Unit 5

[1-2] Read the passage and answer the questions.

In comics and movies, superheroes run up walls, lift things as big as buses, and use their powers to fight against giant monsters! Few of us, (A) ________, understand why. And it is this lack of a logical explanation that makes us think twice and wonder if it just might be possible for us to fly like Superman. (B) ________, what bodies can and can’t do follows very strict rules—rules of geometry—which is a kind of math that’s about size and shape. 

1. 글의 흐름으로 보아, 주어진 문장이 들어가기에 적절한 곳을 고르시오.

While it is all very exciting, most of us understand that these things can never really happen.

(A) Therefore (B) For example

2. 위 글의 반란 (A), (B)에 들어갈 말로 가장 적절한 것은?

(A)

(B)

(A) Therefore (B) For example

(B) Therefore (B) Instead

(C) Likewise (C) In contrast

(D) However (C) In fact

(E) However (C) For example

3. 주어진 글 다음에 어떤 글의 순서로 가장 알맞은 것을 고르시오.

In comics and movies, superheroes run up walls, lift things as big as buses, and use their powers to fight against giant monsters!

(A) In fact, what bodies can and can’t do follows very strict rules—rules of geometry—which is a kind of math that’s about size and shape.

(B) And it is this lack of a logical explanation that makes us think twice and wonder if it just might be possible for us to fly like Superman.

(C) While it is all very exciting, most of us understand that these things can never really happen. Few of us, however, understand why.

(A) (A) - (C) - (B)  (B) - (A) - (C)  (C) - (A) - (B)  (C) - (B) - (A)  (A) - (C) - (B)

4. (A), (B), (C)의 각 열호 안에서 어법에 맞는 표현으로 적절한 것은?

In comics and movies, superheroes run up walls, (A) lift / lifting things as big as buses, and use their powers to fight against giant monsters! While it is all very exciting, most of us understand that these things can never really happen. Few of us, however, understand why. And it is this lack of a logical explanation that makes us think twice and wonder if it just might be possible (B) for / of us to fly like Superman. In fact, what bodies can and can’t do (C) follows / follow very strict rules—rules of geometry—which is a kind of math that’s about size and shape.

(A) lift … for … follow

(B) lifting … of … follow

(C) lift … of … follow

5. 다음 글의 맨 끝 부분 중, 어떻게 들린 것을 고르시오.

The best way ① to explain these rules is to look ② closely at the difference between little and big things. Here is Little Thing. It could be anything—a car, a log, or a bar of soap. Let’s say it’s a creature ③ even if it looks a bit ④ like a cube in the picture.

Let’s take a few measurements of Little Thing, such as ⑤ their length, surface area, cross section, volume, and weight.

6. 글의 흐름으로 보아, 주어진 문장이 들어가기에 적절한 곳을 고르시오.

It takes EIGHT Little Things to make one Big Thing.

Now, let’s meet Big Thing. ① Big Thing is twice as long, twice as wide, and twice as tall as Little Thing. ② How many Little Things would it take to make one Big Thing? ③ If you double the length of something (×2), its surface area and cross section go up FOUR times (2×2), and its volume and weight go up EIGHT times (2×2×2)! ④ We’ll call this the Big Thing Little Thing rule, or the BTLT rule for short. ⑤
10. The BTLT rule isn’t just about numbers. It has a big effect on how the living bodies work. Some important features of bodies—like how much food and air they need—depend on each body’s volume and weight. Others—like the strength of muscles—depend on each body’s cross section and surface area.

It’s easy to see that Big Thing is going to need as much food to eat and air to breathe as EIGHT Little Things. But if we take a slice through Big Thing, we can see that its muscles are only FOUR times thicker than Little Thing’s muscles. So it is only FOUR times stronger.

The BTLT rule makes some things quite impossible for bodies to do or be! It stops existing as from car-sized spiders to living in the real world. It also means that we could never lift a bus nor could we ever flap our arms and fly.

7. 위 글의 틀린 쓰기 ①~⑤ 중에서 어법상 틀린 것을 고르시오.

1  2  3  4  5

8. (A), (B), (C)의 각 결절 안에서 어법에 맞는 표현으로 적절한 것은?

(A) how (B) that (C) for
① how  ... that  ... for
② what  ... what  ... for
③ how  ... what  ... for
④ what  ... what  ... of
⑤ how  ... that  ... of

9. Rearrange the words in parentheses to be appropriate in grammar.

→

[7-9] Read the passage and answer the questions.

If you DOUBLE the length of something, its surface area and cross section go up FOUR times while its volume and weight ① go up EIGHT times.

