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Cruise ships

Welcome to Poseidon Cruises!

BIG BOAT
BIG FUN

Do you want a mix of relaxation and adventure? Then Poseidon Cruises is perfect for you! At embarkation, show your boarding pass and we'll do the rest. Our porters take your luggage right to your cabin. And cruise directors tell you about activities on the ship. Do you want to relax? Then spend time on your private balcony or visit the pool. Do you want to have fun? Make new friends on the upper deck. We also offer many shore excursions. Passengers disembark at several ports of call. How do you get to land? We take you to land on tenders. Call us today to learn more.

Get ready!

1 Before you read the passage, talk about these questions.
   1 Why do people take cruises?
   2 You win free tickets for a cruise. Where do you go? Why?

Reading

2 Listen and read a part of a brochure for a cruise ship. Where can you make new friends? Choose the correct answers.

   1 What does the brochure mainly talk about?
      A how to buy a cruise ship ticket
      B the types of rooms available on a ship
      C the fun parts of traveling on a cruise ship
      D why cruise ships are good for families

   2 One of the porter's duties is to ...
      A pack your luggage.
      B put your bags in your room.
      C inform about activities on the ship.
      D help passengers get on tenders.

   3 According to the passage, what does a person do on the upper deck?
      A visit the pool
      B get on a tender
      C have lunch
      D meet people

Vocabulary

3 Read the sentence pairs. Choose where the words best fit in the blanks.

   1 relaxation / adventure
      Mick does not want a lot of activity. He wants ________ during his holiday.
      Rita climbs a mountain because she enjoys the ________.

   2 embarkation / shore excursion
      Penny visits a new city. She is on a(n) ________ .
      Oscar shows his ticket at ________.

   3 porter / cruise director
      Ulysses is a ________. He handles the passenger's luggage.
      Miranda is a ________. She tells passengers about activities.
4 Match the words (1-6) with the definitions (A-F).

1. __ cabin
2. __ balcony
3. __ upper deck
4. __ disembark
5. __ port of call
6. __ tenders

A. to get off of a ship  
B. a place where ships stop  
C. the top part of a ship  
D. a room on a ship where passengers sleep  
E. small boats that take passengers from the cruise ship to land  
F. a small outdoor area that is attached to cabins

Listening

5 Listen to a cruise director make an announcement. Then answer the questions.

1. What does the cruise director talk about?
   A. a stop at a port of call  
   B. a shore excursion  
   C. things to do on the ship  
   D. problems with the dining area

2. According to the announcement, what activity takes place at 10 am?
   A. games on the upper deck  
   B. lunch in the dining room  
   C. passengers watch a movie  
   D. a play in the theater

6 Listen again. Fill in the blanks.

Cruise Director: Hello, ladies and gentlemen. Welcome to the Grande Dame.  
This is your 2 __. There are many activities on the Grande Dame today. At 10 am, join us on the 3 __ for games. Then we have lunch at 4 __. At 2 pm, watch a movie at the ship theater. The theater is on 5 __. Finally, dinner is at 6 __. The 6 __ is on Deck 10. Have a wonderful day on our cruise ship!

Speaking

7 With a partner, act out the roles below, based on the announcement from Task 6. Decide who Student A and Student B are. Then switch roles.

USE LANGUAGE SUCH AS:

At 10 am, join us on the Deck __ for ...
We have lunch at 6 pm
The theater is on the Deck ...

Student A: You are a passenger on a cruise ship. Ask Student B about:
- activities on the ship
- times of the activities
- location of the activities

Student B: You are a cruise director on a cruise ship. Answer Student A’s questions.

Writing

8 Use the conversation in Task 7 to fill out the schedule for the cruise ship.

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<th>Time</th>
<th>Activity</th>
<th>Location</th>
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<td>Breakfast</td>
<td>Dining room</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Lunch</td>
<td>Dining Room</td>
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adventure [N-COUNT or UNCOUNT-U6] Adventure is fun and exciting activities.
affordable [ADJ-U8] Something that is affordable is something that you have enough money to buy.
arrivals terminal [N-COUNT-U5] An arrivals terminal is where people who land at the airport enter through.
ATM [N-COUNT-U11] An ATM (automatic teller machine) is a machine that you use to access and withdraw money from your bank account.
attendant [N-COUNT-U7] An attendant is a train worker.
baggage claim [N-COUNT-U5] A baggage claim is where you pick up your bags in an airport.
balcony [N-COUNT-U6] A balcony is an outdoor area that is attached to the cabin.
bank [N-COUNT-U11] Banks are places where people keep their money.
bed and breakfast [N-COUNT or UNCOUNT-U4] A bed and breakfast is small house or hotel that offers lodging and a morning meal.
benefit [N-COUNT-U8] A benefit is something good about a thing.
berth [N-COUNT-U7] A berth is a type of bed that is on a train.
boarding pass [N-COUNT-U5] A boarding pass is a paper that allows you to get on a plane or bus.
boarding time [N-UNCOUNT-U5] The boarding time is when passengers get on the plane.
bottled water [N-UNCOUNT-U15] Bottled water is clean water that is in a container.
branch [N-COUNT-U11] A branch is an office that is part of a bigger company.
break-in [N-COUNT-U14] A break-in is when a person enters a home or building without permission.
budget hotel [N-COUNT-U4] A budget hotel is a sleeping and resting place that is inexpensive and has few services.
bug spray [N-UNCOUNT-U15] Bug spray is a chemical substance that kills bugs.
business hours [N-UNCOUNT-U11] A company's business hours are the times that the company is open.
buy-back [N-COUNT-U12] A buy-back is a policy. A business buys back something they previously sold you.
by bus [PREP PHRASE –U8] To go by bus is to travel somewhere on a big vehicle that carries a lot of people.
by rail [PREP PHRASE-U7] To travel by rail is to travel on a train.
cabin [N-COUNT-U4] A cabin is a small wooden house where visitors stay.
cabin [N-COUNT-U6] A cabin is a room on a ship.
campsite [N-COUNT-U4] A campsite is a sleeping and resting place where people stay in tents.
cash register [N-COUNT-U13] A cash register is a machine that holds a shop's money. It shows and records each transaction.
cash-only [ADJ-U10] A cash-only business only accepts cash as a method of payment.
catch the train [V PHRASE-U7] To catch the train is to ride on a train.
celebrate [V-I or T-U1] To celebrate is to have fun on an important day.
charge card [N-COUNT-U10] A **charge card** is a small card from a bank or shop that allows you to buy items and pay for them later.

cheaply [ADV-U8] Something that can be purchased **cheaply** is purchased for a little money.

check in [PHRASAL V-U5] To **check in** is to get the boarding pass from the airport worker.

checking account [N-COUNT-U10] A **checking account** is a type of bank account. You can withdraw money using checks.

collectible [N-COUNT-U13] A **collectible** is a valuable object that a person buys and collects.

commission [N-COUNT-U12] A **commission** is the amount of money a business charges for some types of service.

compact [ADJ-U9] A **compact** car is a small car.

conference [N-COUNT-U1] A **conference** is a group of people who come together to talk about business, education, etc.

connect [V-T-U2] To **connect** is to let a telephone caller communicate with someone else.

convert [V-T-U12] To **convert** is to change money from one currency to another.

cost [N-COUNT-U13] The **cost** of an item is the amount of money you pay for it.

coupon [N-COUNT-U13] A **coupon** is a piece of paper that allows you to buy something at a lower price.

courteous [ADJ–U2] Someone who is **courteous** is polite and nice.

credit card [N-COUNT-U10] A **credit card** is a small card that allows you to buy things and pay for them later.

criminal [N-COUNT-U14] A **criminal** is a person who breaks the law.

cruise director [N-COUNT-U6] A **cruise director** is a worker who organizes activities on the ship and tells passengers about the activities.

Cuisine [N-COUNT-U3] A **cuisine** is a style of cooking from a certain place.

currency [N-COUNT-U12] **Currency** is a word for money from a particular place, like the euro and the dollar.

currency exchange office [N-COUNT-U12] A **currency exchange office** is a place where you can change money for another country’s money.

cuts [N-COUNT-U3] A **cut** is meat from a certain part of an animal.

deficit card [N-COUNT-U10] A **debit card** is a small card that takes money out of a bank account.

departure lounge [N-COUNT-U5] A **departure lounge** is where passengers wait to get on their plane.

departures terminal [V-I-U5] A **departures terminal** is a part of the airport that people who fly to a different place use.

direct a call [V PHRASE–U2] To **direct a call** is to decide who the caller speaks to next.

disembark [V-I-U6] To **disembark** is to get off a ship.

drivers license [N-COUNT-U9] A **drivers license** is a card that says you are allowed to drive a car.

drive-through [N-COUNT-U3] **Drive-through** service is a type of service in which customers order and receive food in their car.

duty-free shop [N-COUNT-U5] A **duty-free shop** is a store where you buy items and do not have to pay tax for them.

economy car [N-COUNT-U9] An **economy car** is inexpensive.
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Book 3
Job interviews can be stressful; however, with the proper planning and preparation, you can get the job. Read these tips to help you survive the interview and get a job offer!

Before the Interview
- Research the company and prepare relevant questions. Interviewers appreciate when job candidates demonstrate interest in the company and the available position.
- Organize all paperwork, including your résumé, official transcripts, and references from previous employers.
- Plan responses to common interview questions and practice interviewing with a friend.
- Prepare for questions about your salary expectations by finding out how much employees in the position you are applying for are typically paid.

During the Interview
- Make a good first impression by arriving on time for the interview. Make sure to dress in clean and professional attire. Finally, be polite and use the interviewer’s name when speaking.
- Respond to all questions clearly. Interviewees should provide solid examples of how their previous experience relates to skills needed for the new position. Also, be sure to explain your future career goals.

After the Interview:
- Follow up immediately with a thank-you note restating your interest in the position.
- Employers may request a call-back to obtain more information.

Get ready!

1. Before you read the passage, talk about these questions.
   1. How do people prepare for a job interview?
   2. What items do people bring to job interviews?

Reading

2. Read the article from a magazine, and then mark the following statements as true (T) or false (F).
   1. A job candidate should ask about the company during an interview.
   2. Interviewees make a good impression by dressing professionally for the interview.
   3. A call-back is a typical way for job candidates to follow up after an interview.

Vocabulary

3. Complete the sentences with words or phrases from the word bank.

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<th>interview relevant followed up salary interviewee</th>
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1. Mac ___________ by thanking his interviewer.
2. After the ___________, Ms. Mills wasn’t sure if Tara was right for the position.
3. Mr. Jones is paid a good ___________.
4. The ___________ arrived early and waited until the manager was ready.
5. Mr. George didn’t write his height on the application because it was not ___________.

1
2
3
4
5
Choose the correct words/phrases to go in the blanks.

1. **transcript** / résumé
   A. Mary's ____ lists her professional background.
   B. Steve requested a ____ from his university.

2. **interviewer** / job candidate
   A. The ____ was impressed by Ms. Jones and offered her the job.
   B. Mr. Cruz decides to interview the ____.

3. **attire** / paperwork
   A. The dress code requires professional ____.
   B. Ms. Jessup had to fill out some ____ before she could begin her new job.

4. **reference** / call-back
   A. Traci received a ____ after the interview.
   B. Jason asked Ms. Watson if he could list her as a ____ on his job application.

5. **thank-you note** / job offer
   A. Bob declined the ____ because he found a position at another company.
   B. Paige sent Mr. Trujillo a ____ for helping her complete the project.

6. Listen and read the article again. How should you address the interviewer?

Listening

6. Listen to a conversation between an interviewer and a job candidate. Then mark the following statements as true (T) or false (F).

   1. __ The man wants a job as a manager.
   2. __ The man has never worked in the hotel business before.
   3. __ The man helps train new employees at his current job.

7. Listen again, and fill in the blanks.

   **Candidate:** Well, I'm currently working as an assistant hotel manager, but I'm looking to 1 _______ __ _______.
   **Interviewer:** Okay. According to your résumé, you've 2 _______ 
   _______ _______ for five years, right?
   **Candidate:** That's correct.
   **Interviewer:** And what would you say has been your 3 _______ 
   _______ _______ during those five years?
   **Candidate:** Last year I created a very successful 4 
   _______ _______ for new hotel employees.
   **Interviewer:** Really? That's great.
   **Candidate:** Yes, it's really helped our hotel run 5 _______ _______.

Speaking

6. With a partner, act out the roles below, based on the dialogue from Task 7. Then switch roles.

   **USE LANGUAGE SUCH AS:**
   - Why are you interested in working as...?
   - I'm currently working as a...
   - What would you say has been your greatest accomplishment?

   **Student A:** You are an interviewer at the Royal Point Hotel. Ask Student B questions about:
   - work experience
   - relevant job skills
   - future goals

   **Student B:** You are a job candidate in an interview. Respond to Student A's questions.

Writing

9. You are an interviewer. Use the article and the conversation to write an article giving advice on how to prepare for an interview (100-120 words). Make sure to talk about the following:

   **Interview advice**
   - Preparing before an interview
   - Making a good first impression
   - Common interview questions
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In the courtroom

Jury Duty  Rules and Expectations

Thank you for reporting for jury duty. The following is a description of what to expect today.

You will receive a number. Enter the courtroom when the clerk of the court calls that number.

In the courtroom, have a seat in the jury box. The bailiff will direct you.

Attorneys for the defense and prosecution will then ask you questions. A judge presides over the proceedings and the court reporter records your answers. The goal is to select jurors for a trial. It is important that you answer their questions honestly. This provides the defendant with a fair trial. Potential jurors may leave after questioning if not selected.

Get ready!

1 Before you read the passage, talk about these questions.
   1 Who must be in a courtroom during a trial?
   2 How can lawyers be sure that jurors will be fair?

Reading

2 Read this court pamphlet. Mark the following statements as true (T) or false (F).

   1 A judge asks potential jurors questions to check if they are biased.
   2 Jurors’ answers are recorded by an employee of the court.
   3 Every person that reports for jury duty listens to a trial.

Vocabulary

3 Match the words (1-6) with the definitions (A-F).

1 ___ clerk of the court 4 ___ prosecution
2 ___ court reporter 5 ___ juror
3 ___ defense 6 ___ bailiff

A the side of a case that attempts to prove innocence
B the side of a case that attempts to prove guilt
C a person who assists a judge
D an officer who keeps order in court
E a person that types everything that is said in court
F a person who listens to a trial and decides if a defendant is guilty or not
4. Check (√) the sentence that uses the underlined parts correctly.
   1. √ A. The *proceedings* took place in the courtroom on the second floor.
   2. √ B. The *defense* brought the lawsuit against the corporation.
   3. √ A. The judge took his seat in the *jury box* when the trial started.
   4. √ B. Judge Williams is *presiding* over the upcoming trial.
   5. √ A. Mary isn't going to be at work because she has *jury duty*.
   6. √ B. The *bailiff* typed the attorney's words very quickly.
   7. √ A. The *court reporter* sat at the table with her client and waited for the trial to start.
   8. √ B. The attorney stood close to the *jury box* as he made his argument to the jurors.

5. 🎧 Listen and read the text again. Say what happens when you report for jury duty.

6. **Speaking**
   
   With a partner, act out the roles below based on Task 7. Then, switch roles.

   **USE LANGUAGE SUCH AS:**
   
   *Your Honor, I don't believe that...*  
   *He believes that...*  
   *My client is only...*

   **Student A:** You are a defense attorney. You see a problem with a juror. Talk to Student B about:
   - the juror
   - a question and answer
   - your client

   **Student B:** You are a judge. Talk to Student A about a juror and make a decision.

7. **Listening**
   
   **Listen to a conversation between a judge and a defense attorney. Choose the correct answers.**

   1. What is the conversation mostly about?
      - A. removing a juror
      - C. selecting a new juror
      - B. questioning a juror
      - D. protesting a juror's decision
   2. What is the judge's opinion?
      - A. He thinks young people often commit crimes.
      - B. He plans to release the defendant.
      - C. He doubts the juror would be unfair.
      - D. He agrees with the attorney's argument.

8. **Writing**
   
   Use the conversation from Task 8 to complete the notes about selecting a juror for a trial.

   **JURY NOTES**
   
   Today, we ___ a juror. I thought he would be ___
   I believe this because he ___
   The judge ___ and ___

   Attorney: Your Honor, I don't believe that 1 _____ four
   should sit for this trial.

   Judge: For what 2 _____?

   Attorney: One of his answers to my questions. He believes that
   young people are more likely to commit crimes these days.

   Judge: And you're worried that he will be 3 _____ toward the
   defendant?

   Attorney: Yes. My client is only seventeen years old.

   Judge: The 4 _____ has a point. We'll release him.

   Attorney: Thank you, Your Honor.

   Judge: We'll continue the 5 _____ after the 6 _____ of the
court calls in another juror.
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6 SI System of Units

Light-Reflecting Material: Summary and Specifications

Engineers here at Parker Engineering have developed a new, lightweight material that reflects light. This report details the experiment process and results.

The aim of the project was to construct a material that was both lightweight and highly reflective. Following the development of the prototype, measurements of the material’s weight and reflective ability were recorded. We are submitting all measurements in accordance with the SI system of units, commonly known as the metric system. The weight of the material was measured in grams per square meter. The luminous intensity was measured with a base unit of candelas. The light reflected back was measured on a solid angle of one square meter. This supplementary unit was used for ease of calculation. The derived unit of luminance was used to measure the amount of light returned.

The test conditions and results are as follows: The light source reflected 75,000 candelas of luminous intensity. Experiments show that the material returned with a luminance of 1,000 candelas per square meter at a distance of 100 meters and .0001 steradians. The weight of the material measured 95 grams per square meter.

Based on the above results, the material was above average for lightness and reflective ability.

Reading

2 Read the report from an engineer at Parker engineering. Then, mark the following statements as true (T) or false (F).

1. Engineers recorded the material’s reflective ability.
2. Luminous intensity was measured with candelas.
3. The prototype did not meet the weight requirements.

Vocabulary

3 Match the words (1-7) with the definitions (A-G).

1. luminous intensity 5. steradian
2. supplementary unit 6. SI system of units
3. solid angle 7. derived unit
4. base unit

A. A measurement system with seven types of units
B. A two-dimensional angle in a sphere
C. The power of light the human eye can perceive
D. A unit of measurement formed by combining base units
E. A measurement unit beyond the seven basic types
F. A unit of measurement for angles
G. One of seven basic units of measurement

Get ready!

1 Before you read the passage, talk about these questions.

1. What types of measurement are you familiar with?
2. What can you measure with the SI system of units?
4 Write a word that is similar in meaning to the underlined part.

1 One unit of measurement for mass is very light. g _ _ m

2 This lamp emits 120 units of luminous intensity.
   c _ n _ l _ s

3 Record the exact dimensions.
   _ _ a _ r _ m _ s

4 How many units of measurement for area is the yard?
   _ q _ r _ m _ e _ s

5 Measure the reflection's brightness from a distance.
   _ u _ n _ c _

5 Listen and read. How much does the new material weigh?

Listening

6 Listen to a conversation between an engineer and a clothing manufacturer. Choose the right answers.

1 What is the main idea of the dialogue?
   A describing the production process
   B selling the material to a manufacturer
   C reducing how much the material weighs
   D negotiating the cost of the material

2 According to the dialogue, what is NOT an advantage of the product?
   A It does not weigh very much.
   B It is extremely reflective.
   C Its price has been reduced.
   D It can be placed on safety clothing.

