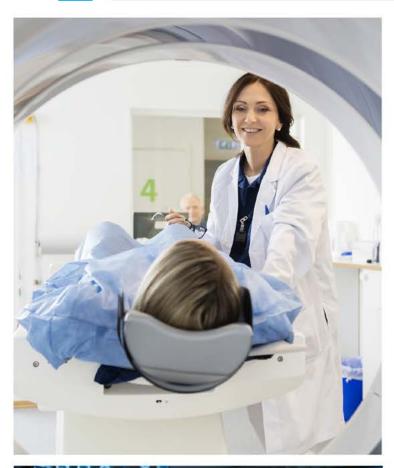


ADVANCED C1/C2 WRITING FOCUS TEACHER'S HANDBOOK

LET'S TALK! ENGLISH



CHAPTER FOUR HEALTH CARE





COMPREHENSION 4-5

GRAMMAR G

Review of Time and Condition Clauses

WRITING SKILLS

4-25

4-22

Cohesion: Substitution Visuals in a Report Sequencing & Classifying Expressions Process Report

LEARNING OBJECTIVES

I will be able to ...

- talk about symptoms and illnesses.
- use the correct vocabulary for medical equipment.
- use more formal vocabulary for academic texts.
- refer to visuals in a text.
- write a process report using sequencing and classifying language.

VOCABULARY

INTRODUCTION

	INTRODUC	TION	
4.1	Segmented Recording	SPEAK	
4.2*	Viewing / Grouping Activity		
l.3	Segmented Recording	LISTEN & SPEAK	
	COMPREHE	NSION	
.4	Multiple Choice**	LISTEN & READ	
.5	Multiple Choice**	READ	
.6	Sentence Jumble**	LISTEN & READ	
.7	Open Recording	READ & SPEAK	
	VOCABUL		
.8	Text Match**	READ	
l.9	Fill-in-the-Blanks**	READ & WRITE	
.10 .11	Image Match** Text Match**	READ READ	
.11	Text Match**		
12 13	Fill-in-the-Blanks**	READ LISTEN, READ & WRITE	
.13	Category Match - Graded Order*	LISTEN, READ & WRITE	
.15*	Viewing / Pairing Activity	LISTEN & SPEAK	
.16	Open Recording	SPEAK	
.17*	Viewing / Pairing Activity	LISTEN, READ & SPEAK	
.18	Multiple Choice**	READ	
.19	Fill-in-the-Blanks**	READ & WRITE	
.20	Fill-in-the-Blanks**	READ & WRITE	
.21	Sentence Jumble**	READ	
.22	Category Match**	READ	
.23	Sentence Jumble**	LISTEN & READ	
.24	Category Match**	READ	
.25	Fill-in-the-Blanks**	READ & WRITE	
.26	Open Recording	READ & SPEAK	
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	GRAMM	AR	
.28	Multiple Choice**	READ	
.29	Fill-in-the-Blanks**	READ & WRITE	
.30	Multiple Choice**	LISTEN	
.31	Word Jumble**	WRITE	
.32 .33	Multiple Choice** Multiple Choice**	READ READ	
2.4	WRITIN		
.34	Multiple Choice**	READ	
.35	Question and Answer		
.36	Fill-in-the-Blanks**		
.37	Question and Answer	WRITE	
.38	Category Match - Graded Order**	READ READ	
.39 .40	Multiple Choice** Fill-in-the-Blanks**	READ READ & WRITE	
.40	Text Match**		
.41	Open Text	READ & WRITE	
.43	Open Text	WRITE	
	opentient		

* This activity needs your input or attention. ** This activity is auto-graded by the HUB.

CHAPTER 4 ACTIVITY INDEX

Topic Vocabulary

VOCABULARY

GRAMMAR

Other Words and Phrases

WRITING SKI



INTRODUCTION

CHAPTER 4 VOCABULARY

Functional Vocabulary

abnormal (adj) acute (adj) admit sb into hospital alleviate pain and suffering anesthetic (n) artery (n) bandage (n) belly (n) benign (adj) bladder (n) brace (n) brain (n) break out in sth (pv) bruised (adj) cast (n) chronic (adi) come down with an illness congested (adj) contagious (adj) contract a disease crutch (n) debilitating (adj) deficient (adj) degenerative (adj) dehydrated (adj) deviate (v) discharge sb from hospital dislocate a joint dizzy (adj) emergency room (ER) (n) faint (v, adj) fatal (adj) feverish (adj) flare up (pv) fracture a bone gauze (n) get over an illness have a seizure heart (n) inconclusive (adj) infectious (adj) inflamed (adj) injection, shot (n) intestine (n)

invasive (adj) itchy (adj) keep track of sth (pv) kidney (n) knock sb out (pv ← →) liver (n) lung (n) malignant (adj) nauseous (adj) obesity (n) outpatient (n) pancreas (n) pass away (pv) pass out (pv) pass sth on ($pv \leftarrow \rightarrow$) Band-Aid[®] (n) pop your shoulder out quarantine yourself rash (n) recover (v) resuscitate a person sharp pain (n) side effect (n) sling (n) stiff (adj) stitch (n) stomach (n) subconscious (n) suffer a stroke sustain an injury tender (adj) terminal (adj) throbbing (adj) throw up (pv) thyroid (n) tissue (n) unconscious (adj) vein (n) wheelchair (n)

adjacent to (prep) alongside (prep) among (prep) apply (v) app (n) appliance (n) applicability (n) applicable (adj) applicant (n) application (n) applied (adj) inapplicable (adj) misapply (v) as opposed to (prep) figure (n) for the sake of (prep) given (prep) in terms of (prep) in the event of (prep) instead of (prep) on behalf of (prep) other than (prep) rather than (prep) regarding (prep) regardless of (prep) subsequent to (prep) table (n) target (n, v) throughout (prep) toward (prep) unlike (prep) using (prep)

Idioms

a new lease on life

be composed of (v) be made of (v) before long (adv) besides (prep) classify as/into (v) categorize as/into (v) category (n) component (n) consist of (v) contain (v) divide into (v) element (n) eventually (adv) essential (adj) fall into (v) in addition (adv) in the meantime (adv) in time (adv) initially (adv) include (v) important (adj) not only ..., but also ... part (n) phase (n) piece (n) point (n) set (n) shortly after (adv) sort into (v) split into (v) stage (n) subcategory (n) subsequently (adv) type (n)

Note: Use the Vocabulary Translation Sheets for your reference.



4.1 - SPEAK

Segmented Recording

Click the blue play button to watch the entire slideshow and gather your thoughts before recording. Then, click the record button and tell a story about this patient's medical journey. Click "**Done**" to move on to the next image.



4.2 - LISTEN, READ & SPEAK

Viewing / Grouping Activity (Groups of 3)

TEACHER NOTE: Look at the **Pairing/Grouping Activity** section of the **Step-By-Step Guide** in this book to help prepare for this activity.

Discuss each question as a group.

- 1. Do you think your country has a good healthcare system? Why or why not?
- 2. Do most people in your country prefer traditional medicine, modern medicine, or a combination of the two?
- 3. Do you have to pay for medicine in your country?
- 4. What are the latest advancements in medical technology (anywhere in the world)?
- 5. What are some pros and cons of advancements in medical technology?
- 6. Who do you think should fund research of new treatments and medical equipment? Should it be the government, independent corporations, or academic institutions?

4.3 - LISTEN & SPEAK

Segmented Recording

Listen to each question and respond using complete sentences. Click "**Done**" to listen to the next question.

- 1. Do you prefer traditional medicine, modern medicine, or a combination of the two?
- 2. Do you have any family natural remedies that have been passed on from older generations?
- 3. Describe a time when you sustained an injury. How did you get hurt and what did you do to heal?

COMPREHENSION

NEW MEDICAL TECHNOLOGIES



Interviewer: Today, we will focus on rapidly improving medical technology. It seems like new devices and methods are coming out faster than most of us can **keep track of**.

As a medical professional, can you sum up the most exciting medical innovations making their way to our doctors' offices?

Medical professional: Well, in terms of new medical technologies, things are now more exciting than ever. We can categorize advancements in two ways: medical diagnosis, which is gathering evidence that disease is present in your body; and treatment, which is curing the diseases we find. The technologies making the biggest impact on the diagnosis of disease right now are smartphone and smartwatch apps that help us monitor your health and pick up on something going wrong. You can already buy watches that draw on smartphone technology to track your heart and lung functions. Some of these can track fevers caused by influenza or other viruses. Some can even do at-home blood pressure checks. These monitors allow us to gather enough information to personalize therapies for each patient more effectively. This is especially important for people with risk factors for certain diseases and can play a central role in diagnosing conditions, including cancer, much earlier.

Improvements in 3D printing also fall into the diagnostic category. It's now possible to print flexible electronic sensors that can be applied to your skin, like a bandage or tattoo. They are waterproof and stretchy, so they don't cause discomfort and can stay on the skin long enough to monitor what's going on inside the body. This can be done on an **outpatient** basis as opposed to the procedures required by traditional monitoring devices. Rather than being hooked up to machines in the doctor's office, these tiny sensors can transmit data to a smartphone to help doctors carry out tests without interrupting the patient's daily routine.

