2021**학**년도 EBS 수능특강 영어

UNIT 17

학습자료의 모든 것, EBS 분석·변형문제

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WORKBOOK

<mark>한 줄 해석</mark> – 주어진 문장들을 우리말로 해석하시오.

- **1.** For quite some time, science educators believed that "hands-on" activities were the answer to children's understanding through their participation in science-related activities. ¹⁾
- 2. Many teachers believed that students merely engaging in activities and manipulating objects would organize the information to be gained and the knowledge to be understood into concept comprehension. ²⁾
- **3.** Educators began to notice that the pendulum had swung too far to the "hands-on" component of inquiry as they realized that the knowledge was not inherent in the materials themselves, but in the thought and metacognition about what students had done in the activity. ³⁾
- 4. We now know that "hands-on" is a dangerous phrase when speaking about learning science. 4)
- **5.** The missing ingredient is the "minds-on" part of the instructional experience. ⁵⁾
- **6.** Clarity about the knowledge intended in any activity comes from each student's re-creation of concepts and discussing, thinking, arguing, listening, and evaluating one's own preconceptions after the activities, under the leadership of a thoughtful teacher, can bring this about. ⁶⁾
- 7. After all, a food fight is a hands-on activity, but about all you would learn was something about the aerodynamics of flying mashed potatoes! 7)
- 8. Our view of what students need to build their knowledge and theories about the natural world extends far beyond a "hands-on activity." ⁸⁾
- **9.** While it is important for students to use and interact with materials in science class, the learning comes from the sense-making of students' "hands-on" experiences. ⁹⁾

For quite some time, science educators ¹⁰[is believed / believed] that "hands-on" activities were the answer to children's understanding through their participation in science-related activities. Many teachers believed ¹¹[what / that] students merely ¹²[engage / engaging] in activities and manipulating objects would organize the information ¹³[to gain / to be gained] and the knowledge ¹⁴[to be understood / to understand] into concept comprehension. Educators began to notice that the pendulum ¹⁵[has swung / had swung] too far to the "hands-on" component of inquiry as they realized 10[that / what] the knowledge was not inherent in the materials themselves, but in the thought and metacognition about what students ¹⁷[had done / have done] in the activity. We now know that "hands-on" is a dangerous phrase when ¹⁸[speaking / spoken] about learning science. The missing ingredient is the "minds-on" part of the instructional experience. Clarity about the knowledge 19[intended / is intended] in any activity 20[comes from / come from] each student's re-creation of concepts — and discussing, thinking, arguing, listening, and evaluating one's own preconceptions after the activities, under the leadership of a thoughtful teacher, can ²¹[bring / be brought] this about. After all, a food fight is a hands-on activity, but about all you would learn ²² [to be / was] something about the aerodynamics of flying mashed potatoes! Our view of ²³[how / what] students ²⁴[are needed / need] to build their knowledge and theories about the natural world ²⁵[extending / extends] far beyond a "hands-on activity." While it is important for students to use and ²⁶[interacts / interact] with materials in science class, the learning comes from the sense-making of students' "hands-on" experiences.

어법 수정 - [] 안의 표현을 모두 어법적으로 바르게 고치시오.

For quite some time, science educators ²⁷[is believed] that "hands-on" activities were the answer to children's understanding through their participation in science-related activities. Many teachers believed ²⁸[what] students merely ²⁹[engage] in activities and manipulating objects would organize the information ³⁰[to gain] and the knowledge ³¹[to understand] into concept comprehension. Educators began to notice that the pendulum ³²[has swung] too far to the "hands-on" component of inquiry as they realized ³³[what] the knowledge was not inherent in the materials themselves, but in the thought and metacognition about what students ³⁴[have done] in the activity. We now know that "hands-on" is a dangerous phrase when ³⁵[spoken] about learning science. The missing ingredient is the "minds-on" part of the instructional experience. Clarity about the knowledge ³⁶[is intended] in any activity ³⁷[come from] each student's re-creation of concepts — and discussing, thinking, arguing, listening, and evaluating one's own preconceptions after the activities, under the leadership of a thoughtful teacher, can ³⁸[be brought] this about. After all, a food fight is a hands-on activity, but about all you would learn ³⁹[to be] something about the aerodynamics of flying mashed potatoes! Our view of ⁴⁰[how] students ⁴¹[are needed] to build their knowledge and theories about the natural world ⁴²[extending] far beyond a "hands-on activity." While it is important for students to use and ⁴³[interacts] with materials in science class, the learning comes from the sense-making of students' "hands-on" experiences.

낱말 선택-[] 안의 표현 중 문맥상 바른 낱말을 고르시오.

For quite some time, science educators believed that "hands-on" activities were the 44 [answer / opposition] to children's understanding through their participation in science-related activities. Many teachers believed that students merely engaging in 45)[cavities / activities] and manipulating objects would organize the information to be gained and the knowledge to be understood into concept 40[comprehension / compression]. Educators began to notice that the pendulum had swung too far to the "hands-on" 47 [component / leftover] of inquiry as they realized that the knowledge was not 48 [inherent / inhabited] in the materials themselves, but in the thought and metacognition about what students had done in the activity. We now know that "hands-on" is a(n) 49 [dangerous / interesting] phrase when speaking about learning science. The missing 50[ingredient / nutrition] is the "minds-on" part of the instructional experience. Clarity about the knowledge intended in any activity comes from each student's re-creation of concepts — and discussing, thinking, arguing, listening, and ⁵¹ [evaluating / evacuating] one's own preconceptions ⁵²[before / after] the activities, under the leadership of a thoughtful teacher, can bring this about. After all, a food fight is a hands-on ⁵³[accident / activity], but about all you would learn was something about the aerodynamics of flying mashed potatoes! Our view of what students need to build their knowledge and theories about the natural world 54 [extends / retreats] far beyond a "hands-on activity." While it is important for students to use and interact with 55)[elements / materials] in science class, the learning comes from the sense-making of students' "hands-on" experiences.

문단 배열 – 주어진 글 다음에 이어질 내용의 순서를 바르게 배열하시오.

56)

For quite some time, science educators believed that "hands-on" activities were the answer to children's understanding through their participation in science-related activities. Many teachers believed that students merely engaging in activities and manipulating objects would organize the information to be gained and the knowledge to be understood into concept comprehension.

- (A) Educators began to notice that the pendulum had swung too far to the "hands-on" component of inquiry as they realized that the knowledge was not inherent in the materials themselves, but in the thought and metacognition about what students had done in the activity. We now know that "hands-on" is a dangerous phrase when speaking about learning science.
- (B) After all, a food fight is a hands-on activity, but about all you would learn was something about the aerodynamics of flying mashed potatoes! Our view of what students need to build their knowledge and theories about the natural world extends far beyond a "hands-on activity." While it is important for students to use and interact with materials in science class, the learning comes from the sense-making of students' "hands-on" experiences.
- (C) The missing ingredient is the "minds-on" part of the instructional experience. Clarity about the knowledge intended in any activity comes from each student's re-creation of concepts and discussing, thinking, arguing, listening, and evaluating one's own preconceptions after the activities, under the leadership of a thoughtful teacher, can bring this about.