7 Listen again and complete the conversation.

E: Ms. Platt, thanks for 1 __________ __________
   __________ to meet with me.
M: My pleasure. So, what's this great new product you
   mentioned on the phone?
E: It's a super reflective material. Its 2 __________ is very high.
M: And what exactly is it designed for?
E: It would work great for 3 __________ __________. Small
   strips placed on uniforms can reflect large amounts of light.
M: And how much does it cost?
E: Well, the production process is rather involved. So it costs
   about 70 dollars 4 __________ __________ __________.
M: That's 5 __________ __________ __________. Other
   reflective materials are available for less.
E: But ours reflects twice as much light as others. So you use
   less of it.
M: Good point. It 6 __________ __________.

Speaking

8 With a partner, act out the dialogue from Task 7. Then
   switch roles.

USE LANGUAGE SUCH AS:

What's this great new product you mentioned on the phone?
It's a super reflective material.
How much does it cost?

Student A: You are a clothing manufacturer. Ask Student B
   about a materials:
   • uses
   • cost

Student B: You've created a lightweight, reflective material.
   Answer Student A's questions.
   Make up a name for the manufacturer.

Writing

9 You are an engineer who has developed a new
   reflective material. Use the report and conversation
   from Task 8 to write a brief journal article about the
   material (100-120 words). Write about:
   • The uses of the product
   • The characteristics of the product
   • Why this product is better than others
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1 Mac® and PCs

As Apple® grows in popularity, the Mac® versus PC debate continues. Many businesses experience trouble choosing between the two. However, businesses must realize that each computer is suited for different needs.

The two differ most in their operating systems. With a PC you have a variety of OS options from Microsoft® and other sources. Macs® come with one of the proprietary Apple® OSes like OS X®. You can install Windows® on a Mac®, but many users prefer the Mac® OS regardless.

Macs® have proven themselves vital in publishing, particularly the prepress process. Mac® has superior typography and color matching. Once printed, products look exactly as good as they do on the computer screen.

Meanwhile, PCs are noted for their fast processing speed and adaptability. Users can customize a PC to their needs. Additionally, their video subsystems are more powerful. This makes PCs desirable for game designers and others who need advanced graphics.

However, both computers have their limitations. While PCs are cheaper, they are also more susceptible to viruses. Macs® usually cost more but are less susceptible to computer viruses. However, Macs® tend to have fewer third-party software options than PCs. Businesses need to consider such concerns and make the right decision when buying computers for their companies.

Get ready!

1 Before you read the passage, talk about these questions.
   1 Why do people prefer one operating system over another?
   2 How might one operating system benefit a company more than another?

Reading

2 Read the computer magazine article. Then, mark the statements as true (T) or false (F).
   1 Macs® are generally more expensive than PCs.
   2 PCs are better suited to publishing.
   3 PCs have fewer options from third-party software producers.

Vocabulary

3 Match the words (1-7) with the definitions (A-G).
   1 __ Apple®       5 __ processing speed
   2 __ Windows®     6 __ video subsystem
   3 __ customize    7 __ Microsoft®
   4 __ OS X®

A company that creates the most common PC operating system
B part of a computer that creates visuals
C a measurement of how quickly a computer works
D operating system for PCs
E changing a computer for your needs
F operating system for Macs®
G company that creates Macs®
4 Fill in the blanks with the correct words: Mac®, prepress, color matching, PC, typography
   1 A ________ comes with OS X®.
   2 Publishing software is needed for the ________ process.
   3 Good ________ means anything printed out looks exactly like what's on screen.
   4 I'm getting a ________ because I like the Windows® OS.
   5 The ________ on this computer includes hundreds of fonts.

5 Listen and read the computer magazine article again. What makes the PC more popular with game designers?

Listening

6 Listen to a conversation between two employees at a publishing company. Choose the correct answers.
   1 What is the conversation mostly about?
      A customizing PCs for publishing
      B locating third-party software options
      C finding publishing programs for Mac®
      D the differences between Macs® and PCs

6 What can you infer about the employees?
   A They currently use Macs®.
   B They are unfamiliar with PCs.
   C They plan to request new Macs®.
   D They create and publish software.

7 Listen again and complete the conversation.

Employee 1: Mr. Jackson has decided to update our computers. 1 ________ ________ ________ ________.
Employee 2: Really? PCs? I'm glad we're updating, but I'd rather 2 ________ ________ ________.
Employee 1: You would? Not me. You can't customize a Mac®.
Employee 2: Sure, you 3 ________ ________ ________. But Macs® do some things so much better.
Employee 1: What do you mean?
Employee 2: The 4 ________ ________ and typography are more sophisticated on a Mac® than on a PC. We need that in publishing.
Employee 1: Okay, I'll give you that. But Macs® have 5 ________ ________ ________, don't they?
Employee 2: Maybe a little, but that's mostly with video, and we barely use it.

Speaking

With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

- We're switching to PCs.
- You can customize PCs.
- But Macs® have slower processing speeds.

Student A: Talk to Student B about:
   - switching to PCs
   - benefits of PCs
   - drawbacks of Macs®

Student B: You are an employee. Talk to Student A about the benefits of Macs®.

Writing

You are an IT Worker at a company. Use the article and the conversation from Task 8 to write an email to management recommending the company purchase either Macs® or PCs (120-150 words). Talk about:

- Which type of computer you would choose
- Why your company needs this type of computer
- The benefits of the type of computer you would choose
- The drawbacks of the type of computer you wouldn't choose
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Get ready!

1. Before you read the passage, talk about these questions.

1. What values do you think make a company successful?
2. What traits or actions can discourage customers from doing business with a company?

Software Plus

At Software Plus, we value our customers above all else. We want to:

- provide quality products at affordable prices
- keep prices as low as possible so that our customers know they are getting a fair deal
- treat each customer as an individual
- strive to make every person who shops with us feel important and valued

Software Plus also recognizes innovation as a key part of our business. We will take steps to:

- stay one step ahead of the market
- monitor current trends and move quickly to fill gaps in the market

Word Bank

products customers employees
market opportunities

The employees of Software Plus are the company’s greatest asset. As such, we endeavor to:

- provide a pleasant, friendly working environment
- supply training opportunities and perks
- foster professional growth and development

Environmental issues are a priority at Software Plus. We promise to:

- support a wide range of environmentally friendly initiatives, such as recycling and car sharing
- never knowingly create a product that is harmful to the environment

Vocabulary

3. Match the words (1-7) with the definitions (A-G).

1. __ gap
2. __ trend
3. __ innovation
4. __ priority
5. __ perk
6. __ opportunity
7. __ endeavor

A. a benefit people receive from their jobs
B. the most important thing to do
C. a new development
D. to try to do something
E. a temporarily popular item or style
F. a place where something is missing
G. a chance to do something useful
4 Read the sentence pairs. Choose where the words best fit in the blanks.

1 foster / strive
   The company aims to _______ the staff's development.
   Mr. Gao wants his workers to _______ to do their best.

2 affordable / one step ahead
   It's important to stay _______ of our competition.
   The other company's product is more _______.

3 initiatives / core values
   This company has three _______: loyalty, quality and trust.
   There are many new _______ to help small businesses.

4 environmental issues / assets
   The company was forced to sell many of its _______.
   Being aware of _______ can reduce pollution.

Listening
5 Listen to a conversation between two managers.
Mark the following statements as true (T) or False (F).

1 T The poster will be displayed in the break room.
2 T The man wants to include a statement about current employees.
3 F The woman thinks people will like the environmental initiatives.

6 Listen again and complete the conversation.

Manager 1: I need some help with this poster for next month's 1 ______ _______.
Manager 2: Sure, have a seat. What can I do?
Manager 1: Well, management wants a display that shows our 2 ______ _______. The problem is, the manual lists a lot of values, but I can only show four.
Manager 2: I'd start with customer care. You could write about how we keep our software affordable.
Manager 1: That's good, thanks. What do you think of including 3 ______ _______. though?
Manager 2: Yeah, why not? You could mention a few of our environmental initiatives. Like our recycling program.
Manager 1: Good idea. But it's a job fair, and there's 4 ______ _______ ______ __________. I should include something about them, right?
Manager 2: What do you 5 ______ _______ _______?
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Accounting software

It’s here! The new version of PBL’s complete accounting software offers the same ease of use, security, and functionality as our previous version, plus updates to launch your business into the future of financial accounting.

PBL Unlimited features:
- Up to 50 user licenses
- Cash flow manager
- Automatic inventory tracking
- Audit trail report
- Remote access
- Data mining
- Unlimited customer accounts
- Two years of free updates
- And so much more ...

Get ready!

1 Before you read the passage, talk about these questions.
   1 What are the advantages to using accounting software?
   2 What are some different types of accounting software?

Reading

2 Read these advertisements. Then, mark the following statements as true (T) or false (F).

1    Multiple users can operate PBL Unlimited.
2    The Virtual Accountant features self-teaching tools.
3    The Virtual Accountant is best for large firms.

Vocabulary

3 Match the words (1-5) with the definitions (A-E).

1    ease of use
2    updates
3    garbage in, garbage out
4    functionality
5    data mining

A    the result of flawed input is flawed output
B    improvements created by a program’s designers
C    analyzing information and finding patterns in it
D    the degree to which a program is simple to operate
E    the degree to which a program is practical and useful
4 Fill in the blanks with the correct words and phrases:
user licenses, remote access, up and running, tutorials, user-friendly.
1 Large firms need software with a lot of ____________.
2 The business will be ____________ soon.
3 Don is traveling and wants a program with ____________.
4 Individuals may want a program that is ____________.
5 People who are new to accounting should use ____________.

5 Listen and read the advertisement again. How many people are allowed to use one copy of PBL unlimited?

Listening
6 Listen to a conversation between two accountants. Choose the correct answers.
1 What is the dialogue mostly about?
   A choosing software  C PBL’s latest update
   B the number of users  D using outdated software

2 What are the accountants likely to do?
   A stop using software
   B select PBL Unlimited
   C shop for other programs
   D update their current software

7 Listen again and complete the conversation.

Accountant 1: So, Tim, have you thought about which
   1 ____________ we should get?
Accountant 2: Well, I’m thinking about getting PBL Unlimited.
Accountant 1: Hmm … I 2 ____________ PBL Unlimited. I like the
   Virtual Accountant, though.
Accountant 2: This 3 ____________ PBL Unlimited has some
   4 ____________.
Accountant 1: But the Virtual Accountant is really easy to use. It
   has tutorials on 5 ____________.
Accountant 2: That’s cool. But I 6 ____________ for homes, not businesses.
Accountant 1: You don’t think it would work for the business?
Accountant 2: Well, I would 7 ____________ something
   with more features.
Accountant 1: What features does PBL Unlimited have?
Accountant 2: Oh, it has everything! It has inventory tracking,
   data mining and a lot more.

Speaking
8 With a partner, act out the roles below based on Task 7. Then switch roles.

USE LANGUAGE SUCH AS:
Have you thought about which software …?
I’m thinking about getting …
What features does … have?

Student A: You are an accountant.
Talk to Student B about:
• software
• features
• preferences

Student B: You are an accountant.
Answer Student A’s questions.

Writing
9 Use the advertisement and the conversation from Task 8 to complete the email.

FROM: _____ CPA
TO: _____ Accounting Manager

I know you want to buy new software for our department. I just wanted to let
you know about a really great program that I used at a previous job.

__________

__________

Thanks for your time!

______
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7 Filing equipment

The Stationery Store

On special offer for one month only!

DON'T MISS OUR SALE - GREAT SAVINGS!

Ring Binders:
Three inch, two-ring or four-ring binders, available in blue, green, red, yellow and black. Twelve for the price of ten!

Box Files:
A4 or legal size, available in blue or grey. Buy two, get one free!

Suspension Files:
All files come with colored tabs and inserts. Package of 100 files - now half price!

CD Storage Boxes:
Easy to assemble. Holds 100 CDs. Now 20% off!

CD-R discs:
700MB digital storage. CDs will play back on DVD or CD players. Safe and permanent; it's impossible to erase your data. Pack of fifty discs - half price!

Clear Pockets:
A4 pockets, punched with holes to fit most types of binder. Perfect for presentations and pictures! Pack of one hundred for the price of fifty! This month only!

Free next-day delivery
for orders over $25.

Get ready!

1 Before you read the passage, talk about these questions.
   1 Where do people store their papers?
   2 How do people keep things organized?

Reading

2 Read this store advertisement. Then, mark the following statements as true (T) or false (F).
   1 Box files are available in three colors.
   2 CD storage boxes can hold 20 CDs.
   3 Clear pockets are half price this month.

3 Match the words (1-6) with the definitions (A-F).
   1 ___ suspension file  3 ___ erase  5 ___ tab
   2 ___ storage box  4 ___ legal  6 ___ insert
   A a piece of plastic on a suspension file
   B a file that hangs inside a drawer
   C a piece of paper inside a tab
   D a place where you can put things
   E to remove something from a surface or disk
   F a large size of paper
Choose the word that is closest in meaning to the underlined part.

1. Put these files in a folder with metal rings.
   A. ring binder   B. suspension file   C. tab

2. This office needs more space for keeping items that are not in use.
   A. inserts   B. storage   C. legal

3. Put that document into the grey large, rectangular container.
   A. clear pocket   B. box file   C. ring binder

4. Put that picture inside a plastic envelope.
   A. storage box   B. clear pocket   C. tab

5. Listen and read the advert again. Say five things you can buy from the store.

Listening

6. Listen to a conversation between a secretary and a salesperson at a stationery company. Check (√) the things the administrative assistant orders.

   1. __ box files  4. __ storage boxes
   2. __ ring binders  5. __ CDs
   3. __ suspension files  6. __ clear pockets

7. Listen again and complete the conversation.

Salesperson: The Stationery Store, this is Mike speaking. How can I help you?
Secretary: Hi, I'd like to place an order for some 1 ______ supplies.
Salesperson: No problem, what would you like?
Secretary: First of all, I need some 2 ______ _______.
Salesperson: Okay, they come in two sizes, 3 _______ and A4. Which would you like?
Secretary: The legal. I'll take a dozen of those in gray.
Salesperson: Great. Anything else?
Secretary: I need seventy red 4 _______ _______ and three hundred 5 _______ _______.
Salesperson: Got it. Do you have an account with us or are you paying with a credit card?
Secretary: We have an account. It's Johnstone and Company, and the account number is 3748 3948.
Salesperson: Thanks. We have the address on the computer, so we'll deliver it tomorrow morning. Is sometime between nine and eleven okay?
Secretary: 6 _______ _______, thanks.

Speaking

8. With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

I'd like to place an order...
They come in two sizes.
I'll take...

Student A: You work at a stationery company. Talk to Student B about:
- the order
- account number
- delivery

Student B: You want to place an order for some stationery. Tell Student A what you want to buy.

Writing

9. Use the conversation from Task 8 to fill out the receipt.

![The Stationery Store Receipt]

COMPANY: __________
ACCOUNT NUMBER: __________
DATE: __________
ORDER       PRICE

THANKS FOR YOUR PURCHASE!
COME BACK SOON
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15 Nurse practitioner

Nurse Practitioners and Primary Care

It’s a familiar scene: long waits at the doctor’s office in crowded waiting rooms. But there’s a way to avoid this and still get your check up! How? See an NP (nurse practitioner) instead.

NPs are an excellent point of entry health providers. They hold advanced degrees and must be board certified. So you’re sure to get good care.

NPs provide a wide range of services. They conduct physical exams and diagnose illnesses. They prescribe treatment such as physical therapy. Many provide regular immunizations for children. Some even offer counseling services.

Though patients must see doctors for specialized care, nurse practitioners provide general healthcare without the wait.

Get ready!

1. Before you read the passage, talk about these questions.
   1. What kind of jobs do nurse practitioners perform?
   2. What qualifications must nurse practitioners hold?

Reading

2. Read the article from Healthy Living magazine. Then, mark the following statements as true (T) or false (F).

   1. Patients are usually directed to NPs by point of entry health providers.
   2. Nurse practitioners treat patients’ physical and emotional needs.
   3. Patients of NPs must visit a doctor’s office to get shots.

Vocabulary

3. Match the words (1-5) with the definitions (A-E).

   1. __ immunization
   2. __ advanced degree
   3. __ physical therapy
   4. __ board certified
   5. __ point of entry

   A. a college degree higher than a bachelor’s degree
   B. having passed a test to document expertise in an area of medicine
   C. treatment for an illness or injury by physical methods rather than the use of drugs
   D. the administration of a medical substance to help protect a person against a disease
   E. the first level of access to a system

4. Fill in the blanks with the correct words and phrases from the word bank.

   prescribe   nurse practitioner
   diagnose   counseling
   physical exam

   1. Mark is in constant pain. He hopes the doctor can quickly ______ the problem.
   2. When Linda conducts a(n) ______, she checks all areas of a person’s body.
   3. Peter examined his patient, he decided to ______ medication to reduce the pain.
   4. Todd offers ______ services. Many people tell him about their problems.
   5. Molly likes learning about medicine and helping people. She wants to be a ______ when she grows up.
5 Listen and read the article again. How can a patient avoid a long wait at the GP's?

Listening
6 Listen to a conversation between an interviewer and a NP. Choose the correct answers.

1. What is the dialogue mostly about?
   A. challenges of being an NP
   B. the steps of a physical exam
   C. procedures that the NP performs
   D. common illnesses that the NP sees

2. According to the dialogue, what service does the nurse practitioner NOT offer?
   A. prescribing medications
   B. offering counseling
   C. performing immunizations
   D. diagnosing illnesses

7 Listen again and complete the conversation.

Interviewer: Thanks for agreeing to 1 ______. I know nurse practitioners get busy.
NP: It's my pleasure.
Interviewer: So, what kind of 2 ______ do you provide?
NP: Lots. I conduct 3 ______ and perform immunizations for children. I also offer counseling.
Interviewer: What patients do you have today?
NP: My next patient has an injury from a 4 ______. I'm giving him physical 5 ______.
Interviewer: Are there any limits to the care you provide?

Speaking
8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:
What kind of services do you provide?
My next patient has ...
Are there any limits to the care you provide?

Student A: You are an interviewer and you are writing an article about NPs. Ask Student B questions to find out about:
- services
- today's patients
- limits to care

Student B: You are a nurse practitioner. Answer Student A's questions.

Writing
9 Use the conversation from Task 8 to fill out the interviewer's notes.

Article about NPs

Services Provided:
---
Performs
---
Offers
---
Limits to Care:
Does not
Beauty Salon

Jenny Dooley
Virginia Evans
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Hair coloring

Get ready!
1. Before you read the passage, talk about these questions.
   1. Why do some people color their hair?
   2. What are some advantages of different hair colors?

Reading
2. Read the information from a magazine article. Then, mark the following true (T) or false (F).
   1. Chestnut hair is easy to maintain.
   2. Healthy red hair holds color well.
   3. Blonde shades have low maintenance.

Vocabulary
3. Place the words and phrases from the word bank under the correct heading.