In the treatment category, we have some groundbreaking research going on. Traditional surgery or drug therapies are very **invasive** and can be **debilitating**, given their side effects. But now, researchers are testing theories that use the brain to help fight disease. They have established the brain/body connection and are making the case that stimulating the brain in certain ways can trigger a response in the rest of the body. Researchers are using electronic capsules that emit pulses from inside the intestines to stimulate a brain response. This method is showing good results for treatment of diabetes and **obesity** but also may be an option for those developing Alzheimer's and Parkinson's disease.

Another treatment technology that **deviates** from traditional methods is called nanotechnology. Nanodevices, or nanoparticles, are less than a millimeter in size, and research suggests that they can **target** doses of medicine in a completely new way. Nanoparticles can travel through bodily fluids like blood, lymph, or even the **tissue** around the eye. They move toward the diseased area and deliver drugs only to that area instead of overwhelming the entire body of a critically-ill patient. Nanotechnology is exciting! It could have a dramatic effect on a patient's ability to fight off even difficult diseases of the kidneys and liver.

Interviewer: It sounds like researchers are tackling some difficult issues on behalf of their patients right now.

Medical professional: Yes. The research into using technology alongside our bodies' natural processes is moving quickly. In the event of a research breakthrough, we will be able to wipe out diseases and give patients with critical conditions **a new lease on life**. And we haven't even discussed a third category: prevention. We have some incredible developments there as well, especially in terms of boosting the **immune system** as our first line of defense against disease.

Interviewer: I'd love to have you back for another discussion regarding that research. Thanks for your time today.

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VOCABULARY

COMPREHENSION

4.4 - LISTEN & READ

Multiple Choice

Listen to the statements. Then, decide whether each one is **true** or **false** based on the "New Medical Technologies" interview.

1. It's difficult to stay well-informed and up to date with new medical developments.	A. True	B. False
2. Medical technology is currently an exciting field to be in.	A. True	B. False
3. Smartphone and smartwatch apps are helping doctors provide better treatments.	A. True	B. False
4. A patient wearing a modern electronic sensor can go swimming.	A. True	B. False
5. Researchers are working toward using electronic capsules to treat many diseases.	A. True	B. False
6. Nanoparticles can move independently within the body.	A. True	B. False
7. The breakthroughs in medical research have wiped out diseases.	A. True	B. False
8. There are three categories of medical advancement.	A. True	B. False

4.5 - READ

Multiple Choice

Choose the answer that best completes each statement based on the "New Medical Technologies" interview.

- 1. In paragraph 1, the interviewer asks the medical professional about ...
 - A. medical innovations that are being researched right now.
 - B. medical innovations that doctors are using with patients.

C. medical innovations that will soon be used with patients.

- 2. In paragraph 2, the medical professional answers that ...
 - A. there are two new ways to develop medical technology.

B. there are two areas of development in medical technology.

- C. medical technologies are being improved for better diagnosis and prevention.
- 3. In paragraph 3, the medical professional states that ...
 - A. people using healthcare apps can diagnose themselves at home.
 - B. people using healthcare apps don't need to see the doctor as much.

C. people who use healthcare apps can get earlier diagnoses for diseases.

4. In paragraph 4, the medical professional says that 3D printers can be used to ...

A. create new devices to replace conventional diagnostic methods.

- B. apply electronic sensors onto the skin-like tattoos.
- C. carry out diagnostic tests on patients.
- 5. In paragraph 5, the medical professional mentions treatments that ...
 - A. can fight brain disease using the intestines.

B. can fight disease in the body with the help of the brain.

C. can fight disease using surgery or drug therapies.

6. In paragraph 6, the medical professional says nanotechnology is exciting because ...

A. nanoparticles only affect the diseased areas, such as the liver or kidneys.

- B. nanoparticles can treat large areas of the body.
- C. nanoparticles only affect diseases of the liver or kidneys.

COMPREHENSION

4.6 - LISTEN & READ

Sentence Jumble

Listen to the interviewer's questions and put each answer from the medical professional in the correct order. Use the "New Medical Technologies" interview if needed.

- 1. What are two categories of medical technology advancements? Diagnosis and treatment of diseases
- 2. How do medical professionals use the information gathered from smartphones and smartwatches? **They help personalize therapies and make them more effective.**
- 3. How is 3D printing helping to diagnose disease? It creates electronic sensors to monitor what is going on inside the body.
- 4. What is a disadvantage of traditional monitoring devices? **They are performed on an inpatient basis.**
- 5. By using the brain to help fight disease, what is being avoided? Invasive therapies and debilitating side effects
- 6. Which treatment option will be available soon for patients diagnosed with Alzheimer's and Parkinson's? **Electronic capsules that stimulate a specific brain response**
- 7. What is an advantage of using nanoparticles as treatment? **Drugs are delivered only to the diseased area.**
- 8. How is this new research different from treatments of the past? It is using technology alongside our bodies' natural processes.
- 9. What is another important area of medical treatment? **Disease prevention is also vital.**

4.7 - READ & SPEAK

Open Recording

Read the "New Medical Technologies" interview. Then, answer each question about it using your own answers.

- 1. How can 3D printing help modern medicine?
- 2. Which three categories of developments in medicine does the medical professional mention?
- 3. How can modern medicine personalize therapies, and why, according to the medical professional, is this important?
- 4. Why does the medical professional say that using nanotechnology is a deviation from traditional medicine?
- 5. What is having the biggest effect on detecting health problems, according to the medical professional?
- 6. The medical professional mentions electronic capsules. What will doctors use them for?
- 7. Have you heard of any of these innovations? Do you know of any new medical treatments or technology that are not mentioned here?

CABULARY

VOCABULARY



4.8 - READ

Text Match

Match each bold word from the "New Medical Technologies" interview with the correct meaning.

- 1. a medical condition in which a person has too much body weight to be healthy
- 2. a mass of cells that together form different parts of the body
- 3. medical treatment that requires entering the body
- 4. to aim an attack on something specific
- 5. to become more energetic, active, and positive
- 6. to do something differently from what is expected or considered normal
- 7. a person who gets treatment at a hospital but does not stay overnight
- 8. making a person's mind or body weaker
- 9. to regularly look for up-to-date information about something
- 10. the body's defense system to fight disease and infection

4.9 - READ & WRITE

Fill-in-the-Blanks

TEACHER NOTE: After students complete this activity, have them compare the different uses of each word in their own language as a class. Have them talk about whether or not they use the same word for each of the English meanings.

Complete each sentence with the correct word from the word bank.

debilitating	new lease on life	keep track of	outpatient	targets
immune system	obesity	tissue	invasive	deviated

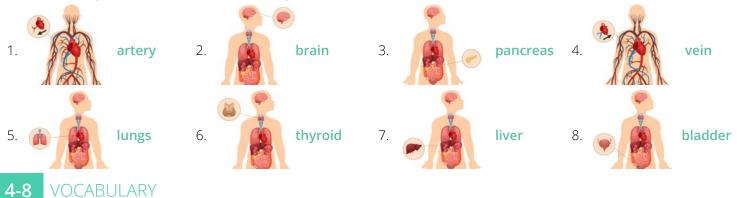
1. Which types of medical treatment would you say are [invasive]?

- 2. Do you think nerve pain or muscle pain is more [debilitating]?
- 3. Have you ever [deviated] from the treatment a doctor prescribed for you? If yes, give an example and say why.
- 4. Can you give an example of a medicine that [targets] a particular medical problem?
- 5. What can give a person a [new lease on life]?
- 6. Do you [keep track of] your blood pressure and heart rate? Why or why not?
- 7. Why do you think [obesity] is such a big problem in countries such as the USA, Australia, and New Zealand?
- 8. What do you do to boost your [immune system]?
- 9. How often do you have a routine checkup, blood tests, X-rays, or other forms of [outpatient] care?
- 10. Have you ever bruised the [tissue] around your eyes, causing a black eye? If yes, how did it happen?

4.10 - READ

Image Match

Match each organ name with the correct image.



obesity tissue invasive target a new lease on life deviate outpatient debilitating keep track of immune system

IN	TROD	UCT	ION

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VOCABULARY

GRAMMAR



lung

vein

bladder

thyroid

heart

brain

liver

artery

kidney

pancreas

intestine

stomach



stomach

4.10 - READ (Continued)



Text Match

Match each word with the correct definition.

- 1. takes oxygen into and passes carbon dioxide out of the body
- 2. collects liquid waste
- 3. carries blood from the body back to the heart
- 4. produces hormones that control how the body grows and functions
- 5. destroys microbes in food and starts to break it down to be digested
- 6. pumps blood around the body
- 7. controls thought, movement, memory, and feeling
- 8. converts toxins in the blood into inert substances; produces bile
- 9. carries blood from the heart to the rest of the body
- 10. removes waste products from the blood and produces urine
- 11. produces insulin and other enzymes that help the body digest food
- 12. absorbs nutrients and water into the blood; two parts: small and large

4.12 - READ

Text Match

Match each noun with the correct verb with which it collocates.

What can you ...