낱말 채우기-[] 안에 문맥상/어법상 알맞은 단어들을 채우시오.

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students to use and interact with materials in science class, 64)

상당한 기간 동안, 과학 교육자들은 '직접 해 보는' 활동이 과학 관련 활동에의 참여를 통한 아이들의 (과학에 대한) 이해를 위한 해 답이라고 믿었다. 많은 교사들은 학생들이 그저 활동에 참여하고 사물을 조작만 해도 그들이 얻게 되는 정보와 이해하게 되는 지식 을 개념 이해로 체계화할 것이라고 믿었다. 교육자들은 지식이 재료 자체에 내재되어 있는 것이 아니라 학생들이 그 활동에서 한 것 에 대한 생각과 초(超)인지에 있다는 것을 깨달으면서 '직접 해 보는' 탐구의 요소 쪽으로 추가 너무 많이 기울었다는 것을 알아차리 기 시작했다. 이제 우리는 과학 학습에 대해 말할 때 '직접 해 보는'이 위험한 문구라는 것을 알고 있다. 누락된 요소는 교육 경험의 '고도의 사고를 하는' 부분이다. 어떤 활동에서든 (그 활동의) 목표가 되는 지식에 대한 명확성은 각 학생이 개념을 재창조하는 것에 서 비롯되는데, 그 활동을 한 뒤에, 사려 깊은 선생님의 지도를 받으며, 토론하고, 사고하고, 논쟁하고, 듣고, 자기 자신의 선입견에 대해 평가하는 것이 이것을 가져올 수 있다. 결국, 음식물 던지기 장난은 직접 해 보는 활동이지만, 여러분이 배울 거의 모든 것은 바로 으깬 감자 날리기의 공기 역학이었다! 학생들이 자연 세계에 대한 지식과 이론을 구축하기 위해 무엇을 필요로 하는지에 대한 우리의 견해는 '직접 해 보는 활동'을 훨씬 넘어선다. 과학 수업에서 학생들이 재료를 사용하고 재료와 상호작용하는 것이 중요하지 만, 학습은 학생들이 '직접 해 보는' 경험에 대한 이해를 형성하는 것으로부터 나온다.

<mark>한 줄 해석</mark> – 주어진 문장들을 우리말로 해석하시오.

- **1.** Looking for patterns works because our memories are organized in terms of what psychologists call 'schema'. ¹⁾
- 2. A schema is a familiar pattern of relationships stored in your memory. 2)
- 3. That way they form memories so strongly linked that they are recalled more or less as a single unit. ³⁾
- **4.** This is so powerful that it doesn't just influence your way of remembering lists, it actually affects your entire way of thinking. ⁴⁾
- 5. In one experiment, chess grandmasters and masters were tested against ordinary chess players to see how accurately they could remember the position of 20 to 25 chess pieces placed randomly on a board after glancing at the board for 5 to 10 seconds. ⁵)
- 6. The masters and ordinary players were pretty similar in being able to remember the places of only 6 pieces. 6)
- 7. Yet if the pieces were arranged in the form of a(n) game (unknown to anyone), the grandmasters and masters could suddenly remember all the positions, while the ordinary players could still manage only 6. 7)
- 8. It was clear that this was not simply a memory feat it was due to the grandmasters' and masters' ability to see the positions as a single chunk or schema. ⁸⁾

9. It is clear that the more you develop schema, or patterns, the better you'll remember things. 9.

- **10.** And if you can reduce complex inputs to simple chunks, you'll find you can think about them much more clearly and effectively. ¹⁰
- **11.** As a general rule, if you ever find yourself forgetting anything, it is not because your brain is declining or your memory is receding. ¹¹)
- **12.** It's simply because you are not using the correct memory technique to help you store and retrieve the information.¹²)

Looking for patterns works because our memories are organized in terms of ¹³[what / how] psychologists call 'schema'. A schema is a familiar pattern of relationships ¹⁴[stored / is stored] in your memory. That way they form memories so strongly linked ¹⁵[which / that] they are recalled more or less as a single unit.

This is so powerful ¹⁶[what / that] it doesn't just influence your way of ¹⁷[remembering / remembrance] lists, it actually affects your entire way of thinking. In one experiment, chess grandmasters and masters were tested against ordinary chess players to see how ¹⁸[accurate / accurately] they ¹⁹[should / could] remember the position of 20 to 25 chess pieces ²⁰[placed / were placed] randomly on a board after glancing at the board for 5 to 10 seconds. The masters and ordinary players were pretty ²¹[similar / similarly] in being able to remember the places of only 6 pieces. Yet if the pieces ²²[were arranged / arranged] in the form of a game (unknown to anyone), the grandmasters and masters could suddenly remember all the positions, while the ordinary players could still manage only 6. It was clear ²³[what / that] this was not simply a memory feat — it was due to the grandmasters' ability to see the positions as a single chunk or schema.

It is clear that ²⁴[more / the more] you develop schema, or patterns, the better you'll remember things. And if you can reduce complex inputs to simple chunks, you'll find you can think about them ²⁵[many / much] more clearly and effectively. As a general rule, if you ever find yourself ²⁶[forgetting / to forget] anything, it is not because your brain ²⁷[declining / is declining] or your memory is receding. It's simply because you are not using the correct memory technique to help you store and ²⁸[retrieve / to retrieve] the information.

어법 수정 - [] 안의 표현을 모두 어법적으로 바르게 고치시오.

Looking for patterns works because our memories are organized in terms of ²⁹[how] psychologists call 'schema'. A schema is a familiar pattern of relationships ³⁰[is stored] in your memory. That way they form memories so strongly linked ³¹[which] they are recalled more or less as a single unit.

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It is clear that ⁴⁰[more] you develop schema, or patterns, the better you'll remember things. And if you can reduce complex inputs to simple chunks, you'll find you can think about them ⁴¹[many] more clearly and effectively. As a general rule, if you ever find yourself ⁴²[to forget] anything, it is not because your brain ⁴³[declining] or your memory is receding. It's simply because you are not using the correct memory technique to help you store and ⁴⁴[to retrieve] the information.

낱말 선택-[] 안의 표현 중 문맥상 바른 낱말을 고르시오.

Looking for patterns works because our memories are 45 [organized / originated] in terms of what psychologists call 'schema'. A schema is a(n) 46 [similar / familiar] pattern of relationships stored in your memory. That way they 47 [form / process] memories so strongly linked that they are recalled more or less as a single unit.

This is so powerful that it doesn't just influence your way of remembering lists, it ⁴⁸[relatively / actually] affects your entire way of thinking. In one experiment, chess grandmasters and masters were tested against ordinary chess players to see how ⁴⁹[sedately / accurately] they could remember the position of 20 to 25 chess pieces ⁵⁰[placed / practice] randomly on a board after glancing at the board for 5 to 10 seconds. The masters and ⁵¹[ordinary / superb] players were pretty similar in being able to remember the places of only 6 pieces. Yet if the pieces were arranged in the form of a game (unknown to anyone), the grandmasters and masters could suddenly remember all the positions, while the ordinary players could still ⁵²[manage / damage] only 6. It was clear that this was not simply a memory feat —it was due to the grandmasters' and masters' ⁵³[ability / agility] to see the positions as a single chunk or schema.

