• left-handed
• dominant
• recent
• function
• seem
• indicate
• hemisphere
• that is
• in charge
• brain wave
• somewhat
• electrically
• active
• individual
• rely on
• particular
• evidence
• suggest
• clear-cut
• vary

• relatively
• straightforward
• cover
• involve
• familiar
• term
• exclusively
• current
• understandably
• conduct
• thorough
• investigation
• political
• journalist
• condense
• simplify
• deadline
• tempting
• be eager to
• quotation

• vanish
• indigo
• violet
• remain
• spectrum
• daylight
• be comprised of
• filter
• consequently
• composition
• progressively
• depth
• beneath
• surface
• absorb
• scatter
• within
• cast
• characteristic of
• exist

• pollutant
• coal
• combustion
• release
• atmosphere
• drastic
• fossil fuel
• revolution
• rate
• present
• negative
• disperse
• ecosystem
• disordered
• sulphur
• highly
• counterbalance
• as long as
• due to
• radiation
For example, not all left-handers are right brain dominant.

Recent research on brain function seems to indicate that most people have one dominant hemisphere, that is, one side that seems more “in charge” than the other. For perhaps ninety percent of people, this is the left hemisphere. Brain wave studies seem to indicate that the dominant hemisphere is somewhat more electrically active than the recessive one, and what the individual somehow relies on that particular hemisphere more than on the other. The evidence does not suggest a clear-cut left-right dominance in all cases, however. About half of them have dominant left hemispheres just as most right-handers do. Left-handers account for about ten percent of the population, and they seem to vary in brain dominance more than do right-handers.
**brain function study**

- People have one 1 __________ hemisphere.

**brain wave study**

- People rely on the dominant hemisphere, which is more electrically active.

**For example**

- Brain dominance is not 2 __________ in all cases.

**However**

- Not all left-handers are right brain dominant.
- They vary in brain dominance more than do 3 __________.

---

**WORKSHEET**

1. 어법](절문) 말줄 치 ①, ② 중, 어법상 틀린 것을 찾아 바르게 고쳐 쓰시오.

   __________ → __________

2. 단답형] 말줄 치 (A) do가 대신 가리키는 동사구를 쓰시오.

   __________

3. 서술형] 말줄 치 단문 (B)를 주어를 it으로 시작하여 복문으로 다시 쓰시오.

   __________

**TIPS**

- 주어 + seem(s) + to 부정사구 → It seems that + 주어 + 동사(구)

  Recent research on brain function seems to indicate that most people have one dominant hemisphere.

  → It seems that recent research on brain function indicates that most people have one dominant hemisphere.

  두뇌 기능에 관한 최근 연구는 대부분의 사람들이 우세한 한쪽 뇌구를 가지고 있다는 것을 보이 주는 것 같다.
But, these topics are relatively straightforward to cover as they involve familiar people, terms, and places.

Many of us rely exclusively on the media for information on topics of current interest as, understandably, we do not have time to conduct our own, more thorough literature reviews and investigations. (①) For business and political news as well as for human-interest stories, newspaper, radio, and television media do a good job of keeping us informed. (②) Stories involving complex science are harder to do. (③) Journalists covering these stories often do not have a scientific background and, even with a scientific background, it is difficult to condense and simplify scientific issues for viewers or readers. (④) Finally, journalists work on tight deadlines, often having less than a day to research and write a story. (⑤) Tight deadlines also make it tempting to rely on activists who are eager to provide information and colourful quotations.
Then yellow vanishes and then, one by one, the other colors disappear until from about one hundred feet only indigo and violet remain.

The color spectrum of daylight is comprised of red, orange, yellow, blue, green, indigo, and violet. But water acts as a filter on the color spectrum of light. Consequently the color composition of light changes progressively with the depth. (①) Just two inches beneath the surface, all the infrared rays of the color spectrum (A) is/are absorbed and scattered by the water. (②) Within twenty to thirty feet, all the reds have been (B) filtering/filtered out. (③) Orange is the next color to go. (④) This creates the blue-green cast characteristic of most waters. (⑤) Blue and green are simply the only two colors that exist in deeper water depths, so everything appears to be blue-green.