Word Bank
auburn platinum chestnut
light brown copper honey blonde
golden blonde dark brown

Browns and Blacks
Choose from our new color swatch book. There are plenty of reasons to go brunette. Maintenance is very easy, and dark hair reflects a lot of light, so it looks very shiny. But remember, if you're thinking about a very dark color (like blue-black) consult a professional. Once you dye your hair black, it is very difficult to change it back.

Hot colors
chestnut, dark brown, light brown

Blondes
For a youthful, energetic look, try blonde shades. But it may take time to find the right shade to match your skin tone. Also, blonde hair costs a lot of money and time to maintain.

Reds
Do you enjoy getting a lot of attention? Then, try a head-turning shade of red.

Redheads must have very healthy hair in order for the hair color to last for a long time. But it's worth it! Just stay away from purple-black tones, which appear unnatural.

Hot colors
auburn, copper

4. Write a word that is similar in meaning to the underlined part.
   1. Tara has decided to dye her hair a pale yellow color.  __I__n__
   2. The stylist advised Sara against getting very dark black with tones of blue hair because it doesn't match her skin tone.  __u__c__k
   3. Helen is the only person with brown hair in her class.  __r__n__c__k
5. Listen and read the information from a magazine article again. What must someone consider if they want to dye their hair blonde?

Listening

6. Listen to a conversation between a stylist and client at a hair salon. Choose the correct answers.

1. What does the man help the woman with?
   A. choosing a new hair color
   B. maintaining a previous hair color
   C. advising about hair care
   D. picking the right hair cut

2. What is true about the woman?
   A. She has never dyed her hair before.
   B. She visits the salon every two weeks.
   C. She has naturally dark hair.
   D. She wants to look younger.

7. Listen again and complete the conversation.

**Stylist:** Good morning, Mrs McAllen. You’re here for a consultation, aren’t you?

**Client:** That’s right. I really want to change my look.

**Stylist:** Well, let’s talk about your options. First, do you want to go lighter or 2?

**Client:** I’ve always wanted to try 3 hair.

**Stylist:** Okay, blonde is very popular. But you should know that you’d have to come in every 2 to 4 weeks for touch-ups.

**Client:** Wow, that could get 4.

**Stylist:** On the other hand, blonde hair typically makes women look younger.

**Client:** Really? Maybe blonde isn’t such a great idea then. What are some low-maintenance options?

**Stylist:** Well, you have 5 hair. We could give you light brown instead.

**Client:** I want a bigger change from my natural color. How about red shades?

**Stylist:** I think copper red would look fantastic on you. And it’s a lot easier to maintain than blonde.

**Client:** That sounds perfect! Let’s see how I look as a 6!
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Savings accounts

At Drury Savings Bank, our primary goal is customer satisfaction. That's why we encourage you to open a savings account with us. It's a great way to improve your financial stability and quality of life.

Our employees develop one-on-one savings plans. That means each depositor receives individual attention from our staff. We're currently offering great interest rates. The more you deposit, the more interest you earn. So what are you waiting for? Schedule an appointment, and we'll help plan your long-term financial goals.

Vocabulary

Match the words (1-5) with the definitions (A-E).

1. __ deposit  3. __ depositor  5. __ long-term
2. __ interest  4. __ withdrawal

A. lasting for a long time
B. when you take money from an account
C. someone who puts money into an account
D. a percentage earned on an amount of money
E. to put money into an account

Fill in the blanks with the correct words and phrases from the word bank.

1. __ earn __ interest rate __ savings account
   __ limit __ minimum balance

1. Tim was fined when his account fell below the __. 
2. Many banks __ limit __ savings withdrawals to six per year. 
3. The woman deposited the money from her paycheck into an __ account. 
4. With the high rates, the man was able to __ extra money. 
5. The man kept his money in an account with an excellent __. 

Get ready!

Before you read the passage, talk about these questions.

1. What encourages people to open savings accounts?
2. What are some restrictions on savings accounts in your country?

Read the bank advertisement. Then, mark the following statements as true (T) or false (F).

1. __ Depositors can develop different savings plans.
2. __ Larger accounts earn more money than smaller accounts.
3. __ Customers can open savings accounts with any amount of money.
5 Listen and read the advertisement again. Is it possible to keep a savings account open with no money in it?

Listening
6 Listen to a conversation between a teller and a customer. Choose the correct answers.

1 What is the conversation mostly about?
   A making a withdrawal
   B reducing account fees
   C opening a savings account
   D checking on interest rates

2 Why will the man pay a fee?
   A He is opening a new account.
   B He is ordering a cashier's check.
   C He already withdrew money this month.
   D His account doesn't have enough money.

7 Listen again and complete the conversation.

Teller: Is this correct, Mr. Jones? You want to take three hundred out of your 1__________?
Customer: That's right. Why is there a problem?
Teller: A small one. You have the money. But your account is 2__________ to one withdrawal a month.
Customer: Oh, and I 3__________ money last week to make a cashier's check. Well, I really need the cash.
Teller: Are you sure? There will be a 4__________.
Customer: 5__________ is it?
Teller: It's twenty dollars.
Customer: I don't 6__________ . I'll just pay the fee.

Speaking
8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:
Is this correct ...
Your account is limited to ...
There will be a fee ...

Student A: You are a banker. Talk to Student B about:
- his/her account
- the withdrawal limit
- the fee he must pay to withdraw

Student B: You are making a withdrawal. Talk to Student A about the withdrawal limit fee.

Writing
9 Use the advertisement and the conversation from Task 8 to fill out the paperwork.

Customer Name: ____________________
Account Number: ____________________
Type of Transaction: ____________________
Fee: Y / N
If yes, reason for fee: ____________________
Fee Amount: ____________________
Total Transaction Amount: ____________________
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Diagnosing crop problems

Reading

2 Read the webpage from an agricultural extension office. Then, choose the correct answers.

1. What is the purpose of the webpage?
   A. to explain a diagnostic technique
   B. to offer advice on diagnosing problems
   C. to give information about services
   D. to list common causes of crop problems

2. Who does the office provide assistance for?
   A. college students
   B. the general public
   C. laboratory scientists
   D. agriculture professors

3. Which service is NOT provided?
   A. advice on growing crops
   B. on-site diagnosis of problems
   C. laboratory analysis of samples
   D. preparation of new fields

Vocabulary

3 Match the words (1-5) with the definitions (A-E).

1. __ abiotic
2. __ brown
3. __ field pattern
4. __ symptomology key
5. __ symptom

A. to change color
B. non-living
C. a sign that indicates disease
D. a tool used to diagnose diseases
E. a sign of disease that occurs throughout an area
Speaking

8. With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

- What’s the problem with your corn?
- I noticed the tops of some of the plants were ...
- And what happened next?

Student A: You are an agricultural advisor. Ask Student B about:
- crop problems
- symptoms
- changes

Student B: You are a farmer. Answer Student A’s questions.

Listening

6. Listen to a conversation between an agricultural advisor and a farmer. Check (√) the symptoms of the farmer’s corn.

1. √ wilting
2. √ drying out
3. √ browning tops
4. × blackened roots
5. √ stunted growth

7. Listen again and complete the conversation.

Advisor: Mr. Fussel, what’s the problem with your corn?
Farmer: Well, 1. _____________ even though I gave them plenty of water and fertilizer.
Advisor: 2. _____________ first noticed the problem.
Farmer: That would have been 3. _____________ . First, I noticed the tops of some of the plants were browning.
Advisor: What happened next? 4. _____________ ?
Farmer: Not that. Next, they 5. _____________ slightly. That’s when I 6. _____________ water.

Writing

9. Use the conversation from Task 8 to write an email to an agricultural advisor. Include: your problem, crop symptoms, and changes you’ve seen.

To: Farmadvisor@farmsite.com
From: TTheandez@Hfarm.com

To: _______________________

_____________

_____________

_____________

Sincerely

_____________

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Book 3
2 Hospital staff

HEARTLAND HOSPITAL

FIRST FLOOR

Dr. Paul Sartin, **cardiologist, surgeon** / Office: 100
See for: Heart Disease, Heart Surgery

Dr. Lydia Greenwich, **anesthesiologist** / Office: 101
See for: Surgery Pain Relief and Preparation

Dr. Richard Collins, chief **pediatrician** / Office: 102
See for: Children’s Health

Dr. Ann Harold, **obstetrician** / Office: 103
See for: Labor, Pregnancy

Dr. Thomas Locke, chief **radiologist** / Office: 104
See for: X-rays, CT Scans

Carol Howard, **lab technician**
See for: Test Results

SECOND FLOOR

Dr. Rowan McNeil, **general practitioner** / Office: 202
See for: General Medicine

Carol Simmons, NP, head **nurse** / Office: 203
See for: Nursing Schedules

Dr. Charles Thiel, **pharmacist** / Office: 204
See for: Prescriptions

Get ready!

1 Before you read the passage, talk about these questions.
   1 Who are some different people who work in a hospital?
   2 What are some special kinds of doctors?

Reading

2 Read the hospital directory. Then, mark the following statements as true (T) or false (F).

1 A patient having heart surgery will visit Dr. Sartin and Dr. Greenwich.
2 Dr. Harold is best qualified to examine a sick four-year-old.
3 Pregnant women meet their doctor on the second floor.

Vocabulary

3 Match the words (1-5) with the definitions (A-E).

1 ___ lab technician 4 ___ nurse
2 ___ anesthesiologist 5 ___ pharmacist
3 ___ general practitioner

A a doctor who provides many kinds of care to adults and children
B a doctor who renders patients unconscious or prevents them from feeling pain
C a medical professional who works with samples in a laboratory
D a medical professional who helps a doctor and cares for patients
E a person who fills prescriptions and gives medicine
4 Read the sentence and choose the correct word.

1. The radiologist / pharmacist has prepared the X-rays.
2. The lab technician / pediatrician is checking on the three-year-old.
3. A great obstetrician / cardiologist treated me after my heart attack.
4. The anesthesiologist / obstetrician says the baby is doing fine.
5. Dr. Brown is a famous transplant surgeon / nurse.

5 Listen and read the hospital directory again. Who are some of the hospital staff and what are their duties?

Listening

6 Listen to a conversation between a doctor and a nurse. Choose the correct answers.

1. What is the main idea of the conversation?
   A. a patient's appointment
   B. a patient's missing chart
   C. a patient's blood pressure
   D. a patient's general practitioner

2. What will the woman likely do next?
   A. examine the patient
   B. call the cardiologist's office
   C. take the patient's blood pressure
   D. lead the man to the patient's room

7 Listen again and complete the conversation.

Nurse: Dr. McNeil, could you come over here 1 _______ _______ ?
Doctor: Sure, Carol. What do you need?
Nurse: I just took Ms. Greyson's blood pressure. It's one fifty 2 _______ ninety-two.
Doctor: Hmm. That's 3 _______ _______ _______ _______.
Nurse: Yes, I 4 _______ _______ , too.
Doctor: Who's her 5 _______ ?
Nurse: Her chart says it's Dr. Sartin.
Doctor: He'll want to 6 _______ _______ this.
Nurse: I'll let his office know to set up an appointment.
Doctor: Good idea. Thanks for consulting me.

Speaking

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

Can you come over here?
What do you need?
Who is ...

Student A: You are a nurse. Talk to Student B about:
- a problem with a patient
- what you think about it
- what to do next

Student B: You are a doctor. Talk to Student A about a patient.

Writing

9 Use the conversation from Task 8 to fill out the consultation form.

Heartland Hospital
Staff Directory

Consultation Form

Patient: _______________________
Doctor Consulted: _______________________
Issue: _______________________
Solution: _______________________

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3 Parts of a motorcycle

Coming in at 1,000 pounds with a full tank, the Grinnel X43 is our entry-level touring motorcycle and among our best selling!

With state-of-the-art, computer-adjusted front and rear suspension systems and comfortable seating it offers an amazingly smooth riding experience for those just entering the world of motorcycles.

The X43’s handlebars are designed to reduce strain and put the driver in full control. Convenient placement of the throttle, the clutch lever, and the shift lever make this bike simple and easy to operate for a first-time driver. Unlike chain or belt drives, the X43’s shaft drive is extremely durable and requires little maintenance. It’s just one example of the X43’s reliability. Our aim is to ensure that you get the smoothest ride with minimal maintenance.

And how do we accomplish that goal? We start with a high-strength steel frame. The fork tubes and durable triple trees provide the front suspension, while the swingarm with computer-controlled shock absorbers creates the rear suspension. A six-gallon fuel tank ensures you can take a long ride without refueling. And not only is the X43 supported by a standard steel side stand, it is supported by Grinnel’s three-year, unlimited mileage warranty. Check out the Grinnel X43 today, and get into the world of riding motorcycles.

Vocabulary

3 Read the sentence pair. Choose where the words best fit the blanks.

1 motorcycle / frame
A A _________ is similar to a bicycle with an engine.
B The wheels, seat, and other parts attach to the _________.

2 side stand / handlebars
A The _________ allow drivers to park a motorcycle.
B _________ are used to make turns.

3 chain drive / shaft drive
A A _________ has a long rod in the drive train.
B Gears are an important part of a _________.

4 fuel tank / belt drive
A Gasoline or diesel is stored in the _________.
B A _________ connects the engine and rear wheel.

Get ready!

1 Before you read the passage, talk about these questions.

1 What are some of the parts of a motorcycle?
2 What keeps a motorcycle standing when it is not being driven?

Reading

2 Read the advertisement for a motorcycle. Then, choose the correct answers.

1 What is the advertisement mostly about?
A different types of options for a motorcycle
B types of products from a motorcycle company
C a motorcycle designed for touring
D available parts for a motorcycle

2 What is true of the X43 model?
A It is built for racing.
B It has an optional side stand.
C It is recommended for first-time drivers.
D It weighs less than 900 pounds with fuel.

3 Which is NOT a feature of the X43?
A side stand  C steel frame
B belt drive  D shock absorbers
4 Place the words and phrases from the word bank under the correct heading.

**Word Bank**
- clutch lever
- swingarm
- fork tube
- shift lever
- throttle
- triple tree
- shock absorber

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5 🎧 Listen and read the advertisement for a motorcycle again. What type of rider is the X43 aimed at?

6 🎧 Listen to a conversation between two mechanics. Mark the following statements as true (T) or false (F).

1. The motorcycle was in an accident.  
2. The mechanic wants to replace the fork.  
3. The frame is the most damaged part.

7 🎧 Listen again and complete the conversation.

**Mechanic 1:** No doubt about that.
**Mechanic 2:** I think I could find a reasonably priced replacement.
**Mechanic 1:** OK. How about the 2______?
**Mechanic 2:** I went over it with a 3______-______ and didn't find a single crack.
**Mechanic 1:** That's incredible!
**Mechanic 2:** There was some damage, but it's 4______.
**Mechanic 1:** So do you think it's still 5______?
**Mechanic 2:** Sure, but 6______-______ a lot of work. We'll also need to replace both wheels, the brakes, and the swingarm.
**Mechanic 1:** 7______-______?
**Mechanic 2:** That's all I could find.

8 With a partner, act out the roles below based on Task 7. Then switch roles.

**USE LANGUAGE SUCH AS:**
- How about the ____?
- So do you think it ____?
- We'll also need to ____

**Student A:** You are a mechanic. Talk to Student B about:
- the damage to a motorcycle
- what needs to be repaired
- if the motorcycle can be ridden

**Student B:** You are a mechanic. Talk to Student A about the damage to a motorcycle.

9 Use the advertisement and conversation from Task 8 to fill out an assessment of a damaged motorcycle. Include: damaged parts, repairs required, and parts that are safe.

**Damage Assessment**
- Customer name: __________
- Damaged parts: __________
- New parts required: __________
- Safe parts: __________
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### Appendix
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Get ready!

1. Before you read the passage, talk about these questions.
   1. How willing are you to take risks with your money? Why?
   2. How does risk affect a person’s investing style?

Reading

2. Read the investment advice column. Then, choose the correct answers.
   1. What is the purpose of the article?
      A. to evaluate levels of risk aversion
      B. to explain conservative investment strategies
      C. to compare high and low risk investments
      D. to give advice based on investment styles
   2. What investments should people with moderate to high risk aversion NOT purchase?
      A. bonds
      B. CDs
      C. mutual funds
      D. stocks
   3. According to the column, what are the benefits of bonds?
      A. They have almost no risk.
      B. They benefit from market fluctuations.
      C. They give higher returns than mutual funds.
      D. They provide a chance to make large profits.

Vocabulary

3. Write a word that is similar in meaning to the underlined part.
   1. Most people are comfortable with a medium level of risk. ___ d ___ a ___
   2. Candice is a cautious investor. ___ o ___ e v ___ i ___
   3. Jon worked hard to meet his planned level of achievement. ___ o ___
   4. His high reluctance to face the chance of loss keeps him from making most investments. ___ s ___ a ___ r i ___
4. Read the sentence pair. Choose where the words best fit the blanks.

1. personal investment / retirement
   A. Dad went into __________ at age 60.
   B. Buying the shop was __________.

2. aggressive / risk-free
   A. Joe made __________ investments, hoping for a huge return.
   B. These government bonds are __________.

3. comfort zone / risk tolerance
   A. Some stock purchases require a high __________.
   B. CDs are safe and should be in any investors __________.

5. Listen and read the page from the investment advice column again. If you are not afraid of risk but at the same time like to play safe, what should you invest in?

Listening

6. Listen to a conversation between a financial advisor and a customer. Mark the following statements as true (T) or false (F).

1. __ The customer has high risk aversion.
2. __ The advisor suggests investing in a moderate investment.
3. __ A mutual fund is out of the customer’s comfort zone.

7. Listen again and complete the conversation.

   Advisor: Well. The first thing to consider is how much __________ you are willing to take.
   Customer: I’m not sure. I certainly don’t want to __________.
   Advisor: Okay. Are you willing to risk losing half of your money __________ double it?
   Customer: Yeah, but I couldn’t handle losing much more than that.
   Advisor: All right. You have a fairly __________ of risk aversion.
   Customer: So, what should I invest in?
   Advisor: There are a number of options. A mutual fund is a fairly __________ investment.
   Customer: I’ve heard of those. They aren’t __________?
   Advisor: They involve some risk, but nothing that would put you out of your comfort zone.

Speaking

8. With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

The first thing to consider is...
You have a...
There is a...

Student A: You are a financial advisor. Talk to Student B about:
- his/her level of risk aversion
- an appropriate investing style
- possible investments

Student B: You are a new investor. Talk to Student A about investing and risk.

Writing

9. Use the conversation from Task 8 to fill out the risk aversion worksheet for the client.

New Client Risk Aversion

Client Name: ____________________________

How much of an investment is the client willing to risk? ____________________________

Client’s risk aversion level: ____________________________

Suggested investments: ____________________________
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12 Masonry

SUE GABLE

Expert Mason

Whether you want a decorative brick wall or a complete brick building, I am the mason for you. I have over 20 years of masonry experience. My recent work includes:

- leading the installation of the exterior bearing wall at the Two Oaks Shopping Center
- designing and installing numerous curtain walls in the Fair Meadows housing project
- installing a complex multiwythe cavity wall at the Jefferson Government Building

With my experience, I can recommend the right design for your needs. For example, do you need room for drainage but still want a brick wall? A single wythe veneer wall with airspace backing is right for you.

