone or something, in a rough or careless way, using your hands or shoulders（用手或肩）推，推挤，推撞
9. **wiggle**: v. to move with small movements from side to side or up and down, or make something move like this（动作较小地）摆动；扭动
10. **propel**: v. to move, drive, or push something forward 推动；推进；驱动
11. **literally**: adv. used to emphasize that something is actually true 的确，确实
12. **angular**: adj. having sharp and definite corners 有尖角的
13. **peculiarity**: n. [C] something that is a feature of only one particular place, person, or situation（仅为某人、某地方或某情况所独有的）特点；独特性

Current studies show that what goes on **labels** is an important **consideration** for **manufacturers**, since more than seventy percent of shoppers read food labels when considering whether to buy a product. A recent controversy as to whether labels on prepared foods should educate or merely inform the consumer is over, and a consumer group got its way. The group had maintained that product labels should do more than simply list how many **grams** of **nutrients** a food contains. Their **contention** was that labels should also list the percentage of a day's total nutrients that the product will supply to the consumer, because this information is essential in planning a healthy diet. A government agency disagreed strongly, **favoring** a label that merely informs the consumer, in other words, a label that only lists the contents of the products. The agency **maintained** that consumers could decide for themselves if the food is **nutritious** and is meeting their daily needs. The consumer group, in supporting its case, had **cited** a survey in which shoppers were shown a food label, and were then asked if they would need more or less of a certain nutrient after eating a serving of this product. The shoppers weren't able to answer the questions easily when they were not given a specific percentage. This study, and others helped get the new **regulation** passed, and now food products must have the more detailed labels.

【生词摘录】

1. **label**: n. [C] a piece of paper or other material that is stuck onto something and gives information about it 标签, 标记
2. **consideration**: n. [U] *formal* careful thought and attention 【正式】斟酌, 考虑
3. **manufacturer**: n. [C] a company or industry that makes large quantities of goods 制造商; 制造公司, 制造厂
4. **gram**: n. [C] the basic unit for measuring weight in the metric system 克 (公制基本重量单位)
5. **nutrient**: n. [C] a chemical or food that provides what is needed for plants or animals to live and grow 养分; 营养物, 营养品
6. **contention**: n. [U] *formal* argument and disagreement between people 【正式】争论, 争端; 口角
7. **favor**: v. to think that a plan, idea etc is better than other plans, ideas etc 赞同, 支持 (计划、想法等)
8. **maintain**: v. to strongly express your belief that something is true 断言 (某事) 属实; 坚持说...
9. **nutritious**: adj. food that is nutritious is full of the natural substances that your body needs to stay healthy or to grow properly (食物) 有营养的, 滋养的, 营养价值高的
10. **cite**: v. to mention something as an example, especially one that supports, proves, or explains an idea or situation (尤指为支持、证明或解释一种观点或情况而) 引证, 援引
11. **regulation**: n. an official rule or order 规则; 条例; 法令

Good afternoon. I'm here today to talk to you about a career with our **airline**. We're especially interested in **recruiting** people to fill **openings** for flight **attendants**. First of all, to work as a flight attendant with us, you must be accepted into our training program and with so many people applying, it's not easy to be selected. From the thousands of applications that we receive annually, we choose fewer than a thousand people for training. So, we require experience serving the public; and it also helps if you've earned some college credits. Also, not everybody who gets accepted into the training program makes it through. The course meets six days a week for five weeks. The training includes **extensive** classroom work in such subjects as first aid and passenger psychology as well as practical training in flight **procedures** and meal service. A lot of our **graduates** say that our flight attendants develop the skills of a nurse, a **headwaiter**, and a public relations **executive**! But, as a flight attendant myself, I can say that all of the hard work is worth it. Of course, I get to travel throughout the country, and the airline pays all of my expenses while I'm away from my base station. And, what I like best of all is that I've made friends with people from all over the country!

### 【生词摘录】

1. **airline**: n. [C] a business that runs a regular service to take passengers and goods to different places by plane 航空公司
2. **recruit**: v. to find new people to work in a company, join an organization, do a job etc 招聘, 吸收 (新成员)
3. **opening**: n. [C] a job or position that is available 空缺 (职位), 空额
4. **attendant**: n. [C] someone whose job is to look after or help customers in a public service 服务员
5. **extensive**: adj. containing or dealing with a lot of information and details 广泛的, 全面的
6. **procedure**: n. [C] the correct or normal way of doing something (正确的或通常做事的) 步骤, 手续
7. **graduate**: n. [C] *AmE* someone who has completed a course at a college, school etc 【美】毕业生
8. **headwaiter**: n. [C] the waiter who is in charge of the other waiters in a restaurant (餐馆的) 服务员领班
9. **executive**: n. [C] someone who has an important job as a manager in a company or business (公司或商业机构中的) 主管, 行政领导, 经理

Today I want to talk about the Earth's last major **climatic** shift, at the end of the last **ice age**. But first, let's back up a moment and review what we know about climatic change in general. First, we defined "climate" as **consistent** patterns of weather over significant periods of time. In general, changes in climate occur when the energy balance of the Earth is **disturbed**. Solar energy enters the Earth's atmosphere as light and is **radiated** by the Earth's surface as heat. Land, water, and ice each affect this energy exchange differently. The system is so complex that, to date, our best computer models are only **crude approximations** and are not sophisticated enough to test **hypotheses** about the causes of climatic change. Of course, that doesn't keep us from **speculating**. For instance, volcanic activity is one mechanism that might affect climatic change. When large volcanoes erupt, they **disperse** tons of particles into the upper atmosphere, where the particles then reflect light. Since less light is entering the system of energy exchange, the result would be a **cooling** of the Earth's surface. Of course, this is just one possible mechanism of global climate change. In all probability, a complete explanation would involve several different mechanisms operating at the same time.

#### 【生词摘录】

1. **climatic**: adj. connected with the weather in a particular area 气候的
2. **ice age**: one of the long periods of time, thousands of years ago, when ice covered many northern countries 冰川期, 冰河时代
3. **consistent**: adj. always having the same beliefs, behavior, attitudes, quality etc (信仰、行为、态度、品质等) 一贯的, 一致的; 始终如一的
4. **disturb**: v. to interrupt someone so that they cannot continue what they are doing by asking a question, making a noise etc 干扰, 打扰; 使中断
5. **radiate**: v. if something radiates light or heat, or if light or heat radiates from something, it is sent out in all directions 辐射 (光或热); (向四面八方) 发射
6. **crude**: adj. not developed to a high standard or made with great skill 粗制的
7. **approximation**: n. [C] a number, amount etc that is not exact, but is almost correct 概算, 近似值
8. **hypothesis**: n. [C] *plural* hypotheses, an idea that is suggested as a possible way of explaining a situation, proving an idea etc, which has not yet been shown to be true 假设, 假说
9. **speculate**: v. to think or talk about the possible causes or effects of something without knowing all the facts or details 猜测, 推测
10. **disperse**: v. if something disperses or is dispersed, it spreads over a wide area (使) 消散; (使) 分散
11. **cooling**: n. [U] the process of becoming cooler; a falling temperature 冷却

I know you're anxious to get your permits and get started. But there're just a few things I'd like to mention that might help you avoid trouble during your stay. First of all, make sure you carry adequate water. You'll need it if you're **hiking**, especially in this heat. A good **rule of thumb** is to bring one **gallon** per person per day this time of year. Don't try to rely on the park's natural springs to supply all your water needs. And please, do not use soap in the springs. It's your responsibility to protect the park's natural **features**. For those of you staying beyond the weekend, make sure that you set up camp well away from dry **creekbeds**. We may get some heavy rainfall, and those creekbeds could quickly become filled with water, and you and all your equipment might end up washed **downstream**. When you pick up your permits, you'll also get a park services **booklet**. It'll tell you everything you need to know about the hiking **trails**. They vary in length, of course, but most of them are under five miles—relatively easy day hikes. Remember, if you're hiking **solo**, make sure you let someone know you're going and when they can expect you back. And . . . uh, for your own safety, we recommend that you not climb rock faces. A lot of the rock throughout the park is very **unstable**. One final word: watch out for poisonous snakes. **Rattlesnake** activity is at its peak this time of year, especially at night. For your own good, we recommend wearing protective clothing and carry a **flashlight** after dark.

### 【生词摘录】

1. **hike**: v. to walk a long way in the mountains or countryside 徒步旅行, 远足
2. **rule of thumb**: a rough method of calculation, based on practical experience (根据实际经验的) 粗略的计算方法
3. **gallon**: n. [C] a unit for measuring liquids, equal to 3.785 litres 加仑 (等于 3.785 升)
4. **feature**: n. [C] a part of something that you notice because it seems important, interesting, or typical 特点, 特征, 特色
5. **creekbed**: n. [C]
6. **downstream**: adv. in the direction the water in a river or stream is flowing 顺流而下; 向下游方向
7. **booklet**: n. [C] a very short book that usually contains information 小册子
8. **trail**: n. [C] 小径
9. **solo**: adv. 单独地
10. **unstable**: adj. 不牢固的, 不稳定的
11. **rattlesnake**: n. [C] 响尾蛇
12. **flashlight**: n. [C] 手电筒

Last week we talked about Anne Bradstreet and the role of women in the **Puritan** colonies. Today I want to talk about some other women who've contributed to American history—some famous and some not-so-famous. The first woman I'd like to talk about is **Molly Pitcher**. Those of you who are familiar with the name may know her as a hero of the American Revolution. But, in fact, there never was a woman named Molly Pitcher. Her real name was actually Mary Ludwig Hays. She got the **nickname** Molly Pitcher for her acts of **bravery** during the Revolutionary War. As the story goes, when Mary's—or Molly's—husband, John Hays, **enlisted** in the **artillery**, Mary followed, like many other wives did. She helped out doing washing and cooking for the soldiers. She was known to be a pretty unusual woman. She smoked a pipe and **chewed tobacco**. Anyway, in the summer of 1778, at the Battle of Monmouth, it was a **blistering** hot day, maybe over a hundred degrees, and fifty soldiers died of thirst during the battle. Molly wasn't content to stay back at camp. Instead, she ran through **gunshots** and **cannon** fire carrying water in **pitchers** from a small stream out to the thirsty American soldiers. The relief that she brought with her pitchers of water gave her the legendary nickname Molly Pitcher. The story also says that she continued to load and fire her husband's cannon after he was wounded. They say she was so well liked by the other soldiers that they call her "Sergeant Molly." In fact, legend has it that George Washington himself gave her the special military title.

### 【生词摘录】

1. **Puritan**: adj. 清教徒的
2. **nickname**: n. [C] 绰号, 昵称
3. **bravery**: n. [U] 勇敢
4. **enlist**: v. 征募, 应募, 参军
5. **artillery**: n. 炮兵部队
6. **chew tobacco**: 嚼烟草
7. **blistering**: adj. 酷热的
8. **gunshot**: n. [C] 枪击
9. **cannon**: n. [C] 大炮
10. **pitcher**: n. [C] 罐壶, (带柄和倾口的) 大水罐



## Molly Pitcher



她名叫麦考利(Mary Hays McCauly)，但人们称呼她为莫利水壶(Molly Pitcher)。

玛丽海斯(Mary Hays)是威廉海斯(William Hays)的妻子，他是独立战争时，曾参与蒙茅斯郡一役的炮兵。

战争源于来自费城的柯林顿将军(General Henry Clinton)想要带领英军行军穿越新泽西；在气候灼热的 1778 年 6 月 28 日清晨，华盛顿将军命令李将军(General Charles Lee)攻击蒙茅斯郡附近的英军，而英军及美军则在炙热的气温下打了一整天的仗。

玛丽海斯在枪林弹雨中，背负着一只水壶为精疲力竭和受伤的美国士兵供应饮水，而当她的丈夫海斯因不堪灼热而不支倒地时，莫利立即接替丈夫的炮手位置；这是美国历史上第二度有女性参战的战役(第一次为 1776 年时，参与福特华盛顿(Fort Mifflin)防御战的科尔宾(Margaret Corbin))。

为表彰她的英勇贡献，华盛顿将军任命她为未受军官衔的军官，从此以后，她就被称做中士莫利(Sergeant Molly)；位于战争遗址上的纪念碑则提用来纪念她的英勇贡献。

Today we're going to talk about **shyness** and discuss recent research on ways to help children learn to interact socially. Many people consider themselves shy. In fact, forty percent of people who took part in our survey said they were shy. That's two out of every five people. And there are studies to indicate that the tendency toward shyness may be inherited. But just because certain children are **timid**, doesn't mean they are **doomed** to be shy forever. There are things parents, teachers, and the children themselves can do to overcome this tendency and even to prevent it. One researcher found that if parents gently push their shy children to try new things, they can help these children become less afraid and less **inhibited**. Another way to help shy children is to train them in social skills. For example, there are special training groups where children are taught things like looking at other children while talking to them, talking about other people's interests, and even smiling. These groups have been very successful at giving shy children a place to feel safe and accepted, and at building up their **self-esteem**.

#### 【生词摘录】

1. **shyness**: n. [U] 羞怯, 胆怯
2. **timid**: adj. 胆小的, 羞怯的
3. **doomed**: adj. 命定的
4. **inhibited**: adj. 羞怯的, 内向的
5. **self-esteem**: n. 自尊

We've just seen two **contemporary** large birds that cannot fly: the **emu** and the **ostrich**. Over here is an interesting **specimen** from the past. This **stuffed** animal is not the giant **penguin** it appears to be, but an **auk**. This particular kind of auk is very rare, only 78 **skins** are known to exist and most are not preserved as well as this one. The great auk, as you can see, was a rather large bird, and it couldn't fly either. However, evidence suggests that the auk was an excellent swimmer and diver. Unfortunately, those abilities did not protect it from being easy prey for hungry sailors who years ago sailed the very cold and often icy waters of Greenland, Iceland, and Scotland. In fact, records indicate that the auk was rather tasty and that its eggs. Excuse me . . . that its eggs and feathers were useful as well. Still, it isn't clear what other factors led to the big bird's **demise** around 1844, the last time anyone reported seeing one. Of course, we believe it's important to take extra **precautions** to preserve the remaining great auk skins. After all, these specimens should prove **invaluable** for future scientific research. Does anyone have any questions before we move on to our next bird exhibit?