It is clear that the more you ⁵⁴[discard / develop] schema, or patterns, the better you'll remember things. And if you can reduce complex inputs to simple chunks, you'll find you can think about them much more clearly and ⁵⁵[effectively / ineffectively]. As a general rule, if you ever find yourself ⁵⁰[forbidding / forgetting] anything, it is not because your brain is declining or your memory is receding. It's simply because you are not using the correct memory technique to help you store and ⁵⁷[retain / retrieve] the information.

문단 배열 – 주어진 글 다음에 이어질 내용의 순서를 바르게 배열하시오.

58)

Looking for patterns works because our memories are organized in terms of what psychologists call 'schema'. A schema is a familiar pattern of relationships stored in your memory. That way they form memories so strongly linked that they are recalled more or less as a single unit.

- (A) Yet if the pieces were arranged in the form of a game (unknown to anyone), the grandmasters and masters could suddenly remember all the positions, while the ordinary players could still manage only 6. It was clear that this was not simply a memory feat it was due to the grandmasters' and masters' ability to see the positions as a single chunk or schema.
- (B) This is so powerful that it doesn't just influence your way of remembering lists, it actually affects your entire way of thinking. In one experiment, chess grandmasters and masters were tested against ordinary chess players to see how accurately they could remember the position of 20 to 25 chess pieces placed randomly on a board after glancing at the board for 5 to 10 seconds. The masters and ordinary players were pretty similar in being able to remember the places of only 6 pieces.
- (C) It is clear that the more you develop schema, or patterns, the better you'll remember things. And if you can reduce complex inputs to simple chunks, you'll find you can think about them much more clearly and effectively. As a general rule, if you ever find yourself forgetting anything, it is not because your brain is declining or your memory is receding. It's simply because you are not using the correct memory technique to help you store and retrieve the information.

낱말 채우기 - [] 안에 문맥상/어법상 알맞은 단어들을 채우시오.

⁵⁹⁾ because our memories are organized in terms of what psychologists call 'schema'. A schema is a familiar pattern of relationships stored in your memory. That way they form ⁶⁰⁾

패턴을 찾는 것은 효과가 있는데, 왜냐하면 심리학자들이 '스키마'라고 부르는 것과 관련하여 우리의 기억이 구조화되어 있기 때문이 다. 스키마는 여러분의 기억 속에 저장된 익숙한 관계의 패턴이다. 그런 식으로 그것들은 매우 강하게 연결된 기억을 만들어서 그것 (기억)은 거의 하나의 단위로서 생각나게 된다.

This is so powerful that ⁶¹, ⁶²

. In one experiment, chess grandmasters and

masters were tested against ordinary chess players to see 63)

of 20 to 25 chess pieces placed randomly on a board after glancing at the board for 5 to 10 seconds. The masters and ordinary players were pretty similar in being able to remember the places of only 6 pieces. Yet if the pieces were arranged in the form of a ⁶⁴ (unknown to anyone), the grandmasters and masters could suddenly remember all the positions, while the ordinary players could still manage only 6. It was clear that this was not simply a memory feat — it was ⁶⁵

이것은 매우 강력해서 여러분이 목록을 기억하는 방식에 영향을 끼칠 뿐만 아니라 실제로 여러분의 전체 사고방식에도 영향을 끼친 다. 한 실험에서, 체스를 두는 일반인들과 비교하여 체스 최고수와 고수인 선수들을 대상으로 실험이 행해졌는데, 그것은 그들이 5에 서 10초 동안 체스판을 흘낏 본 이후에 체스판 위에 무작위로 놓인 20에서 25개의 말의 위치를 얼마나 정확하게 기억할 수 있는지 를 보기 위함이었다. 그 체스 고수인 선수들과 일반인들은 매우 비슷하게도 단지 6개의 말의 위치를 기억할 수 있었다. 하지만 그 체 스 말이 (아무에게도 알려지지 않은) 경기 형태로 배열되면, 그 체스 최고수와 고수인 선수들이 갑자기 모든 위치를 기억할 수 있었 고, 반면에 체스를 두는 일반인들은 여전히 6개의 말만 기억할 수 있었다. 이것이 단순히 기억력이 해낸 일만은 아니라는 것은 분명 했는데, 그것은 체스 최고수와 고수인 선수들이 그 위치를 하나의 덩어리, 즉 스키마로 볼 수 있었기 때문이었다.

It is clear that 66)______ unit units and a second second

. And if you can reduce complex inputs to simple chunks, you'll find you can think about them much more clearly and effectively. As a general rule, if you ever find yourself forgetting anything, it is not because your brain is declining or your memory is receding. It's simply because ⁶⁷

분명히, 여러분이 스키마, 즉 패턴을 더 많이 개발할수록, 여러분은 더 잘 기억할 것이다. 그리고 복잡한 입력 내용을 간단한 덩어리 로 환원할 수 있다면, 여러분은 그것들에 관해 훨씬 더 분명하고 효과적으로 생각할 수 있다는 것을 알게 될 것이다. 일반적으로 여 러분이 스스로가 어떤 것을 잊고 있는 것을 발견한 적이 있다면, 그것은 여러분의 뇌가 쇠퇴하고 있거나 여러분의 기억력이 약해지 고 있기 때문이 아니다. 그것은 단지 여러분이 정보를 저장하고 불러오는 데 도움을 줄 수 있는 올바른 기억 방법을 사용하고 있지 않기 때문이다.

한 줄 해석 – 주어진 문장들을 우리말로 해석하시오.

- 1. Novelty compels both humans and animals to engage with the unfamiliar.
- 2. Indeed, our strong desire for novelty has evolutionary roots, improving our survival odds by keeping us alert to both friends and threats in our environment.²⁾
- **3.** As new parents quickly learn, when given a choice, babies consistently look at, listen to, and play with unfamiliar things. ³⁾
- **4.** One of my favorite moments from early parenthood was when I watched my infant son notice his hands for the first time. ⁴⁾
- **5.** His discovery stands out as a metaphor for learning: His interest in what those strange, wonderful appendages could do was his first step toward controlling them. ⁵⁾
- **6.** The preference for novelty is an efficient way for immature cognitive systems to process information, helping babies cope with changes to their environment before releasing their inner explorer. ⁶
- 7. Interestingly, in human genetics, a preference for novelty has been linked to the migration of early humans to the far reaches of the earth. η
- 8. Recent studies have shown that human groups that migrated the farthest from Africa had more of the genes linked to novelty seeking. ⁸⁾
- **9.** That is, the people who traveled the farthest from home may have had some biological propensity to experience mysterious new places. ⁹⁾

