This is the third of four volumes devoted to reading instruction, in a series of materials for teaching English as a second language to adult nursing aide students. The three units included deal with fundamentals in nursing: asepsis, measurement and abbreviation, and emergencies. Each unit consists of readings interspersed with close passages, comprehension questions, vocabulary exercises, and brief lessons in language usage and basic nursing procedure. Pictorial aids illustrate most portions of each unit. (JB)
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In Unit VI you will read about the importance of cleanliness in the hospital. In Unit VI there are readings about how disease germs are destroyed or controlled in the hospital. You will learn aseptic techniques in your training. It is very important to understand how germs are spread so that you can help to keep them from spreading in the hospital. You will be more aware of the importance of cleanliness in the hospital after you read this unit.

The most important language section of Unit VI is a lesson about English passive sentences. As you continue your studies, you will notice more and more passive sentences. Passive sentences occur often in textbooks and manuals. It is important for you to understand passive sentences because you will see them so often in your reading.
1. When you sneeze or cough, millions of germs get into the air. You will spread germs if you do not cover your nose and mouth when you sneeze and cough.

2. Always cover your mouth and nose when you sneeze or cough. Cover your mouth and nose with a tissue.

3. Then throw the tissue away.

4. Wash your hands after you sneeze or cough.
(SHORT READINGS)

1. When you sneeze or cough, millions of germs get into the air. You will spread germs if you do not cover your nose and mouth when you sneeze and cough.

2. Always cover your mouth and nose when you sneeze or cough. Cover your mouth and nose with a tissue.

3. Then throw the tissue away.

4. Wash your hands after you sneeze or cough.
CLEANLINESS IN THE HOSPITAL IS ESSENTIAL.

Write your answers in complete sentences.

1. This nursing aide is going into the bathroom: the men's room.

2. What is he doing now?

3. Are his hands clean or dirty?
EVEN NURSING AIDES CAN SPREAD GERMS

1. Where did this nursing aide go?
   She did not wash her hands.

2. Now she is bringing water to the patient.

3. The nursing aide is touching the water glass. Are her hands clean or dirty?

4. Now the germs from the nursing aide's hands are on the glass.

5. Who's touching the glass now?

6. What is the patient doing?

7. Maybe the patient will get from the glass.
CLEANLINESS IN THE HOSPITAL IS ESSENTIAL.

1. This nursing aide is going into the bathroom. He is going into the men's room.

2. What is he doing now? He's washing his hands.

3. Are his hands clean or dirty? His hands are clean.

EVEN NURSING AIDES CAN SPREAD GERMS

1. Where did this nursing aide go? She went into the bathroom. She did not wash her hands.

2. Now she is bringing water to the patient.

3. The nursing aide is touching the water glass. Are her hands clean or dirty? Her hands are dirty.

4. Now the germs from the nursing aide's hands are on the glass.

5. Who's touching the glass now? The patient is touching the glass now.

6. What is the patient doing? The patient is drinking the water.

7. Maybe the patient will get germs from the glass.
TIMELY TIPS ON HEALTH AND SAFETY
JOIN THE CLEAN HANDS CLUB

Washing your hands is something you usually do with little thought. You may do it to look better or feel cleaner or because it is considered good manners. But washing your hands to prevent disease is the best reason for doing it.

Hands pick up germs easily. Almost anything they touch can be a source of infection. And when you put your fingers into your eyes or mouth, you invite disease-causing bacteria into your body. When you have dirty hands and touch other persons, you may be exposing them to infection, too.

WHEN TO WASH

Washing your hands should be a matter of routine after going to the bathroom or before eating. Homemakers should always wash their hands before preparing food. All persons who are food handlers by occupation must, of course, keep their hands clean when they are at the job.

One such person with a communicable disease could spread it to many others because of the large quantity of food and utensils he handles every day.

BEWARE

At certain times, clean hands are a "must." Be particularly careful when you have a cold or other upper respiratory infection. One study showed that a handkerchief used more than once became a source of millions of organisms.

When you care for a person with a communicable disease such as measles or the flu, wash your hands before entering and after leaving the patient's room. This helps in preventing the spread of illness.
TOP COMBINATION

For best results, the time-tested ingredients are still best—soap and running hot water. Soap makes water ‘wetter,’ permitting closer contact between skin and water. Unless your occupation or a skin problem requires a special cleanser, ordinary soap is adequate. Work it into all parts of your skin, with a brush if necessary. Rinse the soap and dirt away, and dry well with a clean towel.

START EARLY

The habit of hand washing, started early in life, pays big dividends in the prevention of disease. As soon as they are able, children should be taught, by their parents’ example, that hand washing is a very good idea.

COMPREHENSION

1. What is the best reason to wash your hands?
   a. to look better
   b. to feel cleaner
   c. washing your hands is good manners.
   d. to prevent disease

2. What does a “matter of routine” mean?
   a. after going to the bathroom or before eating
   b. a habit
   c. washing your hands
   d. your job

3. When should homemakers always wash their hands?
   a. before they handle food
   b. after eating
   c. in the bathroom
   d. before they go to work

4. Which of the following are “food handlers by occupation.”
   a. cooks
   b. waiters
   c. children
   d. waitresses
5. Read the fourth paragraph again. What does "one such person" mean?
   a. anyone
   b. a person with clean hands
   c. no one
   d. a food handler
   e. anyone who is a food handler by occupation and
      has a communicable disease
6. What is a communicable disease?
   a. any illness
   b. an illness that can be spread to other people
   c. an injury
   d. an illness that can be cured
7. In the fourth paragraph, last line, what does "he" mean?
   a. any man
   b. any man or woman
   c. any man who is a food handler by occupation and
      has a communicable disease
   d. any man or woman who is a food handler by occupation
      and has a communicable disease
8. What does "beware" mean?
   a. be careful
   b. be on time
   c. clean hands are a "must"
   d. wash your hands
9. What are two examples of communicable diseases in this reading?
   a. organisms and germs
   b. illness and disease
   c. a cold and organisms
   d. measles and flu
10. Which occupations might need a special cleanser for hand
    washing?
    a. auto-body repairman
    b. surgeon
    c. nursing aide who works in surgery
    d. gardener
11. When should children be taught to wash their hands?
   a. as soon as the children are able to wash their hands
   b. as soon as the parents can wash the children's hands
   c. as soon as the children can eat
   d. as soon as the parents can set a good example

12. According to this reading, "Children should be taught that hand washing is a very good idea." How do the parents teach this idea?
   a. The parents send their children to school.
   b. The parents always wash their own hands when they should.
   c. The parents make their children wash their own hands.
   d. The parents take their children to the doctor.

[VOCABULARY]

1. Read sentences a & b. Underline the words in each sentence that mean habit.
   a. Washing your hands is something you usually do with little thought.
   b. Washing your hands should be a matter of routine after going to the bathroom or before eating.

2. Define the following terms:
   - housewife
   - housekeeper
   - housecleaner
   - homemaker

Which of the terms above refer to occupations that might be advertised in a newspaper?
Which term means the same as homemaker?
3. Read the following sentence and answer the questions. "All persons who are food handlers by occupation must keep their hands clean."

What do the people in the sentence above do for a living?

List three examples of food handlers.

How do they make a living?

What is their occupation?

Study the following dialogs. These are questions that people ask often. Notice that B's answer is the same to each question.

A: What do you do for a living?
B: I'm a nursing aide at Pilikia Nui Hospital.

A: How do you make a living?
B: I'm a nursing aide at Pilikia Nui Hospital.

A: What's your occupation?
B: I'm a nursing aide at Pilikia Nui Hospital.

4. Define beware.

You might see beware on signs.

In Hawaii you will see Kapu on signs. Kapu means stay out, no trespassing.
Often there are clues in a reading to help you understand new vocabulary. Sometimes a writer will define new words. If you are an alert reader, many times you can figure out the meaning of new vocabulary without using a dictionary. Authors use certain words to introduce examples or definitions. Authors use words like for example, such as and that is. These words are important because the author is going to give you more information. The author is going to help you understand the vocabulary in the sentence.

Read the following sentences. Write a definition for the underlined words. Circle the context clues in each sentence. Remember: look for the context clues. Sometimes a definition is right there in the sentence.

(Tri)
1. When you care for a person with a communicable disease such as measles or the flu, wash your hands before entering and after leaving the patient's room.

**communicable disease**

NOTE: measles and flu are examples of communicable diseases. The clue such as tells you an example is coming. It also means there are more examples than are listed.

2. Service jobs, such as jobs in the health field, police work and tourism, are available in many cities.

**service jobs**

3. Muscles can **contract**; that is, they can shorten.

**contract**

4. Some patients are **bed-ridden**; that is, they cannot get out of bed.

**bed-ridden**

5. You have **voluntary muscles** in your body; that is, you have muscles that you can control. For example, there are voluntary muscles in your hand.

**voluntary muscles**
Nursing aides often work in the wards in a hospital. They also work in clinics. An outpatient clinic is part of the hospital. People can see the doctor in the outpatient clinic. They can go home after they see the doctor. Outpatients do not stay in the hospital. People can bring their children to an outpatient clinic. The children might need shots. The children might have colds or serious illnesses. Children can get shots at an outpatient clinic. People can see the doctor at the outpatient clinic.

Nursing aides might work in an outpatient clinic. Nursing aides take TPR's. Nursing aides record TPR's. Nursing aides interview the patients before the patients see the doctor. They might ask the patient what is wrong. They might write down what the patient says and give that information to the doctor.
Nursing aides often work in the wards in a hospital. They also work in outpatient clinics. An outpatient clinic is part of the hospital. People can see the doctor at the outpatient clinic. They can go home after they see the doctor. Outpatients do not stay in the hospital.

People can bring their children to an outpatient clinic. The children might need shots. The children might have colds or more serious illnesses.

Children can get shots at an outpatient clinic. People can see the doctor at the outpatient clinic. Nursing aides might work in an outpatient clinic.

Nursing aides might take TPR's. Nursing aides might record TPR's. Nursing aides might interview the patients before the patients see the doctor. They might ask the patient what is wrong. They might write down what the patient says and give that information to the doctor.
COMPREHENSION

Read the following statements: If the statement is true, according to the reading, put a T by the number. If the statement is false, according to the reading, put an F by the number. (Tr2)

1. Nursing aides work in hospitals.
2. Nursing aides work in outpatient clinics.
3. An outpatient clinic is not part of the hospital.
4. There are no doctors at the outpatient clinic.
5. Outpatients stay in the hospital.
6. Children can get shots at the outpatient clinic.
7. Nursing aides take and record TPR's.
8. Nursing aides might interview the patients in the outpatient clinic.
9. Nursing aides do not talk to the patients.
10. Nursing aides do not talk to the doctor.

Read the pair of sentences below. If both sentences have the same meaning, put a check by the sentence number. (Tr3)

11. The children might have colds.
    Maybe the children have colds.
12. The children need shots.
    The children might need shots.
13. Parents can bring their children to an outpatient clinic. Parents might bring their children to an outpatient clinic.
    Maybe nursing aides work in the outpatient clinic.
15. Maybe nursing aides take TPR's.
    Nursing aides take TPR's.
16. They can write down what the patients say.
    Maybe they can write down what the patients say.

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17. They ask the patient what is wrong. They might ask the patient what is wrong.

18. They give the information to the doctor. They can give the information to the doctor.

19. They might give the information to the doctor. They give the information to the doctor.

20. Maybe she works in the outpatient clinic. She might work in the outpatient clinic.

[INTERVIEW EXERCISES]

1. Write down 3 questions you might ask a patient in an interview at an outpatient clinic.

2. Ask another student your questions. Practice writing down the answers.

[VOCABULARY]

1. to see the doctor - to have an appointment with a doctor; to go to a doctor. John is sick. He is going to see the doctor.

2. a shot - an injection usually in the arm or hip. There is a measles shot for children.