*infrared ray 적외선

---

**Worksheet**

1. (A), (B)의 각 네모 안에서 어법에 맞는 표현으로 가장 적절한 것을 골라 쓰시오.
   
   (A) ___________________  (B) ___________________

2. 다음 질문에 맞도록 답을 완성하시오.
   
   Q: What is the first color that disappears?
   A: It is/They are ___________________.
They become pollutants only when the coal is burned and the combustion products are released into the atmosphere.

A drastic increase in the use of fossil fuels since the industrial revolution greatly increased the rate at which humans were and still are adding to the entropy of the planet in the form of pollutants. (1) Because Earth is a closed system, these pollutants have always been present on the planet. (2) The reason for negative impact of pollutants on the environment is not because they exist, but because they have dispersed throughout the world’s ecosystem in a very disordered manner. (3) Carbon and sulphur have no impact on the environment when they are locked up in the highly ordered form of coal. (4) So, can solar energy be used to counterbalance increases in entropy caused by the use of fossil fuels? (5) Yes, as long as the rate of increase in entropy due to fossil fuels are less than the rate of decrease in entropy from solar radiation, the net entropy on the planet will not increase.

*entropy 엔트로피(열역학상 존재하는 흐름적 에너지량의 적도)
A carbon footprint is historically defined as the total amount of \( \text{produced to directly and indirectly support } \) \( \text{usually expressed in equivalent tons of carbon dioxide (CO}_2\text{). For example, when you drive a car, the engine burns fuel, which creates a certain amount of CO}_2\text{, depending on } \) \( \text{and the driving distance.} \)
A carbon footprint is historically defined as the total amount of greenhouse gases produced to directly and indirectly support human activities, usually expressed in equivalent tons of carbon dioxide (CO$_2$). For example, when you drive a car, the engine burns fuel, which creates a certain amount of CO$_2$, depending on its fuel consumption and the driving distance.

**STEP 02**

1. Turn off unnecessary lights.
2. Recycle trash.
3. Take the stairs.

**STEP 03**

5 Ways to reduce your carbon footprint

1. Turn off unnecessary lights.
2. Recycle trash.
3. Take the stairs.
4. Buy local and organic food.
5. Use a cup when brushing your teeth.
<table>
<thead>
<tr>
<th>ANÁLISIS</th>
<th>PRACTICA 01</th>
<th>PRACTICA 02</th>
<th>PRACTICA 03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sin filtro</td>
<td>Sin filtro</td>
<td>Sin filtro</td>
<td>Sin filtro</td>
</tr>
</tbody>
</table>

**UNIT 14**

**WORD PREVIEW**

- unforgettable
- phrase
- in a fraction of a second
- part
- ceiling
- suddenly
- lie
- bleed
- take place
- windowless
- lecture hall
- goal
- yell
- watch out
- mean
- instantly
- brain
- search for
- definition

- following
- element
- behavior
- familiar
- characteristic
- go into being
- companion
- attract
- emergency
- essential
- survival
- evidence
- heroically
- potential
- rescuer
- aid
- exactly
- due to
- instead
- anxious

- political
- satirist
- host
- comment
- laughter
- tense
- experience
- hurt
- actually
- thanks to
- high
- continue
- cease
- release
- mask
- pain
- cause
- organ
- reason

- remind
- useful
- understand
- belief
- passively
- view
- mean
- follow
- relate
- conversation
- respond
- case
- attempt
- extract
- index
- intent
- recognition
- guidance
I had an unforgettable experience with learning an American phrase when I began teaching at Thomas Jefferson College not long after I arrived in this country in the seventies.

(A) Of course, all of this happened in a fraction of a second — after which a part of the ceiling fell on my head and I was suddenly lying on the floor bleeding and waiting for paramedics to arrive.

(B) I had only begun to learn how to speak American English. My class took place in a large, windowless lecture hall, and on the first day, I’d just started to explain my goals for the class when one of the students yelled at me, “Watch out!”