1. contract <mark>malaria</mark>	2. suffer a stroke	3. sustain <mark>a head injury</mark>	4. alleviate pain and suffering	5. amputate <mark>a limb</mark>
6. fracture <mark>a bone</mark>	7. have a seizure	8. resuscitate a person	9. develop Alzheimer's	10. dislocate a joint

4.13 - LISTEN, READ & WRITE

Fill-in-the-Blanks

Doctors often use formal medical language, but when we talk to our friends, we use informal phrasal verbs to talk about medical issues. Listen to what a doctor says, then repeat what she says to a friend by completing each sentence with everyday words (phrasal verbs) from the word bank. *Not all phrasal verbs will be used. You might have to change the words (plural, conjugate) depending on the sentence.*

For example: You hear: You can't take this test if you are still suffering from a cold.

You read: She said I couldn't take this test if I was ______ a cold.

You type: She said I couldn't take this test if I was [fighting off] a cold.

pass on	pop out	knock out	flare up	put on	come down with
pass out	get out	get over	throw up	pass away	break out in

B: She said it'd take me ten days to [get over] this illness.

B: She said I had [come down with] a stomach virus.

B: She said I had [popped] my shoulder [out].

B: She said I had [passed out] after they took a blood sample.



VOCABULARY

4.13 - LISTEN, READ & WRITE (Continued)

Fill-in-the-Blanks

- 1. A: It will take you ten days to recover from this illness.
- 2. A: You fainted after I took a blood sample.
- 3. A: I'm afraid you have contracted a stomach virus.
- 4. A: You have dislocated your shoulder.
- 5. A: This drug can affect the stomach, so it might make you vomit.
- B: She said the drug could affect my stomach, so it might make me [throw up].
- 6. A: Please quarantine yourself so that you don't infect other people with the disease.B: She asked me to guarantine myself so that I don't [pass] it [on] to others.
- 7. **A:** If your condition recurs, please call me immediately.
- **B:** She told me to call her immediately if my condition [flared up].
- 8. A: I'm very sorry to tell you that your great uncle died last night.
- B: She said she was very sorry to tell me that my great uncle had [passed away] the night before.
- 9. A: The anesthetic should keep you unconscious for two hours.
- **B:** She said the anesthetic should **[knock]** me **[out]** for two hours.
- 10. A: There are side effects. If you develop a rash, please call me immediately.
 - B: She said there were side effects, and if I [break out in] a rash, I should call her immediately.

VOCABULARY TIP - Additional Phrasal Verbs for Illnesses and Complaints

Pł	nrasal Verbs	Definitions
Tom's acne ha	is finally cleared up .	to become better / go away
I'm fighting o	ff a sore throat.	to try hard to get better
I hope the swe	elling <mark>goes down</mark> soon.	to return to normal size
	irus going around.	to affect many people
Give the cut ti	me to heal up .	to become covered with new skin
	a stomach bug.	to become sick from something
	pulled through.	to survive or recover from an operation or severe illness
Her ankle has	swollen up.	to become larger than normal
My grandpa t	hrew out his back.	to pull or strain a muscle in your back, causing pain

4.14 - LISTEN

Category Match - Graded Order

Listen to the descriptions. Then, place each vocabulary word and image letter under the correct description. *The order will be graded.*

- 1. After spraining my ankle, I could not put all of my weight on it. I used these to help me walk.
- 2. After I sustained a knee injury, the doctor needed to stabilize my leg to keep it from getting worse.

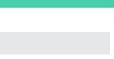




- 3. While recovering from an accident, I wasn't able to use my legs and was glad to still have a way to get around, especially outside of the house.
- 4. For my broken bone to heal properly, it needed to be immobilized and protected from further injury.







VOCABULARY

GRAMMAR

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4.14 - LISTEN (Continued) **Category Match**

- 5. When I got stitches, the nurse covered the exposed area to prevent infection.
- 6. For disease prevention, some people choose to get vaccinated to limit the likelihood of sickness.
- 7. My shoulder popped out yesterday. It feels much better when I have it supported against my body.







- 8. I was wounded badly, and the cut was too deep for a simple bandage. It had to be sewn up in order for it to heal properly.
- 9. I twisted my wrist, and it needed to be wrapped. This prevents me from moving it the wrong way and injuring it further.





	Number 1	Number 2	Number 3	Number 4	Number 5
Vocabulary Word	crutches	brace	wheelchair	cast	gauze
Image Letter	E	I	С	G	В
	Number 6	Number 7	Number 8	Number 9	
Vocabulary Word	Number 6 injection	Number 7 sling	Number 8 stitches	Number 9 bandage	

4.15 - LISTEN & SPEAK

Viewing / Pairing Activity

TEACHER NOTE: Look at the Pairing/Grouping Activity section of the Step-By-Step Guide in this book to help prepare for this activity.

Pick **four** of these items and describe a time when you, a family member, or a friend used or had:

- crutches
- a wheelchair
- stitches
- Band-Aid[®]

- a sling

- a brace
- a cast

- bandage

4.16 - SPEAK

Open Recording

Pick **one** of these items and describe how your day would be different if you had it.

- crutches and a brace on a leg
- a wheelchair
- a cast on your dominant hand or wrist
- a sling on your dominant arm

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4.17 - LISTEN, READ & SPEAK

Viewing / Pairing Activity

TEACHER NOTE: Look at the **Pairing/Grouping Activity** section of the **Step-By-Step Guide** in this book to help prepare for this activity.

First, look up any words you do not know in a dictionary. Then, take turns playing the roles of both doctor and patient. When the doctor asks you to describe your complaint, use the words to describe your symptoms. *The words can be used many times.*

- 1. numb
- 2. throbbing
- 3. tender
- 4. swollen
- 5. aching
- 6. sharp pain

7. itchy 8. dizzy 9. nauseous 10. feverish 11. congested 12. sore

Describe how you feel when you ...

- A. have a bad cold.
- B. have hit your head hard.
- C. have pulled a muscle.
- D. have cut your finger.
- E. have dislocated your shoulder.

4.18 - READ

Multiple Choice

Doctors use many special medical terms to describe a condition. Choose the word that best completes each sentence. *Use a dictionary if needed.*

1. I'm very happy that my tumor is		
2. My dad has had back pain for years. It never seems to get better.	A. benign	B. malignant
3. I caught a/an disease by shaking hands. I'm going to stay home so I	A. acute	B. chronic
don't pass it on to others.	A. invasive	B. contagious
There was a accident on the highway yesterday.	A. fatal	B. terminal
5. You are in vitamins D and B12.	A. deficient	B. abnormal
Your knee joint is, so you should stay off it for a few days.	A. feverish	B. inflamed
7. Parkinson's is classified as a disease because it only gets worse over time.	A. degenerative	B. deficient
You need more tests because the results were	A. unsure	B. inconclusive
9. The accident victim was but in a stable condition.	A. subconscious	B. unconscious
10. The boy was in a skateboard accident.	A. injured	B. dislocated
11. The lab confirmed that my cancer is and is spreading to other organs.	A. benign	B. malignant
12. I was feeling and achy all over, and when mom took my temperature, it	A. feverish	B. inflamed
was 101°F (38.3°C).		
13 diseases are spread through the air. You can catch one when someone	A. Infectious	B. Contagious
coughs or sneezes on you.		
14. The nurses in my ward all work with patients. Many of them only have	A. terminal	B. fatal
a few months to live.		
15. Dad has always had a sore back, but this morning the pain became so	A. chronic	B. acute
that he went to the hospital to have it checked out.		

4-12 VOCABULARY

14. faint 15. stiff 16. tightness in the chest 17. bruised 18. dehydrated

13. twinge

F. have broken a bone in your hand.G. have been in the sun too long.H. have hay fever.I. have food poisoning.J. have hurt your back.

VOCABULARY

GRAMMAR

WRITING SKILL

VOCABULARY

4-13

VOCABULARY



VOCABULARY TIP - Common Medical Abbreviations

The medical profession uses many abbreviations, so it helps to be familiar with them.

Here is a list of some of the most common ones:

Abbreviation	Full Term	Explanation
CPR	cardiopulmonary resuscitation	an emergency lifesaving procedure to try to restart the heart
CT / CAT	computer tomography / computerized axial tomography	produces cross-section images of the body
EKG	electrocardiogram	a test to check the heart's rhythm and electrical activity
ER	emergency room	entry point in a hospital in an emergency situation; no appointment needed
GP	general practitioner	a family doctor that treats common conditions
ICU	intensive care unit	a place in a hospital where critically ill patients are treated
IV	intravenous	drugs or fluids (e.g., liquid food) directly into the vein
MRI	magnetic resonance imaging	makes detailed 3D images of the body
OR	operating room	where surgery takes place
ОТС	over the counter	medicine which does not need a prescription

4.19 - READ & WRITE

Fill-in-the-Blanks

Rewrite each phrase in between the asterisks using the correct, more formal medical expression from the word bank. Use a dictionary and the **Grammar Focus** if needed. You might have to change the words (plural, conjugate) depending on the sentence.

notify a physician	medical attention	take vital signs	alleviate the patient's condition	admit	medical professional
deteriorate	administer	discharge	establish	employ	examine

1. *Doctors and nurses* in the ER had to work quickly to resuscitate the patient. [Medical professionals]