3. to get a shot - to have an injection. The children will get shots at the outpatient clinic.

4. TPR - temperature, pulse and respiration. TPR's = plural. Take his TPR and record it on the chart.
**VACCINATION AND IMMUNIZATION**

An immunization is a vaccination. A vaccination is usually an injection. A vaccination makes you immune to a disease. To be immune means you cannot catch the disease. For example, a vaccination for the measles will prevent you from catching the measles. It makes you immune to the measles.

The polio vaccine is an important vaccination. The polio vaccine is an oral vaccine. Oral means mouth. You swallow the polio vaccine. The vaccine is on a sugar cube. When you eat the sugar cube the vaccine goes into your body. Then you are immune to polio.

It is important for children to have immunizations. Your children need the immunizations listed below.

This is an immunization record for your family. Fill this out for your children.

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**FAMILY IMMUNIZATION RECORD**

Ask your doctor when shots are due. When shots are given, have your doctor enter dates under child's name.

<table>
<thead>
<tr>
<th>SHOTS FOR</th>
<th>CHILD'S NAME</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DIPHTHERIA,</td>
<td>at age 2 mos.*</td>
<td>2 mos. later</td>
<td>2 mos. later</td>
</tr>
<tr>
<td>TETANUS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WHOOPING COUGH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>one vaccine (one shot 2 mos. later)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>each date) can immunize for all three if doctor recommends.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLIO</td>
<td>at age 2 mos.</td>
<td>2 mos. later</td>
<td>2 mos. later</td>
</tr>
<tr>
<td>one oral vaccine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>each date.</td>
<td>12 mos. later</td>
<td>booster 4-6 yrs. old</td>
<td>4-6 yrs old</td>
</tr>
</tbody>
</table>

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**MEASLES**

- triple vaccination after 1 year old
- for all three diseases after 1 year old
- For children already beyond infancy, don't delay. See MD and start series now.

**Mumps**

- for all three diseases after 1 year old

**Rubella**

- German measles (one shot for all three diseases) if doctor recommends.
- No boosters.

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1. According to the immunization record how many shots do children need before they are 7 years old?

2. When should a child have his/her first shot?

3. How many tetanus shots does a child need?

4. A child has a tetanus shot in March at age 2 months. When will he have his next tetanus shot?

5. How old is the child when he has his third tetanus shot?

6. How old is the child when he has his fourth tetanus shot?

7. A booster is an extra shot. A booster helps make sure the child is immune. Which immunizations have boosters?

8. Which vaccination schedules are the same as the tetanus schedule?

9. Does the child have to get three different shots for diphtheria, tetanus, and whooping cough?

10. What is a triple vaccination?

11. What is another name for Rubella?

12. How old does a child have to be to get a measles vaccination?

13. "At age 2 mos." What does * mean on the chart?

14. What does infancy mean? (Try to guess. Don't use a dictionary.)

15. What is an infant? Beyond infancy means the child is not an infant. The child is older than an infant.

16. "See MD and start series now." What does MD mean?

17. What does see MD mean?
VOCABULARY

Write definitions for the terms below.

1. vaccination -
2. immunization -
3. to be immune -
4. a shot -
5. booster -
6. MD -
7. oral -

There are some words that mean numbers. Study the words below.

8. single - one.
   He got a single shot.
   She is single. (She is not married.)

9. double - two (often two things that are alike).

10. twins - two exactly alike, or almost alike.
    Two children born at the same time, who have the same mother
    and father.

11. triple - three (often three things that are alike).

12. triplets - three; three children born at the same time
    who have the same parents.
BACTERIA

There are millions of germs around us. Our hands have many germs on them. We touch many things every day. Everything we touch has germs.

Another name for germs is bacteria. Most bacteria are not harmful to humans. Some bacteria are harmful.

For example, the yeast that makes bread rise is bacteria. Bacteria are in your digestive system. These bacteria help break down food your body doesn't need.

Some bacteria are harmful. Harmful bacteria cause disease and infections.

So there are two kinds of germs—harmless germs or bacteria and harmful germs or bacteria. Harmful germs cause diseases. Harmful germs are disease-causing germs. Harmless germs do not cause disease. Harmless germs are not disease-causing germs. So harmless germs are helpful.
There are millions of germs around us. Our hands have many germs on them. We touch many things every day. Everything we touch has germs.

Another name for germs is bacteria. Most bacteria are not harmful to humans. Some bacteria are helpful. For example, the yeast that makes bread rise is bacteria. Bacteria are in your digestive system. These bacteria help break down food your body does not need.

Some bacteria are harmful. Harmful bacteria cause diseases and infections.

So there are two kinds of germs—harmless germs or bacteria and harmful germs or bacteria. Harmful germs cause diseases. Harmful germs are disease-causing germs. Harmless germs do not cause disease. Harmless germs are not disease-causing germs. Some harmless germs are helpful.
[COMPREHENSION]

1. Name three things that have germs.
2. What is another name for germs?
3. Are most bacteria harmful to humans?
4. Give an example of helpful bacteria.
5. Do we have any helpful bacteria in our bodies? If so, where?
6. What are harmful bacteria called?
7. How many kinds of bacteria are there?
8. What are the kinds of bacteria listed in this reading?
9. Which kind of bacteria cause diseases?
10. Are some harmless germs helpful?
11. Are some harmful germs helpful?
12. What does harmless mean?
13. What does harmful mean?
14. Are disease-causing germs helpful?
15. Are disease-causing germs harmful?

[VOCABULARY]

The following exercises will help you understand the vocabulary in this reading. Read the following information carefully and complete the exercises.

1. Define bacteria.
2. The word bacteria is plural. It means germs. The word bacteria does not have an -s. The word bacteria is from the Latin language. It has the Latin plural -a. The singular for bacteria is bacterium. Many medical terms are from Latin words. Many medical terms end in -um for singular and -a for plural.
What does bacteriology mean?

What does bacteriology mean?

Look at the first four letters of these words: harmful, harmless. What does harm mean?

Look at the underlined part of harmful, harmless. The underlined part is called a suffix. A suffix is an ending that changes the basic word in some way. For example, -s is a suffix. It changes a noun from singular to plural. What are the suffixes that are on harm?

What do harmful bacteria cause?

What do you think harmful means?

Try to write definitions for the following words.

- helpful -
- beautiful -
- careful -
- peaceful -

Do harmless bacteria cause diseases?

What do you think harmless means?

Try to define the following words.

- careless -
- germless -
- weightless -

Note: we cannot always use these suffixes. For example, we do say careless and careful; we do not say weightful or germful.
STERILE THINGS

READING 15:

In the hospital some things are sterile. Sterile things do not have germs. Sterile things have no germs. There are no germs on sterile things. There are no harmless germs on sterile things. There are no germs at all on sterile things.

When we touch sterile things the germs on our hands contaminate the sterile things. Contaminated means to have germs. If you touch sterile things the sterile things are contaminated. They are not sterile.

Some things in the hospital are sterile. These are bandages, n...

thermometers and instruments.
STERILE THINGS

In the hospital some things are sterile. Sterile things do not have germs. Sterile things have no germs. There are no harmful germs on sterile things. There are no harmless germs on sterile things. There are no germs at all on sterile things.

When we touch sterile things the germs on our hands contaminate the sterile things. Contaminated means to have germs. If you touch sterile things, the sterile things are contaminated. They are not sterile.

Some things in the hospital that are sterile are bandages, needles, thermometers and instruments.
1. Is everything sterile in a hospital?
2. Are there harmful germs on sterile things?
3. Are there harmless germs on sterile things?
4. Find two sentences in the first paragraph that tell you what sterile means.
5. What does contaminated mean?
6. If you touch a sterile bandage the bandage is_____
7. If you wash your hands and then you touch a sterile bandage, why is the bandage contaminated?
8. List three things in the hospital that are sterile.
9. List three things in the hospital that are not sterile.
10. List one way sterile things can be contaminated.

[VOCABULARY]

Write definitions for the following terms.

1. sterile -
2. contaminated -
3. harmful germs -
4. harmless germs -
We use *at all* when we want to emphasize the negative idea in a sentence.

1. There are no germs *at all* on sterile things.
2. There are no germs on sterile things *at all*.

Notice that we can write or say sentences 1 and 2 without *at all*. *At all* does not change the meaning of the sentences. It does emphasize the negative—no germs.

**Exercise 1**

Add *at all* to each sentence below. Write the new sentences.

1. Joe doesn't like to work on Saturdays. *He will not work on Saturdays.*
2. Mary doesn't ride the bus. She doesn't drive a car.
3. There are no books in this room. *There aren't any chairs.*

**NOTE 1:** Sometimes people say "Not at all." For example:

A: Does the light bother you?
B: Not at all.
   No, it doesn't.

In B's first choice, "Not at all," there is emphasis on the negative response. B is saying, in a friendly way, that he is sure the light does not bother him. He cannot say, "No at all."

Sometimes you might hear this:

A: Thank you very much for helping me.
B: Not at all.

In this example B is giving a polite, casual response which emphasizes that it was no trouble to help A.

**NOTE 2:** Study the following dialog. Does it look like there is a negative idea in A's question?

A: Do you want anything *at all* for dessert?
B: No, thank you. I'm really full.
Why can A use at all in his question? Is there a negative idea in A's question? Yes, there is a negative idea. A expects B to say no. A does not use a negative in his question like no, don't. When he says "anything at all," he expects B to answer with a negative. Remember we use any and anything with negatives. We use some and something in positive sentences. We cannot use at all with some or something. We cannot say, "Do you want some at all?" (Refer to your SpeakEasy text, Chapter 6 for more information.)

Maybe if we look at what may have happened earlier in the dialog it will help you understand. First, A offers B some cookies. A doesn't know whether B will say yes or no.

A: Do you want some cookies?
B: Oh, no thank you. Everything was delicious.

B indicates he is finished eating. When B says "Everything was delicious," he is complimenting the cook and also saying he is finished eating. Now A asks another question. Now A expects a negative answer from B because B has indicated he is finished eating.

A: Do you want anything at all for dessert?
B: No, thank you. I'm really full.

B could say "yes" here. If he says "yes," he will probably laugh a little and act as though A has convinced him to take something to eat or drink.

A: Do you want anything at all for dessert?
B: Oh, well. Maybe, one small cookie.

Exercise 2

Write B's responses using at all.

1A: Do you have any money?
B: I don't have ________

2A: Do you like to study?
B: I don't like to study ________

3A: Does she want anything?
B: She doesn't ________
4A: Do they like the cereal?
B: They don't like __________.
5A: Does he like to dance?
B: __________.
6A: Do you want to eat?
B: __________.
7A: Did you want to ride the bus?
B: __________.
8A: Do you want anything at all?
B: __________.
9A: Did she earn any money?
B: __________.
10A: Does he like to fight?
ASEPSIS IN THE HOSPITAL

Asepsis is a way of getting rid of disease-causing germs. If something is aseptic, it does not have disease-causing germs on it. In the hospital there are two kinds of asepsis. There is surgical asepsis and there is medical asepsis. Surgical asepsis is a method that keeps germs out of the body. Surgical asepsis is a way of killing all germs and keeping all germs away. Surgical asepsis is used in the hospital. It is used for patients in surgery. When the skin is cut or open, the inner body can be attacked by germs. In surgical asepsis anything that touches a wound must be sterile. Sterile means there are no germs at all.

Germs can get into the body through any opening such as the eyes, ears, and mouth. All natural openings in the body are called orifices. These have protective liquids or mucous membranes to keep germs out of the body. The inner body is protected by the skin. However, if the skin is broken or cut, germs can enter the body easily. Surgical asepsis is used to keep germs out of body openings.

Medical asepsis is a method that destroys or gets rid of harmful germs. It is a method to keep germs from spreading. In the hospital many things must be clean. Clean means all harmful germs are gone. Medical asepsis is a way to keep things clean. Some things that must be clean are glasses, bedding, bedpans, and your hands. Clean things are not sterile. If clean things touch sterile things, the sterile things are contaminated.