I've used every type of masonry unit, including brick, concrete, and limestone. I can make the perfect mortar mix for any material to guarantee a strong, long-lived wall. I am also familiar with using grout to embed steel reinforcement in a wall.

I would be happy to visit your building site for a free consultation. Please call me at (797) 555-2356 or email sue@gablemasonry.com.

Vocabulary

3 Match the words (1-6) with the definitions (A-F).

1 __ cavity wall 4 __ veneer
2 __ single wythe 5 __ curtain wall
3 __ bearing wall 6 __ multiwythe

A a wall with a thickness of one block
B a wall that bears a weight down to a foundation structure
C a wall with a thickness of two or more blocks
D a wall that has one masonry layer backed by an airspace
E a wall that is non-structural and only serves to keep out the weather
F a wall that has two skins made from brick or concrete separated by a hollow space

Get ready!

1 Before you read the passage, talk about these questions.

1 What material does a mason work with?
2 What connects bricks in a brick wall?

Reading

2 Read the ad for a mason. Then, mark the following statements as true (T) or false (F).

1 __ The mason recently completed a single wythe veneer wall.
2 __ The mason mixes her own mortar.
3 __ Grout is used to embed brick into a wall.

4 Fill in the blanks with the correct words and phrases from the word bank.

Word Bank

masonry unit mason mortar grout

1 Use a special __________ to embed the rebar in this wall.
2 The construction company is hiring a new __________ .
3 Use standard __________ to join the bricks together.
4 This concrete __________ weighs eight kilogram.
5 __________ involves the use of many materials other than bricks and cement.
Listen and read the ad for a mason again. What types of walls has the mason recently created?

Listening

Listen to a conversation between a mason and a potential customer. Choose the correct answers.

1. What is the conversation mainly about?
   A. the benefits of masonry
   B. when construction can begin
   C. how masonry can lower construction costs
   D. why masonry is being used more often

2. Why does the woman recommend using masonry?
   A. It is less expensive.
   B. It looks more attractive.
   C. It lasts longer than other materials.
   D. It can be constructed faster than other materials.

Listen again and complete the conversation.

Customer: Hi, Sue. My name is Dave Chandler. I'm considering a new office for my business. I'm thinking of going with masonry.

Mason: That's a great idea. What can I tell you?

Customer: Well, I don't know too much about it. Is it really 1 _______ ________ _______ than a timber or concrete frame?

Mason: I think so. Masonry has a lot of benefits.

Customer: How so?

Mason: For one, masonry structures 2 _______ ________ _______ _______ than other kinds of structures.

Customer: Oh, yeah? How much longer?

Mason: A well-built brick structure has a life of more than fifty years. That's 3 _______ thirty years for steel or reinforced concrete.

Customer: That's impressive. But 4 _______ _______ _______ , I won't need this building in fifty years.

Mason: 5 _______ _______. But it will increase the value of your property. That could be important if you decide to sell it.

Customer: I guess that 6 _______ _______.

Speaking

With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

I'm considering ...
For one, masonry structures ...
To be honest, ...

Student A: You are a mason.
Talk to Student B about:
- masonry and other frame types
- the strength of masonry
- the value of masonry

Student B: You are considering masonry for a new building. Talk to Student A about masonry.

Writing

Use the ad and the conversation from Task 8 to write an informational brochure about masonry walls. Write about:

- types of masonry walls
- materials used
- benefits of masonry
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9 Measurements

Centimeters

1 in. = 2.54 cm

Inches

1 cm = 0.3937 in.

Get ready!

1. Before you read the passage, talk about these questions.
   1. What are the two major measurement systems? Where are they used?
   2. What are some common measures in the two systems?

Reading

2. Read the website for a pipe supplier. Then, mark the following statements as true (T) or false (F).
   1. ____ PSI is used in the metric system.
   2. ____ Kilograms are provided with the imperial product listings.
   3. ____ Aplumb lists two types of pressure measurement for each product.

Vocabulary

3. Match the words (1-6) with the definitions (A-F).
   1. ____ pound
   2. ____ inch
   3. ____ conversion
   4. ____ centimeter
   5. ____ kilogram
   6. ____ millimeter

A a metric measure of distance equal to 1/100 of a meter
B the act of changing a measurement from one system to another
C an imperial measure of distance
D a metric measure of distance equal to 1/1000 of a meter
E a metric measure of weight
F an imperial measure of weight

4. Read the sentence pair. Choose where the words best fit the blanks.

1. imperial / metric
   A The ___________ system uses pounds, not kilograms.
   B An inch is not a(n) ___________ measurement.

2. psi / kPa
   A Metric pressure is measured in ___________.
   B Imperial pressure is measured in ___________.

Aplumb Supply

Measurements and Sizing

Aplumb is proud to serve clients around the world. We know that not all customers use the same measurements. For our North American clients, we provide imperial measurements. All pipe sizes are listed in inches. Weight measurements appear in pounds.

For clients outside North America, we also provide metric measurements. Pipe sizes are listed in millimeters. Weight measurements appear in kilograms.

Each region has its own page. Just click the link for the measurements you need. To convert measurements between systems, use our conversion calculators. Click ‘Conversions’. You can convert inches to centimeters in an instant.
Listen and read the pipe supplier's website again. What do the different systems use to measure length?

Listening

Listen to a conversation between two plumbers. Choose the correct answers.

1. What is the conversation mainly about?
   A. the length of a pipe
   B. the weight of a pipe
   C. the location of a pipe
   D. the pressure a pipe can contain

2. What is true of the man?
   A. He used the wrong type of pipe.
   B. He made a similar mistake before.
   C. He used to work in North America.
   D. He had never used metric measurements.

Listen again and complete the conversation.

**Supervisor:** Bill, can I talk to you 1 ______ _______?

**Plumber:** Sure, boss. What is it?

**Supervisor:** This pipe is 2 ______ _______ _______.

**Plumber:** It is? But I measured it twice. It was twenty-five 3 ______ each time.

**Supervisor:** That explains it. You measured in inches. We need the measurement in 4 _______.

**Plumber:** Oh, my mistake. I'm so used to the 5 ______.

**Supervisor:** That 6 ______ _______ _______ with plumbers who worked in North America.

**Plumber:** It won't happen again. I'll cut a new pipe to twenty-five centimeters.

Speaking

With a partner, act out the roles below based on Task 7. Then, switch roles.

**USE LANGUAGE SUCH AS:**

*Can I talk to you?*

*This pipe is ...*

*You measured in ...*

**Student A:** You are a supervisor. Talk to Student B about:
- a problem with a pipe
- the measurement system used
- why the problem occurred

**Student B:** You are a plumber. Talk to Student A about a problem with a pipe.

Writing

Use the conversation from Task 8 to fill out the memo.

**Jackson Plumbing**

**Employee MEMO**

Recently, an employee cut several pipes using the wrong system of measurement. Review the list below to be sure you're familiar with the correct units for each system.

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DeGrasse Museum Presents
Postmodern Images:
Reintroducing Beauty into Architecture

The DeGrasse Museum invites you to explore Postmodernism at a new exhibit. See 25 physical models and more than 100 photographs of notable Postmodern buildings. This fascinating architectural style is a direct countermovement to early twentieth-century Modernism. While Modernism featured stark, bland designs, Postmodernism embraces color and ornaments. Its followers believe that architecture should be dual purpose, having both function and visual appeal. This reactionary attitude revived ideas from styles before Modernism. Unexpected images and bold shapes characterize Postmodern architecture. Monumentalism is also apparent in the featured model of the Fadner Building. The building's primary design is based on Modernism, and from the ground to the fifteenth floor, it features simple lines and boxes. However, the top is a dramatic example of double coding. Neoclassical columns support a grand, asymmetrical structure that overhangs the street.

Don't miss two lectures by architectural historian Greta Moss. On Saturday, she will discuss the reasons for popular architecture's departure from Modernism. She will also address arguments from late twentieth-century Modernists. During her Sunday lecture, Moss will talk about the art and philosophy of Postmodernism. Learn about the importance of symbolic elements in Postmodern construction. This session will focus on the use of icons in several famous Postmodern buildings. Visit www.degrassemuseum.com for details and tickets.

Get ready!

1 Before you read the passage, talk about these questions.

1 What is the difference between Modern and Postmodern architectural features?
2 What is the artistic philosophy behind Postmodernism?

Reading

2 Read the brochure. Then, mark the following statements as true (T) or false (F).

1 __ According to the brochure, foundations of Postmodernism came before Modernism.
2 __ The exhibit's featured model is a blend of different architectural styles.
3 __ One of the lectures will focus on similarities between Modern and Postmodern symbolism.

Vocabulary

3 Match the words (1-6) with the definitions (A-F).

1 __ icon 4 __ characterize
2 __ bland 5 __ dual purpose
3 __ primary 6 __ Postmodernism

A an image that is associated with a particular idea
B an architectural movement featuring functional and decorative elements
C considered plain or uninteresting
D most basic or important
E to be a fundamental feature or quality of something
F serving multiple functions
4 Fill in the blanks with the correct word or phrase from the word bank.

**Word Bank**
- monumentalism
- symbolic
- double coding
- ornament
- countermovement
- reactionary

1. In a(n) ____________, one set of ideas directly opposes another set of ideas.
2. The carving of a sword is ____________ of the people's resistance to the government.
3. The fireplace is not real; it's just a(n) ____________.
4. The blend of classical features with contemporary features is an example of ____________.
5. “Advocates for Function” is a(n) ____________ group of Modernists.
6. ____________ usually features very large buildings with bold façades.

5 ⚪ Listen and read the brochure again. What is the Postmodern view of functionalism?

**Listening**
6 ⚪ Listen to a conversation between a museum guide and a visitor. Choose the correct answers.

1. What is the conversation mainly about?
   A. how to interpret Postmodern icons
   B. notable Postmodern architects in the region
   C. the differences between Postmodernism and previous styles
   D. when Postmodernism became popular

2. According to the woman, what is a feature of the Fadner Building?
   A. It is not functional.
   B. It displays monumentalism.
   C. It is very bland.
   D. It features symbolism.

7 ⚪ Listen again and complete the conversation.

**Guide:** Before we start the tour, does anyone have any questions?
**Visitor:** Are we going to ____________ of the Grasswood Center?
**Guide:** No. The Grasswood Center is actually not ____________.
**Visitor:** Really? It’s so simple. I was ____________ be part of the exhibit.
**Guide:** I think you’re confusing Postmodernism ____________.
**Visitor:** But the primary purpose of Postmodern buildings is to be functional. Isn’t that why they’re ____________?
**Guide:** Actually, it’s the ____________.
Strict functionalism is a feature of Modernism.

**Speaking**
8 With a partner, act out the roles below based on Task 7. Then, switch roles.

**USE LANGUAGE SUCH AS:**
- I was sure it would ...
- Actually, it's the other ...
- Let's look at ...

**Student A:** You are a museum guide. Talk to Student B about:
- a Postmodern exhibit
- the features of Postmodernism
- architectural styles of local buildings

**Student B:** You are a museum visitor. Talk to Student A about architectural styles of local buildings.

**Writing**
9 Use the reading passage and conversation to complete a feedback form about your museum tour. Include: the exhibit you visited, the information that the tour guide covered, and the most interesting fact you learned on the tour.
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Book 3
4 In the oil field

Slinging Slang

One challenge new rig workers face is language. Hands don’t think twice about using words like possum belly, pillar or flare. They might think it’s funny when the new guy confuses a catwalk with a catline or wildcat.

Most new workers get the idea of fish and fishing. However, other terms are not as clear. Doghouse and knowledge box are two such terms. In addition, most new hires do not know that joint is a length of pipe. Take the time to explain rig slang to new employees. It makes things easier when everyone is on the same page.

Get ready!

1 Before you read the passage, talk about these questions.
   1 What is the slang word for an experienced worker on an oil rig?
   2 What is slang for a platform on a rig?

Reading

2 Read the magazine article from Rig Worker Weekly. Then mark the following statements as true (T) or false (F).
   1 New rig workers can be confused by slang.
   2 It is hard to guess the meaning of some terms.
   3 New workers need to figure out the slang on their own.

Vocabulary

4 Fill in the blanks with the correct words and phrases from the word bank.

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<thead>
<tr>
<th>Word Bank</th>
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<th>doghouse</th>
<th>fishing</th>
<th>pillar</th>
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1 The rig crew stayed in the ________ during the storm.
2 The toolpusher took some paperwork out of the ________.
3 The roughneck used a ________ to stop a leak.
4 Denise used a ________ to move the smaller equipment.
5 The worker tried ________ for the broken drill bit.
6 Bruce used a ________ to burn off the gas.
4 Read the sentences and choose the correct terms.
   1 The hand / fish worked hard to finish the job.
   2 The rig had a large catwalk / possum belly that was used for storing fluid.
   3 The crew working on the wildcat / joint well hoped to find oil.
   4 The workers ran out of pipe, so they had to order more joints / hands.
   5 The men tried to retrieve the possum belly / fish but it was out of reach.
   6 The roughneck crossed the catwalk / wildcat to talk to the toolpusher.

5 Listen and read the magazine article from Rig Worker Weekly again. How should an experienced rig worker help a new hire?

Listening
6 Listen to a conversation between two rig workers. Choose the correct answers.
   1 What can be inferred about the new worker?
      A He is confused by terms used on the rig.
      B He is not dressed for bad weather.
      C He is familiar with some slang terms.
      D He is going to go inside the doghouse.
   2 What will the workers likely do next?
      A fasten together the joints
      B take a tour of the rig floor
      C go to the doghouse
      D move the drilling pipe

7 Listen again and complete the conversation.

Experienced Worker: Hey, can you help me move some joints?
New Worker: Uh ... 1 ______ _____ joints?
Experienced Worker: You must be new.
New Worker: Yes, I've never 2 ______ _____ a rig before.
Experienced Worker: Okay. Well, joints are pieces of 3 ______ ______.
New Worker: Thanks. I'd be 4 ______ _____ help. So ... is the weather usually this bad?
Experienced Worker: Today's not so great, but we can always go in the 5 _____ if it starts to rain.
New Worker: What's that?
Experienced Worker: It's a shelter on the 6 ______ _____: Now let's get to work.

Speaking
8 With a partner, act out the roles below based on Task 7. Then switch roles.

USE LANGUAGE SUCH AS:
   Can you help me ...?
   What are ...?
   Do you know what ...?

Student A: You are an experienced rig worker. Talk to Student B about:
   - the kind of help you need
   - oil rig language
   - how to deal with bad weather

Student B: You are a new worker. Talk to Student A about working on the rig.

Writing
9 Use the conversation from Task 8 to fill out the rig worker's notes below.

Rig Worker's Notes
Slang to remember

Knowledge box: ____________________________

blank: ____________________________

Wildcat: ____________________________
Petroleum II

Virginia Evans
Jenny Dooley
Seyed Alireza Haghighat
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Petroleum seals

A petroleum seal is an important part of a reservoir. If seals are not present, petroleum traps are not created. Instead the petroleum migrates to the surface. Seals are made from rocks and minerals such as limestone, halite, and mudrock. These make good seals because they have small pores. The petroleum cannot flow through them easily. Faults can also be seals if they occur in the right kind of rock.

Capillary seals do not let petroleum pass through unless pressure in the reservoir causes leakage. There are two types of capillary seals. The types are based on how petroleum leakage occurs. Membrane seals leak when the pressure becomes too great. The pressure pushes petroleum through the rock pores. After the pressure level drops, the seal closes up again. Hydraulic seals leak when the pressure in the reservoir accumulates. This causes fractures in the seal. Once enough pressure is released, the fractures mend and the rock reseals.

Vocabulary

3 Place the words from the word bank under the correct heading.

Word Bank

halite hydraulic membrane capillary mudrock limestone

<table>
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<tr>
<th>Seal types</th>
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4 Match the words (1-4) with the definitions (A-D).

1 ___ fracture  
2 ___ seal  
3 ___ fault  
4 ___ accumulate

A a break that occurs in a rock  
B a divide in a rock formation caused by the earth’s movement  
C a rock that keeps petroleum moving upward to the surface  
D to grow or increase over a period of time

Get ready!

1 Before you read the passage, talk about these questions.

1 What are some types of rock where seals form?  
2 What does excessive pressure cause to happen to seal rock?

Reading

2 Read the webpage. Then, mark the following statements as true (T) or false (F).

1 ___ Seals need to be present for petroleum traps to form.  
2 ___ Hydraulic seals leak when the seal fractures.  
3 ___ Faults are a type of capillary seal.
5 🎧 Listen and read the webpage again. What causes a membrane seal to leak?

Listening
6 🎧 Listen to a conversation between a geologist and an oil field worker. Choose the correct answers.

1 What is the purpose of the conversation?
   A to explain how faults work as seals
   B to describe how faults are created
   C to compare the structure of petroleum traps
   D to discuss the types of rocks that form seals

2 What will the software show the woman?
   A where the fault is located
   B how much petroleum is in the trap
   C which kind of rock is creating the seal
   D how the petroleum is moving

7 🎧 Listen again and complete the conversation.

**Oil Field Worker:** Hey, Sasha. What are you doing out in the field?
**Geologist:** I’m conducting an analysis of the
   __________.

**Oil Field Worker:** I just don’t understand how a fault can be a seal. I mean, it’s a
   __________ in the ground.
**Geologist:** Well, faults are often in rocks that are already sealed, __________
   ________.

**Oil Field Worker:** So how does that help?
**Geologist:** If the rock is __________, even with the fault, it remains a seal.

**Oil Field Worker:** Okay, that makes sense.
**Geologist:** But faults change the structure of the __________.

**Oil Field Worker:** Is that why you’re analyzing it?
**Geologist:** Yes, the computer software shows how the hydrocarbons are
   __________ around the fault. It also shows the potential for the fault
   seal to leak.

Speaking
8 With a partner, act out the roles below based on Task 7. Then switch roles.

**USE LANGUAGE SUCH AS:**
- I’m doing an analysis of ...
- What kind of ...?
- The computer software shows ...

**Student A:** You are an oil field worker. Talk to Student B about:
- what work is going on
- the seal type
- why he or she is analyzing the seal

**Student B:** You are a geologist. Talk to Student A about seals.

Writing
9 Use the webpage and the conversation from Task 8 to fill out the geologist’s notes.

**Field Notes**

- **Location:** __________
- **Type of seal:** __________
- **Type of rock:** __________
- **Reason for analysis:** __________
- **Equipment used:** __________
CHAPTER III

TYPES OF AIRSPEED

There are many types of airspeed. Remember that indicated airspeed is what your instrument reads. Calibrated airspeed is corrected for errors and is more accurate. True airspeed and equivalent airspeed are also different. True airspeed refers to the air around the aircraft. Equivalent airspeed refers to the air at sea level. Groundspeed is speed relative to the ground. Always know which type of airspeed you are using.

Be aware of different units of measurement. A knot measures speed. A nautical mile measures distance. Some places use mph (miles per hour) and others use kph (kilometers per hour). Always indicate your units of measurement.

Get ready!

1. Before you read the passage, talk about these questions.
   1. What are some measures of speed?
   2. What unit is air distance measured in?