#### 【生词摘录】

1. **contemporary**: adj. 当代的，同时代的
2. **emu**: n. [C] 鸕鹚（产于澳洲的一种体型大而不会飞的鸟）
3. **ostrich**: n. [C] 鸵鸟
4. **specimen**: n. [C] 样本；样品；实例
5. **stuffed**: adj. 已经喂饱了的
6. **penguin**: n. [C] 企鹅
7. **auk**: n. [C] 海雀（北极地区海鸟，体大，短翅，蹼足）
8. **demise**: n. [U] 死亡
9. **precaution**: n. [C] 预防，警惕，防范
10. **invaluable**: adj. 无价的，非常宝贵的，价值无法衡量的

I'd like to begin by thanking Dr. Kane for inviting me to be here today. Although I'm not a geologist, I have been collecting minerals for years. My collection is really **diverse** because I've traveled all over the world to find them. Today I've brought a few specimens for you to see. After I discuss each one, I'll pass it around so that you can look at it more closely. As you know, **feldspars** are the most **abundant** minerals and are divided into a number of types. These first samples are **orthoclases**. Notice that they vary in color from white to pink to red. This glassy one is found in volcanic rock. In fact, I found it in New Mexico on a collecting trip. This next sample that I'll pass around is a **microcline** mineral, also called **amazonstone**. You can identify it by its bright green color. It's often used in jewelry and really is quite attractive. These final samples are all **plagioclase** feldspars. Many plagioclases are very rare, so I'm particularly proud of the variety in my collection. I've also brought a few **slides** of some larger mineral samples, and if you'll turn out the light now, I'd like to show them to you.

#### 【生词摘录】

1. **diverse**: adj. 多种多样的
2. **feldspar**: n. [C] [矿]长石
3. **abundant**: adj. 丰富的, 充裕的
4. **orthoclase**: n. [C] [矿]正长石
5. **microcline**: n. [矿]微斜长石
6. **plagioclase**: n. [矿]斜长岩
7. **slide**: n. [C] 幻灯片

Welcome to Yellowstone National Park. Before we begin our nature walk today, I'd like to give you a short history of our National Park Service. The National Park Service began in the late 1800's. A small group of explorers had just completed a month-long exploration of the region that is now Yellowstone. They gathered around a **campfire**, and after hours of discussion, they decided that they should not claim this land for themselves. They felt it should be **accessible** to everyone. So they began a **campaign** to preserve this land for everyone's **enjoyment**. Two years later, in the late nineteenth century, an **act** of Congress signed by President Ulysses S. Grant **proclaimed** the Yellowstone region a public park. It was the first national park in the world. After Yellowstone became a public park, many other areas of great scenic importance were set aside, and in 1916 the National Park Service was established to manage these parks. As a park **ranger**, I am an employee of the National Park Service. In a national park, park rangers are on duty at all times to answer questions and help visitors in any difficulty. Nature walks, guided tours, and campfire talks are offered by specially training staff members. The park service also protects the animals and plants within the parks.

#### 【生词摘录】

1. **campfire**: n. [C] 营火
2. **accessible**: adj. 易接近的, 可达到的
3. **campaign**: n. [C] (政治或商业性) 活动, 竞选运动
4. **enjoyment**: n. [C] 享乐, 快乐
5. **act**: n. [C] 法案, 法令
6. **proclaim**: v. 宣布, 声明
7. **ranger**: n. [C] 护林员

I need to make sure you understand how to get **housing** for next year. When you entered as first-year students this year, the school assigned you to a dorm and a roommate, but next year as returning students you'll choose both your roommate and your dorm. But whether or not you actually get to live in your first choice depends on what number you or your roommate draws in the **lottery** system. The system gives priority to the students who have been here longest. Fourth-year students get the first block of numbers, third-years get the second block, and second-years—like you'll be—get the third. The lower the number you draw, the sooner you choose. Number one gets the first choice, number two gets the second choice, and so on. You can use either your own or your **intended** roommate's number to make your room choice. If your roommate for next year has been at the school longer than you have, they'll be in a better block of numbers and so will have a better number than any second-year student. But most of you will probably be **rooming** with other second-year students and so neither of you may have a great number. You may not get into your first or even second choice. Of course, if you've made plans to live off campus, you don't need to enter the lottery at all. Dorm space will be especially tight this year because the dorms on North Campus will be closed for **renovations**. This means that those of you who draw the worst numbers won't be able to get dorm housing at all. In that case, the housing office will help you find off-campus housing.

### 【生词摘录】

1. **housing**: n. [U] 住房供给
2. **lottery**: n. [C] 抽彩给奖法
3. **intended**: adj. 有意的
4. **room**: v. 居住, 寄宿, 占同一间屋
5. **renovation**: n. [C] 修理, 修缮

Before I tell you about the interesting discovery related to **Tyrannosaurus rex**, I need to review something we studied last semester, the difference between what are commonly called **cold-blooded** and **warm-blooded** animals. In warm-blooded animals, birds and mammals, for example, the body temperature normally stays within a narrow range, no matter what the outside temperature is. As a result, a warm-blooded animal is usually active in both cold and hot weather because its body temperature can adjust to the temperature of its environment. On the other hand, cold-blooded animals, such as most **reptiles**, **amphibians**, and insects, are unable to create enough heat **internally** to raise their temperature above the temperature of the environment. So, for example, the temperature of a cold-blooded animal falls when the environment is cool. I hope this **distinction** is clear. Now, moving on to Tyrannosaurus rex, you may know that **dinosaurs**, being reptiles, are generally believed to have been cold-blooded. Well, a recent research study found that the chemical **composition** of the bones of Tyrannosaurus rex was **consistent** with the bones of an animal that has a very narrow range of internal temperature, indicating that it was probably warm-blooded.

#### 【生词摘录】

1. **Tyrannosaurus**: 暴龙
2. **rex**: n. [C] 雷克斯猫
3. **cold-blooded**: adj. 冷血的
4. **warm-blooded**: adj. 温血的
5. **reptile**: n. [C] 爬行动物
6. **amphibian**: n. [C] 水路两栖动物
7. **internally**: adv. 在内, 内在地
8. **distinction**: n. [C] 区别, 差异
9. **dinosaur**: n. [C] 恐龙
10. **composition**: n. [C] 合成物
11. **consistent**: adj. 一致的

Thank you all for coming out this evening to meet sociologist Ellen Lambert. Ms. Lambert **specializes** in research on the **workplace** and recently has been writing about the future of work. This topic should be of special interest, since I know many of you are already at the **forefront** of workplace technology. For example, let's have a show of hands to see how many people here **telecommute** at least part of the time. Hmm. I see eight hands raised. Well, you eight folks who work at home and communicate with your office **via** computer represent one of the trends Ms. Lambert has described: that people are becoming less tied to the workplace. One of the important tools for telecommuting is electronic mail, or E-mail. E-mail lets you send and receive messages almost immediately on your computer, but you control when you read them and when you respond to them. This technology allows people to have more control over time than when relying **solely** on the telephone. Our guest tonight will discuss how these important changes will alter the way we work. But, before **turning the floor over to** Ms. Lambert, I would just like to remind you that she will be available to answer any individual questions at the **reception** immediately following this talk.

#### 【生词摘录】

1. **specialize**: v. 专攻, 专门研究
2. **workplace**: n. [C] 工作场所, 车间
3. **forefront**: n. [C] 最前部, 最前线
4. **telecommute**: v. (在家里通过使用与工作单位连接的计算机终端) 远距离工作
5. **via**: prep. 经由, 通过
6. **solely**: adv. 仅仅, 单独
7. **reception**: n. [C] 招待会



I'm sure almost every one of you looked at your watch or at a clock before you came to class today. Watches and clocks seem as much a part of our life as breathing or eating. And yet, did you know that watches and clocks were **scarce** in the United States until the 1850's? In the late 1700's, people didn't know the exact time unless they were near a clock. Those **delightful** clocks in the **squares** of European towns were built for the public. After all, most citizens simply couldn't afford a personal **timepiece**. Well into the 1800's in Europe and the United States, the main purpose of a watch, which, by the way, was often on a gold chain, was to show others how wealthy you were. The word "**wristwatch**" didn't even enter the English language until nearly 1900. By then the rapid pace of **industrialization** in the United States meant that measuring time had become essential. How could the factory worker get to work on time unless he or she knew exactly what time it was? Since **efficiency** was now measured by how fast a job was done, everyone was interested in time. And since industrialization made possible the manufacture of large quantities of goods, watches became fairly **inexpensive**. **Furthermore**, electric lights kept factories going around the clock. Being on time had entered the language—and life—of every citizen.

#### 【生词摘录】

1. **scarce**: adj. 稀少的
2. **delightful**: adj. 令人愉快的
3. **square**: n. [C] 广场
4. **timepiece**: n. [C] 时钟, 座钟
5. **wristwatch**: n. [C] 手表
6. **industrialization**: n. [C] 工业化, 产业化
7. **efficiency**: n. [C] 效率
8. **inexpensive**: adj. 便宜的, 不贵重的
9. **furthermore**: adv. 此外, 而且

This room is **devoted** to electric fish. The **eel** in the **tank** behind me can produce a strong **jolt** of electricity to **stun** its **prey**, but most of the fish in here produce only weak electrical impulses that are useful for navigating, locating food, and even for communicating. The **knife fish** is a good example. This fish navigates, using tiny **receptors** in the skin that are sensitive to electrical impulses. The knife fish produces an electrical signal, and the receptors in its skin let it know when the signal is **distorted** by a tree root, or some other **obstacle**, so it can go around it. Fish also use the ability to produce and detect electrical impulses to communicate. They can tell each other what **species** they belong to, how big they are, and whether they're male or female. We have a tank here that's specially equipped to convert the **inaudible** signals the fish produce into sounds you can hear when you put on these **headphones**. I urge you all to listen in when I'm done speaking. Now have a look at the electric **rays**. Rays are especially interesting to medical researchers because of the organs they use to produce electricity. These organs contain a chemical that carries signals from one **nerve ending** to the next, not only in rays, but also in people. By studying these organs, scientists hope to learn more about diseases that interrupt the **transmission** of **impulses** from one nerve to another.

### 【生词摘录】

1. **devote**: v. 作……标点符号
2. **eel**: n. [C] 鳗（任一种长的蛇形的无鳞海洋或淡水鱼）
3. **tank**: n. [C] 桶，箱，罐，槽，池塘
4. **jolt**: n. [C] 重击
5. **stun**: v. 使晕倒，打晕
6. **prey**: n. 猎物
7. **receptor**: n. [C] 接受器，感受器
8. **distort**: v. 歪曲，误传
9. **obstacle**: n. 障碍
10. **species**: n. [C] 种类
11. **inaudible**: adj. 听不见的
12. **headphone**: n. [C] 听音器，耳机
13. **ray**: n. [C] 光线，放射线
14. **nerve**: n. [C] 神经
15. **ending**: n. [C] 末梢
16. **transmission**: n. [C] 传输
17. **impulse**: n. [C] 脉冲

So, why did what is now called "modern dance" begin in the United States? To begin to answer this question, I'll need to **backtrack** a little bit and talk about classical **ballet**. By the late 1800's, ballet had lost a lot of its popularity. Most of the ballet dancers who performed in the United States were brought over from Europe. They performed using the **rigid** techniques that had been passed down through the centuries. Audiences and dancers in the United States were eager for their own, "**contemporary**" dance form. And, so, around 1900, dancers created one. So, how was this "modern" dance so different from classical ballet? Well, most notably, it wasn't carefully **choreographed**. Instead, the dance depended on the **improvisation** and free, personal expression of the dancers. Music and **scenery** were of little importance to the "modern" dance, and **lightness** of movement wasn't important either. In fact, modern dancers made no attempt at all to **conceal** the effort involved in a dance step. But even if improvisation appealed to audiences, many dance critics were less than enthusiastic about the performances. They questioned the artistic integrity of dancers who were not professionally trained and the artistic value of works that had no formal structure. Loie Fuller, after performing Fire Dance, was described as doing little more than turning "round and round like an **eggbeater**." Yet, the free, personal expression of the **pioneer** dancers is the basis of the "**controlled freedom**" of modern dance today.

#### 【生词摘录】

1. **backtrack**: v. (由原路) 返回, 后退
2. **ballet**: n. [C] 芭蕾舞
3. **rigid**: adj. 严格的
4. **contemporary**: adj. 当代的
5. **choreograph**: v. 设计舞蹈动作, 精心编排
6. **improvisation**: n. 即兴创作
7. **scenery**: n. 舞台布景
8. **lightness**: n. 轻盈, 灵活
9. **conceal**: v. 隐藏
10. **eggbeater**: n. [C] 打蛋器
11. **pioneer**: adj. 先驱, 创始人
12. **controlled freedom**: 克制的自由

Today I want to discuss **fossil fuels** such as coal, oil, and natural gas. The term "fossil fuel" refers to the **trapped remains** of plants and animals in **sedimentary** rock. You see, living plants trap energy from the sun by the process of **photosynthesis**, and they store the energy in their chemical compounds. Most of that energy is released when the plant dies and **decays**. However, sometimes organic matter is buried before it decays completely. In this way some of the solar energy becomes trapped in rocks, hence the name fossil fuel. Although the amount of organic matter trapped in any one growing season is small, the accumulated remains from millions of years are **considerable**. Because the accumulation rate is so slow, millions of times slower than the rate at which we now dig up this organic matter and burn it for energy, we must consider fossil fuels as **nonrenewable** resources. Tomorrow we'll be discussing **alternatives** to fossil fuels that can be renewed.