Antiseptics and disinfectants are used to get things clean. They are used to get rid of harmful germs. Antiseptics and disinfectants are used to keep germs from spreading. Antiseptics and disinfectants are used in medical asepsis.

Steam and pressure are used to get things sterile. Steam and pressure are used to get rid of all germs. Steam and pressure are used in surgical asepsis.

COMPREHENSION

Multiple Choice: circle the letter of the correct answers. There may be more than one correct answer for some of the sentences.

1. To get rid of disease-causing germs we use
   a. liquids
   b. asepsis
   c. harmful germs
   d. harmless germs
2. An aseptic thermometer does not have
   a. any germs on it.
   b. any numbers on it.
   c. any disease-causing germs.
   d. any harmful germs on it.

3. Medical asepsis is a way to
   a. destroy diseases.
   b. get rid of disease-causing germs.
   c. destroy all germs.
   d. keep germs from spreading.

4. In the hospital when all harmful germs are gone from your hands, your hands are
   a. clean.
   b. sterile.
   c. asepsis.
   d. medical asepsis.

5. When you sterilize instruments in the hospital you use
   a. antiseptics and disinfectants.
   b. steam and pressure.
   c. alcohol.
   d. medicine.

6. When there are no germs at all on a bandage the bandage is
   a. asepsis.
   b. antiseptic.
   c. clean.
   d. sterile.

7. Which one(s) must be clean, but not sterile, in the hospital?
   a. bedpans
   b. instruments
   c. glasses
   d. bedding

8. In the hospital what method is used to keep all germs out of the body?
   a. disinfectant
   b. asepsis
   c. surgical asepsis
   d. medical asepsis
9. The inner body is protected by
   a. orifices.
   b. skin.
   c. medical asepsis.
   d. surgery.

10. Germs can enter the body through
   a. cuts.
   b. orifices.
   c. sores.
   d. your mouth.

**VOCABULARY**

Define the following terms.

1. medical asepsis -
2. surgical asepsis -
3. orifices -
4. antiseptic -
   - anti is a prefix. It goes at the beginning of some words. It means against.
   - septic means dirty.

Put anti on the words or parts of words below and write definitions for the new words.
   a. biotic  
   b. freeze  
   c. war  
   d. toxin (poison)

5. disinfectant; disinfect -
   - dis is a prefix. It means not.

Put dis on the words or parts of words below and write definitions for the new words.
   a. agree  
   b. connect  
   c. honest  
   d. like  
   e. comfort  
   f. appear
It is important for you to understand English passives. Passive sentences appear in many textbooks. Even if you do not use this construction in your speech, it is important for you to understand it in your reading because it appears so often. Study the following examples.

**Sentence 1 is an active sentence.**

1. The elephant broke the plates.

In sentence 1 the elephant is the agent. The elephant is the one doing the action. We know the elephant broke the plates. The elephant is also the subject of the sentence.

**Sentence 2 is a passive sentence.**

2. The plates were broken by the elephant.

In sentence 2 the elephant is still the agent. We know the elephant broke the plates. But the plates are now the subject of the sentence.
Sentence 3 is a passive sentence.

3. The plates were broken.

In sentence 3 is there an agent? What is the subject in sentence 3?

NOTE: In sentence 3 there is not an agent. We don't know who broke the plates. Passive sentences often appear without a stated agent. Sometimes we know the agent from the context of the sentence. For example, Jimmy Carter was elected in 1976. There is no agent expressed in this sentence. We know who the agent is. Who is the agent? We can say the agent is the people or the voters or Americans. So we understand the sentence to be like this:

Jimmy Carter was elected in 1976 by
the people.
the voters.
Americans.

We do not have to include the agent in a passive sentence.
Study the following examples. Underline the agent in each sentence.

1. The instruments were sterilised by the nurse.
2. The beds are made by the nursing aides.
3. The patients were fed by the nursing aides.
4. The TPR's were taken by the nursing aides.
5. The germs were killed by the steam.
6. The child is given a shot by the doctor.
7. The injection is given by a doctor.
8. The meal is cooked by the dietary staff.
9. The wound was attacked by germs.
10. The inner body is protected by the skin.

Now read the sentences again. Draw a line through the "by" phrase for each sentence. Is each sentence still complete?

You can change passive sentences into active sentences. Rewrite the previous 10 sentences so the agent is in the subject position. The first three are already done. Can you discover what happens to the verb when you change a passive sentence to an active sentence?

11. The nurse sterilised the instruments.
12. The nursing aides make the beds.
13. The nursing aides fed the patients.
14.
15.
16.
Look at the verb in a passive sentence. There is be + main verb. Is the be verb (is, are, was, were) present tense? Then the active sentence verb is present tense without be. Is the be verb past tense? Then the active sentence verb is past tense without be.

Passive: The instruments were sterilized by the nursing aide.
Active: The nursing aide sterilized the instruments.
Passive: The instruments are sterilized by the nursing aide.
Active: The nursing aide sterilizes the instruments.

More Exercises
1. When the skin is cut or open the inner body can be attacked by germs.
   a. When can the inner body be attacked by germs?
   b. What can be attacked by germs?
   c. What can attack the inner body?

2. Surgical asepsis is used in the hospital.
   a. Where is surgical asepsis used?
   b. What is used in the hospital?
   c. Who uses surgical asepsis in the hospital?
3. Surgical asepsis is used in the hospital. It is used for patients in surgery.
   a. What does it mean?
   b. What is used for patients in surgery?
   c. Who uses it?
   d. Where is it used?

4. Surgical asepsis is used to keep germs out of body openings.
   a. What is used to keep germs out of body openings?
   b. What is surgical asepsis used for?
   c. Who uses surgical asepsis?

5. Steam and pressure are used to get things sterile.
   a. What is used to get things sterile?
   b. How are things sterilized?
   c. Why are steam and pressure used?
   d. What are steam and pressure used for?
   e. Who uses steam and pressure to get things sterile?
YOUR IMMUNITY SYSTEM

You have an immunity system in your body. Your immunity system protects you from most germs.

A few babies are born without immunity systems. These babies usually die of infections before they are two years old. In healthy people the immunity system can kill the germs that enter the body. Babies without immunity systems cannot fight infections. Even medicine will not help. Medicine gives your immunity system time to work. Medicine kills some germs, but only your immunity system can destroy all the germs that attack your body.

Think about how amazing your immunity system is. It has killed millions of germs in your lifetime. It has saved your life hundreds of times. Germs can travel at amazing speeds inside your body. Germs travel fast in your body because they get into your blood. Your blood moves through your body very fast. Your blood moves or circulates through your body once every 13 seconds. A germ from a cut on your finger can get to your brain in five seconds. A germ in your lungs can get to the bones in your arms in three seconds. Your immunity system must find and destroy these germs before they damage your body.

How does your immunity system work? Basically, the white blood cells in your blood destroy any germ that gets into your blood. Medicine and immunizations help the white blood cells. But, your white blood cells do the work. Your white blood cells destroy the harmful germs in your body.

COMPREHENSION

1. What protects you from most germs?
2. Are babies ever born without immunity systems?
3. What happens to babies that are born without immunity systems?
4. Can medicine kill all the germs that attack the body?
5. What has saved your life hundreds of times?
6. Why do germs travel so fast inside the body?
7. How long does it take your blood to circulate through your body?
8. If you get cut on your finger, how long does it take a germ to get from the cut to your brain?
9. How long does it take a germ to get to the bones in your arms from your lungs?

10. What part of your immunity system destroys germs?

11. What do the white blood cells do in your blood?

VOCABULARY

Define the following terms.

1. immune -
2. infection -
3. amazing -
4. circulates -
5. damage -
6. basically -
CULTURAL EXPLORATION: TAKING A BREAK

When you take a break or "go on a break," you stop working for a short time during your workday. Some people just relax on a break. Some people like to have something to eat on a break. When you get a job, you will probably take a break with some of the people you work with.

You might decide to buy a snack on your break. Usually you will pay for your own food on a break. On a special occasion, for example, on a birthday, someone might say, "This is my treat." "This is my treat," means "I'll pay for the food." But usually, you will pay for your own food.

Hints for women: you should always plan on paying for your own food at work. A male coworker might offer to buy your snack if you go on a break together. If he pays for your snack, you can offer to pay for his snack the next time you go on a break together. You are not obligated to repay him at all, though. If a man offers to pay for your snack, you should not think that he is romantically interested in you. He is probably just being friendly.

If you don't want a person to pay for your snack, you can say, "Let's go Dutch treat." "Dutch treat" means each person pays for his or her own food.

Hints for men: usually when men and women go on a break together each person pays for his or her own food. However, if you ask a female coworker to go on a break with you, she might expect you to pay for anything she eats. You should be prepared to pay for her food in case she doesn't offer to pay for her own food.

Many women want to pay for their own snacks when they go on a break. You can offer to pay for a woman's snack if you want to. Don't insist on paying if she wants to pay for her own food. You should not be insulted if a woman wants to pay for her own food. If a woman lets you pay for her snack, you should not think she is romantically interested in you.

Usually when Americans take a break, it is the custom for each person to pay for his or her own food.

(Tr5)
UNIT VII
MEASUREMENT AND ABBREVIATION

There are three major topics in Unit VII. The first topic is measurement. You will need to know the American system of measurement and the metric system. There are readings and exercises in Unit VII to help you learn and use both of these measurement systems.

The second topic in Unit VII is abbreviations. There are many abbreviations you should know. In this unit you will learn many of the abbreviations that are used in hospitals. You will see these abbreviations on charts and on written orders in the hospital. Some doctors and nurses will use abbreviations when they talk. So it is very important to know abbreviations that are used in the hospital. The people you work with in the hospital will expect you to be able to read abbreviations correctly.

The third topic in Unit VII is business telephone techniques. When you work in a hospital you may have to answer the phone. You must be able to speak clearly and take messages correctly. You must know the correct way to answer a phone at the hospital. And, of course, writing down accurate messages is very important.

Study Unit VII carefully. You will need to know the information in this unit when you start working in a hospital.
SEVEN FEET TALL

Maile Lei Venasa is visiting her grandparents. David Venasa is her g... Maria Venasa is her g... Maile is talking to her grandfather. She is telling her grandfather about school. She is in the second grade at Mango Tree Elementary School. She is learning about the measurement system. She is also learning about measuring with feet and inches. Maile is telling her grandfather about her day at school.


"Well," replies Mr. Venasa. "How tall are you?"

"I'm seven feet tall," Maile replies.

"Six feet tall! That's taller than I am. Are you taller than I am?" asks Mr. Venasa.

"No, Grandpa, but I'm seven feet tall," replies Maile.

"I don't understand," says Mr. Venasa.

"Well, I traced a picture of my foot on some paper," answers Maile. "I used my foot to measure how tall I am. I'm seven feet tall."

"Oh, Maile," says Mr. Venasa. "Your foot isn't a foot."

"It is too. It's a foot," replies Maile.

"Yes," says Mr. Venasa. "Your foot is a foot for walking. It's not a foot for measurement."

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Maile Lei Venasa is visiting her grandparents. David Venasa is her grandfather. Maria Venasa is her grandmother. Maile is talking to her grandfather. She is telling her grandfather about school. She is in the second grade at Mango Tree Elementary School. She is learning about the metric system. She is also learning about measuring with feet and inches. Maile is telling her grandfather about her day at school.


"Well," replies Mr. Venasa. "How tall are you?"

"I'm seven feet tall," Maile replies.

"Seven feet tall! That's taller than I am. Are you taller than I am?" asks Mr. Venasa.

"No, Grandpa, but I'm seven feet tall," replies Maile.

"I don't understand," says Mr. Venasa.