(C) I’d never heard the phrase before and therefore had no idea what the student meant. Instantly, my brain searched for some kind of definition. “Watch” meant “look.” “Out” could mean “outside.” Did the student want me to look outside? I couldn’t, though, because there were no windows in the room.

1 (A) — (C) — (B)  
2 (B) — (A) — (C)  
3 (B) — (C) — (A)  
4 (C) — (A) — (B)  
5 (C) — (B) — (A)
I had an unforgettable experience with learning an American phrase. One of the students yelled at me, "__________!" My brain searched for some kind of ________ on my head. A group of words that have a particular meaning when used ________.
The following elements — proximity to the owner, and attention-getting behavior — are by now familiar to us as characteristic of dogs, and go into their being such fine companions for humans.

(A) If they express that anxiety in a way that attracts other people — people with an understanding of emergencies — to the scene, or allows you to get out of a hole in the ice, it is great.

(B) And they are also essential for the survival of the person whose life was at risk. So are such dogs truly heroes? They are. But did they know what they were doing? There is no evidence that they did. And they don’t know they’re acting heroically. Dogs certainly have the potential, with training, to be rescuers.

(C) Even the untrained dog may come to your aid — but without knowing exactly what to do. Their success is due instead to what they do know: that something has happened to you, which makes them anxious.

**Words & Phrases**

- element 요소  
- characteristic 특성, 특징적인  
- in a way that ~하는 방식으로  
- survival 생존  
- aid 도움  
- instead ~ 대신에  
- behavior 행동  
- go into being 존재하게 되다  
- attract 끌다  
- evidence 증거  
- exactly 정확하게  
- anxious 불안해하는, 걱정하는  
- familiar 익숙한  
- companion 동반자  
- essential 핵심적인  
- potential 잠재력, 잠재적인  
- due to ~이기 때문에  

---

**Worksheet**

1. 밑줄 친 (a) 뒤에 생략된 표현과 (b) 가 가리키는 표식을 각각 두 개와 다섯 개의 영어 단어로 쓰시오.
   
   (a) __________________________  (b) __________________________

2. 다음 영문사전 뜻풀이에 해당하는 단어를 찾아 쓰시오.
   
   (1) __________________________: a view that you can see in a picture or from the place where you are  
   (2) __________________________: completely necessary; most basic and necessary
Stephen Colbert, political satirist and host of The Colbert Report, commented during an interview on the importance of laughter in tense times. “You can’t laugh and be afraid at the same time,” he said.

(A) But we’ve all had the experience of laughing so much we want it stop because it starts to hurt. Like the runner, the hurt actually began earlier, but thanks to the endorphins, we didn’t feel it until later.

(B) It is the high we get from endorphins, which continues after the laughing has ceased, that makes it hard to be, as Colbert says, afraid at the same time.

(C) And he’d be right. Laughing actually releases endorphins. They are released to mask the pain we’re causing to ourselves as our organs are being convulsed. We like laughing for the same reason runners like running — it feels good.

1 (A) — (C) — (B) 2 (B) — (A) — (C)
3 (B) — (C) — (A) 4 (C) — (A) — (B)
5 (C) — (B) — (A)

*convulse 경련을 일으키게 한다
Reminding is very useful for planning and for understanding the plans of others. When someone tells you a story, however, he is talking not only about plans, but often about beliefs.

(A) If we are passively viewing a movie, for example, understanding the movie means being able to follow what is going on by relate what we are seeing to what we know, learning something from the movie in a very weak sense of learning. In a conversation, understanding means being able to respond to a story.

(B) In both of these cases, then, understanding means attempting to extract indexes such that old stories can be related to new ones. For movies, the intent is recognition. For conversation, the intent is to be able to respond.

(C) When what is to be understood in a story is about beliefs, the kind of guidance we need changes. We do not need to know what will happen next. When we hear these kinds of stories, all we are trying to do is understand it.