#### 【生词摘录】

1. **fossil fuel**: 化石燃料
2. **trapped**: adj. 捕集的, 捕获的
3. **remains**: n. [C] 残留
4. **sedimentary**: adj. 沉积的
5. **photosynthesis**: n. [U] 光合作用
6. **decay**: v. 腐烂
7. **considerable**: adj. 相当多的, 相当可观的
8. **nonrenewable**: adj. 不可再生的
9. **alternative**: n. 二中选一, 可供选择的事物

We've been together now in this **pottery** class for several weeks, and I feel you are all doing very well. I thought you might be interested in hearing about a **ceramics workshop** that will be held here at the college next month. Kate Ferguson, who was recently named by **Ceramics Monthly** as one of the dozen best potters in the world, will be at the **recreation** center for an intensive seven-day workshop. Participants in the workshop will, Kate has assured me, make a lot of pots and be able to work closely with her on **refining** their techniques and skills. There's only room for eighteen potters and advanced pottery students in the workshop, so everyone will get personal attention. It costs \$175, which included all your materials, and a picnic, which is usually attended by all of the participants at the end of the workshop. A \$50 **deposit** is required ahead of time, with the rest of the tuition due by May 15th. I should mention that this workshop is **cosponsored** by the Van Howe Chemical Company, which is **donating** the **clay**. If you want to register for the workshop you should call the recreation center at 5553080. You should really consider taking advantage of this opportunity.

#### 【生词摘录】

1. **pottery**: n. [C] 制陶工艺
2. **ceramics**: n. [U] 制陶术, 制陶业
3. **workshop**: n. [C] 研习会, 讨论会
4. **recreation**: n. [U] 娱乐
5. **refine**: v. 精炼, 精制
6. **deposit**: n. [C] 存款, 押金
7. **cosponsor**: v. 共同倡导, 共同主办
8. **donate**: v. 捐赠
9. **clay**: n. [C] 黏土

You might think that most of the patients at sleep clinics are being treated for sleeplessness, commonly referred to as **insomnia**, but that is not the case. The majority of sleep-clinic patients suffer from **disorders** of excessive sleep, or "**hypersomnia**." While most **insomniacs** somehow manage to drag themselves through the day and function at **acceptable**, although not **optimal** levels, this is not so for people who suffer from hypersomnia. They are **incapacitated** by **irresistible** urges to sleep during the day, often in inappropriate situations—at business meetings, in supermarkets, or at parties. Even more dangerous is their failure to remain awake when driving or operating machinery. Falling asleep in such situations could obviously be **life-threatening**. Many **hypersomniacs** suffer from **narcolepsy**, for which the primary **symptom** is excessive daytime sleepiness. Though not apparent in childhood, this symptom most often appears for the first time during the teen years and continues throughout a person's life. The sleep attacks may occur as many as fifteen to twenty times during the course of the day and last for periods from fifteen minutes up to two hours. What can be done to help those suffering from narcolepsy? There are certain drugs that can help, and specialists suggest **voluntary napping** to decrease the frequency of such sleep attacks.

#### 【生词摘录】

1. **insomnia**: n. [U] 失眠(症)
2. **disorder**: n. [C] 混乱, 无秩序状态
3. **hypersomnia**: n. [U] 睡眠过度, 嗜睡
4. **insomniac**: n. [C] 失眠症患者
5. **acceptable**: adj. 可接受的, 合意的
6. **optimal**: adj. 最佳的, 最理想的
7. **incapacitate**: v. 使无能力, 使不能胜任
8. **irresistible**: adj. 不可抵抗的
9. **life-threatening**: adj. 有生命危险的
10. **hypersomniac**: n. [C] 嗜睡症患者
11. **narcolepsy**: n. [C] 嗜睡发作
12. **symptom**: n. [C] 症状
13. **voluntary**: adj. 主动的, 故意的
14. **nap**: n. [C] (白天) 小睡, 打盹

Not long ago, some of you may have read about a team of mountain-climbing scientists who helped to **recalculate** the **elevation** of the highest mountain in the world: Mt. Everest. Of course, the elevation of Mt. Everest was determined many years ago, using traditional surveying methods. But these scientists wanted to make a more precise measurement using a new method that **takes advantage of** recent advances in technology. It's called the **Global Positioning System**. The Global Positioning System uses 24 satellites that circle the Earth. Each of these satellites is constantly sending out signals. And each signal contains important information that can be used to determine the **longitude, latitude**, and elevation of any point on the Earth's surface. Well, in order to use this system to calculate Mt. Everest's elevation, scientists needed to put a special **receiver** on its **summit** to receive signals from the satellites. The problem with this was that, in the past, the receivers were much too heavy for climbers to carry. But now these receivers have been reduced to about the size and weight of a handheld telephone, so climbers were able to take a receiver to the top of Everest and, from there, to **access** the satellite system signals that would allow them to determine the precise elevation. And it turns out that the famous peak is actually a few feet higher than was previously thought.

### 【生词摘录】

1. **recalculate**: v. 重新计算
2. **elevation**: n. [C] 海拔
3. **take advantage of**: 利用
4. **Global Positioning System**: 全球定位系统
5. **longitude**: n. [U] 经度
6. **latitude**: n. [U] 纬度
7. **receiver**: n. [C] 接收器
8. **summit**: n. [U] 定点
9. **access**: v. 接近, 进入, 使用

Human populations near the equator have evolved dark skin over many generations because of exposure to the fierce rays of the Sun. A similar phenomenon has also occurred in other parts of the animal kingdom. The African grass mouse is a good example. Most mice are **nocturnal**, but the African grass mouse is active during daylight hours. This means that it spends its days searching for food in the semidry bush and **scrub** habitats of eastern and southern Africa. Its **fur** is **striped**, like a **chipmunk's**, which helps it blend in with its environment. Because it spends a lot of time in the intense **tropical** sun, the grass mouse has also evolved two separate safeguards against the Sun's **ultraviolet** radiation. First, like the populations of humans in this region of the world, the skin of the grass mouse contains lots of **melanin**, or dark **pigment**. Second, and quite unusual, this mouse has a layer of melanin-pigmented **tissue** between its **skull** and skin. This unique "cap" provides an extra measure of protection for the grass mouse and three other types of African mouse-like rodents that are active during the day. The only other species scientists have identified with the same sort of skull adaptation is the white tent-making bat of the Central American tropics. Although these bats sleep during the day, they do so curled up with their heads exposed to the sun.

### 【生词摘录】

1. **nocturnal**: adj. 夜行的, 夜间活动的
2. **scrub**: n. 矮树, 灌丛
3. **fur**: n. 毛皮
4. **stripe**: v. 划条纹
5. **chipmunk**: n. [C] 花栗鼠
6. **tropical**: adj. 热带的
7. **ultraviolet**: adj. 紫外线的
8. **melanin**: n. [C] 黑色素
9. **pigment**: n. [C] 色素
10. **tissue**: n. [C] 【生】组织
11. **skull**: n. [C] 头骨



We're going to start today talking about **congressional aides**, that is, the people who work for our congressional representatives, both in Washington and in the representatives' local districts. It used to be that members of Congress had a relatively small staff of people working for them, and the role of these people wasn't of primary importance. But now there are thousands of congressional aides, and they've **profoundly** affected the way the whole government works. Congressional aides work in two different locations: one, in the congressional representatives' local offices, the districts from which they were elected, and two, in Washington. Staff in the local offices help members of Congress stay in touch with citizens in their districts. These citizens can bring problems in in person, or by mail or phone. This personal connection between the aides and the local people can be helpful when the next election comes around. People remember the help they get from the office of their local congressional representative. But as you know, members of Congress have to spend most of their time in Washington taking care of their **legislative** duties. Over six thousand new laws are introduced in Congress each **session**. Without help, representatives would have trouble keeping up with the proposed laws that directly affect their districts. So that's why the congressional aides play a major role in Washington. They keep their bosses informed about **pending** legislation, organize **hearings**, and just keep their local congressional representatives **up-to-date** and informed on what's going on in other parts of Congress. Now another thing congressional aides do is to help develop ideas for laws that their bosses can eventually propose to Congress. This can be called the staff's **entrepreneurial** function, a bit like a business **executive** trying to find out what products are most popular. Congressional aides promote or encourage laws they think will be popular with the public. You've also got other employees that work for the whole Congress, not just for individual members. We'll talk about these people next.

### 【生词摘录】

1. **congressional**: adj. 国会的
2. **aide**: n. [C] 助手
3. **profoundly**: adv. 深刻地
4. **legislative**: adj. 立法的
5. **session**: n. [C] 会议（期）
6. **pending**: adj. 未决的
7. **hearing**: n. [C] 听证会
8. **up-to-date**: adj. 最新的
9. **entrepreneurial**: adj. 企业家的
10. **executive**: n. [C] 执行者，经理，董事

Now, you've been reading articles about the tremendous damage done to life and property by earthquakes. That's why **seismologists** have been working so hard to develop methods of earthquake prediction. We can now predict earthquakes fairly well, but the **predictions** only locate potential areas of danger. They don't predict the specific time and location at which an earthquake is likely to occur. Today I want to introduce to you three prediction models that have been developed. The first prediction model looks along earthquake **faults**, those **cracks** in the Earth's **crust**, to find what are known as **seismic** gaps. Seismic gaps are places where the fault has shown little or no seismic activity for a long time. This theory **postulates** that such places are due for a major shock. The second model relies on phenomena, like ground **flit**. Using long **cylindrical** tubes containing water, observers noted that ground tilt tended to occur before major earthquakes. That led them to correctly predict the big Haicheng quake of 1975, the first successful earthquake prediction scientists have ever made. A million people were **evacuated** from that Chinese city before the earthquake struck. Unfortunately, this method hasn't worked **consistently**, so we can't say it's been perfected. The third model is based on the theory that major earthquakes closely follow a series of minor ones. Starting with the measurements and timing of the smaller quakes, a complex **formula** calculates the "times of increased probability" of a much larger quake. Right now, this method, like the first method, cannot predict specific times and places, but that may change as it is further developed. For the moment, none of these models can predict with reasonable levels of confidence.

### 【生词摘录】

1. **seismologist**: n. [C] 地震学家
2. **prediction**: n. [C] 预测, 预报
3. **fault**: n. [C] 断层
4. **crack**: n. [C] 裂缝
5. **crust**: n. [C] 外壳
6. **seismic**: adj. 地震的
7. **postulate**: v. 假定
8. **cylindrical**: adj. 圆柱的
9. **evacuate**: v. 疏散
10. **consistently**: adv. 一贯地, 一向, 始终如一地
11. **formula**: n. 公式, 规则

That's an interesting question, Tom. Women did participate in the early days of **motion-picture** making. One of the most outstanding is Lois Weber. She is **credited** as the first consistently successful woman film director. In the early 1900's, when she first arrived in Hollywood, Ms. Weber made a series of **experimental** sound films. Now this was almost 20 years before modern "talking pictures" were developed. The dialogue for her movies was recorded on **phonograph** records and then **synchronized** with the action on the movie screen, very **innovative** for that time. In addition, Weber felt that movies should be educational as well as entertaining. She made several highly **controversial** movies that dealt with the moral and social issues of her day. And some of her most controversial work **addressed** issues of particular interest to women. Unfortunately, Weber died in 1939, just as Hollywood was beginning to make films aimed primarily at female audiences, which brings me to my next point.

#### 【生词摘录】

1. **motion-picture making**: 电影制作
2. **credit**: v. 授予荣誉
3. **experimental**: adj. 实验的
4. **phonograph**: n. [C] 留声机
5. **synchronize**: v. 同步, 使声画同步, 使电影的(发声与画面动作)吻合
6. **innovative**: adj. 创新的, 革新的
7. **controversial**: adj. 有争议的

Well, if there are no more questions, I would like to continue our discussion of human evolution by looking at **Homo erectus**, the earliest of our ancestors who stood upright. Homo erectus lived about one and a half million years ago and was given that name because, at the time the first fossil was discovered, it represented the first **primate** to stand upright. There is evidence now that Homo erectus had sharper **mental** skills than their **predecessors**. They constructed the first **standardized** tool for hunting and **butchering**. They created an extraordinary stone **implement**, a large **teardrop**-shaped hand **ax** whose design and symmetry reveal a **keen** sense of **aesthetics**. This **detailing**, along with the ax's **utilitarian** value, strongly suggests that Homo erectus had the ability to **conceive of** and execute a design to **specification**. In addition, Homo erectus was the first **hominid** to use fire. This discovery **enticed** them to cook meat, which they could **flavor** and keep from **spilling** by flame, and which **paleontologists** now believe may have given them a new disease. Some fossil bones of Homo erectus are **grossly deformed**, and paleontologists have noted that this condition is similar to that found in people today who have been exposed to **chronic overdoses** of vitamin A. Apparently Homo erectus first got this disease by eating large amounts of animal **liver**.