- 2. The doctor prescribed some medication to *make the patient feel better*. [alleviate the patient's condition]
- 3. I wasn't sure whether the cut on my leg needed *a doctor to look at it*. [medical attention]
- 4. Please *call a doctor* if the patient isn't feeling better within 24 hours. [notify a physician]
- 5. My grandfather was *put* into the hospital after his stroke. Sadly, he passed away a day later. [admitted]
- 6. The ER nurses first *check your pulse, blood pressure, and heart rate* to see whether you have a low-level or high-level emergency. [take vital signs]
- 7. The patient's lungs were dangerously congested, so the doctors had to *use* life support. [employ]
- 8. The drugs that were *given* to the patient intravenously knocked her out within minutes. [administered]
- 9. The specialist ordered an MRI scan to *find out* the best course of treatment. [establish]
- 10. The patient's condition was *getting worse*, so he was transferred to intensive care. [deteriorating]
- 11. I hope I'm well enough to be *let out of the hospital* by the weekend! [discharged]
- 12. My GP *looked at* my mole first, then referred me to a skin specialist. [examined]

OCABULARY



4.20 - READ & WRITE

Fill-in-the-Blanks

Read the conversation between a doctor and his patient. Complete each sentence with the correct word(s) from the word bank. *Not all words will be used.*

nauseous	inflamed	congested	flaring up	abnormal	tenderness	inconclusive
subconscious	pass out	fatal	terminally	malignant	got over	belly

Doctor: Good morning, Mrs. Alvarez. I hear you are having some abdominal pain. Can you describe your exact symptoms? **Mrs. Alvarez:** Thanks for seeing me on such short notice, Doctor. I am worried that my condition is **[flaring up]** again. I have been taking my medication as you prescribed, but my **[belly]** is still itchy. So, I scratch it and then it's really tender to the touch.

Doctor: Okay. Are you [nauseous] at all?

Mrs. Alvarez: I was a little yesterday, but I [got over] that quickly with the anti-nausea medication you had given me. Doctor: Oh good, good. Hmm, I can feel that your abdomen is [inflamed]. On a scale of 1 to 10, how would you rate the [tenderness]?

Mrs. Alvarez: I would say it's a 5 when I am not touching it, but a 9 when I touch it or my clothes accidentally brush it. Doctor: I think we should do a more comprehensive blood panel. The results of the simple blood test were [inconclusive] last time, and I was hoping we could get this [abnormal] pain under control by now with the medication. I want to be sure we aren't missing anything more serious.

Mrs. Alvarez: Am I [terminally] ill, or could I have a [fatal] condition? Oh gosh. I think I am going to [pass out]. Doctor: Mrs. Alvarez, please, calm down. Until a [malignant] diagnosis is found, there is no need to worry. Here, sit and take a deep breath. I will have the nurse come in and draw your blood. I will call you as soon as we get the results. Mrs. Alvarez: Okay, thank you. I'm sorry for panicking a bit. I'll try not to think about the results until I hear from you. Doctor: All right, Mrs. Alvarez. That sounds like a plan. I'll be in touch soon. Take care!

4.21 - READ

Sentence Jumble

When describing a process, it helps to use sequencing expressions to make the order of the steps clear. Put the steps for treating a sprained ankle in the correct order.

- 1. D: First, you experience sudden, sharp pain that forces you to immediately stop moving or take the weight off your ankle.
- 2. F: The second step is to rest the ankle and apply ice to stop the pain and swelling.
- 3. B: Then, you should bandage the ankle to stabilize the joint.
- 4. H: Finally, you should elevate the joint as this further relieves the pain.
- 5. A: After two to three days, the swelling should have gone down, but if not, you should see a doctor.
- 6. C: At this stage, the doctor will usually order an X-ray.
- 7. G: Once he has the X-ray, he can see if there are any complications, and if so, he might recommend a cast.
- 8. I: Having gotten the cast, you should rest the joint for some days.
- 9. E: Later on, you should exercise gently to keep your other joints from getting stiff.

4.22 - READ

Category Match

When writing academic texts, it is often necessary to classify something according to categories, parts, steps, or the relationship to other things. Place **two** synonyms under each bold word.

- 1. There are three **types** of pacemakers: single-chamber, dual-chamber, and biventricular.
- 2. Modern crutches **are made of** lightweight aluminum, plastic, and rubber.

VOCABULARY

4.22 - READ (Continued)

Category Match

- 3. Chemotherapy drugs can be **divided into** six classes.
- 4. The first **step** when treating a compound fracture is to stop the bleeding.
- 5. One important **part** of the treatment is physical therapy.
- 6. The **important** thing to remember is to stay calm.
- 7. The category **below** can be further broken down into four groups.
- 8. In addition to stopping the bleeding, the limb should be elevated.

types	are made of	divided into	step
subcategories	consist of	split into	stage
varieties	are composed of	broken down into	thing to do
part	important	below	in addition to
part element	important vital	below underneath	in addition to besides

4.23 - LISTEN & READ

Sentence Jumble

Listen to sentences that use the words "apply" and "application" in different ways. Then, match each definition with the correct sentence.

1. These conditions	don't apply to me.
---------------------	---------------------------

- 2. The **application** reacted badly with my skin.
- 3. I've **applied** for time off in late September.
- 4. **Apply** pressure until the bleeding stops.
- 5. These new devices have so many practical **applications**.
- 6. If you want to become a doctor, you will have to **apply** yourself. to work hard (v)
- 7. You have to **apply** the lotion three times a day.
- 8. This is a new **application**. The old one kept crashing.
- 9. I've put in an **application** to be transferred to the pediatric ward.a formal request for sth (n)
- 10. He shows great **application** to his work.

to be relevant (v)

a medical treatment (n) to make a formal request for sth (v) to press down hard on sth with your hand or foot (v) to use/make sth work (v); the practical use of sth (n) to spread cream or paint onto sth (v) a computer program designed to do sth specific (n) a determination to work hard; make a great effort (n)

4.24 - READ

Category Match

Place each word related to "apply" under the correct category.

Verb	Noun	Person	Adjective
apply	арр	applicant	applicable
misapply	appliance		applied
	applicability		inapplicable
	application		
	misapplication		

OCABULARY



4.25 - READ & WRITE

Fill-in-the-Blanks

Complete each sentence with the correct form of "apply" from the word bank. Use a dictionary if needed. You might have to change the words (plural, conjugate) depending on the sentence.

apply	misapplication	арр	inapplicable
misapply	applicability	applicant	applied
application	appliance	applicable	

- 1. I'm going to graduate with an [applied] sciences degree in dental hygiene.
- 2. You should only **[apply]** the lotion to undamaged skin.
- 3. There were many **[applicants]** for the position of dental assistant.
- 4. If a doctor [misapplies] his knowledge and knowingly causes harm, this is called malpractice.
- 5. I pulled a muscle in my back because the new [appliance] was too heavy for me to lift alone.
- 6. My fitness [app] can track my heart rate, the number of steps I take, and many other health-related metrics.
- 7. Please fill out all the sections [applicable] to you on the patient history form.
- 8. This cream is for external [application] only.
- 9. The new treatment has wide [applicability] to many common skin complaints.
- 10. If it has nothing to do with you, check the box marked "[inapplicable]."
- 11. The **[misapplication]** of sunscreen can lead to skin cancer.

4.26 - READ & SPEAK

Open Recording

Read each question and respond using complete sentences.

- 1. What can you resuscitate, amputate, contract, fracture, or alleviate?
- 2. Which 10 phrasal verbs can be used to describe a person's experience with illness, such as get over a cold or break out in a rash?
- 3. Which 10 adjectives can you use to describe your symptoms to a doctor, such as feeling dizzy or sore?
- 4. Which 10 organs of the body can you name?
- 5. Which 10 adjectives can be used to describe a patient's condition, such as benign or infectious?

4.27 - SPEAK

(Optional: Refer to the Rubric Section.)

Segmented Recording

TEACHER NOTE: Listen to the students' **Activity 4.1** recording to compare the growth they have shown since first completing this activity.

You already recorded yourself talking about these images in **Activity 4.1**. Record yourself again, but this time, focus on expanding on those thoughts. You will be graded on your growth and improvement in vocabulary, pronunciation, and overall comprehensibility from when you first completed the activity. Click "**Done**" to move on to the next image.

GRAMMAR

WRITING SKIL

GRAMMAR

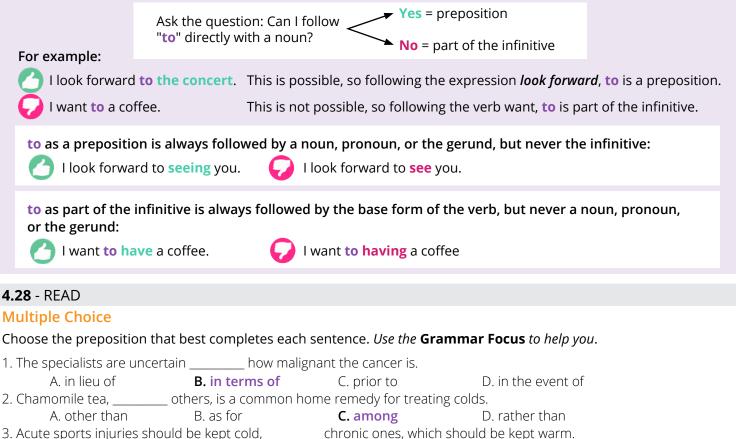
GRAMMAR FOCUS - Less Common Prepositions

A **preposition** shows the relationship (where, when, who, what, why) of a noun to other words. Prepositions are always followed by a noun. A noun can take the form of a single noun, compound noun, noun phrase, noun clause, pronoun, or gerund.