- 10. And yet, while we are born with a strong drive to seek novelty, this drive fades over time. 10)
- **11.** As we grow older, other desires take over, like wanting more predictability. ¹¹)
- **12.** The organizations we build and join reflect this reality: paychecks at the same time each week or month, evaluations according to established processes, jobs that involve a known set of activities. ¹²

Novelty compels both humans and animals ¹³[to engage / engaging] with the unfamiliar. Indeed, our strong desire for novelty has evolutionary roots, ¹⁴[improving / improves] our survival odds by keeping us alert to ¹⁵] [either / both] friends and threats in our environment. As new parents quickly learn, when ¹⁶[given / giving] a choice, babies consistently look at, listen to, and play with unfamiliar things. One of my favorite moments from early parenthood ¹⁷[was / were] ¹⁸[when / where] I watched my infant son ¹⁹[to notice / notice] his hands for the first time. His discovery ²⁰[stands / standing] out as a metaphor for learning: His interest in what those strange, wonderful appendages could ²¹[do it / do] was his first step toward ²²[control / controlling] ²³[them / to them]. The preference for novelty is an efficient way for immature cognitive systems to process information, ²⁴[helped / helping] babies cope with changes to their environment before releasing their inner explorer.

Interestingly, in human genetics, a preference for novelty has ²⁵[been linked / linked] to the migration of early humans to the far reaches of the earth. Recent studies have shown that human groups that migrated the farthest from Africa ²⁶[have / had] more of the genes linked to novelty seeking. That is, the people who traveled the farthest from home ²⁷[may / should] have had some biological propensity to experience mysterious new places. And yet, while we are born with a strong drive ²⁸[seek / to seek] novelty, this drive fades over time. As we grow older, ²⁹[other / another] desires take over, like wanting more predictability. The organizations we build and join ³⁰[reflect / to reflect] this reality: paychecks at the same time each week or month, evaluations according to established processes, jobs that involve a known set of activities.

어법 수정 - [] 안의 표현을 모두 어법적으로 바르게 고치시오.

Novelty compels both humans and animals ³¹[engaging] with the unfamiliar. Indeed, our strong desire for novelty has evolutionary roots, ³²[improves] our survival odds by keeping us alert to ³³[either] friends and threats in our environment. As new parents quickly learn, when ³⁴[giving] a choice, babies consistently look at, listen to, and play with unfamiliar things. One of my favorite moments from early parenthood ³⁵[were] ³⁶[where] I watched my infant son ³⁷[to notice] his hands for the first time. His discovery ³⁸[standing] out as a metaphor for learning: His interest in what those strange, wonderful appendages could ³⁹[do it] was his first step toward ⁴⁰[control] ⁴¹[to them]. The preference for novelty is an efficient way for immature cognitive systems to process information, ⁴²[helped] babies cope with changes to their environment before releasing their inner explorer.

Interestingly, in human genetics, a preference for novelty has ⁴³[linked] to the migration of early humans to the far reaches of the earth. Recent studies have shown that human groups that migrated the farthest from Africa ⁴⁴[have] more of the genes linked to novelty seeking. That is, the people who traveled the farthest from home ⁴⁵[should] have had some biological propensity to experience mysterious new places. And yet, while we are born with a strong drive ⁴⁶[seek] novelty, this drive fades over time. As we grow older, ⁴⁷[another] desires take over, like wanting more predictability. The organizations we build and join ⁴⁸[to reflect] this reality: paychecks at the same time each week or month, evaluations according to established processes, jobs that involve a known set of activities.

낱말 선택-[] 안의 표현 중 문맥상 바른 낱말을 고르시오.

Novelty compels both humans and animals to ⁴⁹[engage with / embark on] the unfamiliar. Indeed, our strong desire for novelty has evolutionary roots, improving our survival ⁵⁰[intuitions / odds] by keeping us alert to both friends and threats in our environment. As new parents quickly learn, when ⁵¹[vague / given] a choice, babies consistently look at, listen to, and play with unfamiliar things. One of my favorite moments from early parenthood was when I watched my infant son ⁵²[pardon / notice] his hands for the first time. His ⁵³[recovery / discovery] stands out as a metaphor for learning: His interest in what those strange, wonderful appendages could do was his first step toward ⁵⁴[controlling / releasing] them. The preference for novelty is a(n) ⁵⁵[egocentric / efficient] way for immature cognitive systems to process information, helping babies cope with changes to their environment before releasing their inner explorer.

Interestingly, in human genetics, a preference for novelty has been linked to the ⁵⁰[misunderstanding / migration] of early humans to the far reaches of the earth. Recent studies have shown that human groups that migrated the farthest from Africa had more of the genes linked to ⁵⁷[excessiveness / novelty] seeking. That is, the people who traveled the farthest from home may have had some ⁵⁸[biological / biology] propensity to experience mysterious new places. And yet, while we are born with a strong drive to ⁵⁹[share / seek] novelty, this drive fades over time. As we grow older, other desires take over, like wanting more ⁶⁰[predictability / contradiction]. The organizations we build and join ⁶¹[reflect / refine] this reality: paychecks at the same time each week or month, evaluations according to established processes, jobs that involve a known set of activities.

문단 배열 – 주어진 글 다음에 이어질 내용의 순서를 바르게 배열하시오.

62)

Novelty compels both humans and animals to engage with the unfamiliar. Indeed, our strong desire for novelty has evolutionary roots, improving our survival odds by keeping us alert to both friends and threats in our environment. As new parents quickly learn, when given a choice, babies consistently look at, listen to, and play with unfamiliar things.

- (A) And yet, while we are born with a strong drive to seek novelty, this drive fades over time. As we grow older, other desires take over, like wanting more predictability. The organizations we build and join reflect this reality: paychecks at the same time each week or month, evaluations according to established processes, jobs that involve a known set of activities.
- (B) One of my favorite moments from early parenthood was when I watched my infant son notice his hands for the first time. His discovery stands out as a metaphor for learning: His interest in what those strange, wonderful appendages could do was his first step toward controlling them. The preference for novelty is an efficient way for immature cognitive systems to process information, helping babies cope with changes to their environment before releasing their inner explorer.
- (C) Interestingly, in human genetics, a preference for novelty has been linked to the migration of early humans to the far reaches of the earth. Recent studies have shown that human groups that migrated the farthest from Africa had more of the genes linked to novelty seeking. That is, the people who traveled the farthest from home may have had some biological propensity to experience mysterious new places.

낱말 채우기-[] 안에 문맥상/어법상 알맞은 단어들을 채우시오.

⁶³) compels both humans and animals to engage with the unfamiliar. Indeed, our strong desire for
novelty has evolutionary roots, ⁶⁴
. As new parents quickly learn, when given a choice,
babies consistently look at, listen to, and play with unfamiliar things. One of my favorite moments from early
parenthood was when I watched my infant son 65). His discovery
⁶⁶ /
appendages could do was his first step toward controlling them. The 67) is an 68)
, helping babies

cope with changes to their environment before releasing their inner explorer.