Reading

2. Read the chapter on airspeed. Then, choose the correct answers.
   1. What is the main purpose of this chapter?
      A. to explain how pilots measure airspeed
      B. to describe different types of airspeed
      C. to help a pilot calculate airspeed
      D. to compare different airspeed instruments
   2. Which of the following is often inaccurate because it is not corrected for errors?
      A. calibrated airspeed
      B. true airspeed
      C. groundspeed
      D. indicated airspeed
   3. Which of these is NOT explained in the chapter?
      A. different types of airspeed
      B. different instruments for reading airspeed
      C. the difference between indicated airspeed and calibrated airspeed
      D. different units used to measure airspeed

Vocabulary

3. Fill in the blanks with the words and phrases from the word bank.

**Word Bank**

airspeed  groundspeed  knot
nautical mile  true airspeed  equivalent airspeed

1. The pilot measured his aircraft's speed based on one nautical mile per hour, or one ________.
2. The pilot had to decide which type of ________ to measure.
3. 1,852 meters is the same as one ________.
4. The co-pilot measured ________ to see how fast the plane was moving in relation to the ground.
5. Pilot Rogers used ________ to see how fast his craft would be flying at sea level.
6. Pilot Stevens measured ________ based on the air immediately around his aircraft.
4. Read the sentence pair. Choose where the words best fit the blanks.

1. indicated / calibrated
   A ________ airspeed is usually accurate because it is corrected for errors.
   B ________ airspeed is not always accurate because it is not corrected for errors.

2. mph / kph
   A A measurement that is based on miles is ________.
   B A measurement that uses kilometers is ________.

5. Listen and read the chapter on airspeed again. What does equivalent airspeed refer to?

Speaking

8. With a partner, act out the roles below based on Task 7. Then switch roles.

USE LANGUAGE SUCH AS:

- I have a few questions about ...
- I'm confused about ...
- Do you know ...

Student A: You are a student. Talk to Student B about:
- indicated airspeed
- calibrated airspeed
- why you feel confused

Student B: You are an instructor. Talk to Student A about errors that might occur in indicated airspeed.

Listening

6. Listen to a conversation between a student and an instructor. Mark the statements true (T) or false (F).

1. T. The woman is confused about indicated and calibrated airspeeds.

2. F. Indicated airspeed is more accurate than calibrated airspeed.

3. T. Changes in air pressure create calibrated airspeed errors.

7. Listen again and complete the conversation.

Student: Mr. Henry, I have a few questions about 1 ________.

Instructor: Of course, Linda. What do you 2 ________?

Student: Indicated airspeed and calibrated airspeed 3 ________ ________ a little.

Instructor: Well, do you know which one is more 4 ________?

Student: 5 ________ airspeed, because it's corrected for errors.

Instructor: 6 ________. So what are you confused about?

Writing

9. Use the conversation from Task 8 to complete the exam questions.

Part III

Indicated VS calibrated airspeed

Indicated airspeed is: ________

____________________

Calibrated airspeed is: ________

____________________

Which one is more accurate? ________

____________________
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4 Replacing components

Removing components

In the past it was simple to remove components. Circuits had one layer. You just had to remove the solder and pull the lead through the hole in the board. Nowadays, boards are multi-layered, and component removal requires lots of skill and patience.

First, double-check that you have disconnected the power source. Then, clear the solder from the hole using a soldering iron and solder wick. Heat the solder. The molten solder will flow into the wick. Then you can pull the lead through. For large pieces, suck the solder away using a solder sucker. This may leave a coating of solder. Remove this using wick. Some parts of the circuit are made of copper, which absorbs heat. Thermal absorption makes it hard to melt solder. The thick, multi-layered boards also produce a heat-sinking effect. If you can’t melt the solder, don’t use a higher wattage iron. This can deform the boards and damage the circuit lands. It can also delaminate multi-layered circuit board lands and some components’ pads. If you can’t remove all the solder, clip the leads close to the components. Then you can solder the new component to the old component’s leads. If you can’t reach the leads, chop off the component close to its base.

Get ready!

1 Before you read the passage, talk about these questions.

1. What are some ways a circuit board can be damaged by heat?
2. What are two ways to disconnect leads or wires?

Reading

2 Read the article on removing components. Then, mark the following statements as true (T) or false (F).

1. Solder wick is used to remove small pieces of solder.
2. A higher wattage iron is good to use on multi-layered boards.
3. Remove the solder before cutting the component leads.

Vocabulary

3 Match the words (1-8) with the definitions (A-H).

1. flow 5. suck
2. deform 6. double-check
3. delaminate 7. clear
4. chop off 8. clip

A. check something twice
B. remove obstacles from a passage
C. remove the coating
D. cut through something small and thin
E. remove using a vacuum
F. move in liquid form
G. change shape in a bad way
H. cut and remove something
4 Write a word that is similar in meaning to the underlined part.

1 These days most circuit boards are made of several boards on top of each other.

2 The fact that some parts take away the heat often makes it hard to melt solder.

3 The thickness of the boards creates a fast cooling effect.

4 You can remove the lead once the solder is hot and in liquid form.

5 You don't need to add a thick layer of paint. A thin layer is enough.

5 Listen and read the article again. How do you remove components from a multi-layered board?

Speaking

With a partner, act out the roles below based on Task 7. Then switch roles.

USE LANGUAGE SUCH AS:

I can't remove this...

You could try...

No, I don't think...

Student A: You are a technician. Talk to Student B about:
- clearing the hole
- the equipment you are using
- other methods of removing the component

Student B: You are a technician. Talk to Student A about how to remove a component.

Writing

Use the article on removing components and the conversation from Task 8 to write a memo about the proper way to remove components. Include what type of equipment to use, what equipment shouldn't be used, and when to clip wires.
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Ceiling fans

Important: Failure to follow these instructions during installation may present a safety hazard.

1. Before you begin, make sure you have enough space to install your ceiling fan. Without proper clearance, the fan may break or cause damage to surrounding walls and fixtures when operated.

2. Locate an appropriate cross support. We recommend mounting the fan independently from the included ceiling box so it stays stable. A fan towards the middle of the room will circulate the air most effectively.

3. Hang the fan with the included metal ceiling box (see page 4 for detailed instructions). Homebreeze Model UJ790 is a swing-up fan, so you will be able to wire the fan easily after you hang it.

4. Wire the fan, or have an electrician wire it for you (see page 6 for detailed instructions).

5. Swing the fan into place and secure the final screws in the ceiling box.

6. Test the fan to make sure that it does not wobble. The UJ790 is a variable-speed fan, so use the highest speed setting to perform this test. You will need two AA batteries to operate the remote control.

Reading

2. Read the instruction manual on a ceiling fan. Then, complete the table using information from the manual.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Installation</td>
<td></td>
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<tr>
<td>Installation</td>
<td></td>
</tr>
<tr>
<td>After Installation</td>
<td></td>
</tr>
</tbody>
</table>

Vocabulary

3. Write a word that is similar in meaning to the underlined part.

1. This light fixture should be installed without relying on other parts to the ceiling beam.  
   _ n d _ _ _ n d _ _ t l _

2. If the fan moves back and forth unsteadily, it is not installed correctly.  
   w _ b l _ s

3. We need a fan that is capable of operating fast or slow to use in the wintertime.  
   _ r i _ b l _ _ p _ _ d

4. Before installation, the electrician located the solid beam in the ceiling.  
   c _ _ s s _ u _ _ o r _

5. Tighten the screws to keep each fixture securely in one place.  
   _ t _ b _ e
4 Fill in the blanks with the correct words and phrases from the word bank.

**Word Bank**
- circulate
- remote control
- swing-up
- follow
- ceiling fan
- clearance

1. Do you have enough ___________ to install a fan here?
2. You must always ___________ the instructions.
3. The bedroom lights are operated by ___________.
4. The purpose of a fan is to ___________ air.
5. This ___________ fan is easy to wire after hanging.
6. The ___________ makes the kitchen cooler.

5 🎧 Listen and read the instruction manual on a ceiling fan again. What is the final step after installation?

**Listening**
6 🎧 Listen to a conversation between two electricians. Mark the following statements as true (T) or false (F).

1. __ The wrong type of light fixture was installed.
2. __ The woman's mistake caused a serious electrical malfunction.
3. __ The woman forgot to test the fans after installation.

7 🎧 Listen again and complete the conversation.

**Electrician 1:** There seems to be something wrong with the way the 1 ___________ are attached.
**Electrician 2:** Really? I tested the lights and they seem okay.
**Electrician 1:** Well, the wiring is fine, but 2 ___________ ___________ ___________, when I turn on the fan at high speed.
**Electrician 2:** Oh, I see what you mean. The whole thing 3 ___________ ___________.
**Electrician 1:** A fan wobbling like that won't 4 ___________ properly. Or it could cause more serious problems, like electrical malfunction or damage to the fan.
**Electrician 2:** I know, I know. That was my fault. I should have 5 ___________ ___________ right away to make sure they were stable.
**Electrician 1:** That's okay, Karen. Now that you've seen what happens, I'm sure you'll remember next time.
**Electrician 2:** I will. And I'll 6 ___________ ___________ right away to tighten those light fixtures and make sure they're secure.

**Speaking**
8 With a partner, act out the roles below based on Task 7. Then switch roles.

**USE LANGUAGE SUCH AS:**
- I tested the ...
- The ... is fine, but look what happens ...
- I should have ...

**Student A:** You are an electrician. Talk to Student B about:
- an error while installing fan
- possible consequences
- what action is needed

**Student B:** You are an electrician. Talk to Student A about a fan installation error.

**Writing**
9 Use the conversation from Task 8 to write the electrician's work report. Write about:
- item installed
- nature of installation error
- why hazardous
- steps taken to correct problem
Merchant Navy

Captain Stuart T. Sheppard
Virginia Evans - Jenny Dooley
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9 Nautical measurements

Get ready!
1 Before you read the passage, talk about these questions.
   1 What are some challenges of learning nautical measurements?
   2 How are measurements at sea different from those used on land?

Reading
2 Read the guide for new seamen on measurements. Then, choose the correct answers.
   1 What is the article mainly about?
      A what words are used for measurements at sea
      B a comparison of the metric system and imperial system of measurement
      C the origin of nautical words for measurement
      D the importance of using nautical terms for distance
   2 Which of the following is NOT a nautical measurement?
      A knot C fathom
      B gross ton D miles per hour
   3 What can you infer about the term "gross ton"?
      A It is no longer in use.
      B It changes with higher speeds.
      C It is often used incorrectly as a measure of weight.
      D It is the most difficult measurement to calculate.

Vocabulary
3 Match the words (1-6) with the definitions (A-F).
   1 _ fathom   4 _ gross ton
   2 _ knot     5 _ nautical mile
   3 _ cable    6 _ foot
   A a measurement equal to 100 fathoms
   B a measurement of depth
   C a distance measurement
   D a measurement of volume
   E a measure of speed
   F a measurement equal to 12 inches
4 Read the sentence pairs. Choose which word or phrase best fits each blank.

1 gross ton / depth
   A The __________ of the water is 6 fathoms.
   B A __________ measures volume, not weight.

2 distance / speed
   A The __________ to the next port is 150 nautical miles.
   B A ship's __________ is measured in knots.

5 Listen and read the guide for new seamen on measurements again. How is depth measured at sea?

Listening

6 Listen to a conversation about navigation. Mark the following statements as true (T) or false (F).

1 __ The ship is behind schedule.
2 __ The ship is traveling at twelve knots.
3 __ The ship will reach the port at 1500 hours.

7 Listen again and complete the conversation.

| Officer: Roberts, 1 finish your watch we should review our course. |
|--------------------|---------------------------------------------|
| Navigator: Sure thing, I've updated the ship's log already. It 2 we're on schedule |
| Officer: We need to reach Newton by 1500 hours. What's our distance? |
| Navigator: We're about ninety nautical miles out 3 |
| Officer: And 4? |
| Navigator: We're traveling at fifteen knots. |
| Officer: By my calculations, it'll six hours to get there. |
| Navigator: I reckon the same thing. We'll be. 6 |

1 fathom = 6 feet = 1.8 meters

Speaking

8 With a partner, act out the roles below based on Task 7. Then switch roles.

USE LANGUAGE SUCH AS:

- How far...
- We're traveling at...
- It'll take about...

Student A: You are a ship's captain. Talk to Student B about:
- when you must arrive at port
- the distance to port
- how fast you are traveling

Student B: You are a navigator. Talk to Student A about when you will reach your next port.

Writing

9 Use the guide for new seamen on measurements and the conversation from Task 8 to fill out the log entry.

Navigator's Log

<table>
<thead>
<tr>
<th>Officer:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time:</td>
<td>Current Speed:</td>
</tr>
<tr>
<td>Distance to Destination:</td>
<td>Estimated Time to Arrival:</td>
</tr>
</tbody>
</table>

1 foot = 12 inches
6 Aquatic systems 1

Protecting Our Oceans

Saltwater systems are a vital part of the Earth’s biosphere. Don’t let human waste destroy our oceans! Trash often piles up in coastal zones. It washes in and out with the tide in intertidal zones. Creatures that live in estuaries and coastal wetlands are especially affected. Coral reefs are also in danger. These active areas support about 25% of all ocean life. Trash from humans usually starts at the coast. However, it is a threat to every aquatic life zone, from the surface to the ocean bottom. It floats out to open sea with the tide. There, the plastics and chemicals harm many varieties of aquatic life.

Vocabulary

3 Match the words (1-6) with the definitions (A-F).

1. ocean
2. open sea
3. saltwater
4. coral reef
5. intertidal zone
6. aquatic life zone

A a large body of water
B an underwater area with particular characteristics
C an area of deep water away from the coast
D bodies of water containing salt
E an area made up of mineral structures
F an area that is sometimes underwater and sometimes exposed

4 Read the sentences and choose the correct words.

1. The debris sank from the surface down to the intertidal zone / ocean bottom.
2. Most sea life lives in the warm waters of the open sea / coastal zone.
3. The estuary / ocean contains some saltwater and some freshwater.

Get ready!

1 Before you read the passage, talk about these questions.

1 In what area does a river meet the sea?
2 What area in an ocean is home to a wide variety of life?

Reading

2 Read the brochure. Then, mark the following statements as true (T) or false (F).

1. Trash typically stays in intertidal zones.
2. Coral reefs contain about half of all ocean life.
3. Only the ocean bottom is unaffected by trash.
Speaking

8. With a partner, act out the roles below based on Task 7. Then switch roles.

USE LANGUAGE SUCH AS:
How did … go?
We found …
On the other hand …

Student A: You are a scientist. Talk to Student B about:
- his or her findings on a research trip
- a problem in an aquatic life zone
- an improvement in an aquatic life zone

Student B: You are a scientist. Talk to Student A about your findings on a research trip.

Writing

9. Use the brochure and the conversation from Task 8 to fill out the research report.

Summary of Aquatic Research Expedition

I found a problem in ___________________________

The problem was ___________________________  

I found an improvement in ___________________________

The improvement was ___________________________
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Tennis: Rules

Get ready!

1 Before you read the passage, talk about these questions.
   1 What are some areas of a tennis court?
   2 What equipment is used when playing tennis?

Reading

2 Read the tennis guide. Then, mark the following statements as true (T) or false (F).
   1 Players serve from behind the service line.
   2 A serving player gets one chance to get the ball over the net.
   3 “Love” indicates that a player has not scored any points.

Vocabulary

3 Match the words (1-7) with the definitions (A-G).
   1 __ tennis court  5 __ fault
   2 __ baseline  6 __ tennis racket
   3 __ service box  7 __ service line
   4 __ net service

A the line dividing a player's side of the court
B a serve that hits the net
C an invalid serve in tennis
D the playing field in tennis
E a piece of equipment used to hit a tennis ball
F the serving line on a tennis court
G the area where a player must land a serve
4 Fill in the blanks with the correct words and phrases from the word bank.

**Word Bank**

- set
- love
- game point
- deuce
- forty
- break point
- fifteen

1. When the player scored at _________ he won the game.
2. With a score of _________, the player had not yet made a point.
3. A daring play won the game for the server's opponent at _________.
4. With scores of _________, both players had made one point.
5. At _________, the server must score two points to win.
6. Both players were very tired after playing a _________ of tennis.
7. After scoring three points, the player's score was _________.

5 🎧 Listen and read the tennis guide again. Why is deuce a special score in tennis?

**Speaking**

6 With a partner, act out the roles below based on Task 7. Then switch roles.

**USE LANGUAGE SUCH AS:**

- I'm confused about ...
- It's split ...
- What don't you ...

**Student A:** You are a tennis fan. Talk to Student B about:

- the tennis court
- how it's divided
- where to serve from

**Student B:** You are new to the game of tennis. Talk to Student A about how a tennis court is arranged.

**Listening**

6 Listen to a conversation between two spectators. Mark the following statements as true (T) or false (F).

1. _ The man doesn't understand how tennis scoring works.
2. _ The player has only scored once.
3. _ The woman compares the deuce score to a tie-breaker situation.

7 🎧 Listen again and complete the conversation.

**Spectator 1:** In tennis, points are worth 1 _______ _______.
**Spectator 2:** So, one point is scored as 2 _______?
**Spectator 1:** That's right. Players start at zero, which is called 3 _______. The first point is still only one point, but it's scored as fifteen.

**Spectator 2:** What comes after that?
**Spectator 1:** The 4 _______ _______ is scored thirty, and the third point is scored forty.

**Spectator 2:** That's the 5 _______ _______?
**Spectator 1:** One more point is needed to win, unless the 6 _______ _______ forty-forty. They call that deuce.
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The Soldier’s Life: Radio Basics

Radios are vital military tools. They allow soldiers to stay in contact during combat and other operations.

Most radios are made to hop frequencies. This prevents the enemy from listening to the full conversation.

The SINCGARS (man-pack) and AN/PRC-148 (handheld) are common military radios. The man-pack can be worn as a backpack. This portable type of radio handles both voice and data transmissions.

The handheld is the most widely used radio. It permits easy two-way contact.

Most modern radios use rechargeable lithium-ion batteries.

Comprehension

1 Read, listen and fill in the blanks to complete the sentences.

1 Radios hop frequencies in order to .................................................................

2 There are two basic types of radios: the ............... and the .............................................

3 The SINCGARS radio can handle not only .................. ............................................. but also voice transmissions.

4 The handheld is most useful for .................................................................

5 Today’s portable handheld radios are powered by .................................................................

2 a) Read again and choose the correct answers.

1 What can be inferred about the SINCGARS radio?
A It cannot hop frequencies automatically.
B It is mostly used for data transmissions.
C It has a better battery than the AN/PRC-148.
D Soldiers wear it like a backpack.

2 According to the text, what is true of the AN/PRC-148 handheld radio?
A It can receive but not send data messages.
B It is too large to fit into a soldier’s pocket.
C It uses a rechargeable battery.
D It has a longer range than man-pack radios.

b) In pairs, talk about how many types of radios there are and how they can be used.

Vocabulary

3 Choose the correct definition for each word.

1 man-pack
A a radio worn on the back
B a message sent through a radio
C a type of radio transmission

2 two-way
A moving in two directions
B consisting of two parts
C using voice and data

3 stay in contact
A to replace batteries
B to have communication
C to turn off a radio
4 Study the table below.