Here are some less common prepositions:

one word	two words	three or more words	participles that can act as prepositions
aboard alongside among apart from apropos beneath besides throughout toward underneath unlike	adjacent to as for as of as to instead of other than prior to rather than regardless of subsequent to up to	as opposed to by means of for the sake of in lieu of in terms of in the event of on behalf of with a view of with regard to	concerning excluding given regarding using

"To" is sometimes a preposition and sometimes part of the infinitive. Here is how you can tell the difference:



A. as opposed toB. instead ofC. apart fromD. rather than4. Children should learn about healthy eating,the increasing problem of obesity in many countries.A. assumingB. unlikeC. givenD. prior to

GRAMMAR 4-17

INTRO	DUCTION COMPRE	EHENSION	VOCABULARY	GRAMMAR	WRITING SKILLS
G	RAMM	AR			€ G
4.28 - READ (Continu	ued)				
Multiple Choice	,				
•	owing trend te	lemedicine in recer	it vears		
0	B. beneath		5	ward	
	elbow crutches				
	B. apart from				
	nospital admission forms				
A. other than	B. subsequent	to C. regardl	ess of D. or	n behalf of	
	me in his wheelchair.				
	B. alongside		D. ap	propos	
	nd fracture, don't move t				
	B. In the even		5	means of	
	rience any problems				
A. regarding	B. unlike	C. throug	nout D. be	eneath	
4.29 - READ & WRITH	Ξ				

Fill-in-the-Blanks

Complete each sentence with the correct preposition from the word bank. *Not all prepositions will be used. Use the* **Grammar Focus** *to help you.*

using	aboard	among	other than	adjacent to	throughout
rather than	subsequent to	for the sake of	unlike	regardless of	excluding

- 1. Blood travels [throughout] the body, bringing oxygen to the cells.
- 2. [Unlike] medicines with active ingredients, a placebo only contains inactive substances.
- 3. You should see a doctor [rather than] trying to stitch the cut yourself!
- 4. My dad was [among] the group who reacted badly to the treatment.
- 5. The physiotherapy department is **[adjacent to]** the orthopedic ward.
- 6. My cancer was diagnosed [using] a CT scan.
- 7. He kept putting weight on his injured foot [regardless of] the pain.
- 8. There is a program of physical therapy you should follow [subsequent to] your operation.
- 9. There's no difference in the medicines [other than] price.
- 10. My mom gave up smoking [for the sake of] her health.

4.30 - LISTEN

Multiple Choice

Listen to two sentences. Then, decide which one is correct based on how the word "to" is being used: as a **preposition** or as part of the **infinitive**.

- 1. **A.** The virus caused him to break out in a fever.
- B. The virus caused him to breaking out in a fever.
- 2. A. I'm used to walk on crutches. It's easy now after weeks of practice.
 - **B.** I'm used to walking on crutches. It's easy now after weeks of practice.
- 3. A. The doctor said we can't afford to wait any longer.
- B. The doctor said we can't afford to waiting any longer.
- 4. A. Sorry, I haven't gotten around to change the gauze yet.
- **B.** Sorry, I haven't gotten around to changing the gauze yet.
- 5. A. For my leg injury, I do physical therapy in addition to swim twice a week.
 - **B.** For my leg injury, I do physical therapy in addition to swimming twice a week.

GRAMMAR

4.30 - LISTEN (Continued)

Multiple Choice

- 6. A. Are you looking forward to leave the hospital soon?
 - B. Are you looking forward to leaving the hospital soon?
- 7. A. I pretended to feel pain in my hip so I wouldn't have to play sports today.
- B. I pretended to feeling pain in my hip so I wouldn't have to play sports today.
- 8. A. My parents often object to my ride my bike without a helmet.
 - **B.** My parents often object to my riding my bike without a helmet.
- 9. A. Mom refused to sign the form, so I can't go on the school trip!
- B. Mom refused to signing the form, so I can't go on the school trip!
- 10. A. Do you prefer reading to watch TV before you go to bed?
 - B. Do you prefer reading to watching TV before you go to bed?



GRAMMAR FOCUS - Review of Time and Condition Clauses When explaining a process, we use many **time** or **condition** expressions. These are generally followed

by the present simple tense (NOT the future simple).

Time Expressions		Condition Expressions	
after as soon as before by the time once suppose / supposing	until when whenever whether while	if as / so long as (just) in case	on condition that provided / providing unless

For example:

- You should lie down as soon as you feel dizzy.
- Supposing I need crutches, will my health insurance pay for them?
- I drink a lot of ginger tea and sleep a lot whenever I get a cold.
- Do not move an accident victim in case he or she has a head injury.

Other tenses are also possible with no change in meaning:

Present Perfect	Examples
We can use the present perfect to emphasize that one action will already be	You should rest your leg until the swelling has gone down. (or: until the swelling goes down.)
complete before the other.	You can go swimming again once the stitches have come out. (or: once the stitches come out.)
Present Continuous	Example
We can use the present continuous after while .	l listen to podcasts while l' m exercising my lower back. (or: while l exercise my lower back.)
Past Simple	Example
We can use the past simple after suppose / supposing when speculating about future events.	Supposing I discharged myself from the hospital, would I get problems with my health insurance? (or: Supposing I discharge myself, will I?)
(1	Continued on next page)



But be careful, in some cases only the present simple is possible and in others only the present perfect:

WRITING SKILLS

Present Simple	Examples and Explanations
If we are talking about two things that <i>logically must happen together</i> , you can only	When I see the doctor, she will take the stitches out. (The doctor will take the stitches out during my appointment.)
use the present simple .	When I've seen the doctor, she will take the stitches out. (The doctor will take the stitches out after my appointment.)
Present Perfect	Examples and Explanations
If we are talking about one action that <i>logically must come before</i> the other, we can only use the present perfect .	When I have talked to the doctor, I'll let you know the test results. (I'll talk to the doctor, then tell you the results.) When I talk to the doctor, I'll let you know the test results. (I'll tell you the results while I'm talking to the doctor.)

4.31 - WRITE

Word Jumble

Put each statement in the correct word order. Use the order: main clause - subordinate clause.

- 1. You will be discharged on the condition that a medical professional visits you every morning at home.
- 2. Ron can play football again, provided he wears a knee brace.
- 3. Never take medication unless it is specifically prescribed for you.
- 4. I usually faint whenever the doctor gives me a shot.
- 5. She can go jogging once her ankle is no longer sore.
- 6. Do not socialize with others just in case you are still contagious.
- 7. I will accept any treatment so long as it does not involve invasive procedures.
- 8. I would rather not travel long distances while I recover from abdominal surgery.
- 9. I will not be able to go swimming until the rash on my arm settles down.

4.32 - READ

Multiple Choice

Choose the answer that best completes each sentence. Use the **Grammar Focus** to help you.

1. I only go to the doctor	I have a serious pro	blem.			
A. in case	B. as soon as	C. if	D. whether		
2. You will be admitted to the	hospital the ER	doctor decides it's only	a minor complaint.		
A. unless	B. supposing	C. in case	D. once		
3. I'm going to call the specialis	st I get the test	results.			
A. until	B. as soon as	C. unless	D. by the time		
4 the joint is disloca	ated or not, you should s	ee a doctor.			
A. Unless	B. While	C. Whether	D. As long as		
5. The rash will settle down qu	5. The rash will settle down quickly you apply the lotion daily.				
A. whenever	B. provided	C. supposing	D. after		
6. I can play football again I get the cast off my leg.					
A. while	B. when	C. in case	D. unless		

4-20 GRAMMAR

WRITING SKILLS

GRAMMAR

4.32 - READ (Continued)

Multiple Choice

7. He's had a massive stroke. I	t might be too late	the ambulance gets	shere.	
A. until	B. on condition that	C. by the time	D. supposing	
8 you fracture a bo	ne in your hand, will you	still be able to work?		
A. Supposing	B. In case	C. Unless	D. Whether	
9. I never look at the needle _	the nurse gives	me a shot or draws my b	lood.	
A. whenever	B. until	C. in case	D. by the time	
10. You won't get dehydrated	you drink plen	ty of water.		
A. while	B. as long as	C. once	D. when	
11. I always carry a first-aid kit	with me I have	e an accident when hiking	2. 2	
A. if		C. in case	D. when	
12. She always listens to music the doctor does her yearly checkup.				
A. while	B. provided	C. once	D. as soon as	

4.33 - READ

Multiple Choice

Choose the answer that best completes each sentence. Use the Grammar Focus to help you. 1. I to play hockey again as soon as my cast is taken off. B. will be able C. have been able A. am able 2. When my doctor ______ the test results, he will contact me. A. has read B. reads C. reads or has read 3. Don't talk about the accident. Wait until Bobby ____ C. leaves or has left A. leaves B. has left 4. You should change the gauze if it ______ to bleed again. B. will start A. started C. starts 5. When I ______ my grandma, I'll tell her the good news that my tumor is benign. A. have called C. call or have called B. call 6. I ______ you with the chores once the bruising on my hand stops throbbing. A. will help B. help C. have helped 7. When they ______ the anesthetic, the surgeon can start the operation. C. administer or have administered A. administer B. have administered 8. As soon as I learn whether my ankle ______ fractured or only sprained, I'll let you know. B. will be C. has A. is 9. I can leave the hospital provided the surgeon _____ me. B. has discharged A. discharges C. discharges or has discharged 10. You should sit down and drink something whenever you ______ dizzy. A. feel B. have felt C. feel or have felt

VOCABULARY

GRAMMAR

WRITING SKILLS

WRITING SKILLS



WRITING SKILL - Cohesion: Substitution

We use various words to substitute nouns, verbs, and clauses to avoid repetition and to make our writing more readable and interesting.