"Well, I traced a picture of my foot on some paper," answers Maile. "Then I used my foot picture to measure how tall I am. I'm seven feet tall."
"Oh, Maile," says Mr. Venasa. "Your foot isn't a foot."
"It is too. It's my foot," replies Maile.
"Yes," replies Mr. Venasa. "Your foot is a foot for walking. It's not a foot for measuring. A foot for measuring is 12 inches long. Maybe you should ask your teacher about this."

"I'm not going to ask her," Maile says. "I like being seven feet tall."
COMPREHENSION:

1. Who is Maile Lei visiting?
2. Is Maile Lei related to Mr. Venasa?
3. What is Maile learning about at school?
4. Is she learning about the metric system?
5. Is she learning about the American system of measurement?
6. How many systems of measurement is she learning about?
7. What did Maile measure at school today?
8. When Maile measured herself, how tall was she?
9. Is she really that tall?
10. Is she taller or shorter than her grandfather?
11. What did the person use to measure her height?
12. Is your foot a foot for measuring?
13. How long is a foot for measuring?
14. What does Maile like?
15. Mr. Venasa says, "Your foot isn't a foot." What does he mean?
16. Maile Lei says, "I traced a picture of my foot on some paper." What does traced mean?
17. List four words for distance in the metric system. The first one is listed for you.
   a. millimeter  
   b. 
   c. 
   d. 
18. List four words for distance in the American measurement system. The first one is listed for you.
   a. inch  
   b. 
   c. 
   d. 

VII
SEVEN FEET TALL

Maile Lei Venasa is visiting her grandparents, David and Maria Venasa. She is telling her grandmother all about her day at school. Maile is seven years old. She is in second grade at Mango T Elementary School. She is learning about measurement at school. She is learning how to use the metric system and how to use feet and inches.

Today the class learned how important it is to use standard measurements. For example, they learned that a foot is not just any foot. They learned that a foot is a standard measurement that is 12 inches.

Maile is telling Grandpa how tall she is to explain all of this to her grandfather.

"Guess who, Grandpa. Today I measured my feet," says Maile.

"Well," replies Maile's grandmother, "how tall are you?"

"I'm seven feet tall," says Maile.

"How can you be seven feet tall? That's taller than I am," says Maile's grandmother.

Maile insists, "But I am Grandpa. I traced my feet on a piece of paper. Then I used my foot picture to measure how tall I am. Everyone used their own feet to measure. I'm seven feet tall."

Mr. Venasa smiles, "Maile, your foot is not a foot.
A foot is inches."

Maile looks at her feet.

"But my foot is a foot," she says.

"No," explains Mr. Venasa. "Your foot is not a foot. A foot is 12 inches. Mean your foot is a foot for walking. But your foot is not a foot for measuring. This is confusing. Maybe you should tell your teacher about this."

"I'm not going to ask her, Grandpa," says Maile. "I'm being seven feet tall."

SEVEN FEET TALL

READING 16A.

Maile Lei Venasa is visiting her grandparents, David and Maria Venasa. She is telling her grandfather all about her day at school. Maile is seven years old. She is in the second grade at Mango Tree Elementary School. She is learning about measurement at school. She is learning how to use the metric system and how to use feet and inches.

Today the class learned how important it is to have standard measurements. For example, they learned that a foot is not just any foot. They learned that a foot is a standard measurement that equals 12 inches.

Maile is trying to explain all of this to her grandfather.


VII

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"Well," replies Mr. Venasa, "how tall are you?"

"I'm seven feet tall," answers Maile.

"How can you be seven feet tall? That's taller than I am," says Mr. Venasa.

Maile insists, "But I am Grandpa. I traced one of my feet on a piece of paper. Then I used my foot picture to measure how tall I am. Everyone used their own feet to measure. I'm seven feet tall."

Mr. Venasa smiles. "Maile, your foot is not a foot. A foot is 12 inches."

Maile looks at her feet.

"But my foot is a foot," she says.

"No," explains Mr. Venasa. "Your foot is not a foot. A foot is 12 inches. I mean your foot is a foot for walking. But your foot is not a foot for measuring. This is getting confusing. Maybe you should ask your teacher about this."

"I'm not going to ask her, Grandpa," says Maile. "I like being seven feet tall."
COMPREHENSION

1. Who is Maile Lei's father?
2. Who is Maile Lei visiting?
3. Who is Maile Lei's grandfather?
4. Who is in the second grade?
5. What is Maile Lei learning about at school?
6. What does standard measurement mean?
7. Who did Maile Lei measure today?
8. How tall does Maile say she is?
9. Is she really that tall?
10. Did Maile use a standard measurement to measure herself?
11. What does trace mean?
12. Mr. Venasa says, "Maile, your foot is not a foot." What does he mean?
13. Maile says, "My foot is a foot." What does she mean?
14. Mr. Venasa says, "Maybe you should ask your teacher about this." What does about this mean? What is Maile supposed to ask her teacher about?
15. Is Maile going to ask her teacher?
CULTURAL EXPLORATION: RELATIVES

In English we have only a few terms for relatives. The following chart illustrates the most common English terms for relatives.

Look at the word you on the chart. The terms for each person on the chart show that person's relationship to you. For example, your mother's brother is your uncle. On this chart the word uncle appears because that is the word you would use to describe his relationship to you. Also, your grandparents are your father's and your mother's parents. The word grandparents appears on this chart because that is their relationship to you.

In the United States many families are small. Often children move away from their parents to start their own families. Often a family is a husband, wife and children.
This small family might live many miles away from the husband's and wife's parents. Many children never really know their grandparents or aunts, uncles and cousins.

Some families have grandparents living with them. But usually the grandparents have their own house or apartment even if they live in the same city with their adult children.

In Hawaii people do live closer to their parents. This is partly because the state is small and many people want to stay here. Also, there is still a strong Oriental influence so that people feel responsible for their parents. Usually the grandparents have their own home. They may take care of their grandchildren during the day while the parents work.

**Vocabulary**

**Terms for Relatives**

| your father's parents | = | your grandparents, grandfather & grandmother |
| your mother's parents | = | your father & mother |
| your parents | = | your uncles |
| your father's brothers | = | your aunts |
| your mother's brothers | = | your brothers & sisters |
| your father's sisters | = | your cousins |
| your mother's sisters | = | your cousins |
| your siblings | = | |
| your uncles' children | = | |
| your aunts' children | = | |

**Terms of Address**

Children use the following terms to address their parents:

| father | = | mother |
| daddy | = | mommy |
| dad | = | mom |
| pop | = | ma |
| pa, papa | = | mama |
The following terms are used for grandparents:

- grandfather
- granddad
- granddaddy
- grandpa
- grandmother
- grandma
- tutu (Hawaiian)
- grandmama

The following terms are used for aunts and uncles:

- uncle + first name
- aunt + first name
  - Uncle Bob
  - Aunt Helen

Auntie is sometimes used for an older woman who is a good friend even if the woman is not a relative.

Cousins are usually called by their first name. Some people use the title, cousin + first name; for example, cousin Sarah, Cousin Mike. Usually, though, cousins are called by their first names without a title.

(Tri)
MEASURING INTAKE AND OUTPUT

In the hospital you may be asked to measure intake and output. Accurate measurement is very important. You will need to know the metric system and how to change ounces to cubic centimeters. Study the following chart and do the exercises.

<table>
<thead>
<tr>
<th>U.S. Measurements</th>
<th>Approximate Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4 teaspoonful</td>
<td>1 cc</td>
</tr>
<tr>
<td>1 teaspoonful</td>
<td>4 cc</td>
</tr>
<tr>
<td>1 ounce</td>
<td>30 cc</td>
</tr>
<tr>
<td>1 cup</td>
<td>240 cc</td>
</tr>
<tr>
<td>1 pint</td>
<td>500 cc</td>
</tr>
<tr>
<td>1 quart</td>
<td>1,000 cc</td>
</tr>
</tbody>
</table>

Use the following information to help you solve the problems below. Water, milk, juice, coffee, tea, custard, jello, ice cream and soup are liquids.

In Pilikia Nui Hospital the following information is important. Other hospitals may use different sized bowls and glasses. Be sure you know how much liquid the bowls and glasses in your hospital will hold.

- one bowl of soup = 240 cc
- one glass of milk = 240 cc
- one glass of orange juice = 120 cc
- one glass of water = 240 cc

Now solve the following problems.

1. Your patient had these liquids for breakfast:
   - 2/3 glass of milk
   - one glass of orange juice

   How many cc's of liquid did your patient have for breakfast?

2. For lunch your patient had 1/2 bowl of soup and one glass of water. How many cc's of liquid did your patient have for lunch?

3. For a snack your patient had two cookies and one glass of milk. How many cc's of liquid did your patient have for a snack?

4. For supper your patient had a steak, a potato, 1/3 glass of milk, one glass of water, and 1/4 cup of jello, how many cc's of liquid did your patient have for supper?
5. For breakfast your patient had a glass of orange juice, a cup of tea, rice, bacon and two eggs. How many cc's of liquid did your patient have for breakfast?

6. For a morning snack your patient had a sandwich and a glass of orange juice. How many cc's of liquid did your patient have for a snack?

7. For lunch your patient had 1 1/2 bowls of soup, a glass of milk and a sandwich. How many cc's of liquid did your patient have for lunch?

8. For a snack your patient had 1/2 glass of milk and 1/2 cup of jello. How many cc's of liquid did your patient have for a snack?

9. For supper your patient had a cup of soup, a cup of tea, two pieces of toast and 2/3 cup of ice cream. How much liquid did your patient have for supper?

10. For an afternoon snack your patient had eight ounces of soda and 1/4 cup of ice cream. How many cc's of liquid did your patient have?
Everyone must have water to live. Only oxygen is more important to life than water. A person can lose half of his body protein and almost half his body weight and still live. If a person loses one-fifth of his body fluid, he will die.

The average adult takes in about 3 1/2 quarts of liquid every day. Fluid taken into the body is called fluid intake. Fluids are liquids. When people say fluids or liquids, we usually think of water. But other fluids include milk, juice, ice, tea, coffee, soda, soup, ice cream and gelatin. There is also some fluid in meat, rice, vegetables and fruit.

Fluids are discharged by the body every day. A healthy person will discharge about 3 1/2 quarts of fluid every day. Some fluid is discharged from the body through perspiration. Some fluid is evaporated from the lungs in breathing. Some fluid is discharged through the intestinal system. Some fluid is discharged as urine.

There is a fluid balance in a healthy body. Fluid balance means that about the same amount of fluid is discharged from the body as that is taken in by the body. So a healthy person will take in about 3 1/2 quarts of fluid every day and will also discharge about that much fluid.

When too much fluid is kept in the body or when too much fluid is lost from the body an imbalance of fluids occurs. Sometimes fluids are held in the body tissues. When this happens the tissues swell. We call this edema. Sometimes fluids are lost through vomiting, bleeding, diarrhea and excessive sweating. If too much fluid is lost, the body becomes too dry. We call this dehydration.

A record of a patient's intake and output of fluids must be kept to be sure the patient's balance of fluids is correct. Usually intake includes all liquids taken into the body. Urine is usually measured for output. Emesis is also measured. However, fluid lost through perspiration is ordinarily not measured. This intake and output information is then used by the doctor to prescribe treatment for the patient. A record of intake and output of fluids may be kept for a 24-hour period. Often a record must be kept for several days. You may be asked to keep intake and output records. These records must always be accurate.
COMPREHENSION

1. What is the most important thing that we need to stay alive?

2. How much fluid loss will cause death in humans?

3. How much protein can a person lose and still live?

4. How much fluid does an average adult take in every day? Write the amount in quarts and also in cubic centimeters.

5. Does an average person get all fluids from drinking water?

6. List three examples of fluids given in the reading.

7. Can you think of any other fluids? List them.

8. How much fluid does a healthy person discharge every day? Write the amount in quarts and in cubic centimeters.

9. List four ways fluid is discharged from the body.

10. Which fluid discharge do we measure?

11. What does fluid balance mean?

12. What happens to body tissues if too much liquid stays in the body?

13. What do we call the condition when tissues swell because of too much liquid?

14. Sometimes fluids are lost in ways that are not normal. List four ways fluids can be lost in ways that are not normal.