【生词摘录】

1. **primate**: n. [C] 灵长类动物
2. **mental**: adj. 智力的
3. **predecessor**: n. [C] 祖先, 祖辈
4. **standardized**: adj. 标准化的
5. **butcher**: v. [C] 屠宰, 屠杀
6. **implement**: n. [C] 工具, 器具
7. **teardrop**: n. [C] 泪珠
8. **ax**: n. [C] 斧头
9. **keen**: adj. 敏锐的, 锋利的
10. **aesthetics**: n. [C] 美学
11. **detailing**: n. [C] 详细设计, 细节设计
12. **utilitarian**: adj. 实用的, 功利主义的
13. **conceive**: v. 构思, 设想
14. **specification**: n. [C] 规范
15. **hominid**: n. [C] 原始人类
16. **entice**: v. 诱惑, 诱使
17. **flavor**: v. 加调料
18. **spill**: v. 溢出
19. **paleontologist**: n. [C] 古生物学家
20. **grossly**: adv. 非常
21. **deform**: v. 变形
22. **chronic**: adj. 慢性的, 长期的
23. **overdose**: n. [C] 服药过量
24. **liver**: n. [C] 肝脏

Yesterday we talked about the **anecdote**. Today we're going to move on to one of the most popular literary forms in Western literature—the short story. A short story is a piece of **prose fiction**, usually under 10,000 words. Although it's similar to the anecdote, it's really a **separate** literary form. You'll remember that the anecdote's sole purpose is to **entertain**, and that it does this by **relating** a curious or interesting event. Well, there are also events in short stories, but the short story uses the event as something a character reacts to. The reader's interest is **captured** by the effect that this event has on the character in the story. We're even likely to **reread** a short story to better understand the character who is being portrayed and why a certain event led to a certain response or action. A short story, though, is not just a short novel. A novel is **narrative**. It tells a **detailed** story that usually takes place over a long period of time. A short story is less **comprehensive** than a novel, and the focus is on a character's mental reaction to an experience. This reaction is the heart of the short story. Now I want you to think back to the short story you read for homework and I'll give you a list of questions to think about.

#### 【生词摘录】

1. **anecdote**: n. [C] 轶事, 奇闻
2. **prose**: n. [C] 散文
3. **fiction**: n. [C] 小说
4. **separate**: adj. 不同的
5. **entertain**: v. 娱乐
6. **relate**: v. 叙述
7. **capture**: v. 俘获
8. **reread**: v. 重读, 再读
9. **narrative**: adj. 叙述性的
10. **detailed**: adj. 详细的
11. **comprehensive**: adj. 全面的

One reason **oceanographers** analyze the **sediment** on the ocean floor is to see how long-term changes in Earth's temperature have affected the depth of the ocean. By analyzing the remains of sea animals in old layers of ocean sediment, oceanographers can determine the depth of the ocean in the past. They've analyzed hundreds of such layers, including some from the coldest periods of Earth's history—the ice ages. What they've found is that during the ice ages, the amount of water in the oceans decreased. Water levels in the ocean dropped by about four hundred feet. Water from the ocean evaporated and became frozen in continental **glaciers**, so it didn't **drain** back into the ocean. When temperatures eventually rose again, the glaciers melted, and the oceans returned to their former depths. Analysis of sedimentary data indicates that periods of glacial freezing and melting occurred in regular cycles of twenty thousand, forty thousand, and one hundred thousand years. Oceanographers are interested in the history of seawater levels because they hope to use this historical data in order to predict the possible effect that global warming could have on seawater levels. If industrial **pollutants** are capable of heating global temperatures to the point that glaciers begin to melt, it is urgent for us to know precisely how high sea levels will rise as a result.

#### 【生词摘录】

1. **oceanographer**: n. [C] 海洋学者, 海洋研究者
2. **sediment**: n. [C] 沉淀物
3. **glacier**: n. [C] 冰河
4. **drain**: v. 排出, 排水
5. **pollutant**: n. [C] 污染物质

Now let's focus on **comics** in the 1950's. Early in the **decade** sales were down, so publishers started looking for some new **angle** to get their readers interested again. They found what they were looking for with **horror comics**, stories about **ghosts** and **demons** that were often **graphically** violent. Before long, most of the major publishers were printing horror comics, but it all came to an end a few years later. You see, there was a psychologist named Frederic Wertham who claimed that comic books, the horror books in particular, were a bad influence on children and turned them into **juvenile delinquents**. Wertham even wrote a book called ***Seduction of the Innocent*** that showed specific scenes from comics that he thought were a particularly bad influence on kids. Wertham wasn't the only one down on comics. The United States Senate **Subcommittee** on Juvenile Delinquency also released a report very critical of comics. The result of all this **fuss** was the creation of **the Comics Code Authority** in 1955. This is a **self-censoring** body created by the publishers. **Essentially**, for a comic book to be approved by the code, it had to be free of the blood and **gore** that was usually **depicted** in most horror comics, and evil could never triumph over good. Children had to be shown that crime did not pay. Well, if comic sales were bad in 1950, things got even worse in 1955. Many small publishers actually went out of business. But the industry **rebounded** by introducing a new **lineup** of **superheroes**, characters like **Spider-Man** and the **Fantastic Four**. Now, I've brought with me today some comic books from this **era** to pass around. They're from my own personal collection, so please be extra careful when **handling** them.

### 【生词摘录】

1. **comics**: n. [C] 喜剧
2. **decade**: n. [C] 十年
3. **angle**: n. [C] 角度
4. **ghost**: n. [C] 鬼, 幽灵
5. **demon**: n. [C] 魔鬼
6. **juvenile**: 青少年
7. **delinquent**: n. [C] 罪犯
8. **subcommittee**: n. [C] 委员会的附属委员会, 小组委员会
9. **fuss**: n. [C] 异议, 反对, 抗议
10. **self-censoring**: 自我审查的
11. **essentially**: adv. 本质上, 本来
12. **gore**: n. [C] 血块, 淤血
13. **depict**: v. 描述, 描写
14. **rebound**: v. 回弹
15. **lineup**: n. [C] 阵容, 阵型, 一组人
16. **superhero**: n. [C] 超级英雄
17. **era**: n. 时代, 时期
18. **handle**: v. 触摸

As you probably know, log structures are gaining in popularity. They are no longer just the simple country homes that we think of as the traditional **log cabin**. Some **upscale** homes now **incorporate** natural round logs in **ceiling beams** and walls. People seem to think the rounded logs give their homes a **cozy**, warm atmosphere. And even people who want to build a traditional log cabin on their own can buy a **kit** with **precut** logs that fit together like pieces of a **jigsaw puzzle**. Before showing you some slides of modern log houses, I'd like to give a little historical background on the subject: Log cabins were first built in the late 1600's along the Delaware River valley. The European immigrants who settled there brought centuries-old traditions of working with logs. And in this heavily wooded area, logs were the material at hand. Log cabins were most popular in the early 1800's with the **settlers** who were moving west. They provided the answer to the pioneers' need for a safe and **sturdy** home that an ordinary family could build quickly: they had **dirt floors** and **sliding boards** for windows. But the log buildings that have probably had most influence on modern architects are those of the mountain **retreats** of wealthy New Yorkers. These country houses, which were popular in the early 1900's, **typify** what's known as the Adirondack style. Now let's look at those slides.

### 【生词摘录】

1. **log**: n. [C] 原木
2. **cabin**: n. [C] 小屋
3. **upscale**: adj. 高消费阶层的, 质优价高的
4. **ceiling**: n. [C] 天花板
5. **beam**: n. [C] 横梁
6. **cozy**: adj. 舒适的, 安逸的, 惬意的
7. **kit**: n. [C] 成套工具, 工具箱
8. **precut**: 按规格裁切
9. **jigsaw puzzle**: 七巧板, 智力拼图玩具
10. **settler**: n. [C] 定居和, 殖民者
11. **sturdy**: adj. 坚固的, 耐用的
12. **dirt floor**: (室内的) 泥地面 (未铺砖、木的)
13. **sliding board**: 滑梯
14. **retreat**: n. [C] 静居处
15. **typify**: v. 代表, 作为……的典型



The Old Canada Road is a **long-lost trail** between the Canadian province of **Quebec** and **Maine**, in the northeast corner of the United States. Yes, it really was lost, and finding it again was a complex process that involved **state-of-the-art** technology. How the location of the road was **pinpointed** was very interesting, and I'll return to it as soon as I've given you a little background information. The road was begun in 1817, a few years before Maine even became a state. At the time, Quebec was a major market for **livestock**, crops, and fish, so a road to Quebec was seen by officials in Maine as necessary for trade. For about 20 years, the movement of people and goods was mostly from Maine to Quebec, but then the trend **reversed** as thousands of Canadians immigrated to Maine to escape poor crops, a lack of jobs, and the threat of disease. I think it was a **cholera epidemic**. Besides these negative reasons, major building projects in Maine also made the state very attractive for the Canadians who needed work. I should stress, though, that immigration during that period went in both directions. In fact, the flow of people and goods went completely **unhindered**. There wasn't even a **border post** until around 1850. The people of the time saw Maine and Quebec as a single region, mainly because of the strong French influence, which is still evident in Maine today. Eventually, the road fell into **disuse** as a major railway was completed; finally, people simply forgot about it and that's how it came to be lost. This brings me back to the original topic.

### 【生词摘录】

1. **long-lost**: adj. 遗失了很长时间的
2. **trail**: n. [C] 小径
3. **Quebec**: 魁北克
4. **Maine**: 缅因州
5. **pinpoint**: v. 精准测定位置, 正确定出
6. **livestock**: n. [C] 家畜, 牲畜
7. **reverse**: v. 反转, 颠倒
8. **cholera**: n. [C] 霍乱
9. **epidemic**: n. [C] 流行病
10. **unhindered**: adj. 不受妨碍的, 不受阻碍的
11. **disuse**: n. [C] 废弃, 不被使用

OK. In the last class we talked about the **classification** of trees, and we ended up with a basic description of **angiosperms**. You remember that those are plants with true flowers and seeds that develop inside fruits. The common **broadleaf** trees we have on campus **fall into** this category, but our **pin**es don't. Now, I hope you all followed my advice and wore comfortable shoes because, as I said, today we're going to do a little field study. To get started, let me describe a couple of the broadleaf trees we have in front of us. I'm sure you've all noticed this big tree next to Brant Hall. It's a black **walnut** that must be 80 feet tall. As a matter of fact, there's a **plaque** identifying it as the tallest black walnut in the state. And from here we can see the beautiful **archway** of trees at the Commons. They're American **elms**. The ones along the Commons were planted when the college was founded 120 years ago. They have the distinctive dark green leaves that look **lopsided** because the two sides of the leaf are **unequal**. I want you to notice the elm right outside Jackson Hall. Some of its leaves have **withered** and turned yellow, maybe due to Dutch elm disease. Only a few branches seem affected so far, but if this tree is sick, it'll have to be cut down. Well, let's move on and I'll describe what we see as we go.

### 【生词摘录】

1. **classification**: n. [C] 分类
2. **angiosperm**: n. [C] 被子植物
3. **broadleaf**: adj. 阔叶树
4. **fall into**: 属于
5. **pine**: n. [C] 松树
6. **walnut**: n. [C] 胡桃（树）
7. **archway**: n. [C] 拱门，拱道
8. **elm**: n. [C] 榆树
9. **lopsided**: adj. 倾向一方的，不平衡的
10. **unequal**: adj. 不平衡的
11. **wither**: v. 枯萎

I was really glad when your club invited me to share my coin collection. It's been my passion since I collected my first Lincoln **cent** in 1971; that's the current **penny** with Abraham Lincoln's image. Just a little history before I start in on my own collection. Lincoln pennies are made of **copper**, and they were the first United States coin to bear the **likeness** of a President. It was back in 1909 when the country was celebrating the **centennial** of Lincoln's birth in 1809 that the decision was made to redesign the one-cent piece in his honor. Before that, the penny had an American Indian head on it. The new penny was designed by artist Victor David Brenner. This is interesting because he put his **initials** V.D.B. on the **reverse** of the coin in its original design. There was a general **uproar** when the initials were discovered, and only a limited number of the coins were struck with the initials on them. Today a penny with the initials from the San Francisco Mint, called the 1909-SVDB, is worth over \$500. Now, when I started my coin collection, I began with the penny for several reasons. There were a lot of them. Several hundred billion have been **minted**, and there were a lot of people collecting them, so I had plenty of people to trade with and talk to about my collection. Also, it was a coin I could afford to collect as a young teenager. In the twenty-five years since then, I have managed to acquire over 300 coins, some of them very rare. I'll be sharing with you today some of my rarer **specimens**, including the 1909-SVDB.

### 【生词摘录】

1. **cent**: n. [C] 分币
2. **penny**: n. [C] 便士, 分
3. **copper**: n. [C] 铜
4. **likeness**: n. [C] 肖像
5. **centennial**: n. [C] 百年纪念
6. **initial**: n. 词首大写字母
7. **reverse**: n. [C] 反面
8. **uproar**: n. [C] 喧嚣
9. **mint**: v. 铸造 (硬币)
10. **specimen**: n. [C] 样本, 样品

Today I want to talk to you about **wasps** and their **nests**. You'll recall that biologists divide species of wasps into two groups: **solitary** and social. Solitary wasps, as the name implies, do not live together with other wasps. In most species the male and female get together only to **mate**, and then the female does all the work of building the nest and providing food for the **offspring** by herself. Solitary wasps usually make nests in the ground and they separate the **chambers** for individual offspring with bits of grass, stone, or mud, whatever is **handy**. What about social wasps? They form a community and work together to build and maintain the nest. A nest begins in the spring when a **fertile** female, called the **queen**, builds the first few **compartments** of the nest and lays eggs. The first offspring are small females that cannot lay eggs. These females, called workers, then build a lot of new compartments, and the queen lays more eggs. They also care for the new offspring and defend the nest with their **stingers**. By the way, only female wasps have stingers. Most social wasps make nests of paper. The females produce the paper by chewing up plant fibers or old wood. They spread the paper in thin layers to make cells in which the queen lays her eggs. Most of you, I'm sure, have seen these nests **suspended** from trees. They may also be built underground in abandoned **rodent burrows**.