Substituting Nouns	Examples
	Of all my bruises , the one on my shin is the most colorful!
one, ones	Please hand me my heart pills . The ones in the blue box.
quantifiers (a few, any, both, each,	l take two medicines every day. Both (of them) are for my heart condition. My doctor recommended two new drugs , but I can't take either
either, neither, none, other, some)	(of them) because they upset my stomach.
Substituting Verbs	Examples
	I hope these shots won't hurt as much as the last ones did .
auxiliaries	The small growth on my arm worries me far less than the one on my leg does .
Substituting Clauses	Examples
	The specialist was really happy with the test results , and so was my GP*.
so / neither + auxiliary	His allergies haven't cleared up , and neither has his rash. *General Practitioner
if so, if not	We'll take an X-ray to see if the bone has set properly , and if so , the cast can come off next week.
n so, n not	My doctor said the therapy should help with my insomnia , but if not , he has other things to try.
	Perhaps you could increase the dose . Oh, I couldn't do that without my doctor's approval!
do that / do it / do so (formal)	I know I should get a bone density scan , but I just don't want to do it until I'm older.
	If you take unapproved medication , you do so at your own risk.
the same	I have to change the gauze every day . I do the same with the bandage on my leg.

WRITING SKILLS

WRITING SKILLS

4.34 - READ **Multiple Choice** Choose the substitution that best completes each sentence. Use the Writing Skill to help you. 1. Your bandages need changing. I'll do _____ on your shin first. A. the same B. so C. the one 2. I don't like going to the dentist and _____ my brother. A. so does **B. neither does** C. the same does 3. His fever should come down by this evening, and _____, he can start to have food again. C. do so A. if so B. if not

- 4. Even though there are loads of painkillers on the market, I can't ______ because I react so badly to them.
- B. take the ones C. do that A. take any 5. It was only a mild stroke, not as bad as the first _____. A. one did B. one was C. did so
- 6. The swelling should settle down soon, but _____, you should rub this lotion on it.
- A. if so C. if not B. so 7. I've always eaten a healthy diet and _____ my whole family.
- C. so A. the same has B. so has
- 8. My great-great-grandfather drank ginger tea every day, and my great-uncle ______.
- A. did the same B. did that C. was too
- 9. The lab tests are really expensive. _____ costs well over \$200 a pop! A. The same B. Each C. If not,
- 10. Mom used to give me my daily insulin injections, but now she says I'm old enough to ______ on my own.

A. do the same B. do each C. do it

4.35 - READ & WRITE

Question and Answer

Rewrite each sentence to avoid repetition using substitution. Use the shortest substitution possible. Use the Writing Skill to help you.

- **For example:** You read: I saw my GP, then a specialist. My GP and the specialist agreed that I need surgery. You type: I saw my GP, then a specialist. Both agreed that I need surgery.
- 1. I'm afraid we didn't complete the clinical trials as quickly as our rivals completed the clinical trials.
- 2. Why didn't you just lie to the doctor? Oh, I couldn't lie to the doctor!
- 3. I can choose between chemotherapy or radiation, but I don't really want to have chemotherapy or radiation.
- 4. Patient A doesn't want to continue treatment, and Patient B doesn't want to continue treatment.
- 5. My granddad takes many pills each morning. Most are OK, but the pills for his arthritis make him sleepy.
- 6. My doctor said I shouldn't feel any side effects from these tablets, but if I feel some side effects from the tablets, I should stop taking them immediately.
- 7. I'm very happy with the test results, and my doctor is very happy with the test results.

VOCABULARY

WRITING SKILLS

WRITING SKILLS

4.35 - READ & WRITE (Continued)

Question and Answer

- 8. The doctor asked the patient if she wanted any pain relief, and if she didn't want any pain relief, whether she needed anything to help her sleep.
- 9. My mom is going on a sugar-free and fat-free diet, and I'm going to go on a sugar-free and fat-free diet.
- 10. I hope I don't test positive because if I test positive, I can't go on the school trip.

Possible answers:

- 1. I'm afraid we didn't complete the clinical trials as quickly as our rivals did.
- 2. Why didn't you just lie to the doctor? Oh, I couldn't do that!
- 3. I can choose between chemotherapy or radiation, but I don't really want (to have) either.
- 4. Patient A doesn't want to continue treatment and neither does Patient B.
- 5. My granddad takes many pills each morning. Most are OK, but the ones for his arthritis make him sleepy.
- 6. My doctor said I shouldn't feel any side effects from these tablets, but if so, I should stop taking them immediately.
- 7. I'm very happy with the test results and so is my doctor.
- 8. The doctor asked the patient if she wanted any pain relief, and if not, whether she needed anything to help her sleep.
- 9. My mom is going on a sugar-free and fat-free diet and so am I.
- 10. I hope I don't test positive because if so, I can't go on the school trip.

4.36 - READ & WRITE

Fill-in-the-Blanks

The text is too informal for an academic style. Rewrite it by replacing each bold expression with a more formal equivalent from the word bank.

necessary	proceed	crucial	remain	examine
provide	in which	considerable	determine	requires
however	occurred	the majority of	numerous	complications

If a patient **needs** an X-ray, he or she should **go** to the radiology department. In **most** cases, the patient will not need to **stay** overnight. There are, **though**, **many** situations **where** inpatient care is **needed**. It is **really**, **really important** for doctors to **see** whether it is a simple fracture or whether there are any **other problems**. Patients should **give** a clear description of how the accident **happened** so that doctors know to **look at** other areas of the body that might have been injured. Such information makes a **big** difference to the speed and success of treatment.

If a patient **[requires]** an X-ray, he or she should **[proceed]** to the radiology department. In **[the majority of]** cases, the patient will not need to **[remain]** overnight. There are, **[however]**, **[numerous]** situations **[in which]** inpatient care is **[necessary]**. It is **[crucial]** for doctors to **[determine]** whether it is a simple fracture or whether there are any **[complications]**. Patients should **[provide]** a clear description of how the accident **[occurred]** so that doctors know to **[examine]** other areas of the body that might have been injured. Such information makes a **[considerable]** difference to the speed and success of treatment.

4-24 WRITING SKILLS

WRITING SKILLS

WRITING SKILLS



WRITING SKILL - Visuals in a Report

When referring to visuals, we commonly use the words "figure" or "table." Graphs, charts, diagrams, photos, and maps can all be referred to as figures.



Here are some phrases to invite readers to view results:

- (Fig. 1)
- (see also Table 6)
- The diagram in Figure 1 shows / provides / presents / illustrates / indicates / represents ...
- Figure 18 contains / corresponds to / demonstrates / displays / lists / reveals ...
- As per the statistics in Figure 4, ...
- Looking at the details shown / listed in ...
- ... as can be seen / observed / detailed / found / reported / displayed in Figure 9.
- Table 11 makes it clear that ...
- From Fig. 2, it can be seen that ...
- Comparing Figs. 3 and 5 shows that ...
- The data in Fig. 8 suggests that ...
- (data not shown)

WRITING SKILLS

VOCABULARY

GRAMMA

WRITING SKILLS

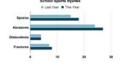


4.37 - WRITE

Question and Answer

Write **one** sentence for each visual with a suitable expression from the **Writing Skill**. The sentence refers to the visual in the text; it is not a caption. *Note: These figures are solely for educational purposes. They are not based on real data.*

For example: You see:

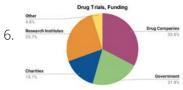


Possible answers:

You type: The Example Figure shows a slight increase in school sports injuries compared to last year.



From Figure 1, it can be seen that the research paper will take six months to complete.



The majority of funding for drug trials is provided by drug companies as reported in Figure 6.

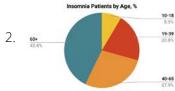
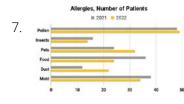
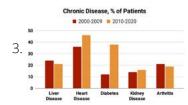


 Figure 2 makes it clear that
 the majority of patients suffering from insomnia are
 over the age of 65.



The number of patients with allergies to pollen has remained high between 2021 and 2022 as seen in Figure 7.



The diagram in Figure 3 indicates that the percentage of patients diagnosed with diabetes increased significantly after 2010.

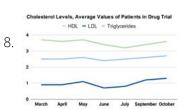
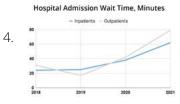


Figure 8 illustrates the average cholesterol levels of patients in a drug trial.



Detailed in Figure 4, hospital admission wait times have made a steady increase since 2019.

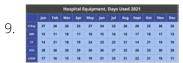


Table 1 shows that hospital equipment is used at a consistent rate throughout a calendar year.



Figure 5 illustrates the global distribution of confirmed Covid-19 cases in 2020.