1. (A) — (B) — (C)
2. (B) — (A) — (C)
3. (B) — (C) — (A)
4. (C) — (A) — (B)
5. (C) — (B) — (A)

—

Words & Phrases

- passively 수동적으로
- intent 의도
- extract 추출하다
- recognition 인식
- index 색인
- respond 반응하다
A new foreign professor was ____________________________. One day, when he was ____________________________, a student shouted, "Watch out!" because _____________________________. When the professor heard the phrase, he was confused because the classroom had no windows from which to _____________________________. Just then, the part of the ceiling fell on the professor’s head. The students ran over to him and found that the professor was _____________________________.

**STEP 02** 달려서 말하기 위에서 작성한 내용을 자연스럽게 말로 이야기해 보시다.
A new foreign professor was beginning to learn American English. One day, when he was explaining something to the class, a student shouted, “Watch out!” because a part of the ceiling seemed to be falling. When the professor heard the phrase, he was confused because the classroom had no windows from which to see outside. Just then, the part of the ceiling fell on the professor’s head. The students ran over to him and found that the professor was lying on the floor bleeding.
<table>
<thead>
<tr>
<th>word preview</th>
<th>practice 01</th>
<th>practice 02</th>
<th>practice 03</th>
</tr>
</thead>
<tbody>
<tr>
<td>generally</td>
<td>prodigy</td>
<td>aspect</td>
<td>pharmacist</td>
</tr>
<tr>
<td>infant</td>
<td>transition</td>
<td>develop</td>
<td>illness</td>
</tr>
<tr>
<td>frequent</td>
<td>rapidly</td>
<td>gestural</td>
<td>medicine man</td>
</tr>
<tr>
<td>consistent</td>
<td>effortlessly</td>
<td>accurately</td>
<td>reputation</td>
</tr>
<tr>
<td>social</td>
<td>established</td>
<td>signal</td>
<td>carry</td>
</tr>
<tr>
<td>partner</td>
<td>domain</td>
<td>confidence</td>
<td>pocket</td>
</tr>
<tr>
<td>profoundly</td>
<td>ultimately</td>
<td>go hand in hand</td>
<td>contain</td>
</tr>
<tr>
<td>affect</td>
<td>remake</td>
<td>insecurity</td>
<td>vitamin</td>
</tr>
<tr>
<td>emerge</td>
<td>apply</td>
<td>nervousness</td>
<td>tablet</td>
</tr>
<tr>
<td>self-efficacy</td>
<td>extraordinary</td>
<td>quiet</td>
<td>seek</td>
</tr>
<tr>
<td>response</td>
<td>ability</td>
<td>anxiety</td>
<td>take out</td>
</tr>
<tr>
<td>effective</td>
<td>master</td>
<td>enter</td>
<td>cost</td>
</tr>
<tr>
<td>facilitate</td>
<td>wave</td>
<td>source</td>
<td>equivalent</td>
</tr>
<tr>
<td>contingent</td>
<td>play it safe</td>
<td>constantly</td>
<td>sell</td>
</tr>
<tr>
<td>reflect</td>
<td>conventional</td>
<td>available</td>
<td>fascinate</td>
</tr>
<tr>
<td>occur</td>
<td>path</td>
<td>indicator</td>
<td>recover</td>
</tr>
<tr>
<td>primarily</td>
<td>afford</td>
<td>emotion</td>
<td>quickly</td>
</tr>
<tr>
<td>imitation</td>
<td>outdated</td>
<td>mask</td>
<td>lie</td>
</tr>
<tr>
<td>allow</td>
<td>engaging</td>
<td>in return</td>
<td>reply</td>
</tr>
<tr>
<td>manifestation</td>
<td>treadmill</td>
<td></td>
<td>expensive</td>
</tr>
</tbody>
</table>
Parents are generally infants’ most frequent and consistent social partners and as such their behaviors are those that most profoundly affect infants’ emerging sense of self-efficacy. The responses that are most effective in facilitating infants’ early self-knowledge are social contingent and reflect the infants’ own behavior. In naturally occurring interactions with young infants, parental responses are primarily imitations of infants’ actions. These imitations are not exact but rather match the infants’ actions in intensity, affect, and tempo. Infants’ early perceptual capacities allow them to recognize these imitative behaviors as mirroring their own. From the beginning of life, infants are aware of the matching quality of their behavior and that of others. Infants may more easily recognize the external effect of their behavior when the actions of others mirror the behavior the infants produce. Some theorists propose that in mirroring infant behavior, which exposes infants to external perceptual manifestations of who they are internally experiencing, parents facilitate infants’ early understanding of their own experience.