15. What do we call the condition when too much fluid is lost from the body?

16. Why do we sometimes keep a record of a patient's intake and output?

17. Who uses the intake-output information?

18. Who may be asked to keep intake and output records?

19. List two fluids that you will measure for output.

20. You had a pint of soup today and 1/2 cup of milk. How much more fluid do you need today?
21. Your patient had one cup of tea, 1/2 cup of orange juice, 2/3 cup of soup and one piece of toast for breakfast. Your patient vomited 240 cc and urinated 260 cc. Record this information on the chart below.

<table>
<thead>
<tr>
<th>Intake cc</th>
<th>Output cc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22. Your patient had 1 1/2 cups of soup today, one cup of ice cream, one egg, 6 ounces of orange juice, two pieces of toast, 3/4 cup of milk and 2/3 cup of jello. Your patient discharged two quarts of urine. Record this information on the chart below.

<table>
<thead>
<tr>
<th>Intake cc</th>
<th>Output cc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MEASURING LENGTH AND WIDTH

On the next page there is a diagram of a two-bedroom apartment. The scale for the apartment is 1/8"=1'. This scale means that 1/8 inch on the diagram equals one foot of space in the real apartment. If you measure the apartment diagram you can figure out how big the real apartment is. For example, the diagram of the master bedroom is 1 1/2" x 1 5/8". We know that in this diagram every 1/8"=1'. How many 1/8 inches are there in an inch? So 1 1/2 inches = feet. So, how big is the master bedroom in the real apartment?

Width means how wide. Length means how long. The width of a room or an object is a smaller number than the length. We write the width first. For example, the room is 12' x 15'. We know the room is 12 feet wide and 15 feet long. If we want to know the total square feet in the room, we multiply the two measurements. The total square feet in a 12' x 15' room is 180 sq. ft.

COMPREHENSION

1. Measure the apartment in feet. Measure each room, the lanai, the hall, and the closets of the apartment which is drawn for this reading.
   a. living room
   b. kitchen
   c. bedroom
   d. master bedroom
   e. bathroom
   f. lanai
   g. hall
   h. mas. bdr. closet
   i. bdr. closet

2. Now calculate the number of square feet in each of the sections below.
   a. living room
   b. kitchen
   c. bedroom
   d. master bedroom
   e. bathroom
   f. lanai
   g. hall
   h. mas. bdr. closet
   i. bdr. closet

3. How wide are the doors in the apartment?
4. What is the length of the living room?
5. What is the width of the lanai?
6. How deep is the bathroom?
7. What is the length of the kitchen?
8. How long is the hall?
9. How wide is the bathroom?
10. What is the length of the apartment at its longest point?
11. How wide is the apartment at its widest point?
Mr. Venasa is not sure about the metric system. He doesn't want to learn it. But he knows he should. More and more things are "going metric." Even some of the road signs in Mahimahi are being changed to give mileage in kilometers instead of miles. And, of course, the children are learning the metric system in school. Mr. Venasa, knows that because his granddaughter, Maile Lei, quizzes him about the metric system almost every day after school.

"Here comes Maile now. She'll be full of questions," Mr. Venasa said to himself.

"Hi, Grandpa."

"Hi, Maile. Did you learn anything today?"

"Of course, Grandpa. We're learning the metric system," Maile. "How many centimeters are in a meter, Grandpa?"

"Centimeters? a meter? I'll have to look that up," says Mr. Venasa.

"I know how many there are," announces Maile.

"There are 100 centimeters in a meter. Do you know how many millimeters there are in a meter?"

"No I don't," replies Mr. Venasa. "Why are you learning about feet and inches?"

"Oh, we're learning too," says Maile. "Grandpa,
Mr. Venasa is not sure about the metric system. He doesn't want to learn it. But he knows he should. More and more things are "going metric." Even some of the road signs on Mahimahimahi are being changed to give mileage in kilometers and in miles. And, of course, the children are learning the metric system in school. He knows that because his granddaughter, Maile Lei, quizzes him on the metric system almost every day after school. "Here comes Maile now. She'll be full of questions," Mr. Venasa says to himself.
"Hi, Grandpa."

"Hi, Maile. Did you learn anything today?"

"Of course, Grandpa. We're learning the metric system," answers Maile. "How many centimeters in a meter, Grandpa?"

"Centimeters in a meter? I'll have to look that up," says Mr. Venasa.

"I know how many there are," announces Maile. "There are 100 centimeters in a meter. Do you know how many millimeters there are in a meter?"

"No I don't," replies Mr. Venasa. "Why aren't you learning about feet and inches?"

"Oh, we're learning that too," says Maile. "Grandpa, you should learn the metric system. It's easy."

"I know, Maile. I'm going to learn it. I'm going to start studying next week. But, right now I'm going to walk to Morin's for a haircut."

"Can I come too, Grandpa?" asks Maile.

"Sure you can," Mr. Venasa answers. "But let's make a deal. No more quizzes on the metric system until you can tell me how old you are in metric."

"Ok, Grandpa. It's a deal," agrees Maile. "But how old are you in metric?"

Mr. Venasa smiles. "Remember, Maile. No more quizzes."

"Ok Grandpa. Let's go. The last one there is a rotten egg."
COMPREHENSION

1. Does Mr. Venasa want to learn the metric system?

2. What does "going metric" mean?

3. "The children are learning the metric system in school. He knows that because his granddaughter quizzes him on the metric system." What does that mean in the second sentence?

4. "She'll be full of questions." What does "full of questions" mean?

5. When does Maile Lei see her grandfather?

6. How often does she see him?

7. Does Mr. Venasa know how many centimeters are in a meter?

8. What is Mr. Venasa going to do next week?

9. What is Mr. Venasa going to do right now?

10. Mr. Venasa says, "No more quizzes on the metric system." What does "no more quizzes" mean?

11. Will Maile ever know how old she is in metric?

12. Where are Maile and Mr. Venasa going?

13. Do you think Mr. Venasa will learn the metric system?

14. What does let's make a deal mean?

15. Why does Mr. Venasa make a deal with Maile Lei?

16. When can Maile ask her grandfather more questions according to their deal?

VOCABULARY

1. "The last one there is a rotten egg" - an expression children use. The last person to do something is called a rotten egg; the loser in a race is called a rotten egg.

2. a deal - an arrangement; an agreement.

3. going to see someone - to visit. Maile is going to see her grandfather. She is going to visit her grandfather.
# ABBREVIATIONS

The following abbreviations are very important.

<table>
<thead>
<tr>
<th>Distance-American</th>
<th>Distance-Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>in. = inch, inches</td>
<td>mm = millimeter</td>
</tr>
<tr>
<td>3 in. = 3 inches</td>
<td>cm = centimeter</td>
</tr>
<tr>
<td>ft. = foot, feet</td>
<td>2.54 cm = 1&quot;</td>
</tr>
<tr>
<td>3 ft. = 3 feet</td>
<td>1 cm = 10 mm</td>
</tr>
<tr>
<td>12&quot; = 1 ft.</td>
<td></td>
</tr>
<tr>
<td>yd. = yard, yards</td>
<td>m = meter</td>
</tr>
<tr>
<td>yds. = yards</td>
<td>100 cm = 1 m</td>
</tr>
<tr>
<td>3 yd. = 3 yards</td>
<td>1,000 mm = 1 m</td>
</tr>
<tr>
<td>3 yds. = 3 yards</td>
<td>0.9144 m = 1 yd.</td>
</tr>
<tr>
<td>36&quot; = 1 yd.</td>
<td></td>
</tr>
<tr>
<td>3' = 1 yd.</td>
<td>km = kilometer</td>
</tr>
<tr>
<td>mi. = mile, miles</td>
<td>1000 m = 1 km</td>
</tr>
<tr>
<td>5280 ft. = 1 mi.</td>
<td>1.609 km = 1 mi.</td>
</tr>
<tr>
<td>1760 yd. = 1 mi.</td>
<td></td>
</tr>
</tbody>
</table>

**American Style**

- ht. = height - use inches, feet, yards to measure height.
- wt. = weight - use ounces, pounds, tons to measure weight.

<table>
<thead>
<tr>
<th>Weight-American</th>
<th>Weight-Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>oz. = ounce, ounces</td>
<td>28.350 grams = 1 oz.</td>
</tr>
<tr>
<td>lb. = pound</td>
<td>q = grams</td>
</tr>
<tr>
<td>lbs. = pounds</td>
<td>453.59237 grams = 1 lb.</td>
</tr>
<tr>
<td>1 lb. = 16 oz.</td>
<td>kg = kilogram</td>
</tr>
<tr>
<td>T. = ton</td>
<td>1,000 kilograms = 1 t.</td>
</tr>
<tr>
<td>1' T. = 2,000 lbs.</td>
<td>1 kilogram = 2.2046 lbs.</td>
</tr>
</tbody>
</table>

**Volume-Metric**

- cc = cubic centimeters
- 30 cc = 1 oz.
- 1 ml = 1 cc
- 30 ml = 30 cc
Volume-American

tsp. = teaspoon
T. tbsp. = tablespoon
1 tbsp. = 3 tsp.
C. = cup, cups
8 oz. = 1 C.
pt. = pint, pints
2 C. = 1 pt.
qt. = quart, quarts
2 pt. = 1 qt.
gal. = gallon, gallons
4 qt. = 1 gal.

Volume-Metric

1/4 tsp. = 1 cc
1 tsp. = 4 cc
240 cc = 1 C.
500 cc = 1 pt.
1000 cc = 1 qt.
1.101 liter = 1 qt.

Put a check by the pairs that are equal. Work as fast as you can.

Exercise 1

<table>
<thead>
<tr>
<th>Volume-American</th>
<th>Volume-Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 cc</td>
<td>1 oz.</td>
</tr>
<tr>
<td>1 yd.</td>
<td>1 ft.</td>
</tr>
<tr>
<td>1 yd.</td>
<td>3 ft.</td>
</tr>
<tr>
<td>1 mi.</td>
<td>3 yds.</td>
</tr>
<tr>
<td>1 yd.</td>
<td>.914 meter</td>
</tr>
<tr>
<td>3 ft.</td>
<td>3'</td>
</tr>
<tr>
<td>2&quot;</td>
<td>2'</td>
</tr>
<tr>
<td>1 ft.</td>
<td>12&quot;</td>
</tr>
<tr>
<td>2 pt.</td>
<td>1 qt.</td>
</tr>
<tr>
<td>1 ch.</td>
<td>1 pt.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exercise 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ounce</td>
</tr>
<tr>
<td>50 cc</td>
</tr>
<tr>
<td>1000 cc</td>
</tr>
<tr>
<td>1 pt.</td>
</tr>
<tr>
<td>1 C.</td>
</tr>
<tr>
<td>30 cc</td>
</tr>
<tr>
<td>1 gal.</td>
</tr>
<tr>
<td>3 oz.</td>
</tr>
<tr>
<td>2 pt.</td>
</tr>
<tr>
<td>1 qt.</td>
</tr>
</tbody>
</table>

time: _____ sec.  _____% correct

time: _____ sec.  _____% correct
**Exercise 3**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ft.</td>
<td>12'</td>
</tr>
<tr>
<td>1 yd.</td>
<td>36'</td>
</tr>
<tr>
<td>12'</td>
<td>1 ft.</td>
</tr>
<tr>
<td>3'</td>
<td>3 yd.</td>
</tr>
<tr>
<td>1 yd.</td>
<td>3 ft.</td>
</tr>
<tr>
<td>3 ft.</td>
<td>36 in.</td>
</tr>
<tr>
<td>1 ft.</td>
<td>12 in.</td>
</tr>
<tr>
<td>12&quot;</td>
<td>1 ft.</td>
</tr>
<tr>
<td>6 in.</td>
<td>6'</td>
</tr>
<tr>
<td>10&quot;</td>
<td>10 ft.</td>
</tr>
</tbody>
</table>