Physician Office Visits, 2021						
	Total	N.	remain	N Adult AD and over	%, Adult 18-20	N Child under T
Dermatology	41,947	37.8	62.2	88.6	P.1	43
Psychiatry	25,993	45.5	51.2	42,4	35.7	21.9
Cardiovascular	27,783	38.6	41.4	77.A	16.8	5.8
Urology	26.153	72.5	27.5	89.1	9.2	1.7
Orthopedic	30,134	42,3	\$7.3	37.1	39,2	25.7
Neurology	14,407	56.1	43.5	63.4	31.9	4.7
Pediatrics	185,119	50.9	49.1	0	0	100

Table 2 presents a variety of physician office visits and the frequency visited by various subgroups in 2021.

WRITING SKILLS

VOCABULARY

GRAMMAR

WRITING SKILLS



WRITING SKILL - Sequencing & Classifying Expressions

Sequencing

When describing a process, it helps to use sequencing expressions to make the order of the steps clear.

Sequencing Expressions			
The beginning	firstly, first of all, initially, to start / begin with		
Steps / Order	after that, as soon as, at the same time, at this point, at this stage, before, having (done), in the meantime, next, once, secondly, subsequently, then, the third step		
After a short time	before long, shortly after, soon		
After a longer time	eventually, in time, later on		
The end / The last step	at the end, finally, lastly		

Classifying

When writing academic texts, it is often necessary to classify something according to category, parts, steps, or the relationship to other things.

Classifying Expressions			
Туреѕ	bracket, category, class, classification, group, kind, model, rank, set, sort, style, subcategory, types, variety, way		
Composition	be composed of, be made of, consist of, contain, include		
Classifying verbs	arrange into, break down into, catalog into, categorize as / into, classify as / into, divide into, fall into, grade into, group into, organize into, rank, separate into, sort into, split into		
Steps*	period, phase, point, stage, step		
Parts	component, element, factor, feature, ingredient, part, piece, section, segment		
Importance	basic, central, essential, fundamental, important, indispensable, integral, intrinsic, main, principal, vital		
Hierarchical structure	above, at the top / bottom, below, on the (same) level		
Additional parts	besides, in addition, not only, but also		

* A **step** is the smallest part of a process. In AE, **stage** is generally used as a subset of **phase**. In BE, these are mostly used as synonyms.

WRITING SKILLS

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4.38 - READ

Category Match - Graded Order

Read the report on the process pharmaceutical companies must go through to apply for drug approval. Place each of the 20 bold expressions, not including the headings, under the correct category. *Put them in the order they appear in the text. The order will be graded. Use the* **Writing Skill** *to help you.*

For example:

You read: When the development is complete, manufacturers **then** apply for permission to begin the second research phase: human trials.

You read: Researchers are constantly working to develop new drugs for each part of the healing process ...

You place:	Sequencing Expressions	Classifying Expressions
	When then	part

TO:New medical studentsFROM:Dr. Jane JonesSUBJECT:New drug approval process

Introduction

Researchers are constantly working to develop new drugs for each **(Example 1)** part of the healing process: diagnosis, treatment, and prevention. In order for medical professionals to be assured that these new drugs are safe to administer to their patients, drug manufacturers must follow a rigorous process demonstrating the products' effectiveness before they are approved for sale.

This report will outline the process drug manufacturers use to gain regulatory approval for new drugs. Generally, the approval process **can be broken down into** the preclinical research and the human clinical trial **phases**. The preclinical research phase includes the work necessary to develop the experimental drug in a laboratory setting. **(Example 2) When** the development is complete, manufacturers **then** apply for permission to begin the second research phase: human trials. This phase **can be further split into** three **stages** in which the new drugs will be used in trials with human subjects to determine their safety and effectiveness.

1. Preclinical Research Stage

Drug manufacturers work for several years developing a drug, first conducting laboratory and animal tests to show the drug is safe before moving on to human clinical trials. **Having completed** the preclinical trial stage, manufacturers start the approval process by notifying the regulatory agency that a new drug is ready for use in human trials. If the agency gives the go-ahead, the manufacturer will begin the three stages of human clinical trials.

2. Human Clinical Trial Stage

The three stages of human trials each use the drug on different **categories** of patients. **After** the regulatory agency approves the human trials, the manufacturer will collect data over the course of about a year using a small number of healthy patients. **At this point**, researchers will use data to determine the type of side effects the new drug may produce in patients. **Once** the drug is shown to produce few side effects and proves to be safe in the healthy patient **subcategory**, the **next stage** of the trials can begin.

During the **second stage** of human clinical trials, researchers will conduct tests with a small **set** of 100 to 300 patients who have the disease or condition the drug is meant to treat. This trial runs for a longer time, usually two years. **At this stage**, patients may be given a placebo or an inactive substance to compare the results with the actual drug. This is an **essential step** in the trials, as it allows researchers to determine how effective the drug is against the specific disease.

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4.38 - READ (Continued)

Category Match - Graded Order

During the third stage of the human trials, researchers will finally study a large group containing several thousand patients who are monitored carefully in clinics or hospitals over the course of about three years. Side effects are studied in detail using the greater number of patients, and researchers can better determine the efficacy of the drug.

Conclusion

As soon as the third stage of the trials is complete, the manufacturer can apply for final approval so that the drug can be sold to consumers. The application includes detailed data from each stage of the clinical trials. As the last step in the process, the regulatory agency will have a specific length of time to review the application and to approve the decision.

Sequencing Expressions (1-5)	Classifying Expressions (1-5)	Sequencing Expressions (6-10)	Classifying Expressions (6-9)
having completed	can be broken down into	second stage	subcategory
after	phases	at this stage	set
at this point	can be further split into	third stage	essential step
once	stages	as soon as	group
next stage	categories	as the last step	

4.39 - READ

Multiple Choice

Read the process for treating a cut and going to the doctor for a checkup. Then, choose the sequencing expression that best completes each sentence. Use the Writing Skill to help you.

Treating a Cut

1. , you should assess whether you can deal with the cut at home or whether it needs medical attention. 2. it is clear that you need a medical professional, you must prepare the wound for travel to a doctor by quickly rinsing it to remove any loose debris or dirt. **3.** _____, apply pressure to the cut with a clean and sterile cloth or bandage. The medical professional will **4.** _____ clean and disinfect the cut properly **5.** _____ **6.** ____ stitching it. **7.** _____ stitched the wound, the nurse will apply gauze. 8. _____, the wound will heal, and after approximately a week to 14 days, the stitches can be removed. 9. _____, you should apply lotions or creams to the area to prevent bad scarring.

1. A. Soon	B. Eventually	C. Initially
2. A. Once	B. Secondly	C. At this point
3. A. Finally	B. Next	C. Having
4. A. then	B. later on	C. in the meantime
5. A. after	B. once	C. before
6. A. subsequently	B. at the same time	C. shortly after
7. A. After	B. Having	C. As soon as
8. A. The next step	B. Initially	C. Before long
9. A. Lastly	B. To start with	C. Soon

B. To start with

WRITING SKILL

WRITING SKILLS

VOCABULARY

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4.39 - READ (Continued)

Multiple Choice

A Checkup

10. _____, my doctor asked general questions about my health and family's medical history in order to update her records.
11. ______ was to check my weight and take my vital signs, such as blood pressure and pulse rate. She wanted initial readings
12. ______ she tested my balance, and 13. ______ had me run for 20 minutes on a treadmill. She observed how I moved, while
14. ______, various medical machines and devices were measuring my heart rate, temperature, and breathing. I'm a little unfit, so after my run, it took a while for my heart rate to come back down, but 15. ______ it slowed enough for the checkup to continue.
16. ______, she had prepared the syringe needed to take a blood sample.
17. ______, all I wanted was to get out of there, but I stuck it out, and it was over quickly.
18. ______, we discussed my diet and exercise routine
19. ______ scheduling a follow-up appointment to discuss the test results and prescribe treatment if necessary.

10. A. To begin with	B. Thirdly	C. Subsequently
11. A. At this point	B. Secondly	C. The next step
12. A. before	B. having	C. shortly after
13. A. once	B. then	C. soon
14. A. at the same time	B. after that	C. thirdly
15. A. after	B. first of all	C. eventually
16. A. Later on	B. In the meantime	C. At the end
17. A. At this point	B. Next	C. Lastly
18. A. In time	B. After that	C. After
19. A. as soon as	B. having	C. before finally

4.40 - READ & WRITE

Fill-in-the-Blanks

Read the process for an MRI and a fractured bone. Then, complete each sentence with the correct sequencing expression from the word banks. *One word/phrase will not be used from each word bank. Use the* **Writing Skill** *to help you.*

at the end	having done this	once	at this stage
at the same time	first of all	next	finally

An MRI Scan

[First of all], you are asked to fill in a questionnaire about your medical history and give your signed consent for the scan to go ahead. [Having done this], the procedure may begin. [Next], you are asked to change into a hospital gown and remove any metal objects you are carrying or wearing. An MRI contrast dye is injected into one of your veins [at this stage] if required. You are then taken to the MRI machine and asked to lie down. [Finally], [once] you have inserted your earplugs and made yourself as comfortable as possible, the motorized bed passes through the MRI tunnel. [At the end] of the procedure, you may leave immediately, provided no sedative was administered.