새로운 것은 인간과 동물 모두를 익숙하지 않은 것과 관계를 맺게 만든다. 사실, 새로움에 대한 우리의 강한 욕구에는 진화적인 뿌리 가 있는데, 그것은 우리로 하여금 우리 주변에 있는 친구와 위협적인 존재 둘 다에 방심하지 않게 함으로써 우리의 생존 가능성을 높여준다. 갓 부모가 된 사람들이 빨리 알게 되듯이, 선택권이 주어지면, 아기들은 익숙하지 않은 것들을 계속해서 쳐다보고, 듣고, 가지고 논다. 부모가 된 초기 시절 내가 가장 좋아하는 순간 중 하나는 젖먹이 아들이 자기 손을 처음으로 알아차리는 것을 바라본 때였다. 아들의 발견은 쉽게 눈에 띄는 학습에 대한 암시이다. 그 이상하고도 멋진 부속기관이 할 수 있는 것에 대한 그의 관심은 그 것들을 조절하는 것을 향한 그의 첫 단계였다. 새로움에 대한 선호는 미성숙한 인지 체계가 정보를 처리하는 효율적인 방법으로, 아 기들이 자기 내부의 탐험가를 표출하기 전에 자신의 환경에 대한 변화에 대처하는 것을 도와준다.

흥미롭게도, 인간의 유전적 특징에서 새로움에 대한 선호는 초기 인류가 지구의 먼 곳까지 이동한 것과 연관되어 왔다. 최근의 연구 에 따르면, 아프리카에서 가장 먼 곳까지 이주한 인간 집단은 새로움을 찾는 것과 관련된 더 많은 유전자를 가지고 있었다. 즉, 집에 서 가장 먼 곳까지 여행한 사람들은 신비로운 새로운 장소를 경험하려는 어떤 생물학적인 성향을 가지고 있었을 가능성이 있다. 그 러나 우리가 새로움을 찾는 것에 대한 강한 욕구를 지니고 태어나지만, 이러한 욕구는 시간이 가면서 약해진다. 나이가 더 들어가면 서 더 많은 예측 가능성을 원하는 것처럼 다른 욕구들이 장악하게 된다. 우리가 만들고 참여하는 조직들이 이러한 현실을 보여 주는 데, 이는 매주 또는 매달 같은 시간에 받는 봉급, 확립되어 있는 과정에 따른 평가, 이미 알려진 일련의 활동을 포함하는 직업과 같 은 것이다.

한 줄 해석 – 주어진 문장들을 우리말로 해석하시오.

- 1. You've no doubt heard the old saying: "when the going gets tough, the tough go shopping!" 1)
- 2. That is precisely what bacteria do when they find themselves in deep trouble. 2)
- **3.** They go shopping for useful genes that can help to get them out of the mess. ³⁾
- **4.** There comes a time in the life of any organism or organization, when it has to try something completely different. ⁴⁾
- **5.** In a sporting team, it has been called throwing away the game plan, and this is exactly what hypermutation involves. ⁵⁾
- **6.** When a bacterial colony is in a critical situation when survival is on the line something very strange happens the bacteria suddenly start mutating at an extraordinarily rapid rate. ⁽⁶⁾
- 7. In so doing, they are consulting the microbial lending library, hoping that they can come up with a mutation that might get them out of their crisis. 7)
- 8. Starving E. coli colonies (hyper-)mutate at a rate one thousand times greater than that which would normally be the case in a well-fed colony. ⁸⁾
- **9.** You can even find certain hypermutators within a normal or well-fed colony, sitting there, ready to spring into a hypermutational mode at the first sign of serious stress. ⁹⁾
- **10.** As Frank T. Vertosick so humorously put it: "these hypermutators are the Van Goghs of the microbial world somewhat insane, but infinitely creative". ¹⁰

You've no doubt heard the old saying: "when the ¹¹[going / to go] gets tough, the tough go shopping!" That is precisely ¹²[how / what] bacteria do when they find ¹³[themselves / them] in deep trouble. They go shopping for useful genes that can help ¹⁴[to get / getting] them out of the mess. There comes a time in the life of any organism or organization, ¹⁵[which / when] it has to try something ¹⁶[completely / complete] different. In a sporting team, it ¹⁷[has called / has been called] throwing away the game plan, and this is exactly what hypermutation involves. When a bacterial colony is in a critical situation — when survival is on the line — something very strange ¹⁸[is happened / happens] — the bacteria suddenly start mutating at an extraordinarily rapid rate. In so doing, they are consulting the microbial lending library, ¹⁹[hopping / hoped] that they can come up with a mutation that might get ²⁰[them / themselves] out of their crisis. Starving E. coli colonies (hyper-)mutate at a rate one thousand times greater than ²¹[those / that] which would normally be the case in a well-fed colony. You can even find certain hypermutators within a normal or well-fed colony, ²²) [sitting / sat] there, ready to spring into a hypermutational mode at the first sign of serious stress. As Frank T. Vertosick so humorously put it: "these hypermutators are the Van Goghs of the microbial world—somewhat insane, but infinitely creative".

어법 수정 - [] 안의 표현을 모두 어법적으로 바르게 고치시오.

You've no doubt heard the old saying: "when the ²³[to go] gets tough, the tough go shopping!" That is precisely ²⁴[how] bacteria do when they find ²⁵[them] in deep trouble. They go shopping for useful genes that can help ²⁶[getting] them out of the mess. There comes a time in the life of any organism or organization, ²⁷] [which] it has to try something ²⁶[complete] different. In a sporting team, it ²⁹[has called] throwing away the game plan, and this is exactly what hypermutation involves. When a bacterial colony is in a critical situation — when survival is on the line — something very strange ³⁰[is happened] — the bacteria suddenly start mutating at an extraordinarily rapid rate. In so doing, they are consulting the microbial lending library, ³¹) [hoped] that they can come up with a mutation that might get ³²[themselves] out of their crisis. Starving E. coli colonies (hyper-)mutate at a rate one thousand times greater than ³³[those] which would normally be the case in a well-fed colony. You can even find certain hypermutators within a normal or well-fed colony, ³⁴[sat] there, ready to spring into a hypermutators are the Van Goghs of the microbial world— somewhat insane, but infinitely creative".

낱말 선택-[] 안의 표현 중 문맥상 바른 낱말을 고르시오.

You've no ³⁵[doubt / trust] heard the old saying: "when the going gets tough, the tough go shopping!" That is ³⁶[inherently / precisely] what bacteria do when they find themselves in deep trouble. They go shopping for ³⁷) [useful / meager] genes that can help to get them out of the mess. There comes a time in the life of any organism or organization, when it has to try something ³⁸[seemingly / completely] different. In a sporting team, it has been called throwing away the game plan, and this is exactly what hypermutation ³⁹[identifies / involves]. When a bacterial colony is in a critical situation — when survival is on the line — something very strange ⁴⁰[happens / disappears] — the bacteria suddenly start mutating at an extraordinarily rapid rate. In so doing, they are consulting the microbial lending library, hoping that they can come up with a(n) ⁴¹[mutation / biodiversity] that might get them out of their crisis. Starving E. coli colonies (hyper-)mutate at a rate one thousand times greater than that which would normally be the case in a well-fed ⁴²[colony / territory]. You can even find ⁴³[certain / surreal] hypermutators within a normal or well-fed colony, sitting there, ready to spring into a hypermutatoral mode at the first sign of serious stress. As Frank T. Vertosick so humorously put it: "these hypermutators are the Van Goghs of the microbial world—somewhat insane, but infinitely ⁴⁴] [creative / patient]".