**Exercise 4**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 qt.</td>
<td>1000 cm</td>
</tr>
<tr>
<td>500 cc</td>
<td>1 pint</td>
</tr>
<tr>
<td>30 cc</td>
<td>1 oz.</td>
</tr>
<tr>
<td>1 C.</td>
<td>1 pt.</td>
</tr>
<tr>
<td>1 gal.</td>
<td>4 quarts</td>
</tr>
<tr>
<td>1 cm</td>
<td>10 mm</td>
</tr>
<tr>
<td>1000 m</td>
<td>1 km</td>
</tr>
<tr>
<td>3'</td>
<td>3 yds.</td>
</tr>
<tr>
<td>6 ft.</td>
<td>6'</td>
</tr>
<tr>
<td>4 cc</td>
<td>1 tsp.</td>
</tr>
</tbody>
</table>

**Exercise 5**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>millimeter</td>
</tr>
<tr>
<td>feet</td>
<td>ft.</td>
</tr>
<tr>
<td>cm</td>
<td>centimeter</td>
</tr>
<tr>
<td>30 cc</td>
<td>1 cm</td>
</tr>
<tr>
<td>4 cc</td>
<td>4 tsp.</td>
</tr>
<tr>
<td>240 cc</td>
<td>1 C.</td>
</tr>
<tr>
<td>ht.</td>
<td>wt.</td>
</tr>
<tr>
<td>1 cc</td>
<td>1 ml</td>
</tr>
<tr>
<td>pounds</td>
<td>lb.</td>
</tr>
<tr>
<td>3'</td>
<td>3 feet</td>
</tr>
</tbody>
</table>

**Exercise 6**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>5280'</td>
<td>1 mi.</td>
</tr>
<tr>
<td>1 mi.</td>
<td>1760&quot;</td>
</tr>
<tr>
<td>16 oz.</td>
<td>1 pound</td>
</tr>
<tr>
<td>500 cm</td>
<td>1 pt.</td>
</tr>
<tr>
<td>1 qt.</td>
<td>1 qt.</td>
</tr>
<tr>
<td>4 gal.</td>
<td>4 gal.</td>
</tr>
<tr>
<td>1 pt.</td>
<td>1 pint</td>
</tr>
<tr>
<td>240 cc</td>
<td>1 C.</td>
</tr>
<tr>
<td>4 cc</td>
<td>1 tsp.</td>
</tr>
<tr>
<td>1 ml.</td>
<td>1&quot; cc</td>
</tr>
</tbody>
</table>

**Time:** ______ sec.

**% Correct:** ______

---

**Exercise 6**

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>5280'</td>
<td>1 mi.</td>
</tr>
<tr>
<td>1 mi.</td>
<td>1760&quot;</td>
</tr>
<tr>
<td>16 oz.</td>
<td>1 pound</td>
</tr>
<tr>
<td>500 cm</td>
<td>1 pt.</td>
</tr>
<tr>
<td>1 qt.</td>
<td>1 qt.</td>
</tr>
<tr>
<td>4 gal.</td>
<td>4 gal.</td>
</tr>
<tr>
<td>1 pt.</td>
<td>1 pint</td>
</tr>
<tr>
<td>240 cc</td>
<td>1 C.</td>
</tr>
<tr>
<td>4 cc</td>
<td>1 tsp.</td>
</tr>
<tr>
<td>1 ml.</td>
<td>1&quot; cc</td>
</tr>
</tbody>
</table>

**Time:** ______ sec.

**% Correct:** ______

VII

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### MEDICAL ABBREVIATIONS

You will need to know these abbreviations before you start to work in a hospital. You might want to start studying them now.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>aa</td>
<td>all of each at</td>
</tr>
<tr>
<td>@</td>
<td>before meals, before eating</td>
</tr>
<tr>
<td>AC, a.c.</td>
<td>at pleasure, as desired</td>
</tr>
<tr>
<td>ad lib</td>
<td>morning</td>
</tr>
<tr>
<td>AM</td>
<td></td>
</tr>
<tr>
<td>BID</td>
<td>twice daily, twice a day</td>
</tr>
<tr>
<td>BM</td>
<td>bowel movement</td>
</tr>
<tr>
<td>BP</td>
<td>blood pressure</td>
</tr>
<tr>
<td>BR</td>
<td>bathroom</td>
</tr>
<tr>
<td>BRP</td>
<td>bathroom privileges</td>
</tr>
<tr>
<td>CVA</td>
<td>cardiovascular accident, stroke</td>
</tr>
<tr>
<td>Dx</td>
<td>diagnosis</td>
</tr>
<tr>
<td>elix.</td>
<td>elixir</td>
</tr>
<tr>
<td>ext.</td>
<td>extract, external</td>
</tr>
<tr>
<td>EEG</td>
<td>electroencephalogram</td>
</tr>
<tr>
<td>EKG</td>
<td>electrocardiogram</td>
</tr>
<tr>
<td>ENT, EENT</td>
<td>Ear, Eyes, Nose, Throat</td>
</tr>
<tr>
<td>GI</td>
<td>gastrointestinal</td>
</tr>
<tr>
<td>Gm.</td>
<td>gram</td>
</tr>
<tr>
<td>gr</td>
<td>grain</td>
</tr>
<tr>
<td>gtt(s)</td>
<td>drop(s)</td>
</tr>
<tr>
<td>HS, hs</td>
<td>at bedtime, hour of sleep</td>
</tr>
<tr>
<td>ID</td>
<td>intradermal</td>
</tr>
<tr>
<td>IM</td>
<td>intramuscular</td>
</tr>
<tr>
<td>IPPB</td>
<td>Intermittent Positive Pressure Breathing</td>
</tr>
<tr>
<td>IV</td>
<td>intravenous</td>
</tr>
<tr>
<td>IV inf.</td>
<td>intravenous infusion</td>
</tr>
<tr>
<td>L, Lt.</td>
<td>left</td>
</tr>
<tr>
<td>noc</td>
<td>night</td>
</tr>
<tr>
<td>NPO</td>
<td>nothing by mouth</td>
</tr>
<tr>
<td>Ob. Gyn.</td>
<td>obstetrics and gynecology</td>
</tr>
<tr>
<td>OOB</td>
<td>out of bed</td>
</tr>
</tbody>
</table>

VII
34. PC, p.c. after meals, after eating
35. Pil. pills
36. PM afternoon
37. PO by mouth
38. prn whenever necessary, if necessary
39. pt(s). patient(s)
40. PT Physical Therapy
41. qd once daily, every day
42. QID four times a day
43. q4h every two hours
44. q6h every four hours
45. q8h every eight hours
46. qm a sufficient quantity
47. ROM Range-of-Motion (exercises)
48. R, Rt. right
49. RT Radiation Therapy
50. Rx take
51. a without
52. SOS if it is needed
53. ax a half
54. sol. solution
55. STAT at once
56. SUBQ, SUBC subcutaneous
57. tab. tablet
58. tbsp. tablespoon
59. TID three times a day
60. TPR Temperature, Pulse, Respiration
61. tr., tinct. tincture
62. tsp. teaspoon

(Tr2)
**PILIKIA NUI HOSPITAL**
**TAMARIND CITY, MAHIMAHI ISLAND**

**TREATMENT RECORD**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Date</th>
<th>Surname</th>
<th>First</th>
<th>Middle</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bath</td>
<td>a.m.</td>
<td>CPST</td>
<td>CPST</td>
<td>CPST</td>
<td></td>
</tr>
<tr>
<td>2. Oral Care</td>
<td>MNE</td>
<td>MNE</td>
<td>MNE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Initial/Date: signature

June 3

**Legend:**
- **Bath:**
  - **C** = complete
  - **P** = partial
  - **S** = shower
  - **T** = tub

- **Oral Care:**
  - **M** = morning
  - **N** = noon
  - **E** = evening

Often there are abbreviations on forms. If the abbreviations are unusual, there may be a legend or key to explain the abbreviations. Usually you can find a legend or key at the bottom of the chart.

**COMPREHENSION**

Study the treatment record. The first column is done for you as an example. Fill in the chart with the information below.

1. Print the patient's name and room number on the form.
2. Record information for the day before yesterday. Show that your patient had a partial bath that morning. Show that your patient brushed his teeth that morning. Record your initials and date and signature on the form.

3. Record information for today. Show that your patient had a complete bath this morning. Show that your patient had oral care this morning. Record your initials, date, and signature.
Sometimes nursing aides answer the phone in the hospital: Part of your job might be to answer the phone and take messages. There are important things to remember about answering the phone at the hospital.

1. Always speak clearly. Open your mouth when you talk. Pronounce words carefully. Never chew gum or eat while you are on the phone.
2. Don't use slang. 

<table>
<thead>
<tr>
<th>don't say</th>
<th>do say</th>
</tr>
</thead>
<tbody>
<tr>
<td>okay</td>
<td>yes</td>
</tr>
<tr>
<td>yeah</td>
<td>certainly</td>
</tr>
<tr>
<td>uh-huh</td>
<td>of course</td>
</tr>
<tr>
<td>bye-bye</td>
<td>good-bye</td>
</tr>
</tbody>
</table>

3. Take accurate messages. Repeat the message to the caller to be sure the message is correct.

4. Speak directly into the mouthpiece of the phone. Hold the mouthpiece about 1/2 inch from your lips. The receiver should be against your ear.

5. Do not put fingers over the mouthpiece while you talk on the phone. Your voice will be muffled.

6. The telephone receiver will pick up sound even though the mouthpiece is covered. The caller can hear you talking to coworkers even when you cover the receiver with your hand.

7. The caller cannot hear office conversations if you use the hold button.

8. Don't leave a caller on hold for long periods. The hold button flashes when someone is waiting.

9. Careful pronunciation is important when you say names, numbers, and letters. Some numbers sound alike on the phone if they are not pronounced clearly.

10. When you take messages, be sure to spell names correctly. Repeat the message and spell the names in the message. The names of some letters sound alike. For example, the Vietnamese names Vinh, Tinh, Binh might all sound alike. The first letter of each name will sound alike on the phone. So spelling the names might be hard to understand, too.

Here is a list of words to help you with the spelling technique you learned in the speaking lessons.

- a as in apple
- b as in baby
- c as in candy
- d as in David
- e as in evening
- f as in father
- g as in go
- h as in hello
- i as in island
- j as in jelly
- k as in Korea
- l as in lunch
USING THE YELLOW PAGES

Look at a telephone directory of Honolulu or any city. At the back are the Yellow Pages. The Yellow Pages are the classified directory. In the classified directory you can find almost anything you want. If you want to buy a musical instrument, like a guitar, but you don't know where to go, you can look in the Yellow Pages under Musical Instruments-Retail. ("Retail" means "sell to persons") You can find the names, addresses and telephone numbers of the stores that sell musical instruments. You can call any store and find out if it has what you want.

EXERCISES

1. Look in the Yellow Pages under Restaurants. Many places to eat are listed there. Are they listed in alphabetical order? Restaurant means "place to eat." What are some of the other words that mean "place to eat?" List all the words you find in the Yellow Pages that mean "place to eat." Don't use a dictionary. Try to guess which words mean "place to eat" by noticing how the words are used.

2. Now look at your map of Tamarind City. How many places to eat are there? Make a classified listing of all the places to eat you know in Tamarind City.

Note: The following questions deal with the Oahu, Hawaii, telephone book.