<table>
<thead>
<tr>
<th>WORDS</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affirmative</td>
<td>Yes.</td>
</tr>
<tr>
<td>Roger</td>
<td>I understand / I received your transmission.</td>
</tr>
<tr>
<td>Negative</td>
<td>No.</td>
</tr>
<tr>
<td>Wilco</td>
<td>I will comply; I will do what you have asked.</td>
</tr>
<tr>
<td>Standby</td>
<td>Wait.</td>
</tr>
<tr>
<td>Over</td>
<td>I'm finished speaking and waiting for a reply.</td>
</tr>
<tr>
<td>Out</td>
<td>I'm finished speaking and don't expect a reply.</td>
</tr>
<tr>
<td>Go ahead</td>
<td>Please send your next transmission.</td>
</tr>
<tr>
<td>Say again</td>
<td>Repeat the last transmission.</td>
</tr>
<tr>
<td>You’re breaking up</td>
<td>I cannot hear you / your voice.</td>
</tr>
</tbody>
</table>

5 Complete the conversation with appropriate words or phrases from the word bank.

D77: Echo one-three, I didn’t hear your last transmission. Please (1) .............................................

E13: I repeat, please advise. Is air reconnaissance available for this area? (2) .............................................

D77: (3) ............................................. We do not have air recon at this time. Please wait for further instructions.

E13: (4) ............................................. I will await your next transmission. (5) .............................................

6 Complete the word or short phrase that is similar in meaning to the underlined part.

1 I understood your last transmission. I am moving toward the objective now.
   _ _ g _ _

2 Yes. All units have reported back to base.
   _ f _ _ _ t _ _

3 You’re going to have to repeat the last transmission, soldier. I couldn’t understand you.
   _ o _ _ e _ _ _ _ p

4 This is Delta Actual. Please proceed with your transmission.
   _ o a _ _ _ _

5 I’m verifying that information for you now. Please wait until my next transmission.
   S _ _ _ _ y

Listening

7 Listen to a radio conversation between a soldier in the field and his commander. Write down any key vocabulary (in bold in the reading passage) that you hear.

8 Listen again to the conversation. Then answer the questions.

   1 Why does the man contact the woman on the radio?

   2 What does the woman order the unit to do?

   3 Why does the man ask the woman to “say again?”

Speaking

9 In pairs, act out short radio exchanges using the procedure words in Ex. 4.
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<td>Unit 6 – Base Structures</td>
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<td>Unit 13 – Maintenance</td>
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A recruit may hope to become a **general** someday, but he or she will start at the lowest **rank**. All enlisted airmen begin duty in the **airmen** tier. Eventually, they can work their way up to the **Noncommissioned Officer Tier**. Such a move requires more leadership and responsibility. Exceptional airmen can reach the highest level for enlisted airmen, the **Senior Noncommissioned Officer Tier**.

On the other hand, **officers** are commissioned, based on their education, experience and qualifications. They begin as **company grade officers**, who are either **lieutenants** or **captains**. Like airmen, officers also have potential to increase their rank. Officers who show the most promise become **field grade officers**, such as majors and colonels. A very select few become **flag officers**, or generals.

### Comprehension

**1** Read, listen, and mark the statements as true (T) or false (F). Correct the false statements.

1. Airmen start in the Noncommissioned Officer Tier. ................................................................. 
   ...

2. A captain is a senior noncommissioned officer. ................................................................. 
   ...

3. Company grade officers are lower in rank than field grade officers. ....................................................
   ...

### Vocabulary

**2** List the types of rank, from highest to lowest.

<table>
<thead>
<tr>
<th>Noncommissioned Officers</th>
<th>Senior Noncommissioned Officers</th>
<th>Company Grade Officer</th>
<th>Flag Officers</th>
<th>Field Grade Officers</th>
<th>Enlisted Airmen</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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12 On Base: Rank Structure
### On Base: Rank Structure

#### INsignia: Enlisted Ranks

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<tr>
<td>Airman Basic</td>
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<tr>
<td>Airman</td>
<td><img src="image" alt="Airman Insignia" /></td>
</tr>
<tr>
<td>Airman First Class</td>
<td><img src="image" alt="Airman First Class Insignia" /></td>
</tr>
<tr>
<td>Senior Airman</td>
<td><img src="image" alt="Senior Airman Insignia" /></td>
</tr>
<tr>
<td>Staff Sergeant</td>
<td><img src="image" alt="Staff Sergeant Insignia" /></td>
</tr>
<tr>
<td>Technical Sergeant</td>
<td><img src="image" alt="Technical Sergeant Insignia" /></td>
</tr>
<tr>
<td>Master Sergeant</td>
<td><img src="image" alt="Master Sergeant Insignia" /></td>
</tr>
<tr>
<td>Senior Master Sergeant</td>
<td><img src="image" alt="Senior Master Sergeant Insignia" /></td>
</tr>
<tr>
<td>Chief Master Sergeant</td>
<td><img src="image" alt="Chief Master Sergeant Insignia" /></td>
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<tr>
<td>Command Chief Master Sergeant</td>
<td><img src="image" alt="Command Chief Master Sergeant Insignia" /></td>
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<tr>
<td>Chief Master Sergeant of the Air Force</td>
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#### INsignia: Officer Ranks

<table>
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<tr>
<td>First Lieutenant</td>
<td><img src="image" alt="First Lieutenant Insignia" /></td>
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<tr>
<td>Captain</td>
<td><img src="image" alt="Captain Insignia" /></td>
</tr>
<tr>
<td>Major</td>
<td><img src="image" alt="Major Insignia" /></td>
</tr>
<tr>
<td>Lieutenant Colonel</td>
<td><img src="image" alt="Lieutenant Colonel Insignia" /></td>
</tr>
<tr>
<td>Colonel</td>
<td><img src="image" alt="Colonel Insignia" /></td>
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<tr>
<td>Brigadier General</td>
<td><img src="image" alt="Brigadier General Insignia" /></td>
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<tr>
<td>Major General</td>
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<tr>
<td>Lieutenant General</td>
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</tr>
<tr>
<td>General</td>
<td><img src="image" alt="General Insignia" /></td>
</tr>
</tbody>
</table>

### 3 Label each insignia.

1. ![Insignia Image](image)
2. ![Insignia Image](image)
3. ![Insignia Image](image)
4. ![Insignia Image](image)
5. ![Insignia Image](image)

### Listening

4. Listen to a conversation between an officer and an airman, and answer the questions.

1. What is the airman’s new rank?
2. Where will the airman transfer to?
3. Why must the airman transfer?

### Speaking

5. You are speaking to new recruits. Explain the difference between NCOs and commissioned officers.
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Get ready!

1. Before you read the passage, talk about these questions.

1. What are some tools police use?
2. What equipment does a police officer typically carry in your country?

Reading

2. Read the page from a police equipment company’s website. Then, choose the correct answers.

1. What is the purpose of the webpage?
   A. to list products available
   B. to show a completed order
   C. to state required equipment
   D. to describe a business

2. Which item is NOT sold with all its needed parts?
   A. zip tie
   B. multi-tool
   C. handcuffs
   D. flashlight

3. What is true of the bulletproof vest?
   A. It is the most expensive item.
   B. It includes plates in all models.
   C. It is available in multiple sizes.
   D. It can only be ordered by phone.

Vocabulary

3. Match the words (1-5) with the definitions (A-E).

   1. ____ zip tie
   2. ____ duty belt
   3. ____ multi-tool
   4. ____ radio
   5. ____ boot

   A. a device with many uses
   B. a strap that holds an officer’s tools
   C. a device used for communication
   D. equipment that protects the foot
   E. an item that binds suspects’ hands
4 Choose the correct word for each blank.

1 badge / handcuffs
   A The criminal couldn’t move because of the ________.
   B Robert wears his ________ on his uniform.

2 gloves / bulletproof vests
   A These ________ protect officers’ hands.
   B Modern ________ can stop most bullets.

3 flashlight / restraints
   A The ________ prevented him from moving.
   B Use your ________ if it is too dark outside.

5 Listen and read the website again. Where does a police officer keep his or her pistol?

Listening

6 Listen to a conversation between two officers.
Mark the statements as true (T) or false (F).

1 T Handcuffs cost much more than zip ties.

2 F The woman thinks zip ties break easily.

3 T Using a zip tie requires both hands.

7 Listen again and complete the conversation.

Officer 1: You don’t think they’re our best option? They’re so lightweight you can carry a dozen at a time.

Officer 2: True, that’s their main advantage.

Officer 1: That and they’re cheap. We can buy fifty or sixty for the price of one pair of handcuffs.

Officer 2: Sure, that’s something else they have 1 __________, __________.

Officer 1: And they’re 2 __________. I could go on and on. So, what are their downsides then?

Officer 2: The biggest downside is that they’re difficult to put on correctly when you only have 3 __________, __________.

Officer 1: I see your point.

Officer 2: I can slap 4 __________ on a suspect with one hand and have my other hand free. I feel a lot safer and more in control that way.

Officer 1: True, that’s 5 __________, __________.

Officer 2: And 6 __________, __________, that outweighs all their negatives.

Speaking

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:
That’s its main advantage.
That’s something they have going for them.
One downside is...

Student A: You are a police officer. Talk to Student B about a piece of equipment. Talk about:
- Its most useful feature
- Other advantages
- Comparison with other equipment

Student B: You are a police officer. Talk to Student A about police equipment.

Writing

9 Use the website and the conversation from Task 8 to fill out the customer feedback form.

Strong Arm Police Equipment Suppliers
Customer Feedback Form

Item ordered: ____________________________
Item Strengths: __________________________
Item Weaknesses: __________________________
Would you recommend this item to a friend? [Y] [N]
Why or why not? __________________________
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7 Aircraft: Support Aircraft

Naval aircraft do not just engage enemy planes and attack air- or ground-based targets. They also perform a variety of support functions that are equally important to naval missions.

Some aircraft undertake patrol missions over long distances, looking for enemy ships or submarines. Unmanned aerial vehicles (UAVs) can perform these functions without putting pilots at risk. Others provide Command and Control. Flying high above the battle group, these aircraft use powerful radar systems to provide airborne early warning of approaching enemies. They also maintain communication among the fleet. Yet some aircraft prevent the enemy from communicating. Such aircraft jam enemy signals in electronic warfare operations.

Aircraft also provide several transport functions. Land- and carrier-based helicopters provide vertical replenishment (VERTREP) operations. The C-2 transport can carry 10,000 pounds of cargo, yet still land on a carrier. The best-known transport plane, the C-130, moves everything from personnel and cargo to tanks and helicopters. Specially modified units also provide aeromedical evacuation.

Search and rescue (SAR) missions are another function of support aircraft, though they are only undertaken by rotary wing aircraft. When someone is lost at sea, when a plane crashes, or when a ship sinks, these aircraft launch to save those left behind.
Aircraft: Support Aircraft

Comprehension

1 Read, listen, and mark the statements as true (T) or false (F).
   1 ___ Patrol missions can be completed without pilots on board.
   2 ___ The C-2 can be outfitted to serve as an airborne medical station.
   3 ___ Airplanes and helicopters are both involved in SAR operations.

Vocabulary

2 Match the definitions to the correct words.
   1 ___ transport  4 ___ helicopter
   2 ___ patrol  5 ___ VERTREP
   3 ___ jam
   A an aircraft that is lifted and kept in the air by rotating wings
   B to block an electronic signal from being transmitted
   C the transfer of cargo to ships using helicopters
   D to conduct an operation in an area for observation and maintaining order
   E to carry something from one place to another

3 Complete the sentences with the terms below.

   Aeromedical evacuation   electronic warfare   command and control   search and rescue   airborne early warning   UAV

   1 The ........................................ system failed to notify the fleet of the approaching attack.
   2 The Navy used a(n) ........................................ to scout the combat zone.
   3 Both ships and aircraft were used in the ............... ............... operation to find the missing sailors.
   4 A(n) ........................................ operation was ordered to take the injured personnel to a hospital.
   5 Officers on the ........................................ aircraft were able to view the entire battlefield.
   6 The Navy uses sophisticated jamming systems to conduct .........................................

4 Read the passage again. Why are helicopters used for SAR and VERTREP missions?

Listening

5 ☐ Listen to a conversation between an officer and a pilot, and answer the questions.
   1 What type of operation did the pilot just complete?
      A patrol
      B search and rescue
      C VERTREP
      D command and control
   2 What will the man most likely do next?
      A Refuel a helicopter.
      B Resupply a destroyer.
      C Attend a mission briefing.
      D Go to the maintenance department.

Speaking

6 ☐ Listen again, and then act out the dialogue from Task 5 with a partner. Then switch roles.

USE LANGUAGE SUCH AS:

   What is the status ...?
   We're putting you up again.
   Just make sure ...

   Student A: You are an officer. Talk to Student B about:
      • results of a SAR mission
      • an upcoming mission
      • how to prepare

   Student B: You are a pilot. Talk to Student A about support missions.

Writing

7 Use the conversation in Task 5 to describe the support functions of naval aircraft.
   Include: transport, patrol, and rescue operations.
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Approach 1

Get ready!

1. Before you read the passage, talk about these questions.

   1. Why are announcements before landing important for flight attendants to make?
   2. What are some important things that passengers may be asked to do as they approach the airport for landing?

Reading

2. Read the announcement script. Then, mark the following statements as true (T) or false (F).

   1. ___ Passengers are asked to recline their seats before landing.
   2. ___ The armrests need to be lowered before landing.
   3. ___ Carry-on items can be placed in overhead bins.

Vocabulary

3. Match the words or phrases (1-9) with the definitions (A-I).

   1. ___ seatback   6. ___ tray table
   2. ___ collect   7. ___ buckle
   3. ___ pass   8. ___ discard
   4. ___ recline   9. ___ lower
   5. ___ turn off

   A. to gather objects together
   B. to hand an object to someone else
   C. to cause something to incline backwards
   D. the part of the chair your back rests on
   E. a small piece of plastic used to eat or work on that is used on an airplane
   F. to power down electronic items
   G. to throw something away
   H. to attach two sides of something together in order to hold something
   I. to move something closer to the ground
4 Read the sentences and choose the correct words or phrases.

1. The flight attendant collected our seatback/trash before we landed.
2. The tray tables/armrests make the airplane seats more comfortable.
3. It is important for your seat to be upright/buckled before we take off.
4. I locked/discarded my tray table in the correct position.

5 Listen and read the announcement again. Where can carry-ons and electronics be placed before landing?

Listening

6 Listen to a conversation between a flight attendant and a passenger. Mark the following statements as true (T) or false (F).

1. ___ The man asks the woman to recline her seat.
2. ___ The man says that the woman can leave her phone on.
3. ___ The woman says she will put her carry-on item under her seat.

7 Listen again and complete the conversation.

Flight Attendant: We are getting ready to land. Do you have any 1 __________ ____________?

Passenger: No, I 2 __________ ____________ already.

Flight Attendant: Then please 3 __________ ____________ ____________ into position.

Passenger: Okay, sure. Sorry about that.

Flight Attendant: You will also have to return your seat back to an 4 __________ ____________.

Passenger: Do I need to 5 __________ ____________ my phone?

Flight Attendant: Please. Electronics sometimes interfere with our radios. Can I put 6 __________ ____________ - __________ in the overhead bin?

Passenger: No, thank you. I will just put it under the seat.

Speaking

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

We are getting ready to ...
You will also ...
Can I put ...?

Student A: You are a flight attendant. Talk to Student B about:
- discarding trash
- changing their seat position for landing
- stowing his or her carry-on item

Student B: You are a passenger. Talk to Student A about what you need to do to prepare for landing.

Writing

9 Use the conversation from Task 8 to fill in a checklist of flight attendant duties before landing.

Chambliss Airways

Checklist Before Landing

1. Trash: ____________________________________________
2. Tray tables: _______________________________________
3. Seat position: ______________________________________
4. Electronics: _______________________________________
5. Carry-on items: ___________________________________
ENVIROMENTAL ENGINEERING
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Waste management is critical for human and environmental health. Without proper waste management, people would just throw garbage in open dumps. Fortunately, many places have better ways to handle waste. However, even the best facilities face challenges.

Liquid hazardous waste is often stored in surface impoundments. However, these can leak and contaminate groundwater. Fumes may also add to air pollution. A better solution is deep-well disposal. This method is permanent and environmentally sound if managed properly.

Solid waste landfills are sites that handle municipal and industrial solid waste. A composite liner is placed under the landfill. The intention is to prevent water pollution. However, environmental agencies suggest that this is only a temporary barrier. On top of the liners is a series of cells which have daily cover over them. Lifts lead to multiple layers of cells.

Solid waste landfills are extremely common. But they are not without problems. Many of them have reached or are close to disposal capacity. As the population grows, this will become a bigger problem. In addition, landfills release flammable toxic gases as waste decomposes. Methane recovery can be accomplished with a series of pipes that suck the gas out. Meanwhile, underground carbon storage can prevent CO2 from entering the atmosphere.

Get ready!

1 Before you read the passage, talk about these questions.
   1 Why is waste management important?
   2 How do solid waste landfills handle waste?

Reading

2 Read the magazine article. Then, choose the correct answers.

1 What is the purpose of the article?
   A to compare types of waste management facilities
   B to describe waste management problems and solutions
   C to explain how solid waste landfills are created
   D to highlight the harmful effects of open dumps

2 What can be inferred about solid waste landfills?
   A They can be difficult to operate.
   B They often have hazardous liquids.
   C They may eventually pollute water.
   D They have too many cell layers.

3 Which of the following is NOT a problem with waste facilities?
   A They are quickly filling up.
   B They emit hazardous gases.
   C They are not compacted well.
   D They can catch fire.

Vocabulary

3 Match the words or phrases (1-8) with the definitions (A-H).

1 _ toxic
2 _ cell
3 _ lift
4 _ carbon storage
5 _ composite liner
6 _ methane recovery
7 _ disposal capacity
8 _ surface impoundment

A the collection of a gas so that it can be used for another purpose
B an area of compacted waste
C a hole that holds liquid waste
D a synthetic material placed over compacted soil
E poisonous
F the largest amount of waste a facility can hold
G a layer put over cells when they are full
H the capture and storage of CO2 so that it doesn’t pollute the atmosphere
Choose the sentence that uses the underlined part correctly.

1. Injecting liquid into underground rock is one way to get rid of waste permanently.
   - p - e - s p - a

2. The manufacturing process creates a lot of garbage from industrial facilities.
   - d u a s d a

3. Many poor countries have lots of large, unregulated areas where people throw trash.
   - e u s

4. Methane is an extremely dangerous greenhouse gas.
   - a r s

5. Some items in landfills may never break down.
   - c o

6. The layer of soil put over cells prevents the wind from blowing waste around.
   - o r

7. Most of the city's waste goes to a(n) place where waste is dumped and buried.
   - o s l

Listen and read the magazine article again. What are some ways to manage hazardous liquid waste?

Listening

Listen to a conversation between an environmental engineer and a city planner. Mark the following statements as true (T) or false (F).

1. The city's solid waste landfill already has a methane recovery system.
2. The landfill's daily covers keep garbage in place and control odors.
3. The engineer will make plans for a carbon storage system.

Use the magazine article and the conversation from Task 8 to complete an informational flyer about your city's waste management programs. Include: the methods the city uses, their benefits, and their safety features.
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11 Pay and Benefits

Get ready!
1 Before you read the passage, talk about these questions.
   1 What are some benefits given to employees?
   2 Why do businesses offer benefits?