문단 배열 – 주어진 글 다음에 이어질 내용의 순서를 바르게 배열하시오.

45)

You've no doubt heard the old saying: "when the going gets tough, the tough go shopping!" That is precisely what bacteria do when they find themselves in deep trouble. They go shopping for useful genes that can help to get them out of the mess. There comes a time in the life of any organism or organization, when it has to try something completely different.

- (A) In so doing, they are consulting the microbial lending library, hoping that they can come up with a mutation that might get them out of their crisis. Starving E. coli colonies (hyper-)mutate at a rate one thousand times greater than that which would normally be the case in a well-fed colony.
- (B) You can even find certain hypermutators within a normal or well-fed colony, sitting there, ready to spring into a hypermutational mode at the first sign of serious stress. As Frank T. Vertosick so humorously put it: "these hypermutators are the Van Goghs of the microbial world somewhat insane, but infinitely creative".
- (C) In a sporting team, it has been called throwing away the game plan, and this is exactly what hypermutation involves. When a bacterial colony is in a critical situation when survival is on the line something very strange happens the bacteria suddenly start mutating at an extraordinarily rapid rate.

낱말 채우기-[] 안에 문맥상/어법상 알맞은 단어들을 채우시오.

You've no doubt heard the old saying: "when the going gets tough, the tough go shopping!" That is precisely
what bacteria do when they find themselves in deep trouble. They go shopping for useful genes that can 46
. There comes a time in the life of any organism or organization,
⁴⁷⁾
throwing away the game plan, and this is exactly what hypermutation involves. When a bacterial colony is in
a critical situation — when survival is on the line — something very strange happens — the bacteria
suddenly start ⁴⁸)
microbial lending library, hoping that they can 49)
than that which would normally be the case in a well-fed colony. You can even find certain hypermutators
within a normal or well-fed colony, sitting there, 50)
. As Frank T. Vertosick so humorously put it: "these
hypermutators are the Van Goghs of the microbial world — 51)

여러분은 틀림없이 '상황이 어려워지면 강인한 이들은 쇼핑하러 간다!'라는 옛 속담을 들어 본 적이 있을 것이다. 그것이 바로 박테리 아가 자신들이 심각한 곤경에 빠져 있다는 것을 알게 될 때 하는 일이다. 그들은 곤경으로부터 그들이 벗어나도록 도와줄 수 있는 유용한 유전자를 찾아 쇼핑하러 간다. 어떤 생물체나 유기체도 그 생애에서 완전히 다른 것을 시도해야만 하는 시기가 온다. 스포츠 팀에서는 이것이 '작전 버리기'로 불려 왔고, 이것이 바로 과돌연변이가 수반하는 것이다. 박테리아 군체가 위태로운 상황에 처하면, 즉 생존이 위태로우면, 아주 이상한 일이 일어나는데, 박테리아가 갑자기 엄청나게 빠른 속도로 돌연변이하기 시작한다. 그렇게 할 때, 그들은 그들이 처한 위기에서 그들을 벗어나게 할 수 있는 돌연변이체를 만들어 낼 수 있기를 바라면서 미생물의 대출 도서관을 뒤지고 있는 것이다. 굶주린 '대장균' 군체는 영양이 충분한 군체에서 대개 그럴 경우의 속도보다 1,000배 더 빠른 속도로 (과)돌연변 이한다. 심각한 스트레스의 징후가 처음 보이면 즉시 과돌연변이 모드로 갑자기 바뀔 채비를 갖추고 가 만히 있는, 정상적이거나 영 양이 충분한 군체 내의 특정한 과돌 연변이 유발 유전자들을 발견하기까지 할 수도 있다. Frank T. Vertosick이 매우 유머러스하게 표현했듯이, "이 과돌연변이 유발 유전자들은 약간 제정신이 아니지만 대단히 창의적인, 미생물계의 반 고흐 같은 존재들이다."

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한 줄 해석 – 주어진 문장들을 우리말로 해석하시오.

- **1.** Social sanctions vary in degree of formalization. ¹⁾
- 2. In most stable associations there are highly formal procedures, such as ceremonies for honoring those whose services are believed to have contributed to the well-being of the membership and for the discredit or exclusion of those whose activities have been considered harmful.²⁾
- **3.** In our society, for example, there are courts of law and means of judging criminals which are so complex that only specialists can understand them. ³⁾
- 4. Some sociologists attach great importance to such highly formalized sanctions and have even defined the organized group as one in which the social structure is protected and reinforced through formal sanctions.
- **5.** Such norms are without doubt controls on deviant behavior, but for most people the less formal sanctions, the spontaneous displays of approval or disapproval, prove more effective. ⁵⁾
- **6.** Those who are about to violate some rule are often stopped short by the show of displeasure on the part of others. •)
- **7.** Ridicule and gossip are especially effective. η
- 8. In some cases deviant parties may be excluded informally, even when they continue to retain membership in the group. 8)
- **9.** Among the most effective of the informal sanctions is the deprivation of mutual services, the refusal of others to honor the claims of the violator's role. ⁹⁾

- **10.** Since roles consist of reciprocating claims and obligations, they cannot be maintained without the cooperation of others in complementary roles. ¹⁰
- **11.** When a person speaks to a colleague, he ordinarily has a minimal claim upon him to respond in some way. ¹¹⁾
- **12.** Others may, however, refuse to live up to their obligation to be polite as a way of indicating their disapproval. ¹²

Social sanctions vary in degree of formalization. In most stable associations there are ¹³[high / highly] formal procedures, such as ceremonies for honoring those ¹⁴[whose / who] services are believed ¹⁵[to have contributed / to contribute] to the well-being of the membership and for the discredit or exclusion of those 10 [whose / who] activities have been considered ¹⁷⁰[harmfully / harmful]. In our society, for example, there are courts of law and means of judging criminals which are so complex 18)[what / that] only specialists can understand them. Some sociologists attach great importance to such ¹⁹[highly / high] formalized sanctions and have even ²⁰[been defined / defined] the organized group as one ²¹[in which / to which] the social structure is protected and reinforced through formal sanctions. Such norms are without doubt controls on deviant behavior, but for most people the less formal sanctions, the spontaneous displays of approval or disapproval, ²²[prove / proving] more effective. Those who are about to violate some rule ²³[is / are] often stopped short by the show of displeasure on the part of ²⁴[the others / others]. Ridicule and gossip are especially effective. In some cases deviant parties may ²⁵ [exclude / be excluded] informally, even when they continue to retain membership in the group. Among the most effective of the informal sanctions $\frac{20}{15}$ / are] the deprivation of mutual services, the refusal of others to ²⁷[honoring / honor] the claims of the violator's role. Since roles ²⁸[consist / are consisted] of reciprocating claims and obligations, they ²⁹[cannot be maintained / cannot maintain] without the cooperation of others in complementary roles. When a person speaks to a colleague, he ordinarily has a minimal claim upon him to respond in some way. Others may, however, refuse to live up to their obligation to be polite as a way of ³⁰[indication / indicating] their disapproval.