3. What word do you have to know to find the listings for doctors in the Yellow Pages?
4. Are all the doctors listed together in alphabetical order?
5. Where can you find the telephone number for the Immigration Department?
6. Where is the telephone number for the State Employment Service?
7. Where can you get information about garbage collection?
8. Are government agencies listed in the Yellow Pages?
9. Are there advertisements in the Yellow Pages?
10. In what order are businesses arranged in the Yellow Pages?
CROSSWORD PUZZLE

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
</tr>
</tbody>
</table>

Write the correct words to complete the puzzle.

ACROSS

1. Abbreviation for morning. It's 10:00
2. Abbreviation for nothing by mouth.
3. Abbreviation for nothing by mouth.
4. Abbreviation for doctor.
5. Abbreviation for road.
6. A female who is related to you.
7. A soft touch. They placed their fingers on the desks.
8. Put the flowers on the bedside table.
9. Abbreviation for right.
10. Abbreviation for before meals.
11. Abbreviation for afternoon and evening. It's 6:00
12. 1, 2, 3, 4, 5.

DOWN

1. Abbreviation for advertisement.
2. Title for a married woman.
3. Abbreviation for National Aeronautics and Space Administration.
4. Metal such as iron, silver, gold.
5. Abbreviation for doctors.
6. A beautiful day.
7. Abbreviation for temperature, pulse and respiration.
8. Many people eat lunch at 12 o'clock.
9. Same as 10 Down.
10. I get up in the mornings at 6:00.
11. Abbreviation for citizen band radio.
12. Title for a woman.
REVIEW EXERCISES

The following questions cover the material in Units VI and VII.

1. When do you have to have clean hands?
   a. when you feed the patients
   b. before you go to the bathroom
   c. when you wake up
   d. when you take the bus

2. Which of the following is a "food handler by occupation"?
   a. a child
   b. a cook
   c. a salesman
   d. a clerk

3. Which one is a communicable disease?
   a. burns
   b. flu
   c. heart disease
   d. hay fever

4. Which of the following occupations might be advertised in the newspaper?
   a. homemaker
   b. housewife
   c. housecleaner
   d. housekeeper

5. Which of the following statements means the same as, "What is your occupation?"
   a. Where do you work?
   b. Do you work?
   c. How do you make a living?
   d. How do you live?

6. What is another name for germs?
   a. bacteria
   b. germs
   c. harmful
   d. disease

7. Which thing must be sterile?
   a. hands
   b. bedpans
   c. surgical instruments
   d. sheets

8. How are things sterilized in the hospital?
   a. with boiling water
   b. with disinfectants
   c. with steam and pressure
   d. with soap and water
9. What is medical asepsis?
   a. a method that destroys or gets rid of harmful germs
   b. a method that destroys all germs
   c. a method that destroys harmful and harmless germs
   d. a method that uses steam and pressure

10. In the hospital what method is used to keep all germs out of the body?
   a. medical asepsis     c. surgical asepsis
   b. disinfectant       d. asepsis

11. What protects your body from most germs?
   a. sterilizing       c. vaccinations
   b. your immunity system   d. asepsis

12. Which of the following is your spouse's brother?
   a. your brother-in-law   c. your son-in-law
   b. your brother         d. your father-in-law

13. How many cubic centimeters in one teaspoonful of liquid?
   a. 1 cc              c. 4 tsp.
   b. 10 tsp.          d. 4 cc

14. How many cubic centimeters in one milliliter?
   a. 10 cc           c. 1 ml
   b. 10 ml           d. 1 cc

15. How many feet are there in one yard?
   a. 3 feet             c. 36"
   b. 3 yards           d. 36'

16. How many millimeters in one centimeter?
   a. 1 cm          c. 1000 mm
   b. 10 cm         d. 10 mm

17. How many cc's in 1 C.
   a. 240 cc        c. 1 cc
   b. 8 oz.        d. 120 cc

18. Which abbreviation means before meals?
   a. BM       c. Bm1.
   b. AC        d. BE

VII
19. Which abbreviation means every eight hours?
   a. q8
   b. qd
   c. q4h
   d. q8h

20. Which abbreviation means three times a day?
   a. TID
   b. BID
   c. q3h
   d. q3d

21. Which abbreviation means nothing by mouth?
   a. NO
   b. NBM
   c. NPO
   d. BID

22. What does STAT mean?
   a. stand still
   b. very ill
   c. at once
   d. later

23. What does HS mean?
   a. at home
   b. his medicine
   c. six hours
   d. bedtime

24. What does PC mean?
   a. after meals
   b. please be quiet
   c. no food
   d. public crossing

25. What does noc. mean?
   a. awake
   b. urine sample
   c. night
   d. no visitors
UNIT VIII
IT'S AN EMERGENCY

PREVIEW

Unit VIII contains valuable information about emergencies in the hospital. Hospitals use codes to identify emergencies. The codes in this unit are used in most hospitals in the United States. When you start to work, though, you should check with your supervisor to be sure you know the codes for emergencies for your hospital.

There are also important language sections in Unit VIII. The sections on relative clauses are important because relative clauses appear very often in reading material.

Another language section deals with impersonal you and they. These two pronouns occur very often in American speech, though not so often in writing. Often we use you and they to refer to people in general. It is important to understand that they don't always refer to a specific person or persons.

The last language section deals with the masculine personal pronoun (he, him, him). You will see that this pronoun often refers to a person who is a member of a particular group, such as doctors, patients, students. In the group there can be males and females. You will have some practice interpreting sentences and deciding when the masculine pronoun refers to a man and when it includes a general group of people both males and females.

After you finish Unit VIII, it would be a good idea to watch and listen for examples of the impersonal you and they and the general use of the masculine pronoun.
Most hospitals have emergency rooms. People who are in accidents or who become suddenly go to the emergency room. People who become suddenly go to the emergency room. For example, a person who has a heart attack can go to the emergency room. A person who has food poisoning can go to the emergency room. A person who was in an automobile accident can go to the emergency room.

Doctors and nurses who work in the emergency room are trained in many life-saving techniques. They may save many lives in the evening.

The weekends are the busiest times in most emergency rooms. Often Friday and Saturday nights are very busy.
Most hospitals have emergency rooms. People who are in serious accidents or who become sick suddenly go to the emergency room in a hospital. People get life-saving treatment in the emergency room. For example, a person who has a heart attack can go to the emergency room. A person who has food poisoning can go to the emergency room. A person who was in an automobile accident can go to the emergency room.

The doctors and nurses who work in the emergency room are trained in life-saving techniques. They might save many lives in one evening.

The weekends are the busiest times in most emergency rooms. Often Friday and Saturday nights are very busy. Many people get hurt on weekends.
COMPREHENSION

1. Which phrases tell about emergency room cases?
   a. a child who swallowed 25 aspirin
   b. a man who fainted in the street
   c. a child who needs a polio vaccine
   d. a woman who needs a physical examination
   e. a man who is having bad chest pains
   f. a woman in labor who hasn't been to a doctor
   g. a child who swallowed two dimes
   h. a woman who is having bad chest pains
   i. a teenager who almost drowned
   j. a man who is overweight and needs to go on a diet

2. Where are emergency rooms located?

3. Who goes to emergency rooms?

4. Who works in emergency rooms?

5. When are the busiest times in emergency rooms?

6. Do many people get hurt on weekends?

7. Why are weekends the busiest times in emergency rooms?

8. Why do you think many people get hurt on weekends?

9. "The doctors and nurses who work in the emergency room are trained in life-saving techniques."
   a. Which doctors is the sentence about?
   b. Which nurses is the sentence about?
   c. Who is trained in life-saving techniques?
   d. Who trained the doctors and nurses in life-saving techniques?
RELATIVE CLAUSES

Study the following sentences.
1. A person who has a heart attack can go to the emergency room.
   a. Who can go to the emergency room?
   b. Can a person who has a heart attack go to the emergency room?

   A person who has a heart attack can go to the emergency room.

   *who has a heart attack* is a relative clause.

   A relative clause is a small sentence inside the main sentence. Write the main sentence here.

2a. ____________

   Now write the complete sentence with the relative clause.

2b. The relative clause gives us more information about the main sentence. The main sentence says that "a person can go to the emergency room." The relative clause tells us that "a person who has a heart attack can go to the emergency room." The relative clause describes more about the person.

   We use *who* at the beginning of a relative clause when we are referring to a person or people. In a relative clause who does not indicate a question. Notice that the relative clause has its own verb. Underline the relative clauses in the sentences below.

3. A person who has food poisoning can go to the emergency room.
4. A person who was in an automobile accident can go to the emergency room.
5. People who are in serious accidents or who suddenly become sick go to the emergency room in a hospital.
Add a relative clause to each of the sentences below.

7. The student is absent.
8. The man is from Korea.
9. The nurse is an R.N.
10. The women are gone.
11. The children are playing.

(Tri)
FIRE--A MAJOR CAUSE OF DISASTER

Fire is a major cause of disaster in the United States. Most people are afraid of fire. It is important to know what to do in case there is a fire. Many people die in fires because they panic or have no plan.

Hospital fires can be especially dangerous. But all hospitals must have escape plans to save the lives of patients and employees. All hospital workers must help prevent fires.

In the United States, there are about two hospital fires every day. Fortunately, most of these fires are extinguished before people are hurt. Your knowledge of fire prevention and what to do if a fire occurs can save your life and the lives of others.
Fire is a major cause of disaster in the United States. Most people are afraid of fire. It is important to know what to do in case there is a fire. Many people die in fires because they panic or because they don't have an escape plan.

Hospital fires can be especially dangerous. But all hospitals have escape plans to help save the lives of patients and employees.

All hospital employees must help prevent fire. Everyone must know about fire prevention. In the United States there are about two hospital fires every day. Fortunately, most of these fires are extinguished before people are hurt. Your knowledge of fire prevention and of what to do in case of a fire can save your life and the lives of others.
1. What is a major cause of disaster in the United States?

2. Why do many people die in fires?

3. Do all hospitals have escape plans in case of fire?

4. What is an escape plan?

5. Who must know about fire prevention?

6. About how many hospital fires are there in the United States every day?

7. Are most of the fires serious?

8. Why should you know about fire prevention?

9. What does extinguished mean? Find the word in the story. Try to guess what the word means without using your dictionary.

10. Why are escape plans important?
FIRE IN THE HOSPITAL

(READING 20)

In the hospital you should not use the word fire. In most hospitals there is a special way to report fires. In most hospitals code is used to report fires.

In some hospitals you can report a fire by saying, "There's a Code Red in the 1st floor closet in Ward 33." Of course, you always tell where the fire is. You would say, "There's a Code Red in the 1st floor closet in Ward 33." You should know how to use the fire extinguishers in the hospital. There are two kinds of extinguishers. There are carbon dioxide extinguishers. These are large and heavy. Carbon dioxide extinguishers are used to put out paper or linen fires. They are chemical fire extinguishers. They are usually smaller than carbon dioxide extinguishers. Chemical extinguishers are used to put out electrical fires.

You should know where the fire escapes are in the hospital. You should know what the escape plan is, too. Your patients will depend on you if there is ever a fire in the hospital.

Class A Fires include:
- Paper
- Cloth
- Wood

FOR CLASS A, B, C FIRES
FIRE IN THE HOSPITAL

In the hospital you should not use the word fire. In most hospitals there is a special way to report fires. In most hospitals a code is used to report fires.

In some hospitals you can report a fire by saying, "There's a code Red." Of course, you always tell where the fire is so you would say, "There's a Code Red in the linen closet in Ward 33."

You should know how to use the fire extinguishers in the hospital. There are two kinds of extinguishers. There are carbon dioxide extinguishers. These are usually large and heavy. Carbon dioxide extinguishers are used to extinguish paper or linen fires.
There are chemical fire extinguishers. These are usually smaller than the carbon dioxide extinguishers. Chemical fire extinguishers are used to extinguish electrical fires.