Benefits Package
Entry-Level Positions

Pay and benefits for entry-level employees increase with time at the company. Entry-level employees receive minimum wage for one year. After that time, employees earn a salary of $40,000 a year.

New employees are not eligible for overtime without managerial approval. Overtime benefits begin after six months. Health insurance and dental benefits begin after three months. Employees earn vacation time after one year with the company. Stock options are also offered after one year of employment.

Harrison Manufacturing offers several retirement plans. After six months, employees may enroll in the plan of their choice.

Reading
2 Read the benefits package from the handbook. Then, choose the correct answer.
   1 What is the article mainly about?
      A the benefit of retirement plans
      B benefits for certain employees
      C how stock options work
      D an overview of health insurance
   2 Which of the following must be approved by a supervisor?
      A overtime  C health insurance
      B dental  D retirement plans
   3 Which benefit begins after one year?
      A dental  C overtime
      B salary  D stock options

Vocabulary
3 Match the words or phrases (1-8) with the definitions (A-H).
   1 __ vacation time
   2 __ salary
   3 __ stock options
   4 __ overtime
   5 __ retirement plans
   6 __ health insurance
   7 __ benefits
   8 __ minimum wage

   A the services provided by employers in addition to being paid
   B a policy to set money aside from one's paycheck to be spent when employment ends
   C the paid time away from work that is allotted to employees
   D the time worked and paid beyond an employee's normal hours
   E the insurance against paying for the cost of medical care
   F a benefit given to employees to purchase company stocks at a discounted price
   G the lowest pay that employers can legally pay employees
   H a set amount of money made during the year as determined by the employer that is paid in installments
4 Read the sentence pairs. Choose which word or phrase best fits each blank.

1 benefits / salary
   A Fortunately, my job has really good _________ to cover medical expenses.
   B Susan's yearly _________ is too low for her to purchase a house.

2 dental / health insurance
   A This job includes _________, so you won't have to worry about your teeth.
   B Most jobs offer _________ to cover medical expenses.

5 Listen and read the benefits package from the handbook again. When does Harrison Manufacturing begin offering benefits to its employees?

Listening

6 Listen to a conversation between an HR representative and an employee. Mark the following statements as true (T) or false (F).

1 T The woman wants to talk about overtime benefits.
2 F The man is not eligible for dental yet.
3 F The man is very interested in the retirement plan.

7 Listen again and complete the conversation.

Representative: Hi, Mike. You've been here now for six months. So let's discuss some 1 ________ you may want.
   Employee: What are my options?
   Representative: Let's see, you're now eligible for 2 ________ and our retirement plan.
   Employee: That's great. What's the 3 ________ ________ like?
   Representative: Well, it's pretty simple. The company withholds money from your paycheck. That money is 4 ________ for your retirement.
   Employee: That 5 ________ ________ enough.
   Representative: Is that something you'd like to sign up for?
   Employee: Oh, yes. I 6 ________ do.

Speaking

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

Let's discuss ...
What's the ________ like?
I definitely ...

Student A: You are an HR representative. Talk to Student B about:
- benefit options
- benefit details
- interest in benefits

Student B: You are a new employee. Talk to Student A about what benefits interest you.

Writing

9 Use the conversation from Task 8 and the handbook to complete the questionnaire about benefits.

Benefits Questionnaire

Which benefit(s) interest you the most?

Would you choose to sign up for a retirement plan? Explain.

Which benefit(s) do you think are unnecessary?
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7 Product Details

Ready to trade in your old phone? Get a Satellite XK50 Smartphone!

TechWare just developed its latest state-of-the-art device. It features a lightning-fast processor and a sleek design. It's lightweight, but it doesn't sacrifice durability! And it has tons of great qualities, including:

- An 8 megapixel camera
- Voice and face recognition
- A crystal-clear touch screen with dimensions of 5.5 inches by 2.75 inches
- 64GB of storage – take your pictures, music, and videos with you wherever you go!

With the Satellite XK50, you’ll get all these upgrades and more!

TechWare releases its newest creation on July 1.

Global Wireless will distribute this make and model exclusively.

To order yours, visit www.globalwireless.com.

Get ready!

1 Before you read the passage, talk about these questions.
   1 What types of information can you find in a product description?
   2 What general qualities do people look for in products like electronic devices?

2 Read the advertisement. Then, complete the table.

<table>
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<tr>
<td>How to get</td>
<td>3 __________________________</td>
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</table>
Vocabulary

3 Match the words (1-5) with the definitions (A-E).

1 _ make  → 4 _ quality
2 _ model  → 5 _ develop
3 _ feature

A to possess a certain characteristic as an important element
B the brand or company that manufactures an item
C to create something new or make an existing thing better
D a characteristic of something
E a specific item that is distinctive from other items of the same type

4 Read the sentences and choose the correct word.

1 The company is releasing/featuring its newest video game next month.
2 Only one company can develop/distribute the product to customers.
3 The picture frame’s qualities/dimensions are five inches by seven inches.
4 This truck is known for its durability/model. It will run for years and years.
5 The new phone has several makes/upgrades that make it easier to use.

5 Listen and read the advertisement again. What are the Satellite XK50’s key features?

Speaking

6 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

When do you think the _ will be ready?
It’ll be about _ / It will be ready around _
How long will it take to _?

Student A: You are a manager at a cell phone manufacturer. Talk to Student B about:
● problems with an upcoming smartphone
● upgrades on the new phone
● when it will be ready

Student B: You are another manager at a cell phone manufacturer. Talk to Student A about the progress of a new smartphone.

Writing

9 Use the conversation from Task 8 to fill out the advertisement.

Ready for a new phone?

Get the ____________________!
This state-of-the-art smartphone features __________ .
It has _________ , _________ , and _________ .
This new ____________________ .
Order one today!
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3 Inbound Calls: Customer Service

Get ready!

1 Before you read the passage, talk about these questions.

   1 How can a customer service representative help with customer issues?
   2 What other kind of work might a customer service representative have to do?

Reading

2 Read the webpage. Then, choose the correct answers.

   1 What is the main idea of the webpage?
      A the customer service provided by a company
      B the skills required to become a customer service representative
      C a list of available jobs in customer service
      D the problems customer service representatives face

   2 Which of the following is NOT offered on the webpage?
      A record of accounts
      B call back service from tech support
      C telephone support
      D in-store consultations

   3 According to the webpage, what is the purpose of keeping account records?
      A to help customers transfer data between computers
      B to remind customers when to update their systems
      C to keep representatives informed about previous service requests
      D to aid customers who lose their receipts

Vocabulary

3 Match the words or phrases (1-8) with the definitions (A-H).

   1 ___ account               5 ___ research
   2 ___ customer service      6 ___ request
   3 ___ issue                 7 ___ service
   4 ___ link                  8 ___ support

   A something that someone asks for
   B a record of a customer's orders and information
   C a problem or concern encountered by a customer
   D to investigate something thoroughly
   E a company's department that gives customers help and guidance
   F advice or instructions that someone provides
   G a connection between two people or things
   H work performed for a business purpose

All of our purchases come with live customer service over the phone. If you experience any issues with your computer, let one of our representatives help you. They can guide you through a number of solutions for a variety of problems. Our representatives offer telephone support for most issues. For more advanced problems, our tech support team will research the situation. In most cases, tech support will call back with a solution within three business days. We also keep a record of your account. That way, representatives know exactly which hardware you are calling about. They can also view your previous requests for service.

We understand that our representatives are the link between our company and customers. We believe our customers deserve excellent service. We are committed to addressing inquiries quickly and professionally.

Make the smart decision and buy your new computer from Tech Unlimited Computer Dealers.

We process all orders in just two business days.
4 Read the sentences and choose the correct words or phrases.

1 A representative’s responsibility is to request/process orders correctly.
2 A customer with a question can make an issue/inquiry with customer service representatives.
3 Customers often ask representatives for help making accounts/decisions about products.
4 Tech support representatives have to research/guide customers through solutions.

5 Listen and read the webpage again. What kind of support does the company offer?

Listening

6 Listen to a conversation between a representative and a customer. Mark the following statements as true (T) or false (F).

1 ___ The woman reached the wrong department.
2 ___ The woman would like to cancel an order.
3 ___ The man adjusted the woman’s order.

7 Listen again and complete the conversation.

Representative: Hello. You’ve 1 ______ ______. How can I assist you today?
Customer: I have a couple questions. I’m not sure if I called the 2 ______ ______.
Representative: That’s not a problem. What can I do for you?
Customer: Well, I have a question about my account. I also want to place 3 ______ ______.
Representative: Don’t worry, I can help you with both of those. Let’s start with the question about 4 ______ ______.
Customer: Okay. When I look at my order history online, I don’t see my latest order. I’m worried that it didn’t get 5 ______ ______.
Representative: 6 ______ ______ did you place the order?
Customer: I placed the order yesterday.

Speaking

8 With a partner, act out the roles below based on Task 7. Then switch roles.

USE LANGUAGE SUCH AS:

How can I help you?
I have a question about ...
Don’t worry ...

Student A: You are a representative. Talk to Student B about:
- problems he or she is having with an account
- what you can do to help
- your recommendation

Student B: You are a customer. Talk to Student A about questions you have about your account.

Writing

9 Use the webpage and the conversation from Task 8 to fill out the notes on a customer’s account.

Account #: 004995-234

Customer: ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ ______ 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Photography is harder than it looks.

Good photographers need practice. Here are some tips for dealing with common problems.

Problem: I’m trying to shoot a moving subject. The photographs are blurry and I can’t see the details.

Solution: Your exposure is probably taking too long. Try a camera with a shorter shutter speed.

Problem: My subject isn’t moving, but my photographs are blurry.

Solution: You might need to focus your lens. Make small adjustments until the image looks right. If that doesn’t work, try using a tripod. It will help you keep the camera steady.

Problem: My night-time pictures are too dark.

Solution: To take a good night-time picture, you need light. Use a camera with a flash.

Problem: My local camera store closed down. Where can I turn my negatives into photographs?

Solution: Learn to develop your own film. This is more satisfying than taking it to a store, anyway.

Vocabulary

3 Write a word that is similar in meaning to the underlined part.

1. The photographer needs to take a picture of the new city hall for the newspaper article.
   s _ _ _ t

2. The material that stores images was damaged, so the photographs were ruined. _ _ _ m

3. If the piece of curved glass is dirty, the pictures will not look right. _ e _ _

4. The new device for taking pictures is much more advanced than the old one. _ a _ e _ a

5. The artist studied the act of creating pictures with a camera. _ o t _ g _ _ h _

6. The magazine hired a new person who takes pictures. p _ _ _ g _ a _ _ e _

7. The proper process of allowing light into a camera helps a photographer achieve the desired effect. e _ _ o s _ _ _
Writing

Read the sentence pairs. Choose which word or phrase best fits each blank.

1 focused / developed
   A The photographer ____________ the camera before he took the photograph.
   B The photographer ____________ the film into photographs.

2 shutter speed / negative
   A The ____________ shows the image with the colors reversed.
   B Adjust the ____________ so the picture won’t be so blurry.

3 flash / tripod
   A To keep the camera steady, use a ____________.
   B To add more light to the subject, use a ____________.

Listen and read the webpage again. How can a photographer take a clear picture of a moving subject?

Listening

Listen to a conversation between a photographer and an assistant. Choose the correct answers.

1 What is the purpose of the conversation?
   A to identify an error while developing negatives
   B to choose an easier photography subject
   C to determine why a batch of photographs came out badly
   D to explain the need for a flash on the next project

2 What does the woman plan to do next on the next project?
   A shoot another type of subject
   B use the camera’s flash
   C develop the negatives differently
   D use a faster shutter speed

Listen again and complete the conversation.

Photographer: Let me take a look. Yeah, they’re 1 ____________.
Assistant: What do you think happened? Did I 2 ____________ incorrectly?
Photographer: No, I don’t think it was your fault. I bet I just used a 3 ____________.
Assistant: That could make the pictures blurry?
Photographer: Oh, definitely. Especially since my 4 ____________.
Assistant: I see. Would it help to 5 ____________ next time?
Photographer: Not in 6 ____________. There was plenty of sunlight out there.

Speaking

With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

They didn’t come out ...
I bet I just ...
Would it help to ...?

Student A: You are a photographer. Talk to Student B about:
   • a problem with a batch of photographs
   • the cause of the problem
   • what you will do differently next time

Student B: You are an assistant. Talk to Student A about a problem with a batch of photographs.

Writing

Use the conversation from Task 8 and the webpage to complete the project reshoot request.

Northwestern Images
Request to Reshoot Form

What was the problem with the original photographs?

__________________________________________________________

How will you avoid this problem again?

__________________________________________________________

__________________________________________________________

__________________________________________________________
Cloud computing is a new approach to software. It offers benefits to businesses and customers alike. In a cloud system, resources and products are hosted in a central location. Businesses either host the system on their own network servers or hire a company to manage the resources. Customers can access the product from anywhere over a standard Internet connection.

Typically customers who access these public clouds interact only with a system’s front end software. They no longer deal with the more complex back end implementation. Because many customers use a single service, the costs are shared between them. Customers pay a metered fee, which covers only what they use. As a result, cloud computing is usually less expensive for users. Businesses may also want to implement internal cloud systems. They can establish private clouds exclusively for their employees. Community clouds, which share resources with other users, are another option. They may even build hybrid cloud systems to permit complex interactions across group boundaries.

Businesses will conclude that their investment in cloud computing is a good one. Cloud services are designed to be flexible and long lasting. The scalability and elasticity of cloud computing makes it the right choice for large or small businesses.

Reading

2 Read the magazine article. Then, choose the correct answers.

1 What is the main idea of the article?
A to describe the benefits of cloud computing
B to explain how cloud computing developed
C to compare cloud computing providers
D to recommend a cloud computing service

2 Why are customer costs lower with cloud computing?
A Networks are faster.
B Cloud services are shared.
C There is less maintenance.
D Cloud systems are more flexible.

3 Which is NOT a benefit of cloud computing?
A scalability
B metered fees
C simple modification
D guaranteed access

Get ready!

1 Before you read the passage, talk about these questions.

1 What kind of cloud computer services can you name? What makes them cloud services?
2 What is the difference between a document created on the Internet and one on your computer?
Vocabulary

3 Match the words or phrases (1-6) with the definitions (A-F).

1 ___ public cloud  4 ___ back end
2 ___ community cloud  5 ___ elasticity
3 ___ cloud computing  6 ___ hybrid cloud

A a shared computer service  
B a cloud accessible to customers  
C a cloud for many kinds of groups  
D the part of a program not seen by users  
E the ability to be easily modified  
F a cloud shared by many businesses

4 Choose the sentence that uses the underlined part correctly.

1 A A metered fee charges only for the services used.
   B Community clouds are the least-accessible cloud type.

2 A If a system has scalability, it can be altered for large or small users.
   B A software program with elasticity cannot be adapted to different systems.

3 A People use cloud computing so they can focus on back end implementation.
   B A front end program is what users access.

4 A A private cloud is designed for only one group.
   B Programs in the public cloud are designed for employees of a specific company.

5 Listen and read the magazine article again. Where are cloud computing systems hosted?

Listening

6 Listen to a conversation between an IT employee and a co-worker. Mark the following statements as true (T) or false (F).

1 ___ Cloud software must be downloaded.
2 ___ The woman’s e-mail program is on her computer.
3 ___ The man prefers web-based e-mail.

Speaking

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

Can you help me out with ...?
How is it different from ...?
You can access your ...

Student A: You are an office employee. Talk to Student B about:
- cloud computing software
- how it differs from desktop software
- where cloud data is saved

Writing

9 Use the magazine article and the conversation from Task 8 to complete a report about cloud computing. Include: the difference between a public cloud and a private cloud, metered fees, and front end programs.
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4 Work Hours

Get ready!

1 Before you read the passage, talk about these questions.
   1. What are some typical working shifts for cab drivers?
   2. Why are breaks important for a cab driver?

Reading

2 Read the employee guide from a cab company. Then, mark the following statements as true (T) or false (F).
   1. The cab company is busiest in the morning.
   2. Part-time employees choose shifts after full-time employees.
   3. Employees are allowed to work a 15-hour shift.

Vocabulary

3 Match the words or phrases (1-7) with the definitions (A-G).
   1. shift
   2. daytime
   3. morning
   4. weekend
   5. full-time
   6. minimum
   7. graveyard shift

A. working for a period during the night
B. occurring early in the day
C. the lowest amount of something that is allowed
D. a set time when someone works
E. occurring while the sun is out
F. occurring on Saturday and Sunday
G. working a standard number of hours

Busy B's Cabs: Employee Guide

Working Your Assigned Shift

We know that most drivers prefer morning and daytime shifts. However, our busiest time is later in the day. This means some employees will work the evening and graveyard shifts. We will accommodate special requests whenever possible.

We let full-time employees choose their shifts first. You will probably get a weekend shift if you are a part-time employee.

You may work longer than your assigned shift. However, please remember to get enough rest. Company policy allows you to work a maximum of 14 hours in a 24-hour period. Then, you must take a break for a minimum of ten hours.
4 Read the sentences and choose the correct words or phrases.
1 The driver worked the morning/evening shift so she could attend school earlier in the day.
2 Employees are not allowed to work for an entire 24-hour graveyard shift/period.
3 The driver took a shift/break to eat his lunch.
4 Drivers are not allowed to work more than the minimum/maximum number of hours.
5 An employee who works one day per week is considered part-time/full-time.

5 Listen and read the employee guide from a cab company again. What can an employee do if he or she needs to work a particular shift?

Listening
6 Listen to a conversation between two cab drivers. Choose the correct answers.
1 What is the main idea of the conversation?
   A why the woman cannot work her shift
   B what time a particular shift starts
   C which shift is the most popular
   D whether the man will work the woman's shift

2 What is the man's concern about working the evening shift?
   A It is later in the day than his usual shift.
   B It would require him to work on his day off.
   C It is more stressful than the graveyard shift.
   D It would require him to work more than the maximum number of hours allowed.

7 Listen again and complete the conversation.

Cab Driver 1: Hey, Lou. Are you working on Wednesday?
Cab Driver 2: I work the 1 ______ _______ that night. Why do you ask?
Cab Driver 1: I need 2 ______ _______ my evening shift. Do you think you could help me out?
Cab Driver 2: I don’t know. I can’t work both shifts. That’s more than the 3 ______ of fourteen hours.
Cab Driver 1: Oh, right. How about 4 ______ _______ the graveyard shift?
Cab Driver 2: I guess that’ll work. Then I just work 5 _______.
Cab Driver 1: Great! I'll tell the dispatcher 6 ______ _______ in the schedule.

Speaking
8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:
Are you working ...?
I can't work ...
How about if ...?

Student A: You are a cab driver. Talk to Student B about:
• your shift
• his or her shift
• changing shifts

Student B: You are a cab driver. Talk to Student A about changing shifts.

Writing
9 Use the employee guide from Busy B's Cabs and the conversation from Task 8 to fill out the shift change request form.

Busy B's Cabs Shift Change Request

Employee requesting change: 
____________________________________________________
Your current shift: ____________________________________

Please describe the change you want to make:
____________________________________________________
____________________________________________________
____________________________________________________

Employee requesting change: 
____________________________________________________
Your current shift: ____________________________________

Please describe the change you want to make:
____________________________________________________
____________________________________________________
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4 Types of Intersections

Get ready!