The actions by parents of infants’ behaviors infant’s early self-knowledge.

(A) disciplinary promote (B) disciplinary achieve
(A) imitative promote (B) imitative damage
(A) decisive damage

Vocabulary Comprehension Structure

Words & Phrases
- consistent 일관된
- facilitate 촉진하다
- profoundly 깊이
- contingent (을) 조건으로 하는
- self-efficacy 자기 효능감
- manifestation 표현
Parents' behaviors most profoundly affect infants' sense of **1**

- Infants recognize parents' imitative behaviors as mirroring their own.
- Infants easily recognize the external effect of their behavior.
- Parents **2** infants' early understanding of their own experience.

---

**WORKSHEET**

1. 어휘 다음 영영사전 뜻풀이에 해당하는 단어를 본문에서 찾아 쓰시오.
   - (1) __________________: a very young child
   - (2) __________________: to make it possible or easier for something to happen

2. 어법 밀줄 친 ◎~◎ 중, 어법상 둘린 것을 찾아 바르게 고쳐 쓰시오.
   __________________ → __________________

3. 서술형 부모가 어린 유아와 상호 작용할 때 주로 하는 반응이 무엇인지 본문에서 찾아 영어로 쓰시오.
   ________________________________

---

**IIPS**

- 목적어 역할의 명사절
  - 명사절인 that절과 의문절은 주절의 속어동사의 목적어 역할을 할 수 있다.
  - The wise think [that their troubles belong only to the present].
    - 속어동사 [명사절]
    - 지혜로운 사람들은 [자신들의 문제가 현재에만 속해 있다]고 여긴다.
  - Pete asked Fred [which plants were edible].
    - 속어동사 [명사절]
    - Pete는 Fred에게 [어떤 식물이 먹을 수 있는지]를 물었다.
Most prodigies don’t make a transition from a child who learns rapidly and effortlessly in an established domain to an adult who ultimately remakes a domain. They apply their extraordinary abilities in ordinary ways, mastering their jobs without questioning defaults and without making waves. In every domain they enter, they play it safe by following the conventional paths to success. They become doctors who heal their patients without fighting to fix the broken systems (A) that/what prevent many patients from affording health care in the first place. They become lawyers who defend clients for violating outdated laws without trying to transform the laws themselves. They become teachers who plan engaging algebra lessons without questioning whether algebra is (B) that/what their students need to learn. Although we rely on them to keep the world running smoothly, they keep us running on a treadmill.

Most gifted children grow to be adults who perform their jobs successfully in (A) ways, without attempting to (B) the established systems.

(A) (B) (A) (B) (A) (B)
1 existing ...... stabilize 2 existing ...... reform 3 innovative ...... maintain
4 innovative ...... undermine 5 efficient ...... expand

1 (A), (B)의 각 네모 안에서 어법에 맞는 표현으로 가장 적절한 것을 골라 쓰시오.
(A) __________________  (B) __________________

2 윗글에서 의사로서 ultimately remakes a domain하는 예로 진술된 부분을 찾아 쓰시오.

________________________

Words & Phrases

- prodigy 영재
- domain 영역, 분야
- conventional 인습적인, 종래의
- transition 변화, 변화
- play it safe 안전책을 강구하다, 위험을 무릅쓰지 않다
- outdated 시대에 뒤떨어진, 구식의
- engaging 남의 마음을 끄는, 매력 있는
- treadmill (일, 생활 등의) 단조로운 반복
As with all aspects of body language, developing your gestural ability starts with learning how to accurately read other people’s signals. Confidence and natural gestures go hand in hand because insecurity and nervousness can lead to jerky movements. One of the best ways to quiet your own anxiety is to learn as much as possible about whatever situation you’re about to enter. When you know how to read people’s body language, you have a great source of inside information constantly available to you. The body is a much better indicator of true emotions and feelings, simply because most people don’t try to mask their body’s revealing signals — they don’t even realize those signals are happening. This allows you to more easily understand people’s true feelings and respond in a way how makes people feel really good, so they want to please you in return — which is another way of saying, you’ll have some serious charisma.