You should know where the fire escapes are in the hospital. You should know what the escape plan is, too. Your patients will depend on you if there is ever a fire in the hospital.

Class B Fires include:
- gasoline
- oil
- grease
- flammables

Class C Fires include:
- electrical
COMPREHENSION

1. Who should not use the word fire in the hospital?
2. How do you report a fire in most hospitals?
3. What does Code Red mean?
4. When you report a fire what information do you include in your report?
5. Who should know how to use the fire extinguishers in a hospital?
6. How many kinds of fire extinguishers are discussed in the reading?
7. What kinds of fires can you extinguish with a carbon dioxide extinguisher?
8. What kinds of fires can you extinguish with chemical extinguishers?
9. What is a fire escape?
10. What is an escape plan?

VOCABULARY

Define the following terms.

fire extinguishers -
fire escape -
fire drill -
escape plan -
to extinguish -
panic -
disaster -
OTHER HOSPITAL EMERGENCIES

Fire isn't the only emergency that can happen in the hospital. There are other emergencies besides fire.

A patient who has a heart attack may have cardiac arrest. Cardiac arrest is when the heart stops beating. Most hospitals use "code 500" for cardiac arrest.

If a patient has cardiac arrest you report it at the nurse's station. You say, "There is code 500 in Room 300, B 4." Always report the room and bed number.

People who might have cardiac arrest usually in the Coronary Care Unit (CCU) or in the Intensive Care Unit (ICU). There is one other code you should know. You should know Code BTA. Code BTA means "bomb threat alert." A bomb threat alert means there has been a bomb threat.

Be sure you know what your hospital uses for an emergency.
OTHER HOSPITAL EMERGENCIES

Fire isn’t the only emergency that can happen in the hospital. There are other emergencies besides fire.

A patient who has a heart attack may have cardiac arrest. Cardiac arrest means the heart stops beating. Many hospitals use "Code 500" for cardiac arrest.

If a patient has cardiac arrest you report it at the nurse's station. You say, "There is a Code 500 in Room 300, Bed 4." Always report the room and bed number.

People who might have cardiac arrest are usually in the Coronary Care Unit (CCU) or in the Intensive Care Unit (ICU).

There is one other code you should know. You should know Code BTA. Code BTA means "bomb threat alert." A Code BTA is never a drill. It always means there has been a bomb threat.

Be sure you know what codes your hospital uses for emergencies. Be sure you know what to do in case of an emergency.
COMPREHENSION

1. Is fire the only emergency that can happen in the hospital?
2. Are there other emergencies besides fire?
3. Name two emergencies besides fire that can happen in the hospital.
4. What does cardiac arrest mean?
5. What does Code 500 mean?
6. What code is used in most hospitals to report a cardiac arrest?
7. Where do you report a Code 500?
8. What information do you give when you report a Code 500?
9. What patients are in the Coronary Care Unit?
10. What does code mean?
11. What patients are in the Intensive Care Unit?
12. Are there patients who have not had heart attacks in the Intensive Care Unit?
13. What does BTA mean?
14. Which code is never a drill?
15. What does bomb threat mean?

VOCABULARY

Define the following terms.
1. cardiac arrest -
2. coronary -
3. threat -
4. drill -
MORE RELATIVE CLAUSES

Remember the relative clauses you studied earlier in this unit. The clause began with the word who. Other words can begin relative clauses, too. For example,

Fire isn't the only emergency that can happen in a hospital.

The relative clause is in italics. What word begins the relative clause in the example sentence?

Now study the following sentences. Underline the relative clause in each one.

1. The house that we live in is for sale.
2. The cat that has stripes is lost.
3. The drill that we practiced was a fire drill.
4. Code BTA is a code that you should know.
5. The germs that cause the disease are very dangerous.
6. The man that has a beard is a teacher.
7. The woman that ate the candy is sick.

You know we use who in relative clauses referring to people. When do we use that?

Now study the following sentence:

"You should know code BTA, which means "bomb threat alert."

What word begins the relative clause in the above sentence?

Is which a question word in the relative clause?

Which refers to things, not to people.

(Tr2)
Underline the relative clause in each of the following sentences.

8. The students who are in nursing aide training are going to the hospital tomorrow.
9. The abbreviations which are most important are in your textbook.
10. Are these the abbreviations that we should know?
11. I always catch the bus that is late.
12. Do you know the girls who are in your classes?
13. Are those the boys that are coming with us?
14. Which books are the ones which the students need?
15. That book is the book that I lost last week.
16. The man who is sitting down is the mayor.
17. The mayor is the man who is sitting down.

Write a relative clause for each of the sentences below.

18. He used the urinal as a flower vase.
19. The patient is going home today.
20. The nurses are helping us bathe the patients.
21. Did you put the emesis basin on the bedside table?
22. Please bring the thermometers to the nurse's station.
23. Take the patient to Physical Therapy.
24. The people are too noisy.
25. I never go to the beaches.
Impersonal Use of You

Impersonal Use of You

Americans often use the pronoun you to mean someone or anyone. You does not always refer to you specifically as an individual.

Study the examples below.

1. A: I need to know what time it is in New York.
   B: Call the operator and ask.
   A: Can someone anyone ask for that information?
   B: Sure someone anyone can.

2. A: This is a nice apartment.
   B: Yes someone anyone can walk to town in 15 minutes.
   A: Can someone anyone walk to the beach?
   B: No, but there's a bus you someone anyone can take.

3. A: Can you park here at night?
   B: Yes, you someone anyone can.

The impersonal use of you is very common in spoken English, in every formal spoken and written English some people use one and not you. For example,

4. I wonder if one can ask for that information.
5. Can one park here at night?

NOTE: This use of one sounds very stilted. Don't try to use it in your speech.

Sometimes it may be unclear whether a speaker is using you to mean just anyone, or whether the speaker really means you personally. If you are unsure, ask the speaker for further explanation.

Impersonal Use of They

Americans often use the pronoun they to mean an unnamed group. Study the following examples. They in these examples means some people. But we don't know specifically who the people are.

1. They say the weather is beautiful in Hawaii.
2. When did they raise the taxes?
3. When will they discover a cure for cancer?
4. Did you read this article? They don't know what they're talking about.
5. A: I called the city office about the bus schedule. 
   B: What did they say?
   A: They had lots of excuses as usual.

We use the impersonal they often in speech. It is not used so often in writing. If we want to be impersonal in writing, we usually use passive sentences. For example,

6. It is said the weather is beautiful in Hawaii. (see sentence 1 for the active sentence, which would be used in speech.)
7. When were taxes raised? (see sentence 2.)
8. When will a cure for cancer be discovered? (see sentence 3.)

Try to listen to Americans speak. You will hear them using the impersonal you and they often. You should understand how to use impersonal you and they. Practice using them in your speech, too.

(Tr))
Many hospitals have outpatient clinics. An outpatient clinic is often part of a hospital. An outpatient is a patient who does not stay in the hospital. An outpatient is a patient who lives at home and comes into the outpatient clinic for medical care. Some outpatients were patients in the hospital. They were released from the hospital but come to the clinic for treatment and examinations until they are completely well.

Some people do not have a private physician. They go to the outpatient clinic when they are sick. There is always a doctor at the outpatient clinic. Patients don't have their own doctor at the outpatient clinic. They might see a different doctor every time they go.

Some clinics are not part of hospitals. There are all sorts of clinics. Some clinics are private clinics. Some clinics are supported by tax money. Clinics can be large or small. Usually there is more than one doctor at a clinic.

Some private clinics are very large. A private clinic is supported by the fees the patients pay to the doctors. There might be many different kinds of doctors in a private clinic. There is usually a laboratory at a private clinic. Laboratory technicians do lab tests in the clinic.

Some clinics are supported by taxes. These clinics are usually smaller than private clinics. Fees are usually low. Some patients might not have to pay fees.

Some doctors do not work in clinics. A doctor who does not work in a clinic has a private practice. A doctor who has a private practice has his own office. Usually there is not a laboratory in a doctor's office. The doctor sends his lab work to a laboratory. There is always a nurse who works with the doctor. Usually, there is a receptionist who answers the phone.

Usually a nursing aide does not work in a private clinic or in a doctor's office. A nursing aide might work in an outpatient clinic. Nursing aides usually work in hospitals.

**COMPREHENSION**

1. Do all hospitals have outpatient clinics?

2. What is an outpatient?
3. Why do patients come to the outpatient clinic?
4. Do outpatients have to be hospital patients too?
5. Does the patient have a private doctor at the outpatient clinic?
6. Name two kinds of clinics.
7. How many kinds of outpatient clinics are discussed in this reading?
8. Look up clinics in the phone book. Do you look in the white pages or in the yellow pages?
9. Find three kinds of clinics in the phone book. List the clinics. List two clinics that you think are private clinics. List two clinics that you think are tax-supported. How can you find out which clinics are tax-supported?
10. What kind of doctor works at a dental clinic?
11. What kind of doctor works at a children's medical clinic?
12. What is a receptionist?
13. Where do nursing aides usually work?
14. What do you think an inpatient is?

INTERPRETATION

Check the sentence in each group below that is closest in meaning to the original sentence. (Tr4)

1. Usually a nursing aide does not work in a private clinic or in a doctor's office.
   a. A nursing aide never works in a private clinic or in a doctor's office.
   b. A nursing aide might work in a private clinic, but not in a doctor's office.
   c. A nursing aide might go to a private clinic or to a doctor's office.
   d. It is unusual for a nursing aide to work in a private clinic or in a doctor's office.
2. Usually there is a receptionist who answers the phone.
   a. A person who answers the phone is a receptionist.
   b. Almost always there is a receptionist who answers the phone.
   c. That is the person who answers the phone.
   d. There is always a receptionist who answers the phone.

3. Some clinics are supported by taxes.
   a. Taxes pay for the services at some clinics.
   b. Patients don’t pay fees at most clinics.
   c. Some clinics charge taxes.
   d. A few clinics charge small fees.
Study the following information.

A doctor who has a private practice has his own office.

The doctor sends his work to a laboratory.

Is the doctor in the example sentences a man or a woman? In English we usually use the masculine pronoun when we are talking in general terms. The example sentences are also in your reading on clinics. In that reading we are talking about doctors as a group. We are not talking about a specific doctor. The doctor could be male or female. We use the masculine pronoun when we are not being specific about whether the person is a man or a woman. Some people have started using 'him/her,' his/hers, he/she, or (him or her, his or her, he or she) to avoid the problem of sounding as though doctors, for example, are always male. So, you will see and hear sentences like this:

A doctor who has a private practice has his/her own office.

The doctor sends his/her work to a laboratory.

(Tr5)

Read the sentences below. Put an M by the sentences if the masculine pronoun definitely refers to a male. Put an M/F if the masculine pronoun is used in a general way to refer to all males or females in the group. (Tr6)

1. A nursing aide should report to his team leader.

2. A doctor goes to school for many years. He may be 30 years old before he starts his own practice.

3. A patient cannot take hospital property when he leaves the hospital.

4. John sent his mother a beautiful necklace.

5. A patient might tell you about his pains and worries.

6. Be sure he has a urinal.

7. Robert broke his leg last week.

8. A person who owns a boat should make sure his passengers can swim.

9. The boy played tennis with his sister.

VIII
Write the correct words to complete the puzzle.

ACROSS
1. Same as 1 down.
3. Give the patients their care in the morning.
6. Common form of address for mother.
7. A fire in a hospital is an
9. Give the letter the patient.
10. The warmest season of the year.
16. Ahi City is (abbreviation) of Tamarind City.
17. A number less than ten.

DOWN
1. How many wide is this room?
2. You can tell with a watch.
4. A woman's name.
5. Contraction for do not. They know the answer.
8. To report a cardiac arrest say 500.
11. Please come with
12. Give the candy to
13. Initials for a woman named Esther Sandly.
15. Abbreviations for registered nurse.