어법 수정 - [] 안의 표현을 모두 어법적으로 바르게 고치시오.

Social sanctions vary in degree of formalization. In most stable associations there are ³¹[high] formal procedures, such as ceremonies for honoring those ³²[who] services are believed ³³[to contribute] to the well-being of the membership and for the discredit or exclusion of those ³⁴[who] activities have been considered ³⁵[harmfully]. In our society, for example, there are courts of law and means of judging criminals which are so complex ³⁰[what] only specialists can understand them. Some sociologists attach great importance to such 37)[high] formalized sanctions and have even 38)[been defined] the organized group as one 39)[to which] the social structure is protected and reinforced through formal sanctions. Such norms are without doubt controls on deviant behavior, but for most people the less formal sanctions, the spontaneous displays of approval or disapproval, 40 [proving] more effective. Those who are about to violate some rule 41 [is] often stopped short by the show of displeasure on the part of ⁴²)[the others]. Ridicule and gossip are especially effective. In some cases deviant parties may ⁴³[exclude] informally, even when they continue to retain membership in the group. Among the most effective of the informal sanctions 44)[are] the deprivation of mutual services, the refusal of others to 45 [honoring] the claims of the violator's role. Since roles 46 [are consisted] of reciprocating claims and obligations, they 47) [cannot maintain] without the cooperation of others in complementary roles. When a person speaks to a colleague, he ordinarily has a minimal claim upon him to respond in some way. Others may, however, refuse to live up to their obligation to be polite as a way of ⁴⁸[indication] their disapproval.

낱말 선택-[] 안의 표현 중 문맥상 바른 낱말을 고르시오.

Social sanctions vary in degree of formalization. In most stable 49 [assumptions / associations] there are highly formal procedures, such as ceremonies for honoring those whose services are believed to have contributed to the well-being of the membership and for the discredit or exclusion of those whose activities have been 50) [dismissed / considered] harmful. In our society, for example, there are courts of law and means of judging criminals which are so ⁵¹[vague / complex] that only specialists can understand them. Some sociologists attach great importance to such highly formalized sanctions and have even defined the organized group as one in which the social structure is ⁵²[protected / destroyed] and reinforced through formal sanctions. Such norms are without doubt controls on deviant behavior, but for most people the less formal sanctions, the spontaneous displays of approval or disapproval, prove more ⁵³[effective / accurate]. Those who are about to ⁵⁴[emulate / violate] some rule are often stopped short by the show of displeasure on the part of others. Ridicule and ⁵⁵) [gossip / truth] are especially effective. In some cases deviant parties may be excluded informally, even when they 50 [contribute / continue] to retain membership in the group. Among the most effective of the informal sanctions is the ⁵/[deprivation / contamination] of mutual services, the refusal of others to honor the claims of the violator's role. Since roles consist of reciprocating claims and obligations, they cannot be 58)[maintained / obtained] without the cooperation of others in complementary roles. When a person speaks to a colleague, he ordinarily has a minimal ⁵⁹[claim / acclaim] upon him to respond in some way. Others may, however, refuse to live up to their obligation to be polite as a way of ⁶⁰[indicating / inducing] their disapproval.

문단 배열 – 주어진 글 다음에 이어질 내용의 순서를 바르게 배열하시오.

61)

Social sanctions vary in degree of formalization. In most stable associations there are highly formal procedures, such as ceremonies for honoring those whose services are believed to have contributed to the well-being of the membership and for the discredit or exclusion of those whose activities have been considered harmful. In our society, for example, there are courts of law and means of judging criminals which are so complex that only specialists can understand them.

- (A) Since roles consist of reciprocating claims and obligations, they cannot be maintained without the cooperation of others in complementary roles. When a person speaks to a colleague, he ordinarily has a minimal claim upon him to respond in some way. Others may, however, refuse to live up to their obligation to be polite as a way of indicating their disapproval.
- (B) Those who are about to violate some rule are often stopped short by the show of displeasure on the part of others. Ridicule and gossip are especially effective. In some cases deviant parties may be excluded informally, even when they continue to retain membership in the group. Among the most effective of the informal sanctions is the deprivation of mutual services, the refusal of others to honor the claims of the violator's role.
- (C) Some sociologists attach great importance to such highly formalized sanctions and have even defined the organized group as one in which the social structure is protected and reinforced through formal sanctions. Such norms are without doubt controls on deviant behavior, but for most people the less formal sanctions, the spontaneous displays of approval or disapproval, prove more effective.

낱말 채우기-[] 안에 문맥상/어법상 알맞은 단어들을 채우시오.

Social sanctions vary 62)
formal procedures, such as ceremonies ⁶³
In our society (1)
, there are courts of law and means of judging criminals which are ⁶⁵)
formalized sanctions and have even defined the organized group as 60,
doubt controls on deviant behavior, but for most people the less formal sanctions, 67)
, prove more effective. Those who are about to violate some
rule are often 68) 69)
are especially effective. In some cases 70, may be excluded
informally, even when they continue to retain membership in the group. 71)
and obligations, they cannot be maintained ⁷²
. When a person speaks to a colleague, he ordinarily has a minimal claim upon
him to respond in some way. Others may, ⁷³ , refuse ⁷⁴ ,, re

사회적 제재는 공식화의 정도가 다양하다. 대부분의 안정적인 단체에는 그 공로가 회원들의 안녕에 기여했다고 생각되는 사람들을 예우하기 위한 그리고 그 활동이 유해한 것으로 여겨졌던 사람들의 불신임 혹은 추방 의식과 같은 매우 공식적인 절차가 있다. 예를 들어, 우리 사회에는 매우 복잡해서 전문가만이 이해할 수 있는 사법 재판소와 범죄자들을 심판하는 수단이 있다. 일부 사회학자들은 그러한 고도의 공식화된 제재에 굉장한 중요성을 부여하고 심지어 조직화된 집단을 공식적인 제재를 통해 사회 구조가 보호되고 강 화되는 집단으로 규정하기까지 했다. 그러한 규범은 의심의 여지 없이 일탈 행위를 제어하는 것이지만, 대부분의 사람들에게는 덜 공식적인 제재, 즉 승인이나 못마땅함의 자연스러운 표현이 더 효과적이라는 것이 드러난다. 어떤 규칙을 막 위반하려 하는 사람들은 흔히 다른 사람들 쪽에서의 즐거움(→ 불쾌감)의 표시에 의해 (하려던 것을) 급히 멈추게 된다. 조롱과 험담은 특히 효과적이다. 경우 에 따라서 일탈자들은 심지어 그들이 그 집단에서 구성원의 자격을 계속 유지하고 있을 때조차도 비공식적으로 배척당할지도 모른 다. 상호 서비스의 박탈, 즉 위반자의 역할 권리 주장을 존중하는 것을 다른 이들이 거부하는 것은 비공식적인 제재 중에서 가장 효 과적인 것에 속한다. 역할은 권리 주장과 의무를 서로 주고받는 것으로 구성되기 때문에, 그것들은 보완적인 역할을 하는 다른 이들 의 협조 없이는 유지될 수 없다. 어떤 사람이 동료에게 말할 때, 그는 보통 그(동료)가 어떤 방식으로든 응답해야 한다는 최소한의 권리 주장을 가진다. 그러나 다른 사람들은 자신들의 못마땅함을 나타내는 하나의 방법으로 예의를 갖춰야 할 의무에 부응하기를 거 부할지도 모른다.