The power of understanding others’ body language is that it will give you charisma, because once you realize how to (A) others’ body language, you can respond with natural gestures to (B) them, which leads them to follow suit.

(A) (B) (A) (B) (A) (B)
1 read satisfy 2 read deceive 3 ignore deceive 4 mimic satisfy 5 mimic confuse

Words & Phrases
- aspect 측면
- insecurity 불안
- available 이용 가능한
- accurately 정확하게
- nervousness 초조
- indicator 지표
- anxiety 불안, 걱정, 열려
- in return 보답으로
- go hand in hand 관련된다. 함께 가다

Worksheet
1. 믿을 친 ①~⑥ 중, 어법상 틀린 것을 찾아 바르게 고쳐 쓰시오.
   ________________
2. 다음 영문사전 뜻풀이에 해당하는 단어를 본문에서 찾아 쓰시오. (단, 필요한 경우 어형을 바꾸시오.)
   ________________ : to tell someone a piece of secret information
My father was a pharmacist and, in Egypt in those days, many people used to go to the pharmacist for every illness, just like going to the doctor. My father was like a medicine man; he had a good reputation. He always carried a little box in his pocket containing a few vitamin tablets and when people came to see him seeking his help, he used to put his hand into his pocket, take out the little box and say, ‘These are very special tablets and cost £1 each,’ which was equivalent to £30 or more each in today’s money, but he only sold one or two at a time. The fascinating thing was that all of these people recovered very quickly. I asked my father why he was lying to people and he replied, ‘If people think that this is the best and most expensive medicine, they will recover all by themselves.’

The writer’s father led his patients to get well on their own by making them ______ (A) ______ that they bought a very ______ (B) ______ medicine.

(A) (B) (A) (B)
① believe …… ordinary ② believe …… effective
③ announce …… original ④ announce …… effective
⑤ regret …… ordinary

---

1. 다음 두 문장의 빈칸에 공통으로 들어갈 가장 적절한 단어를 각각 쓰시오.
   • Judge Kelso has a __________________ for being strict but fair.
   • In her last job, she gained a __________________ as a hard worker.

2. 필자의 아버지가 환자들에게 팔았던 약의 가격과 그 가격을 오늘날의 돈으로 환산했을 때의 가격을 쓰시오.

---

**Words & Phrases**

- pharmacist 약사
- tablet 약
- fascinate 매혹하다
- medicine man 의사
- seek 구하다
- recover 회복하다
- contain 〜이 들어 있다
- equivalent 상당한 것, 동등한 것
Laura Diamond was invited to speak to students about history at Greenwood Elementary School. However, she has to attend a conference in Boston at that time, so she must refuse the invitation.

1. Who was invited to speak?
2. Where was she asked to speak?
3. What was the speech supposed to be about?
4. Why must she refuse the invitation?

Dear Mr. Fuller,

Thank you for inviting me ___________________________ your seventh-grade history class. I commend you for your efforts to expose young minds to the excitement of ___________________________. Unfortunately, I will be ___________________________ in Boston at that time. I’d really like to take ___________________________. I would love to speak to your students sometime.

Sincerely,

_________________________
STEP 01
1 Laura Diamond was invited.
2 She was asked to speak at Greenwood Elementary School.
3 She was supposed to give a speech about history.
4 She has to attend a conference at that time.

STEP 02
Dear Mr. Fuller,

Thank you for inviting me to address your seventh-grade history class. I commend you for your efforts to expose young minds to the excitement of history. Unfortunately, I will be attending a conference in Boston at that time. I’d really like to take a rain check. I would love to speak to your students sometime.

Sincerely,
Laura Diamond