WRITING SKILLS

WRITING SKILLS

4.40 - READ & WRITE (Continued)

Fill-in-the-Blanks

in time	the first step	having	initially
next	as soon as	the third step	shortly after

Treating a Fracture

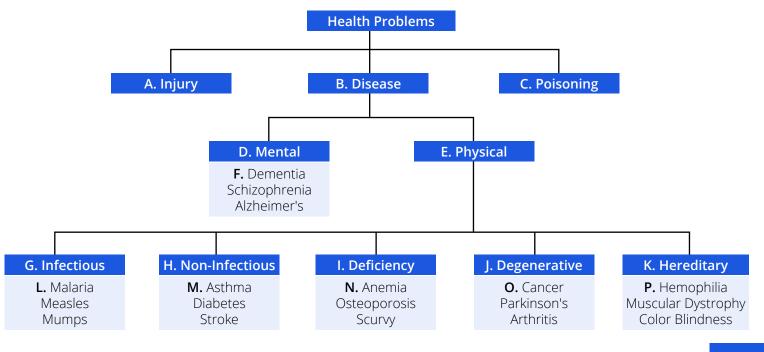
A fractured bone can cause a lot of discomfort. [The first step] in treating a fracture is to immobilize the affected area. [As soon as] you have done this, you should make an appointment to get an X-ray. [Next], a doctor will read the X-ray to verify if it is fractured. [Having] determined the severity and placement of the fracture, the doctor may need to first reset the bone by hand or with surgery. [Shortly after] the reset, a cast is put on to stabilize the bone. [In time], the fracture should heal, and you will have to revisit the doctor to get the cast off. Your cast will come off, but [initially], you need to ease into all activities as your muscles will be weak from not being used as your bone was healing.

4.41 - LISTEN

Text Match

Listen to the short text classifying human health problems. Match each piece of information with the correct letter based on what you hear. *If a category has more than one piece of information, put them in the order that you hear them.*

The health problems affecting humans can be broadly divided into those resulting from injury, disease, or poisoning. If we look specifically at diseases, these can be further broken down into mental and physical categories. Looking first at the subcategory of mental health problems, this consists of conditions such as dementia, schizophrenia, and Alzheimer's disease. In the physical health problems bracket, conditions can be sorted into five separate groups: infectious, non-infectious, deficiency, degenerative, and hereditary. Malaria, measles, and mumps are examples of the first group, while asthma, diabetes, and strokes fall into the second. Anemia, osteoporosis, and scurvy are classified as deficiency diseases; whereas cancer, Parkinson's, and arthritis are categorized as degenerative conditions. Finally, the hereditary group includes disorders such as hemophilia, Muscular Dystrophy, and color blindness.



WRITING SKILLS

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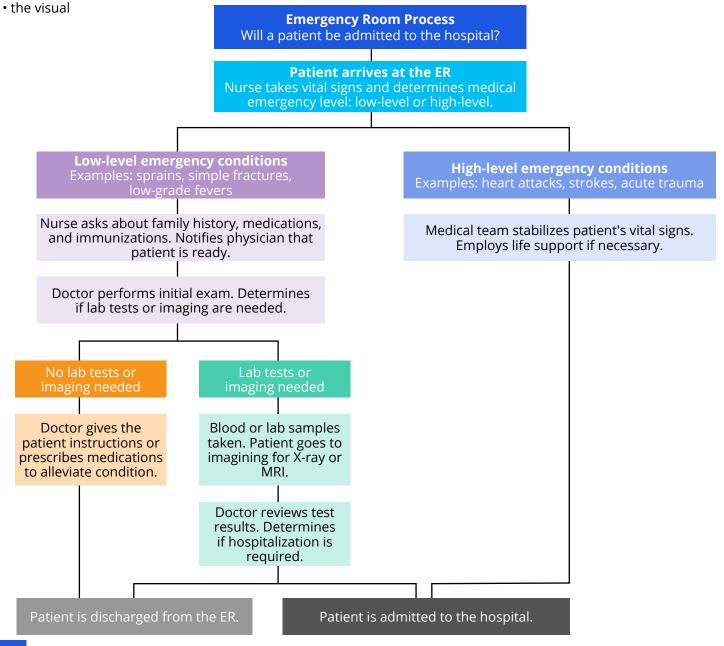
4.42 - READ & WRITE

Open Text

TEACHER NOTE: In the possible answer text, the sequencing expressions are in blue and classifying expressions are in bold. After this activity is completed, you can show your students the possible answer to help prepare them for **Activity 4.43**, which they will complete on their own.

With a partner, use the flowchart to write a process report on the decision to admit an emergency room patient to the hospital. Use:

- sequencing language to describe the steps
- classifying language to describe the categories of hospital wards and health issues
- appropriate medical vocabulary



GRAMMAF

WRITING SKILLS

WRITING SKILLS

4.42 - READ & WRITE (Continued)

Open Text

Format of Process Report

TO: FROM: RE:	Emergency Room Patients Patient Education Coordinator ER Process to Determine Hospital Admission			
Introduction				
First Steps in the Decision Process				
After the Physician's Examination				
Conclusion				

Possible answer:

TO:Emergency Room PatientsFROM:Patient Education CoordinatorRE:ER Process to Determine Hospital Admission

Introduction

When patients arrive at the emergency room, it is sometimes unclear whether they will be admitted to the hospital for care. Medical professionals in the ER follow a process to determine whether patients will be admitted or whether they can be given medical attention and discharged. This report summarizes the steps taken to make a hospital admittance decision.

First Steps in the Decision Process

Nurses begin the decision process when patients arrive at the ER. Nurses take vital signs, such as blood pressure and heart rate and **then classify** patients as either a low-level or high-level emergency condition. High-level emergency patients **can be grouped** in two ways: conditions requiring immediate evaluation or resuscitation (heart attack, stroke) or conditions requiring urgent evaluation (acute trauma, compound fractures). These conditions can be life-threatening; therefore, if the nurse decides a patient has a high-level condition, he calls for an emergency team to stabilize vital signs or employ life support. Immediately after this step, the patient is admitted to the hospital.

If the **first** ER nurse determines that a patient has a low-level emergency condition, such as a sprain, simple fracture, or lowgrade fever, the **next step** of the process begins. **At this stage**, the nurse asks questions about the patient's family history, medications, and immunizations. **Once** the information is collected, the physician is notified that the patient is ready for an examination.

After the Physician's Examination

After the physician performs an examination, patients **are split into** two **categories**: those needing lab tests or imaging and those who do not. If the doctor is able to make a diagnosis without these tests, she will give the patient instructions for treatment or prescribe medication to alleviate the condition. At **this point**, the patient is discharged from the emergency room and allowed to go home.

However, if the physician establishes that tests are needed in order to make a diagnosis, other medical professionals take lab samples from the patient or provide transport to imaging for an X-ray or MRI. **Next**, the physician reviews the test results when they are ready, and a final **categorization** is made. If the patient does not need hospital care, the physician gives instructions or prescribes medication, and the patient is discharged. Or, **having** reviewed the test results, the physician may conclude that the patient needs hospital care. The patient is **then** admitted to the hospital.

Conclusion

Following this process enables all medical professionals in the emergency room to take part in making an efficient decision about a patient's hospital admission. In a high-level emergency situation, the process could help save the patient's life.

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4.43 - WRITE

(Optional: Refer to the Rubric Section.)

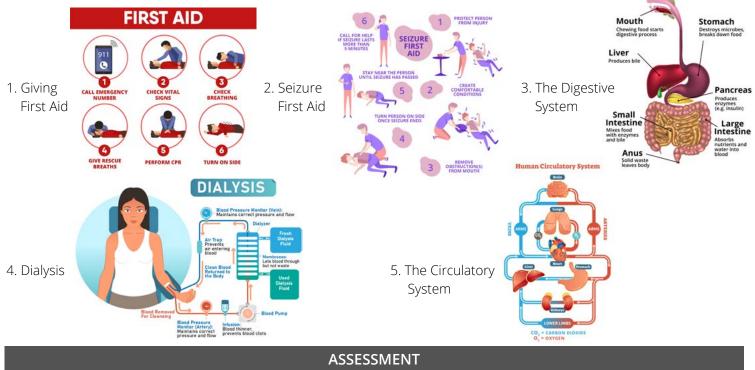
Open Text

TEACHER NOTE: There are **two** rubrics provided for this activity in the **Rubric** section of this teacher handbook for you to choose from.

Choose **one** of the infographics and research the topic. Then, write a 400- to 500-word report about the process. Write in a formal style and use:

- sequencing language to describe the steps
- classifying language to describe any categories in the process
- appropriate medical vocabulary

• the visual(s)



Topics	Guidelines
 Giving First Aid Seizure First Aid The Digestive System Dialysis The Circulatory System 	 Write your process report. Check spelling, grammar, and punctuation. Check vocabulary: Is it too informal? Check for repetition: Have you used a word too many times? Can you use a synonym instead? Are your grammatical references clear? Can you avoid repetition by substitution? Check for variation of vocabulary: Can you use part to whole, specific to general, vocabulary sets, or an ordered series? Check grammar: Is it too informal? Can you remove personal pronouns and contractions? Can you use the passive voice or noun phrases? Have you used the language of sequencing to make the process clear? Have you used the language of classification to make the categories clear? Is your report factual? Should you remove your opinion from the description?



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