The BTLT rule isn’t just about numbers. It has a big effect on (A) [how / what] the living bodies work. Some important features of bodies—like ② how much food and air they need—depend on each body’s volume and weight. Others—like the strength of muscles—depend on each body’s cross section and surface area.

③ It’s easy to see (B) [that / what] Big Thing is going to need as much food to eat and air to breathe as EIGHT Little Things. But if we take a slice through Big Thing, we can see that its muscles are only FOUR times thicker than Little Thing’s muscles. So it is only FOUR times stronger.

The BTLT rule makes some things quite impossible for bodies to do or be! It ④ stops existing as from car-sized spiders to existing in the real world. ⑤ It also means that we could never lift a bus nor could we ever flap our arms and fly.

11. 주어진 글 다음에 어법을 정확한 순서로 가장 영문은 것을 고르시오.

Is it clear by now why you and I can’t fly in the sky or lift a bus like heroes in comic books?

(A) But don’t let this knowledge stop you from enjoying the next superhero movie.
(B) The next time you’re watching a hard-working ant, you’ll realize the secret of its strength is this hidden principle behind what you see.
(C) It’s all because of the BTLT rule, which governs the lives of all creatures in the world.

Just remember why it can only happen in the movies.

① (A) - (C) - (B)  ② (B) - (A) - (C)  ③ (B) - (C) - (A)  ④ (C) - (A) - (B)  ⑤ (C) - (B) - (A)
[12-14] Read the passage and answer the questions.

For the very tiniest insects, flying is easy. A little wind on their wings (A) [is / are] enough to make them fly. But because of the BTLT rule, (you get) getting the bigger, the harder. ① ____________, if you made an insect twice as long, its surface area would get four times bigger, ② which (B) [means / mean] its wings would also get four times bigger.

Its muscles, too, would be four times thicker and four times as strong. This would be fine if the insect ③ were just four times heavier, but because of the BTLT rule, it would weigh EIGHT times more. So it wouldn’t be able to take off ④ unless its wings and its muscles were much, much bigger. That’s ⑤ why really big birds (C) [like / unlike] ostriches can’t fly and walk ⑥ ____________ and why the only way humans can fly is with the help of engines.

12. (A), (B), (C)의 각 괄호 안에서 어법에 맞는 표현으로 적절한 것은?

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<thead>
<tr>
<th>(A)</th>
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<tbody>
<tr>
<td>① is</td>
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<td>⑤ is</td>
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13. 위 문장 (A), (B)에 들어갈 말로 가장 적절한 것은?

<table>
<thead>
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<th>(A)</th>
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<tbody>
<tr>
<td>① Therefore</td>
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<td>② Therefore</td>
<td>instead</td>
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<td>③ Likewise</td>
<td>in contrast</td>
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<tr>
<td>④ For example</td>
<td>instead</td>
</tr>
<tr>
<td>⑤ However</td>
<td>for example</td>
</tr>
</tbody>
</table>

14. Rearrange the words in parentheses to be correct in grammar.

→

[15-16] Read the passage and answer the questions.

Is it clear by now why you and I can’t fly in the sky or lift a bus like heroes in comic books? It’s all because of the BTLT rule, (A) [which / in which] governs the lives of all creatures in the world. The next time you’re watching a hard-working ant, you’ll realize the secret of its strength is this hidden principle behind (B) [what / whatever] you see. But (you don’t stop) not letting knowledge from this the next superhero movie. Just remember (C) [why / what] it can only happen in the movies.

15. (A), (B), (C)의 각 괄호 안에서 어법에 맞는 표현으로 적절한 것은?

<table>
<thead>
<tr>
<th>(A)</th>
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<td>① which</td>
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<tr>
<td>⑤ which</td>
<td>...</td>
<td>what</td>
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</tbody>
</table>

16. Rearrange the words in parentheses to be appropriate in grammar.

→

17. 글의 흐름으로 보아, 주어진 문장이 들어가기에 적절한 곳을 고르시오.

It’s the BTLT rule at work again.

An ordinary ant can lift between ten and fifty times its own weight, yet the best human weight lifters can lift only about twice their body weight. ① How can little insects be stronger than big humans? ② Let’s say Little Thing can lift something as heavy as itself. ③ Since muscle strength depends on cross section, Big Thing is four times stronger than Little Thing, so Big Thing can lift four times as much as Little Thing. ④ But because Big Thing weighs the same as eight Little Things, Big Thing can’t lift something as heavy as itself. ⑤ It can only lift something half as heavy as itself.