### 【生词摘录】

1. **wasp**: n. [C] 黄蜂
2. **nest**: n. [C] 巢
3. **solitary**: adj. 独居的
4. **mate**: v. [C] 成配偶, 交配
5. **offspring**: n. [C] 子孙, 后代
6. **chamber**: n. [C] 蜂箱
7. **handy**: adj. 手边的, 唾手可得的, 容易得到的
8. **fertile**: adj. 能繁殖的
9. **queen**: n. [C] 雌王
10. **compartment**: n. [C] 小隔间
11. **stinger**: n. [C] 针, 刺
12. **suspend**: v. 吊, 悬挂
13. **rodent**: 啮齿动物
14. **burrow**: n. [C] 洞穴

One of the most popular myths about the United States in the nineteenth century was that of the free and simple life of the farmer. It was said that farmers worked hard on their own land to produce whatever their families needed. They might sometimes trade with neighbors; but in general they could get along just fine by relying on themselves, not on commercial ties with others. This is how Thomas Jefferson **idealized** the farmer at the beginning of the nineteenth century, and, at that time, this may have been close to the truth, especially on the **frontier**. But by mid-century, **sweeping** changes in agriculture were well under way as farmers began to **specialize** in the raising of crops such as cotton or corn or wheat. By late in the century, revolutionary advances in farm **machinery** had vastly increased production of specialized crops. And the extensive network of railroads had linked farmers throughout the country to markets in the East and even **overseas**. By raising and selling specialized crops, farmers could afford more and finer goods and achieve a much higher standard of living, but at a price. Now, farmers were no longer dependent just on the weather and their own efforts. Their lives were increasingly controlled by banks, which had power to grant or deny loans for new machinery, and by the railroads, which set the rates for shipping their crops to market. As businessmen, farmers now had to worry about national economic depressions and the influence of world supply and demand on, for example, the price of wheat in Kansas. And so, by the end of the nineteenth century, the era of Jefferson's independent farmer had come to a close.

#### 【生词摘录】

1. **idealize**: v. 理想化
2. **frontier**: n. [C] 边境, 边疆
3. **sweeping**: adj. 广泛的, 彻底的
4. **specialize**: v. 专攻, 专门研究
5. **machinery**: n. [C] 机械
6. **overseas**: adv. 在海外, 在国外

Before moving on to a new topic, I want to finish up our unit on **arachnids** by looking at what may seem a very unusual aspect of **spider** behavior, a **species** where the young spiders actually **consume** the body of their mother. Unlike most other spiders, this species lays one, and only one, **clutch** of 40 eggs in her lifetime. The young spiders hatch in mid-spring or early summer, inside a nest of **eucalyptus** leaves. Their mother spends the warm summer months bringing home large insects—often 10 times her weight—for meal. The **catch** is always significantly more than her young spiders can eat. So, the mother **fattens** herself up on this extra prey and stores the **nutrients** in her extra **unfertilized** eggs. As the weather turns colder, there are fewer insect prey to hunt. That's when the nutrients stored in those extra eggs begin to seep into the mother's **bloodstream**. So, when there are no more insects to feed to the young spiders, they attach themselves to the mother's leg **joints** and draw **nourishment** by sucking the nutrient-rich blood. After several weeks, the mother is depleted of all nutrients and she dies. But then how do the young get nourishment? They start to feed on one another. Now, if you recall our discussion of Darwin, you'll see the evolutionary value of this: Only the strongest spiders of the clutch will survive this "**cannibalism**," and the mother spider will have ensured that her genes have an increased chance of survival through future generations.

### 【生词摘录】

1. **arachnid**: n. [C] 蜘蛛类动物(包括蜘蛛、蝎子、虱子等)
2. **spider**: n. [C] 蜘蛛
3. **species**: n. [C] 种类
4. **consume**: v. 吃
5. **clutch**: n. [C] 一次产的或孵的蛋
6. **eucalyptus**: n. [C] 桉树
7. **catch**: n. [C] 捕获物
8. **fatten**: v. 养肥, 使肥胖
9. **nutrient**: n. [C] 营养物
10. **unfertilized**: adj. 未受精的
11. **bloodstream**: n. [C] 血流
12. **joint**: n. [C] 接合处
13. **nourishment**: n. [C] 食物, 营养品
14. **cannibalism**: n. [C] 嗜食同类, 自相残杀

Moving away from newspapers, let's now focus on magazines. Now, the first magazine was a little **periodical** called **The Review**, and it was started in London in 1704. It looked a lot like the newspapers of the time, but in terms of its content, it was much different. Newspapers were concerned mainly with news events, but The Review focused on important domestic issues of the day, as well as the policies of the government. Now, in England at the time, people could still be thrown in jail for publishing articles that were critical of the king. And that's what happened to **Daniel Defoe**. He was the outspoken founder of The Review. Defoe actually wrote the first issue of The Review from prison! You see, he had been arrested because of his writings that criticized the policies of the Church of England, which was headed by the king. After his release, Defoe continued to produce The Review, and the magazine started to appear on a more frequent schedule, about three times a week. It didn't take long for other magazines to start popping up. In 1709, a magazine called **The Tatler** began publication. This new magazine contained a mixture of news, poetry, political analysis, and **philosophical** essays.

### 【生词摘录】

1. **periodical**: n. [C] a magazine, especially one about a series or technical subject, that comes out at regular times such as once a month 期刊, 杂志
2. **The Review**: 《评论》杂志
3. **Daniel Defoe**: 丹尼尔·笛福 (1660 -1731), 他还写有国内外旅行游记、人物传记及其他纪实性作品以及有关经商的著作。  
 生于伦敦一小工商业者家庭, 1731 年 4 月 26 日卒于莫尔福德。幼时只受过普通中等教育。早年曾经商, 办工厂, 屡次破产, 又屡次重新起家。笛福对写作和政治很感兴趣, 早年写过很多文章和小册子, 长年奔走于英格兰和苏格兰各地了解舆论情况, 因文字两次获罪下狱。从 1704 年起, 他创办《评论》杂志(The Review, 1704-1713), 这是英国第一份定期出版的文化和政治刊物, 是英国报业的先驱。笛福年近花甲才开始小说创作, 他的第一部小说《鲁宾逊漂流记》(Robinson Crusoe, 1719) 是其代表作, 也是英国近代小说的开山之作; 这部小说通过具体而真实的细节来叙述故事、刻画人物, 以日常事件构成不平凡的故事, 具有强烈的真实感, 被认为是现实主义的创始之作。笛福的其它小说作品包括《辛格顿船长》(Captain Singleton, 1720)、《摩尔·弗兰德斯》(Moll Flanders, 1722)、《大疫年日记》(A Journal of the Plague Year, 1722) 和《罗克萨娜》(Roxana, 1724) 等。除小说外,
4. **The Tatler**: 《闲话者》, 由爱迪森 (Joseph Addison, 1672~1719) 和史蒂尔 (Sir Richard Steele, 1672~1729) 共同创办, 面向中产阶级读者, 起到了传播文化和道



德说教的作用。

5. **philosophical**: adj. related to philosophy 哲学的



There's an art exhibition here on campus which **ties in well with** the discussions we've had about folk art. It's an exhibition of wildlife art calendars from about a hundred years ago. Like most other folk art, the calendar pictures were not considered to be art in their own day. People just thought of them as a way of decorating a practical object. In fact, the calendar pictures were originally printed as advertising for various companies that made hunting or fishing products, like guns or fishing **rods**. The calendars were handed out free to customers to thank them for their business. Most people just hung the calendars on their walls where the pictures faded in the sun, and then tore the picture off the calendar as each month passed. As a result, collectors today place a lot of value on calendars that are complete and in good condition. Even though the people who used the calendars didn't regard them as art, the original paintings the prints were made from were often of good quality. In fact, many famous wildlife painters created calendar art at some point in their lives. To them, it was a way of getting their work reproduced and shown around. One aspect of the exhibit that I find very interesting is the way these pictures reflect changing attitudes toward wildlife. The pictures in the exhibit often portray the **thrill** and adventure of hunting rather than any particular concern for wildlife preservation. But most of today's wildlife art shows animals in their natural surroundings without any humans in the scene. This modern wildlife art appeals to large numbers of nature lovers, even those who oppose the **practice** of hunting.

【生词摘录】

1. **rod**: n. [C] 杆
2. **practice**: n. [C] 阴谋, 欺诈或图谋的行为

As many of you already know, March is Women's History Month, so it's just a few weeks until the university begins its annual **observance**. The Women's Studies Program, **in conjunction with** the College Life Office, is pleased to announce that a full schedule of events is planned throughout March. The opening activity will be a lecture by Dr. Linda Thompson, **coordinator** of the Women's Studies Program; she'll talk about the status of women on college campuses. All students are invited to attend at eight p.m. on March first in the Student Center, Room 112. On March fourth, the Student Center Café will offer a forum for women poets to read their works. The English department's Kate Benson will read from her recently published **poetry collection** *The Ways of a Woman*. Student poets will be encouraged to share their poems as well. Interested people should sign up at the Women's Studies Office. On the fifteenth, come out and hear Thomas Lane, author of the **best-selling** *The Gender Connection*, talk about male-female relationships. The talk will be held in the Student Center **Auditorium** at 7:30 p.m. with a **reception** to follow. Lots of other events are being planned, including a show of the work of women artists, a **panel** discussion about women's legal issues, and more. Check the campus paper for times and places, or stay **tuned** to WRUC for further details.

### 【生词摘录】

1. **observance**: n. [C] 惯例, 仪式, 庆祝
2. **in conjunction with**: 和……一起, 与……协力
3. **coordinator**: n. [C] 协调人, 调度员
4. **poetry**: n. [C] 诗作, 诗歌, 诗集
5. **collection**: n. [C] 收集, 珍藏
6. **best-selling**: n. [C] 畅销书
7. **auditorium**: n. [C] 会堂, 礼堂
8. **reception**: n. [C] 招待会
9. **panel**: n. [C] 小组
10. **tune**: v. 调谐, 调整 (收音机的波长或周率), 收听

Welcome to the largest **retrospective** exhibit this art museum has ever devoted to an architect. The architect chosen for this honor is Frank Lloyd Wright, probably the greatest United States architect of the twentieth century. Wright has the reputation of being **arrogant** and **insensitive** to his clients' needs, but his work is based on a set of principles rather than a style. Because of his belief in unity of design and the elimination of unnecessary detail, he resisted his clients' wishes to introduce what he called foreign objects to his carefully designed interiors. Frank Lloyd Wright always tried to achieve harmony of building and setting. The first drawing in the exhibit, of one of his "**Prairie**" houses, illustrates this integration of the house with the landscape of the American Midwest. You can see how he stresses the **horizontal** line with **spreading roofs** and **strips** of windows. Outside **porches** stretch into the gardens, making one harmonious whole. Because of this goal of harmony, you won't see **skyscrapers** among his designs. Wright was criticized for his impractical houses with **leaky** flat roofs, but his houses also had great **virtues**. The design of the Prairie houses, for example, made them warm in winter and cool in summer. The drawings and photos in this exhibit will show the **enormity** of Frank Lloyd Wright's contribution to modern architecture.

### 【生词摘录】

1. **retrospective**: 回顾的  
**a retrospective art exhibition**: an extensive exhibition or performance of the work of an artist over a period of years 作品回顾展出: 一个艺术家在一段时间内的作品的全面展览或展示
2. **arrogant**: adj. 傲慢的, 自大的
3. **insensitive**: adj. 不敏感的, 麻木不仁的
4. **prairie**: 大草原, 牧场
5. **horizontal**: adj. 地平线的, 水平的
6. **spreading**: adj. 扩展到, 延展的
7. **roof**: n. [C] 屋顶, 房顶
8. **strip**: n. [C] 条 (通常有同样宽度的长而狭窄的条片)
9. **porch**: n. [C] 门廊, 走廊
10. **skyscraper**: n. [C] 摩天楼
11. **leaky**: adj. 有漏缝的
12. **virtue**: n. [C] 优点
13. **enormity**: n. [C] 巨大, 庞大

Today, I'd like to turn our attention to an area of management often **overlooked** in traditional management courses: **small-business** management. Small businesses have gone from being traditional small-town stores selling food or clothing to sophisticated, **high-tech enterprises**. And in addition to the important products they produce, they create jobs for lots of people because there are so many of them. It's important for management to keep in mind which of the customers' needs the business serves, because it can't serve all their needs. Writing a business plan that everyone in the organization understands and follows will help to provide the necessary focus and direction. It's important to **state** clearly what the purpose of the business is. **Additionally**, each person within the organization must know what tasks to perform in order to fulfill that purpose. Now, if for some reason a business plan doesn't work, try hard to discover why not, rewrite it, and immediately focus on the new plan. A work of **caution**, however, never give up a bad plan without replacing it. A business has to have a plan because it can't afford to waste its limited resources. And, as you know, waste leads to **unnecessarily** high production costs. Production costs are at the heart of the company's ability to make a high quality product and sell it at an **affordable** price.