1. Before you read the passage, talk about these questions.
   1. What are some common types of intersections?
   2. What types of intersections do not require full stops?

Understanding Intersections

It's important to understand the different types of intersections. Intersections can be grouped into two main categories. The first category is intersections that require vehicles to come to a full stop. These include 4-ways, T-junctions, and box junctions. The second type of intersection allows traffic to flow without stopping. This group includes roundabouts, traffic circles, continuous flow intersections, and jughandles. At any type of intersection, you should know the regulations that apply. For example, it's important to know which vehicle has the right of way. This changes by nation and region. Likewise, check how to enter a turn lane and whether or not U-turns are permitted.

Reading

2. Read the chapter. Then, choose the correct answers.

   1. What is the purpose of the passage?
      A. to describe the safety features of intersection types
      B. to give the pros and cons of full stop intersections
      C. to list different types of intersections
      D. to explain right of way in different intersections

   2. Which intersection requires a driver to stop?
      A. roundabout
      B. T-junction
      C. traffic circle
      D. jughandle

   3. Which of the following does NOT change by region or nation?
      A. how to enter turn lanes
      B. whether U-turns are allowed
      C. if box junctions require stops
      D. which vehicle has the right of way

Vocabulary

3. Match the words or phrases (1-7) with the definitions (A-G).

   1. ___ roundabout
      2. ___ traffic circle
      3. ___ jughandle
      4. ___ T-junction
      5. ___ box junction
      6. ___ 4-way
      7. ___ continuous flow

         A. an intersection where one road ends at a right angle
         B. an intersection where vehicles follow a gradual bend
         C. an indirect route over an intersection
         D. an intersection that contains yellow crosshatching
         E. a road that eliminates left turns at intersections by leading drivers to another turn location
         F. an intersection where traffic coming from all four directions must stop
         G. a circular area at an intersection that allows for vehicles to pass between two roads
4 Fill in the blanks with the correct words or phrases from the word bank.

**Word Bank**

intersection  the right of way
U-turn  turn lane

1 At the next __________, take a left.
2 At a 4-way intersection, the vehicle on the right has __________.
3 It’s illegal to make a(n) __________ on this road.
4 This street has a(n) __________ for both left turns as well as right turns.

5 Listen and read the chapter again. What are the two main types of intersections?

**Listening**

6 Listen to a conversation between a city planner and a construction manager. Mark the following statements as true (T) or false (F).

1 __ The design calls for a T-junction at 10th Street and Route 9.
2 __ A roundabout will not fit in the area.
3 __ The man suggests using a jughandle.

7 Listen again and complete the conversation.

**Planner:** Ms. Reed, I have an idea for the 1 _______ 10th Street and Route 9.

**Manager:** Sure, James. What is it?

**Planner:** Well, the plan 2 _______ a four-way stop.

**Manager:** Yes, that’s correct.

**Planner:** I think that will 3 _______ traffic.

**Manager:** It will. But there’s no room for a 4 _______ there.

**Planner:** I know. But I think we could fit a 5 _______.

**Manager:** You know, that’s a good idea. Let’s 6 _______ _______ _______ at the plans.

**Speaking**

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

**USE LANGUAGE SUCH AS:**

- I have an idea for ...
- I think that will ...
- We could fit a ...

**Student A:** You are a city planner. Talk to Student B about:
- a planned intersection
- the current plan
- a change to the plan

**Student B:** You are a project manager. Talk to Student A about an intersection.

**Writing**

9 Use the conversation from Task 8 to complete the construction manager’s email.

To: __________________________

From: __________________________

Subject: __________________________

Dear __________,

The Route 9 plan calls for a _______ intersection. I think this will _______. A _______ will not fit. Instead, I suggest we use _______. Let me know what you think.

Sincerely,

_______
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2 Types of Menus

Get ready!
1 Before you read the passage, talk about these questions.

   1 Why do restaurants have menus?
   2 What are some different types of menus?

Reading
2 Read the webpage. Then, mark the following statements as true (T) or false (F).

   1 ___ The website is advertising a restaurant’s different menus.
   2 ___ Specialty menus, such as children’s menus, are available.
   3 ___ Menus can be specially designed or based on a template.

Vocabulary
3 Write a word or phrase that is similar in meaning to the underlined part.

   1 The restaurant had a menu focusing on traditional meals associated with a specific kind of cuisine.   ___ t _ n _ i _ ___ e _ u
   2 The man looked at the list of dishes that the restaurant was able to prepare for customers. m _ n _
   3 The restaurant introduced a menu that altered daily for a specific time period, that repeats.   _ _ c l _ me _ _
   4 The customers ordered from the menu that is used daily or during a meal period. f _ _ e _ en _

4 Fill in the blanks with the correct phrases from the word bank.

   1 The hotel guest hung the room service __________________ outside her hotel room.
   2 The customers asked for a __________________ as they wanted to order dessert.
   3 The man liked the idea of breakfast at night, so he ordered from the __________________.
   4 We arrived late for the lunch __________________, so we used the dinner menu.
   5 The conference attendees could select between a few preset items on the __________________.
   6 The six-year old girl enjoyed the puzzles and games on the __________________.

We create print designs for a variety of businesses, including restaurants. Choose from several menu templates, or let us custom design one for you. Just provide us with a list of menu items for meal periods. We’ll create the perfect fixed menus or cycle menus for your eating establishment.

If you need specialty menus, look no further. We create children’s menus that are so entertaining, adults want them, too. Ethnic menus are no problem. We can design them in English and the ethnic language of your choice. Does your diner offer hamburgers for breakfast and pancakes for dinner? We can devise a casual California menu for you.

Powerful Print Designs also creates elegant banquet menus for hotels, caterers, and restaurants. We’ll even customize designs for special occasions like weddings or birthdays.

We also offer door-knob menus for hotels that offer room service.

Click here to see some of our great menu designs.
Listen and read the webpage again. What large event menus does the print shop handle?

Listening

Listen to a conversation between two restaurant owners. Choose the correct answers.

1 Why were the customers disappointed?
   A because the pancakes did not taste good
   B because the kitchen ran out of bacon
   C because the menu did not have enough dishes
   D because they wanted burgers for breakfast

2 What will the man most likely do next?
   A create a specialty burger menu
   B remove the breakfast menu
   C switch to a California menu
   D print out a new fixed menu

Speaking

With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

Oh, I don’t mean ...
That might not be ...
I bet ...

Student A: You are a restaurant co-owner. Talk to Student B about:
   • a menu change
   • disappointed customers
   • childhood memories

Student B: You are also a restaurant co-owner. Talk to Student A about the menu.

Writing

Use the conversation from Task 8 to fill out a notice explaining the menu change to the restaurant staff.

Notice

Attention Staff:

____________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

New Menu Launch Date: ________________________________

Student A: You are a restaurant co-owner. Talk to Student B about:
   • a menu change
   • disappointed customers
   • childhood memories

Student B: You are also a restaurant co-owner. Talk to Student A about the menu.
Soups

Get ready!

1 Before you read the passage, talk about these questions.
   1 What kinds of soups are made with vegetables?
   2 What kinds of soups are made with meat and seafood?

Reading

2 Read the newspaper article about a soup restaurant. Then, choose the correct answers.

1 What is the main idea of the article?
   A best soups for different occasions
   B ingredients in a particular kind of soup
   C ways to maintain freshness of soups
   D recommendations about various soups

2 Which soup did the reviewer dislike?
   A tomato puree
   B clam chowder
   C lobster bisque
   D beef consommé

3 Which is NOT offered by the restaurant?
   A home-made broth
   B fresh, local ingredients
   C thick, rich clear soups
   D chicken-potato stew

Vocabulary

3 Write a word or phrase that is similar in meaning to the underlined part.

1 The thick soup with pieces of meat and vegetables is very filling. s __ _

2 The restaurant specializes in foods made by heating ingredients in liquid. o ___ o __

3 The last step in making a consommé is the process of removing solids and impurities. l a _ _ _ c n

4 The chef created a new recipe for a soup with the solids strained out. _ _ r o _

5 The restaurant makes its liquid bases for soups in-house. t h s

6 The customer prefers soups made with a mixture of solids. _ h k s _ _ s
4 Place the words or phrases from the word bank under the correct headings.

**Word Bank**

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5 Listen and read the newspaper article about a soup restaurant again. What did the reviewer like about both the chowder and the bisque?

**Speaking**

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

**USE LANGUAGE SUCH AS:**

- How do you like ...?
- It's too ... for my taste.
- I'd recommend ... 

**Student A:** You are a restaurant server. Talk to Student B about:
- a problem with soup
- why he or she doesn't like the soup
- your recommendations

**Student B:** You are a customer. Talk to Student A about a problem with your soup.

**Writing**

9 Use the newspaper article about a soup restaurant and the conversation from Task 8 to write a customer satisfaction report. Include:
- a product that a customer ordered, why the customer was not satisfied, and actions taken to resolve the problem.

**Server:** Would you prefer the chicken-potato stew instead? It's 1 _______ _______ than this one.

**Customer:** No, that sounds too heavy. I'd rather have something a little lighter, but still 2 _______ _______ _______.

**Server:** If that's what you're looking for, I'd recommend the 3 _______ _______.

**Customer:** No, I 4 _______ _______. Do you have something with vegetables?

**Server:** Let's see. Oh, of course. We have 5 _______ _______ _______ broccoli cream soup.

**Customer:** That 6 _______ _______. Bring me that instead.
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Cloud computing: SaaS and PaaS

Get ready!
1 Before you read the passage, talk about these questions.
   1. What are some ways that software is distributed?
   2. How do users pay for cloud computing services?

14

Reading
2 Read the journal article. Then, choose the correct answers.

1. What is the main idea of the article?
   A. The challenges of developing cloud computing software
   B. Recent changes in cloud computing technology
   C. The history of the development of cloud computing
   D. An overview of cloud computing models

2. What is true of SaaS users?
   A. They access software that is provided by a network host.
   B. They rent software from a cloud computing provider.
   C. They purchase software from the developer.
   D. They need a specialized web browser.

3. Which of the following is NOT required for users to access a cloud?
   A. web browser
   B. software license
   C. a fee
   D. a large bandwidth

Vocabulary
3 Match the words (1-8) with the definitions (A-H).

1. ___ cloud computing 6. ___ online
2. ___ distribution 7. ___ bandwidth
3. ___ software license 8. ___ software on
4. ___ computer platform demand
5. ___ browser

A. a software system that is used to gain access to information on the internet
B. being connected to the internet
C. a measure of a computer system’s capacity to send and receive information
D. a combination of hardware and system software that allows an application to run
E. a model in which software is rented from a provider
F. a legal agreement which grants the buyer of a program the right to use it
G. the action of supplying a product or service
H. a model in which computing is delivered as a service rather than as a product
4 Choose the sentence that uses the underlined part correctly.

1 A In PaaS, computer software can be rented.
   B A computer must be equipped with SaaS to access a web browser.

2 A The company uses a pay-as-you-go system, requiring a set monthly fee.
   B The customer pays a metered fee, so he only pays for the services he uses.

3 A To access data storage, a computer must have software on demand.
   B Some software developers only supply software as a product.

5 Listen and read the journal article again. What must a computer have in order to access the cloud?

Listening

6 Listen to a conversation between a manager and an engineer. Mark the following statements as true (T) or false (F).

1 ___ The man had a negative experience with cloud computing
2 ___ The company recently requested a new software license.
3 ___ The woman recommends SaaS.

7 Listen again and complete the conversation.

Manager: Hey, Tonya. I’m thinking about upgrading the company’s network, and I was wondering what __________ __________ __________ __________.

Engineer: SaaS is a networking model.
Manager: I don’t know much about computers. What does that mean?
Engineer: Let me explain the basics. SaaS stands for Software as a Service. It is a model that __________ __________ __________ __________.
Manager: What’s cloud computing?
Engineer: It’s a __________ __________ __________ __________ services.
Manager: So it’s a way to access information?
Engineer: Yes, partly. Clients purchase the right to a __________ __________. Then they share that software with their users.
Manager: Okay. How __________ __________ __________ for that, though?
Engineer: Clients typically pay regular fees. Some companies charge users metered fees, while others __________ __________ “ __________ “ __________. It just depends on your needs.

Speaking

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

USE LANGUAGE SUCH AS:

I’m thinking of ...
What are your thoughts on ...
Some prefer ...

Student A: You are a manager.
Talk to Student B about:
• elements of cloud computing
• how the services work
• his or her recommendation

Student B: You are an engineer.
Talk to Student A about elements of cloud computing.

Writing

9 Use the journal article and conversation from Task 8 to write a review of SaaS and PaaS. Include: user options for accessing information, how users can pay for services, and what computer requirements users need to access the cloud.
Logistics

Virginia Evans
Jenny Dooley
Donald Buchannan
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Vocabulary

Match the words or phrases (1-7) with the definitions (A-G).

1. __ live storage
2. __ simple storage
3. __ complex staging
4. __ high-density storage
5. __ holding cost
6. __ handling cost
7. __ occupancy cost

A. a system that allows easy access for putting away items, picking, or retrieval
B. the price that is paid to put an item in storage and to retrieve it
C. the cost of using a space
D. a system that is designed to reduce space per storage position
E. the price that is paid to keep a stock of goods in storage
F. the process of storing items on a conveyor belt or live rollers
G. a mechanical system for short-term accumulation, presentation, and picking

Reading

2. Read the textbook excerpt. Then, choose the correct answers.

1. What is the purpose of the excerpt?
   A. to list examples of mechanical equipment
   B. to explain how to minimize space during storage
   C. to describe handling methods and their costs
   D. to contrast simple storage with complex staging

2. Which of the following is NOT a storage cost?
   A. handling
   B. holding
   C. occupancy
   D. accumulation

3. Why do logisticians sometimes use live storage?
   A. to permit easier accumulation of materials
   B. to include versatility and expandability
   C. to use more vertical space during storage
   D. to allow for larger aisle allowances

Storage Analysis

Storage equipment is used to hold and handle materials between operations. There are four handling methods. Each requires different equipment:

- **Simple storage** allows easy access for put-away, picking, and retrieval. Yet, it requires more space per unit. This is due to larger aisle allowances and less vertical space. Simple storage uses bin shelving and pallet racking.
- **Complex staging** is good for temporary accumulation, presentation, or picking. It is good for low-flow materials with large inventories. Sometimes, it is mechanized for speed. Complex staging often uses shuttle systems.
- **High-density storage** minimizes space by using more vertical space. However, it is slower and costlier than other methods. Bulk floor stacking is an example of high-density storage.
- **Live storage** uses conveyor belts and live rollers. Its purpose is to allow easier accumulation.

All storage methods require handling costs. Holding costs and occupancy costs, including housekeeping, may also be incurred. Logisticians also need to consider intangibles. These include needs for expandability and versatility.
4 Fill in the blanks with the correct words or phrases from the word bank.

**Word Bank**
- intangibles
- allowances
- versatility
- accumulation
- housekeeping
- expandability

1. A good storage method should include both adaptability and ____________________.
2. Unlike simple storage, complex staging allows for temporary ____________________.
3. The storage analysis guide considers costs and ____________________, such as safety.
4. High-density storage lowers aisle ____________________.
5. ____________________ allows for an increase in inventory.
6. Cleanliness and organization are key aspects of ____________________.

5 Use the conversation in Task 8 to complete the chart.

---

**Speaking**
8 With a partner, act out the roles below based on Task 7. Then, switch roles.

**USE LANGUAGE SUCH AS:**
- This is the price of ...
- That basically means that ...
- Such as the needs for ...

**Student A:** You are a professor. Talk to Student B about:
- storage costs
- how to describe each cost
- intangibles

**Student B:** You are a student. Talk to Student A about storage costs and intangibles.

---

**Writing**
9 Use the conversation in Task 8 to complete the chart.

---

**Storage Costs**

Handling Costs: ____________________

Holding Costs: ____________________

Occupancy Costs: ____________________
accumulation [N-UNCOUNT-U14] Accumulation is the process of increasing in amount or quantity, little by little.

allowance [N-COUNT-U14] An allowance is the share or portion of something that is allowed or permitted.

arm's reach [N-COUNT-U12] Arm's reach is the distance that can be covered within the range of a person's arm movement without moving the rest of the body.

arrival rate [N-COUNT-U9] An arrival rate is the average number of shipments that are delivered within a given time period.

assembly line [N-COUNT-U2] An assembly line is a system of machines, workers, and equipment that allow a product under construction to go from one operation to another, down a line, until the product is completely assembled.

automated storage and retrieval storage (AS/RS) [N-UNCOUNT-U13] automated storage and retrieval storage AS/RS is a computer-controlled system that automatically places and takes items from specific storage locations.

automation [N-UNCOUNT-U2] Automation is the automatic control of a device, process, or system, using mechanical or electronic tools which take the place of human labor.

basket [N-COUNT-U15] A basket is a lightweight wooden container.

bin [N-COUNT-U15] A bin is a box, or some other lidded container, used for storage.

bottleneck [N-COUNT-U2] A bottleneck is something that slows down or stops the progress or flow of materials.

box [N-COUNT-U15] A box is a stiff, rectangular container, usually made of cardboard, that is used for shipping and storage.

bulk [ADJ-U12] if items are bulk, they are massed together in a large group or amount.

by hand [ADJ-U12] If a task is completed by hand, it is done without the aid of mechanical tools.

Cabinet [N-COUNT-U15] A cabinet is a storage case with doors and shelves.

calendar [N-COUNT-U9] A calendar is a table, organized to cover one year, that shows the days of the week, the dates on which those days fall, and how many days are within each month.

capacity [N-COUNT-U12] Capacity is the maximum amount or number that a unit can hold.

cargo [N-COUNT-U7] Cargo includes all freight that is transferred by motor vehicle, ship, or train.

cart [N-COUNT-U15] A cart is a small-wheeled vehicle used for moving materials from one part of a space to another.

carton [N-COUNT-U15] A carton is a box or container, usually made of ridged cardboard, which is used for storage.

cautions [N-UNCOUNT-U3] Caution is the practice of taking care to avoid risk or damage.

central storage [N-UNCOUNT-U13] Central storage is a high-level inventory control system that unites storage items into one, or a few, large areas.

centralized [ADJ-U13] If something is centralized, all activity is focused around a center.

charter [N-COUNT-U7] A charter is a commercial lease contract for an aircraft or other vehicle, used for the transfer of passengers or goods.

chute [N-COUNT-U12] A chute is a sloped channel through which materials travel.

cold chain [N-COUNT-U5] A cold chain is a temperature-controlled supply chain that is used to extend the shelf life of perishable items, such as fruits and vegetables, seafood, frozen foods, chemicals, and pharmaceutical drugs.

combined pick and deliver [N-COUNT-U10] Combined pick and deliver refers to a system where one handler gathers materials from storage and delivers them to the destination.

complex equipment [N-UNCOUNT-U11] Complex equipment is costly to buy and own, but inexpensive to operate because it is largely automated, requiring less in labor costs.

complex handling [N-UNCOUNT-U11] If equipment is complex handling, it is used for short distances and high quantities or intensity.
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