### 【生词摘录】

1. **overlook**: v. 没注意到
2. **high-tech**: 高科技的
3. **enterprise**: n. [C] 企业
4. **state**: v. 声明, 陈述, 规定
5. **additionally**: adv. 除此之外
6. **caution**: n. [C] 小心, 谨慎
7. **unnecessarily**: adv. 不必要地
8. **affordable**: adj. 可支付的, 供得起的

The next style of furniture design I'd like to discuss is Shaker furniture design. The Shakers are a religious group that **flourished** in the nineteenth-century United States. At that time, the Shakers lived in their own communities and believed in living simply. This ideal of simplicity extended to their furniture design, as you will see. Because the shape of their furniture wasn't supposed to be unnecessarily **decorative**, the furniture's surface became the only place to create visual pleasure. Shaker furniture used **light-colored** woods like **pine**, **maple**, or **cherry**. It was often painted blue, green, or yellow. As these slides show, some of their most interesting pieces were made for the **workplace**. Notice that this **sewing** table has **drawers** that can be pulled out from either side. This feature enables two people to **sew** at the same time. **Likewise**, if you look closely at these slides of **counters** and **workbenches**, you'll notice that these pieces were also designed to be used from more than one side. Thus, several people would be able to work at one time. Nowadays, Shaker furniture design's enjoying a **revival**. The simple but **stylish** furniture made by the Shakers is popular among **affluent** collectors, including such celebrities as Bill Cosby and Oprah Winfrey. As you've seen, the **plainness** of Shaker furniture makes it strangely modern in appearance. In fact, their **austere**, **minimalist** designs have influenced several modern furniture designers, some of whom we'll discuss next.

### 【生词摘录】

1. **flourish**: v. 繁荣, 茂盛, 活跃
2. **decorative**: adj. 装饰的
3. **light-colored**: adj. 颜色浅的
4. **pine**: n. [C] 松树
5. **maple**: n. [C] 枫树
6. **cherry**: n. [C] 樱桃树
7. **workplace**: n. [C] 工作场所, 办公室, 车间
8. **sewing**: 裁缝, 缝纫
9. **drawer**: n. [C] 抽屉
10. **sew**: v. 缝制, 缝纫
11. **likewise**: adv. 同样地
12. **counter**: n. [C] 柜台
13. **workbench**: n. [C] 工作台
14. **revival**: n. [C] 复兴, 复活, 复苏
15. **stylish**: adj. 时髦的, 漂亮的, 流行的
16. **affluent**: adj. 丰富的, 富裕的
17. **plainness**: n. [C] 无装饰, 无花纹
18. **austere**: adj. 简朴的
19. **minimalist**: adj. 极简抽象主义的

Scientists are always on the **lookout** for alternative sources of energy. Today we're going to discuss one that's so plentiful they say it could supply more energy than all the coal and oil in the world. It's found in something called gas **hydrate** and, believe it or not, that's a kind of ice. That's right. But the water in this ice was way down below the Earth's surface when it was frozen, so it was under a lot of pressure. And trapped inside the **crystals** of ice are individual molecules of **methane**—that's what's in natural gas. All this makes gas hydrate pretty strange stuff. If you touch a **match** to a piece of this ice, it'll burst into flame. And when geologists bring a chunk of it up to the surface to study at normal air pressure and temperature, gas hydrate begins to **hiss** and **bubble**, and in less than half an hour, the ice melts and the methane inside escapes into the air. Now, as you might guess, this can make gas hydrate kind of hard for miners to handle. And then there's the problem of where it's located in frozen **arctic** regions or in ocean waters off the Atlantic coast, and up to a mile down. **Environmentalists** warn that mining it could even be **disastrous**. **Offshore drilling** could allow seawater to seep down into the huge icy deposits and release tons of methane up into the atmosphere. And methane, our listeners may recall, is a **greenhouse** gas that could really worsen the problem of global warming. So, gas hydrate may offer some interesting possibilities. But, with all these **drawbacks**, I'm not going to hold my breath waiting for it to fuel my **furnace**.

### 【生词摘录】

1. **lookout**: n. [C] 留神关注
2. **hydrate**: n. [C] 氢氧化物, 水合物
3. **crystal**: n. [C] 水晶, 晶体
4. **methane**: n. [C] 甲烷, 沼气
5. **match**: n. [C] 火柴
6. **hiss**: v. 发出尖锐的咝咝声
7. **bubble**: v. 起泡, 冒泡
8. **arctic**: adj. 北极的
9. **environmentalist**: n. [C] 环境保护论者
10. **disastrous**: adj. 灾难性的
11. **offshore**: adj. 近海的
12. **drilling**: n. [C] 钻井
13. **greenhouse**: n. [C] 温室
14. **drawback**: n. [C] 缺点, 障碍
15. **furnace**: n. [C] 炉子

Today, I want to talk about the **Cariboo gold rush** of 1858, which began when gold was discovered in the frontier town of **Quesnel Forks** in the Canadian province of British Columbia. By 1861 thousands of men had **flocked** to the region hoping to strike it rich. Naturally, as the town grew, supplies had to be brought in, and this was done with **mules**. Now the mules were quite **reliable**, but there were some **drawbacks**. For example, a mule carrying a heavy load could travel only 15 miles in a day, meaning that a typical trip into Quesnel could take as long as 20 days. So, as the demand for supplies continued to grow, a group of merchants and **packers** decided to try a new approach, believe it or not, they shipped in a **herd** of camels. I know that sounds strange, but camel trains had been used quite effectively during the California gold rush some 10 years earlier. But the results in the Cariboo region weren't quite the same. In fact it was a disaster. The camels couldn't carry the heavier loads the merchants expected them to. Their two-toed feet were perfect for desert travel, but they weren't suited for Cariboo's **rugged** mountain **terrain**. To make matters worse, the mules became very **agitated** whenever they came across a camel and that caused a lot of accidents on the **treacherous** mountain **trails**. The **mulepackers** went so far as to threaten the camel owners with a **lawsuit**. But the reason the merchants finally got rid of the camels is because these animals simply weren't cut out for the job.

### 【生词摘录】

1. **gold rush**: 淘金热
2. **flock**: v. 聚集, 蜂拥而至
3. **mule**: n. [C] 骡
4. **reliable**: adj. 可靠的, 可信赖的
5. **drawback**: n. [C] 缺点, 障碍, 劣势
6. **packer**: n. [C] 赶牲口运货的人
7. **herd**: n. [C] 兽群
8. **rugged**: adj. 高低不平的, 崎岖的
9. **terrain**: n. [C] 地形, 地势
10. **agitated**: adj. 不安的, 焦虑的
11. **treacherous**: adj. 变化莫测的
12. **trail**: n. [C] 小路, 小径
13. **lawsuit**: n. [C] 诉讼 (尤指非刑事案件)

Look at our **topographical** map and you'll see that the middle third of the North American continent from the Rocky Mountains almost to the Mississippi River is pretty flat. This is the Great Plains. This kind of area is sometimes called a **prairie**, sometimes a **steppe**. That's s-t-e-p-p-e. The **defining** features are **level terrain**, dry climate, and an absence of trees. The Great Plains are actually the former bed of a shallow inland sea. Over millions of years, **sediment** left by **glaciers**, water, and wind **smoothed** out the dry sea bed. As I said, the Great Plains are bordered on the west by the Rocky Mountains. And it's really the Rockies that are responsible for the formation of the grasslands. The mountains are so high that they block the heavy **moist** air traveling eastward from the Pacific Ocean. Lighter, drier air passes over the mountains. Until people **intervened** with irrigation and farms, only grass could grow on the dry, **windy** plain. In fact, we can divide the Great Plains into three zones. In the west, where it's driest and windiest, the grass is very short. In the eastern zone, there's more rain and grass grows as high as 360 centimeters. In the middle third, there's a mix of grass species that grow to an **intermediate** height.

#### 【生词摘录】

1. **topographical**: adj. 地形学的
2. **prairie**: n. [C] 大草原, 牧场
3. **steppe**: n. [C] 大草原, 干草原
4. **level**: adj. 平坦的
5. **terrain**: n. 地形
6. **sediment**: n. [C] 沉淀物
7. **glacier**: n. [C] 冰川
8. **smooth out**: v. 消除, 使平滑
9. **moist**: n. [C] 潮湿
10. **intervene**: v. 介入, 干预
11. **windy**: adj. 多风的
12. **intermediate**: adj. 中间的



Did you know you can catch a mood? A bad mood isn't spread by a **virus** like the flu is, but it can be **contagious**. Moods sort of drift from person to person **unconsciously**. **Slight, unintentional** signals carry the mood. You've probably experienced it yourself. You're around someone who's feeling down and showing it—**slumped** shoulders, **downcast** mouth, **subdued** voice—all that sort of thing. Pretty soon you begin to feel depressed too. Of course, good moods are also **catching**, not just bad ones. Moods spread in steps. One person's facial expression or whatever is observed by another, who then unconsciously begins to **mimic**. The process is automatic—a **split** second **mimicry**. The person isn't even aware of the copying. A **full-blown** case of mood transfer develops as this copying continues. Not everyone picks up moods to the same degree. Those who're most **susceptible** often have strong **physiological** responses to what's going on around them. You know, people who break out in a nervous **sweat** easily and whose stomachs **churn**. People don't all send moods equally well either. The best mood senders are expressive people because mood **contagion** can't happen without signals. If they aren't there—that is, the person gives no **indication** of the mood they're in—nobody will pick up the mood.

### 【生词摘录】

1. **virus**: n. [C] 病毒
2. **contagious**: adj. 传染性的
3. **unconsciously**: adv. 无意地, 不知不觉
4. **slight**: adj. 微小的
5. **unintentional**: adj. 不是故意的, 无心的, 无意识的
6. **slumped**: adj. 耷拉着的
7. **downcast**: adj. 气馁的, 沮丧的
8. **subdued**: adj. 被抑制的
9. **catching**: adj. 能传染的
10. **mimic**: v. 模仿, 仿效
11. **a split second**: 一瞬间
12. **mimicry**: n. [C] 模仿
13. **full-blown**: adj. 全面的
14. **susceptible**: adj. 易受影响的
15. **physiological**: adj. 生理学的
16. **sweat**: v. 出汗
17. **churn**: v. 产生剧烈搅动
18. **contagion**: n. [C] 传染
19. **indication**: n. [C] 迹象, 指示, 暗示

We've probably all wondered how a new word gets into the dictionary. Take the word "**doofus**," for example, spelled d-o-o-f-u-s, meaning a stupid or **incompetent** person. This word, which has been around since the late 1960's in a **slang** sense, made it into the **Merriam-Webster's Collegiate Dictionary** only in 1993. Why did it take so long? Well, first of all, dictionary editors like to wait at least three years to be sure a word is going to last, especially a slang word. They don't want to put in a new word **prematurely** and then have to take it out in the next edition. But even for words that aren't slang, getting into the dictionary isn't easy. New words have to pass a lot of **editorial** tests, including how difficult or easy they are to look up. There's also a limit to how thick a dictionary can be or how small its type can get before people feel they don't want to use it. Some words have to come out before others can go in. The Collegiate Dictionary adds about ten thousand words to every edition, but it takes out only a few hundred, so choices have to be made very carefully.

#### 【生词摘录】

1. **incompetent**: adj. 不能胜任的, 无能力的
2. **slang**: n. 俚语
3. **prematurely**: adv. 过早地, 早熟地
4. **editorial**: adj. 编辑的

Did you ever wonder why it is that most people are "**programmed**" to sleep at night instead of during the day? If there's something about the cycle of light and dark that's telling us when to sleep, then shouldn't the sleep cycle of a blind person be different? As it turns out, many blind people—people with no visual perception of light at all—do have the same sleep cycle as **sighted** people. So now you're wondering, "How can this happen?" The answer is: **hormones**, one hormone in particular. It's called **melatonin**. In sighted people, the level of melatonin goes up at night, or when it's dark, and goes down in the day, or when it's light. It's believed that it's the presence of this hormone in the blood that gives us the **urge** to sleep. If an increase in melatonin level "programs" sighted people to sleep at night, then what about blind people? A researcher, named Dr. Charles Czeisler, tells about an interesting experiment. He tried shining a bright light into the eyes of some blind people. When he did this, he noticed that the level of the melatonin in the blood of these subjects went down just as it would do for sighted people. Somehow, the eyes of these subjects, even though they were damaged and had no visual perception of light, could tell their brain when there was more or less light. Now, this doesn't work for all blind people; in fact, most of Czeisler's subjects had no **hormonal** response to light at all. Further research may be able to explain this sensitivity to light **in terms of** the type of blindness of the subject.

### 【生词摘录】

1. **programme**: v. 编程, 计划, 安排
2. **sighted**: adj. 看得见的, 有视力的
3. **hormone**: n. [C] 荷尔蒙, 激素
4. **melatonin**: n. [C] 褪黑激素
5. **urge**: n. [C] 强烈欲望
6. **hormonal**: adj. 荷尔蒙的, 激素的
7. **in terms of**: 在……方面

Since we've been discussing **alternative** fuels lately, I wanted to **pass on** to you some information I read about a new fuel that's been in the news a lot lately. It's called **A-21**. It's composed of water and a chemical known as **naphtha**. It seems to be a very **promising** fuel because it's much cleaner than the gasoline that we use today. That's not to say that it doesn't pollute, but it is cleaner. A-21 isn't like some other alternative fuels that require completely new types of engines. A-21 still works in regular, everyday **combustion** engines—like the ones in cars—with only minor mechanical **modifications**. So changing over wouldn't be a big deal. You may doubt some of these **claims** as many researchers have. Some people **feared** that because it contains about 45 percent water it would freeze in the winter. But a small amount of **antifreeze** was added to it, and that seems to have solved the problem. A-21 has recently undergone street tests in buses in **Reno, Nevada**. So far it seems to work just fine. This is a good thing, especially in Nevada, because the state government there has passed a law requiring that a large percentage of vehicles in Nevada run on alternative fuels. A-21 should help.

#### 【生词摘录】

1. **alternative**: adj. 选择性的, 二中择一的
2. **pass on**: 传递
3. **naphtha**: n. [C] 石脑油
4. **promising**: adj. 有希望的, 有前途的
5. **combustion**: n. [C] 燃烧
6. **modification**: n. [C] 更改, 修改, 修正
7. **claim**: n. [C] 声称, 主张
8. **fear**: v. 害怕, 担心
9. **antifreeze**: n. [C] 防冻剂
10. **Reno**: 里诺 (美国有名的“离婚城市”, 在内华达州西部, 凡欲离婚者, 只须在该市住满三个月, 即可离婚)
11. **Nevada**: 内华达州

Today we're going to continue our discussion of modern art and talk about Charles Csuri. Charles Csuri has been a part of many modern art movements. He's worked in Pop Art, Cubism, and Conceptual Art, but he made his mark as a pioneer in computer art. Even long before computers became popular, he was **punching** cards and feeding them into the big **mainframe** computer at Ohio State University. In the beginning, he had to work without a **monitor**, so he was virtually creating art in the dark. He even learned computer programming so he could experiment with this new tool. Through the computer, Csuri has been able to explore a new world of possibilities. For example, the computer enables him to **sculpt** in three dimensions. Also, he can look at a sculpture from any angle, and move it around, change the location of the light source, or he can copy it in different colors. Over the years, Csuri received numerous **grants** for various projects. This money allowed him to train students in computer **graphics** and **animation** techniques, and to advance the computer as a medium for artists. Even though he uses modern technology, Csuri still insists he is creating art. He's always told his students to keep the issues of art in focus, and not get so caught up in the technology that you forget about the image.

#### 【生词摘录】

1. **punch**: v. 打孔
2. **mainframe**: n. 主机, 大型机
3. **monitor**: n. [C] 显示器
4. **sculpt**: v. 雕刻
5. **grant**: n. [C] 基金的赠予
6. **graphics**: n. [C] 图形, 图像
7. **animation**: n. [C] 动画片制作

Now we're entering Kangaroo Country. In all, there are more than fifty different species of kangaroo, and the advantage of zoos like ours is that you see them in their natural habitat. The ones we have all live in the **grasslands**. On my right, you can see one of the biggest types: the red kangaroo. It travels about 20 miles per hour. It looks like hard work, but **hopping** actually lets the kangaroo **conserve** more energy than another animal could when running on four legs. In fact, up to a certain point, the faster a kangaroo goes the more energy it conserves. Rather than taking more hops to increase speed, the kangaroo makes the length of each jump longer. Let's stop here for a minute. Take a look over on your right at this group of kangaroos resting. Can you see that their ears are moving? Hearing may well be the kangaroo's most important sense. Their two large ears can move **independently**, so sometimes one ear is pointing forward and the other toward the **rear**. Kangaroos' eyesight is also excellent. They have a wide field of vision and, like most **grazing** animals, they are especially good at detecting movement. Before we move on, I'd like to point out one more thing: If you look closely, you can see a **joey** that's a baby kangaroo peering out of its mother's **pouch**. Before long that joey will be out of the pouch **for good**. The mother will push it out by the time it's eight months old.

### 【生词摘录】

1. **grassland**: n. [C] 牧草地, 草原
2. **hopping**: n. [U] 跳跃
3. **conserve**: v. 保存
4. **independently**: adv. 独立地
5. **rear**: n. [C] 后面, 后边, 后部
6. **grazing**: 食草, 牧草
7. **joey**: n. [C] 幼兽, 幼袋鼠
8. **pouch**: n. [C] 小袋
9. **for good**: 永久地

Before we **adjourn**, I'd like to remind everybody about the **upcoming fundraising** event—the ten kilometer run. The run is being organized to help raise money for the **renovation** of the old **gym**. Our gym is in desperate need of repair, and the university must rely entirely on private **donations** to pay for its renovation. This event will be the students' contribution to the effort. The procedure for participating is quite simple. No entrance fees, no **advance registration**, and you don't have to be the best athlete on campus. You only need to find sponsors willing to contribute one or more dollars for every kilometer of the race that you complete. So, for example, if you run all ten kilometers, you'll collect ten dollars from someone who has **pledged** to give you one dollar per kilometer. After the run, a race official will record the number of kilometers you've completed. You can then show the record to your sponsors when you collect the money. You might encourage your friends to run in the race by telling them that there will be awards for everyone who gets five sponsors or more. But above all, it'll just be a lot of fun. So, please **spread the word** and get everyone involved either as runners or sponsors.

#### 【生词摘录】

1. **adjourn**: v. 延期, 闭[休, 延]会
2. **upcoming**: adj. 即将来临的
3. **fundraising**: 筹款, 募款
4. **renovation**: n. [C] 修理, 修缮
5. **gym**: n. [C] 体育馆
6. **donation**: n. [C] 捐赠品, 捐款
7. **advance**: adj. 预先的
8. **registration**: 注册, 登记
9. **pledge**: v. 保证, 发誓

And as we enter this next **gallery**, please turn your attention to the **statue** on your right. It's a **bust** of the seventh President of the United States, Andrew Jackson. It was done by American sculptor Hiram Powers. Mr. Powers is particularly significant to our sculpture **collection** here at the **Metropolitan Museum of Art**. His statue **entitled** California was the first work by an American artist to become part of the collection at the Met. But back to this piece. When Powers was **modeling** this bust, he asked the President, who was 68 years old at the time, if he wanted to be made to appear younger than that. President Jackson replied that he didn't; so as you can see, he's shown here with **wrinkles** and lines of aging **etched** on his face. **Consequently**, this bust is considered to be one of the most realistic **portrayals** of Andrew Jackson. Powers traveled from his studio in Italy to the White House to do the **original** study for the bust. He did the study in **clay**, but he sculpted the final statue from fine Italian **marble**, as you can see. I should add that the usual practice at the time was to get local **artisans** to do the actual carving of the marble. Note that the President is **draped** in a Roman **toga**. This is because in the nineteenth century that was the **customary attire** for representations of heads of state and other important figures. Powers kept the bust in his studio until after President Jackson's death, when it was sold to the Democratic Club in New York City. It was lent to us here at the Met in 1874 and twenty years later became part of our permanent collection. Now, if you'll step this way, we'll move on to the next piece.

### 【生词摘录】

1. **gallery**: n. [C] 展览馆, 画廊
2. **statue**: n. [C] 雕像
3. **bust**: n. [C] 半身像
4. **collection**: n. [C] 收藏
5. **entitle**: v. 给...题名或命名
6. **model**: v. 模仿
7. **wrinkle**: n. [C] 皱纹
8. **etch**: v. 蚀刻
9. **consequently**: adv. 因此
10. **portrayal**: n. [C] 画像, 肖像
11. **original**: adj. 第一手的, 最初的, 原始的
12. **clay**: n. [C] 粘土
13. **marble**: n. [C] 大理石
14. **artisan**: n. [C] 工匠, 技工
15. **drape**: v. 遮盖
16. **toga**: n. [C] 宽大长袍
17. **customary**: adj. 习惯的, 惯例的
18. **attire**: n. [C] 服装



If you liked the colorful animals we just saw, you're going to love these next animals: frogs. You might not **normally** think of frogs as being colorful, but these frogs definitely are. They are the **dart-poison** frogs of Central and South America. Look at their **striking** colors, often yellow with black **stripes** or deep blue with black **spots**. **Beyond** being nice to look at, these **markings** have a purpose. They warn **predators** that these frogs are poisonous. When threatened, these frogs **secrete** a substance through their skin that would easily kill whatever animal might try to eat them. Their bright colors communicate this, and so most animals tend not to hunt them. Now, speaking of hunting, for centuries these frogs were sought after by hunters. As you might think, the hunters didn't want to eat the frogs, but rather, they captured them for their poison. They would add the poison to the tips of their hunting **arrows**. Of course, nowadays most hunters use guns. These days, dart-poison frogs are **of less interest to** hunters than to medical researchers. Researchers believe that they can make new heart medicine from the poison, because it acts as a **stimulant** on the body's nervous system. Researchers think they could use it to **stimulate** a weak heart. There is, however, a problem with doing research on these frogs. Those that are caught in the wild will produce their poison until they die. However, those that are born in **captivity**, like the ones you see here, will not produce any poison at all.

### 【生词摘录】

1. **normally**: adv. 正常地, 通常地
2. **striking**: adj. 显著的, 惹人注目的, 鲜明的, 惊人的
3. **stripe**: n. [C] 斑纹, 条纹
4. **spot**: n. [C] 斑点
5. **beyond**: prep. 除……之外
6. **marking**: n. 记号, 斑纹
7. **predator**: n. 食肉动物
8. **secrete**: v. 分泌
9. **arrow**: n. 箭
10. **stimulant**: n. 刺激物
11. **stimulate**: v. 刺激
12. **captivity**: n. [C] 俘虏, 囚禁

Okay, as you look at this next exhibit, you'll notice something quite common—an ordinary **bar** of soap. Now, soap has been around a long time. In fact, the ancient **Phoenicians** produced soap as a **substance** for washing the body way back in 600 B.C. They made it by blending **goat's** fat with wood **ash**. The Phoenicians, as you may know, regularly **traded** along the **Mediterranean**, and they were the ones who introduced soap to the Greeks and Romans. Now, soap was not something welcomed by all countries. In fact, during the **superstitious** Middle Ages, many people were afraid to **bathe** their whole body too frequently. They thought it could be dangerous for their health—that it could even kill them. And even after the production of soap became common in some European countries in the eleventh and twelfth centuries, even then some people in the heart of Europe refused to use it. You'll find it interesting that when a **duchess** was given a box of soap as a present in 1549, she was so **insulted** that she had the **gift-giver** thrown off her **estate**! But by the nineteenth century the attitude toward soap had changed **drastically**. In some regions of Europe the tax on soap was so high that people secretly made their own. A **baron** went so far as to suggest that the wealth of a nation could be judged according to the amount of soap it used. Now, if you turn your attention to the next exhibit, you can see how soap is manufactured today.

#### 【生词摘录】

1. **bar**: n. [C] 长方块
2. **Phoenician**: n. [C] 腓尼基人
3. **substance**: n. [C] 物质, 物体
4. **goat**: n. [C] 山羊
5. **ash**: n. [C] 灰烬
6. **trade**: v. 交易, 买卖, 经商
7. **Mediterranean**: n. [C] 地中海
8. **superstitious**: adj. 迷信的
9. **bathe**: v. 沐浴, 洗
10. **duchess**: n. [C] 公爵夫人, 女公爵
11. **insult**: v. 侮辱, 凌辱
12. **gift-giver**: n. [C] 送礼者
13. **estate**: n. [C] 房地产; 庄园, 种植园
14. **drastically**: adv. 激烈地, 彻底地
15. **baron**: n. [C] 男爵, 贵族

The winds of a **tornado** are the most violent and **destructive** ones on Earth. Any of you who have seen one knows very well how frightening and powerful they are. What's interesting about them is that scientists don't actually know exactly why tornadoes occur. We do know, however, what happens when tornadoes are formed. As you remember, a front occurs when cool, dry air from the north meets warm, **humid** air coming from the south, from the Gulf of Mexico, for tornadoes in the United States. Where these air **masses** meet, a narrow zone of storm clouds develops, and **thunderstorms**, and sometimes tornadoes, occur. How is this violent weather produced? Well, a mass of warm, humid air rises very rapidly. As it rises, more warm air rushes in to replace it. This **inrushing** air also rises, and in some cases, especially when there is extreme **thermal instability**, begins to **rotate**. When this happens, the rotating air forms a tornado. Even if you've seen tornadoes only in movies, you know that they can **demolish** buildings in seconds. This is possible because when a tornado passes over a house, it sucks up air from around the house and so the air pressure outside the house drops rapidly. Inside, pressure remains the same. So, air pressure inside is greater than air pressure outside. The result is that the building explodes outward. Next, we'll talk a little bit about how new technological developments are being used to try to predict tornadoes.

### 【生词摘录】

1. **tornado**: n. [C] 飓风, 龙卷风
2. **destructive**: adj. 破坏性的
3. **humid**: adj. 潮湿的, 湿润的
4. **mass**: n. [C] 团, 块, 堆
5. **thunderstorm**: n. [C] 雷雨
6. **inrushing**: adj. 大批涌进的
7. **thermal**: adj. 热的, 热量的
8. **instability**: n. [C] 不稳定(性)
9. **rotate**: v. 旋转
10. **demolish**: v. 毁坏, 破坏, 推翻, 粉碎

You'll recall that in last week's class I talked about how the sound made by most animals, though sometimes complex, are different from human language. Only in humans do these sounds represent objects and events. Keep in mind that most animals can only repeat their limited **utterances** over and over again, while humans can say things that have never been said before. Today I want to focus on human language and how it developed. I doubt you'll be surprised when I say that the evolution of language was slow and **laborious**. There's some **reliable** evidence that language began with early humans a million and a half years ago. Through the study of the size and shape of brain **fossils**, scientists have determined that early human brains, like modern brains, had a left **hemisphere** slightly larger than the right hemisphere. We know that in modern humans, the left hemisphere's the **seat** of language. We also know that early human brains had a well-developed **frontal** section, known as **Broca's** area, which **coordinates** the muscles of the mouth and throat. It's clear, then, that early humans had a speech **apparatus**. They could produce any sound that we can. What we don't know is whether early humans used what they had. Since scholars know virtually nothing about **prehistoric** speech patterns, all they can do is **speculate** about how language actually originated. Let me give you a brief summary of some of these theories.

### 【生词摘录】

1. **utterance**: n. [C] 发音, 说话, 意见, 言辞, 言论
2. **laborious**: adj. 费力的, 艰辛的
3. **reliable**: adj. 可靠的, 可信赖的
4. **fossil**: n. [C] 化石
5. **hemisphere**: n. [C] 大脑半球
6. **seat**: n. [C] 位置, 场所, 中心
7. **frontal**: adj. 前面的, 前部的, 前额的
8. **coordinate**: v. 协调, 调整
9. **apparatus**: n. [C] 仪器, 设备, 器械
10. **prehistoric**: adj. 史前的
11. **speculate**: v. 推测, 思索

At last month's meeting you asked me to draw up a report about the possibility of keeping the student center open twenty-four hours a day. I decided that the best way to **assess** the need for **expanded** hours was to talk to the people who were still in the student center at closing time. First, over the course of the two weeks, I interviewed more than fifty students as they left the student center at its regular closing time of twelve midnight. About eighty percent of them said they would prefer that the center stay open later. Of the three main uses of the center—eating in the **snack bar**, **recreation** in the game room or watching TV, and studying by far the most popular late night activity is—and this may surprise you—studying. Almost all of the people I talked to said that their main reason for being in the center after ten p.m. was to study in groups or to find a quiet place to study because their dorm was too noisy. Of course, many of these people used the snack bar or TV room for **breaks**. My **recommendation** is that we ask the **administration** to keep the center open after midnight for studying. The recreation room and snack bar can still close at the usual time. This should meet the **objection** that it costs too much to **staff** the center from midnight to eight a.m., which I'm sure will be the first response.

#### 【生词摘录】

1. **assess**: v. 评估, 评定
2. **snack bar**: 快餐店, 小吃店
3. **recreation**: n. [C] 消遣, 娱乐
4. **break**: n. [C] 休息
5. **recommendation**: n. [C] 推荐, 劝告, 建议
6. **administration**: n. [C] 行政机关, 管理部门
7. **objection**: n. [C] 反对, 反对的理由
8. **staff**: v. 供给职员, 为…配置工人或助手等职工

These days we take for granted the wide variety of music available on the radio. But, this wasn't always the case. In the early days of radio, stations were capable of broadcasting only a narrow range of sounds, which was all right for the human voice but music didn't sound very good. There was also a great deal of **crackling** and other **static** noises that further interfered with the quality of the sound. A man named **Edwin Armstrong**, who was a music lover, set out to change this. He invented **FM** radio, a technology that allowed stations to send a broad range of **frequencies** that greatly improved the quality of the music. Now, you'd think that this would have made him a **millionaire**; it didn't. Radio stations at that time had invested enormous amounts of money in the old technology. So the last thing they wanted was to invest millions more in the new technology. Nor did they want to have to compete with other radio stations that had a superior sound and could put them out of business. So they pressured the Federal Communications Commission, the department of the United States government that regulates radio stations, to put **restrictive regulations** on FM radio. The result was that its use was limited to a very small area around New England. Of course as we all know, Edwin Armstrong's FM technology eventually **prevailed** and was **adopted** by thousands of stations around the world. But this took years of court battles and he never saw how it came to affect the lives of almost everyone.

### 【生词摘录】

1. **crackling**: n. [C] 爆裂声
2. **static**: adj. 静电的
3. **FM**: 调频 (frequency modulation)
4. **frequency**: n. [C] 频率
5. **millionaire**: n. [C] 百万富翁, 大富豪
6. **restrictive**: adj. 限制性的
7. **regulation**: n. 规则, 规章
8. **prevail**: v. 流行, 盛行, 获胜, 成功
9. **adopt**: v. 采用

I'm going to talk about a train that **exemplifies** the rise and fall of passenger trains in the United States: the Twentieth Century Limited. Let me go back just a bit. In 1893, a special train was established to take people from New York to an **exposition** in Chicago. It was so successful that regular service was then set up between these cities. The **inaugural** trip of the Twentieth Century Limited was made in 1902. The train was different from what anyone had ever seen before. It was pulled by a steam engine and had five cars: two **sleepers**, a dining car, an **observation** car, and a **baggage** car, which, believe it or not, contained a library. The 42 passengers the train could carry were **waited on** by a large staff. There were even secretaries and a **barber** on board. It wasn't long before people had to wait two years to get a **reservation**. As time passed, technical improvements shortened the trip by a few hours. Perhaps the biggest technological change occurred in 1945, the **switch** from steam to **diesel** engines. By the 1960's, people were traveling by car and airplane. Unfortunately, the great old train didn't survive until the end of the century it was named for.

#### 【生词摘录】

1. **exemplify**: v. 例证, 例示, 作为……例子
2. **exposition**: n. [C] 博览会, 展览会
3. **inaugural**: adj. 最早的, 开始的
4. **sleeper**: n. [C] (火车等的) 卧铺
5. **observation car**: n. [C] (火车的) 游览车厢 (有特大车窗或透明车顶), 了望车
6. **baggage**: n. [C] 行李
7. **wait on**: 服侍, 招待
8. **barber**: n. [C] 理发师
9. **reservation**: n. [C] 预订, 预约
10. **switch**: n. [C] 转变
11. **diesel**: n. [C] 柴油机

I understand your professor has been discussing several Eastern Woodland Indian **tribes** in your study of Native American cultures. As you have probably learned, the Eastern Woodland Indians get their name from the **forest-covered** areas of the Eastern United States where they lived. The earliest Woodland cultures date back 9,000 years, but the group we'll focus on dates back only to about 700 A.D. We now call these Native Americans the **Mississippian** culture, because they settled in the Mississippi River **valley**. This civilization is known for its **flat-topped monuments** called temple **mounds**. They were made of earth and used as **temples** and official **residences**. The temple mounds were located in the central square of the city, with the **huts** of the **townspeople** built in **rows** around the plaza. The Mississippian people were city **dwellers**. But some city residents earned their living as farmers, **tending** the fields of **corn**, **beans**, and **squash** that surrounded the city. The city's **artisans** made **arrowheads**, **leather goods**, **pottery**, and **jewelry**. **Traders** came from far away to exchange **raw** materials for these **items**. In the slides I'm about to show, you will see models of a Mississippian city.

#### 【生词摘录】

1. **tribe**: n. [C] 部落, 部族
2. **Mississippian**: adj. 密西西比的
3. **valley**: n. [C] 山谷, 流域
4. **flat-topped**: adj. 平顶的
5. **monument**: n. [C] 纪念碑
6. **mound**: n. [C] 坟墩
7. **temple**: n. [C] 庙, 寺, 神殿
8. **residence**: n. [C] 住所
9. **hut**: n. [C] 小屋, 棚屋
10. **townspeople**: n. [C] 市民, 镇民
11. **row**: n. [C] 排
12. **dweller**: n. [C] 居住者
13. **tend**: v. 照管, 护理
14. **corn**: n. [C] 玉米
15. **bean**: n. [C] 豆
16. **squash**: n. [C] 南瓜
17. **artisan**: n. [C] 工匠, 技工
18. **arrowhead**: n. [C] 箭头
19. **leather goods**: 皮件
20. **pottery**: n. [C] 陶器
21. **jewelry**: n. [C] 珠宝
22. **trader**: n. [C] 商人
23. **raw**: adj. 未加工的 (raw material: 原材料)
24. **item**: n. [C] 产品



As Dr. Miller mentioned, we're trying to **recruit** volunteers for the **Hawk Mountain Sanctuary**. But before I get into the details of the volunteer program, I'd just like to tell you a little about what we do there. One of our main jobs is to keep detailed records of the migration patterns of **raptors**. For those of you who don't know, raptors are birds of **prey**, like **hawks** and **eagles**. Between August and December, we see around twenty different species migrating from Canada and New England. About 20,000 birds. Part of what attracts them to Hawk Mountain is the location on the **East Ridge** of the **Appalachian** Mountains. What happens is that the sun warms the **ridge** in such a way that air **currents** are formed. The birds just sort of **glide** along on the air, so they use up very little energy. As volunteers, you'll be helping us keep accurate counts of the raptors. Any drop in number could mean something's gone wrong in the environment because of **pesticides** or disease, even hunting. We just had a **scare** with the **broad-winged** hawks. Their numbers have dropped drastically over the last ten years. It was suggested that the birds may have changed their migratory route. So for 11 days we had several hundred volunteers—**stationed** every five miles—to observe and count. And sure enough, they discovered that instead of hugging the Appalachians as they'd always done, the broad-wings were cutting a wide path over the **Delaware River**. Needless to say, we were greatly **relieved**.

### 【生词摘录】

1. **recruit**: v. 征募, 招收
2. **raptor**: n. [C] 猛禽, 肉食鸟
3. **prey**: n. [C] 捕猎, 捕食; 猎物
4. **hawk**: n. [C] 鹰
5. **eagle**: n. [C] 鹰
6. **East Ridge**:
7. **Appalachian**: 阿巴拉契亚的
8. **ridge**: n. [C] 山脊
9. **current**: n. [C] 气流
10. **glide**: v. 滑行, 滑翔
11. **pesticide**: n. [C] 杀虫剂
12. **scare**: n. [C] 恐惧
13. **station**: v. 驻扎
14. **relieved**: adj. 放心的

Everyone is interested in improving their **diet**. Adding **grains** is one of the easiest ways. Many people in the United States have a growing concern about **nutrition**, so grains are often served in restaurants. And many grains are now available in **grocery** stores, too, though for some you still have to go to health food stores. You can **stock** up when you go, though, because uncooked grains keep a long time. You'll find that grains are easy to prepare. Many grains are as simple to cook as **spaghetti**. **Barley**, for instance, is just cooked in **salted** water. Remember, though, **whole-grain** barley, the most **nutritious** kind, never will get as **tender** as spaghetti no matter how long it's cooked. **Grain-based** salads are easy, too. Just use grains **left over** from a hot meal. You can even put together a grain **salad** hours before you need it, since grains don't **wilt** like **lettuce** does. But to get back to health factors, all grains are nutritious and many have special benefits. Barley has very little fat. Some experts believe that it may even reduce **cholesterol** levels. **Jasmine** rice is also low in fat. And it has a **bonus** in its wonderful **aroma**, a very special **fragrance**.

#### 【生词摘录】

1. **diet**: n. [C] 饮食
2. **grain**: n. [C] 谷物, 谷类
3. **nutrition**: n. [C] 营养
4. **grocery**: n. [C] 食品杂货店, 食品, 杂货
5. **stock**: v. 囤积
6. **spaghetti**: n. [C] 意大利面条
7. **barley**: n. [C] 大麦
8. **salted**: adj. 盐腌的, 盐味的
9. **whole-grain**: adj. 整粒的
10. **nutritious**: adj. 有营养成分的, 营养的
11. **tender**: adj. 嫩的
12. **leave over**: 剩余, 残留
13. **salad**: n. [C] 色拉
14. **wilt**: v. 枯萎
15. **lettuce**: n. [C] 莴苣, 生菜
16. **cholesterol**: 胆固醇
17. **jasmine**: n. [C] 茉莉
18. **bonus**: n. [C] 额外给予的东西, 奖金
19. **aroma**: n. [C] 芳香, 香气
20. **fragrance**: n. [C] 芬芳, 香气, 香味

Well, in answer to your question, several women actively participated in the Civil War. The one that comes immediately to mind is **Mary Walker**. She's important because she's the only woman ever to be awarded the Congressional Medal of Honor. As you know, this medal is given to people who've served the United States with **exceptional bravery**. In addition, she was the only female **physician** in either of the two armies that fought in that war. Even though she had two medical degrees, many officers made her life difficult because they didn't believe that a woman should be a doctor. However, she refused to **back down** and leave the army. In fact, she risked her life several times during the war and was even **captured at one point**, but she was soon released. Umm, after the war, she was arrested several times for wearing **pants**. And although Congress eventually tried to take her medal away, she refused to give it back and continued to wear it wherever she went. She died in 1919, a year before women received the right to vote, which brings me to my next point.

#### 【生词摘录】

1. **exceptional**: adj. 异常的, 格外的
2. **bravery**: n. [C] 勇敢
3. **physician**: n. [C] 医师, 内科医师
4. **back down**: 放弃原主张
5. **capture**: v. 俘获, 捕获
6. **pants**: n. [C] 短裤

So, you see, physical illness can have psychological causes. Now, we just have time to introduce another interesting example of the **interaction** between the mind and the body, **placebos**. Placebos—maybe you've heard them called **sugar pills**—are harmless substances, not always sugar, that are used **routinely** on groups of sick people in experiments. These experiments test the effectiveness of new drugs. One group is given the new drug, the other group is given a placebo, and the results are measured. As you might guess, some of the people who receive the new drug get better. Surprisingly, however, some of the placebo group also get better. Why? Well, it's an interesting question, one which doctors can't quite answer. Some of the group may have gotten better on their own, without any treatment at all, but research has shown that the very **act** of taking a **medication** that you think will make you better, often does make you feel better. Have you ever taken an **aspirin** and felt better in five minutes? Aspirin doesn't work that fast, does it? Basically, if you believe you will get better, sometimes you do. The history of how doctors and **healers** have used the mind-body connection to cure people is long and interesting, but I see that it's time to close, so I'll have to **cover** this in the next class. You'll have to hold your questions on this topic till then. Before you go, I have some **handouts** for you **concerning** the midterm exams next week.

#### 【生词摘录】

1. **interaction**: n. [C] 相互作用, 相互影响
2. **placebo**: n. [C] 安慰剂
3. **routinely**: adv. 日常地, 定期地, 常规地
4. **act**: n. [C] 过程, 行为
5. **medication**: n. [C] 药物治疗
6. **aspirin**: n. [C] 阿司匹林
7. **healer**: n. [C] 治疗者
8. **cover**: v. 涉及, 包含
9. **handout**: n. [C] 小册子, 传单, 讲义
10. **concerning**: prep. 关于