- Answer Sheet -

2021학년도 EBS 수능특강 영어 17강 - Gateway

 상당한 기간 동안, 과학 교육자들은 '직접 해 보는' 활동이 과학 관련 활동에의 참여를 통한 아이들의 (과학에 대한) 이해 를 위한 해답이라고 믿었다.
 많은 교사들은 학생들이 그저 활동에 참여하고 사물을 조작 만 해도 그들이 얻게 되는 정보와 이해하게 되는 지식을 개념 이해로 체계화할 것이라고 믿었다.
 교육자들은 지식이 재료 자체에 내재되어 있는 것이 아니라 학생들이 그 활동에서 한 것에 대한 생각과 초(超)인지에 있다 는 것을 깨달으면서 '직접 해 보는' 탐구의 요소 쪽으로 추가 너무 많이 기울었다는 것을 알아차리기 시작했다.

4) 이제 우리는 과학 학습에 대해 말할 때 '직접 해 보는'이 위 험한 문구라는 것을 알고 있다.

5) 누락된 요소는 교육 경험의 '고도의 사고를 하는' 부분이다. 6) 어떤 활동에서든 (그 활동의) 목표가 되는 지식에 대한 명확 성은 각 학생이 개념을 재창조하는 것에서 비롯되는데, 그 활동 을 한 뒤에, 사려 깊은 선생님의 지도를 받으며, 토론하고, 사고 하고, 논쟁하고, 듣고, 자기 자신의 선입견에 대해 평가하는 것 이 이것을 가져올 수 있다.

7) 결국, 음식물 던지기 장난은 직접 해 보는 활동이지만, 여러 분이 배울 거의 모든 것은 바로 으깬 감자 날리기의 공기 역학 이었다!

8) 학생들이 자연 세계에 대한 지식과 이론을 구축하기 위해 무엇을 필요로 하는지에 대한 우리의 견해는 '직접 해 보는 활 동'을 훨씬 넘어선다.

9) 과학 수업에서 학생들이 재료를 사용하고 재료와 상호작용 하는 것이 중요하지만, 학습은 학생들이 '직접 해 보는' 경험에 대한 이해를 형성하는 것으로부터 나온다.

10) believed

11) that

- 12) engaging
- 13) to be gained

14) to be understood

- 15) had swung
- 16) that
- 17) had done
- 18) speaking
- 19) intended
- 20) comes from
- 21) bring
- 22) was
- 23) what
- 24) need
- 25) extends
- 26) interact
- 27) believed
- 28) that
- 29) engaging
- 30) to be gained
- 31) to be understood
- 32) had swung
- 33) that
- 34) had done
- 35) speaking
- 36) intended
- 37) comes from
- 38) bring
- 39) was
- 40) what

- 41) need
- 42) extends
- 43) interact
- 44) answer
- 45) activities
- 46) comprehension
- 47) component
- 48) inherent
- 49) dangerous
- 50) ingredient
- 51) evaluating
- 52) after
- 53) activity
- 54) extends
- 55) materials
- 56) (A) (C) (B)
- 57) through their participation in science-related activities

58) students merely engaging in activities and manipulating objects would organize the information to be gained and the knowledge to be understood into concept comprehension

- 59) not inherent in the materials themselves
- 60) but in the thought and metacognition about what students had done in the activity
- 61) Clarity about the knowledge
- 62) comes from each student's re-creation of concepts
- 63) extends far beyond a "hands-on activity

64) the learning comes from the sense-making of students' "hands-on" experiences

2021학년도 EBS 수능특강 영어 17강 - 01번~02번

1) 패턴을 찾는 것은 효과가 있는데, 왜냐하면 심리학자들이 '스 키마'라고 부르는 것과 관련하여 우리의 기억이 구조화되어 있 기 때문이다.

- 2) 스키마는 여러분의 기억 속에 저장된 익숙한 관계의 패턴이다.
- 3) 그런 식으로 그것들은 매우 강하게 연결된 기억을 만들어서 그것(기억)은 거의 하나의 단위로서 생각나게 된다.

4) 이것은 매우 강력해서 여러분이 목록을 기억하는 방식에 영 향을 끼칠 뿐만 아니라 실제로 여러분의 전체 사고방식에도 영 향을 끼친다.

5) 한 실험에서, 체스를 두는 일반인들과 비교하여 체스 최고수 와 고수인 선수들을 대상으로 실험이 행해졌는데, 그것은 그들 이 5에서 10초 동안 체스판을 흘낏 본 이후에 체스판 위에 무 작위로 놓인 20에서 25개의 말의 위치를 얼마나 정확하게 기억 할 수 있는지를 보기 위함이었다.

6) 그 체스 고수인 선수들과 일반인들은 매우 비슷하게도 단지6개의 말의 위치를 기억할 수 있었다.

7) 하지만 그 체스 말이 (아무에게도 알려지지 않은) 경기 형태 로 배열되면, 그 체스 최고수와 고수인 선수들이 갑자기 모든 위치를 기억할 수 있었고, 반면에 체스를 두는 일반인들은 여전 히 6개의 말만 기억할 수 있었다.

8) 이것이 단순히 기억력이 해낸 일만은 아니라는 것은 분명했 는데, 그것은 체스 최고수와 고수인 선수들이 그 위치를 하나의 덩어리, 즉 스키마로 볼 수 있었기 때문이었다.

9) 명히, 여러분이 스키마, 즉 패턴을 더 많이 개발할수록, 여러 분은 더 잘 기억할 것이다.

10) 그리고 복잡한 입력 내용을 간단한 덩어리로 환원할 수 있다면, 여러분은 그것들에 관해 훨씬 더 분명하고 효과적으로 생각할 수 있다는 것을 알게 될 것이다.

11) 일반적으로 여러분이 스스로가 어떤 것을 잊고 있는 것을 발견한 적이 있다면, 그것은 여러분의 뇌가 쇠퇴하고 있거나 여 러분의 기억력이 약해지고 있기 때문이 아니다.
12) 그것은 단지 여러분이 정보를 저장하고 불러오는 데 도움 을 줄 수 있는 올바른 기억 방법을 사용하고 있지 않기 때문이다.

- 13) what
- 14) stored
- 15) that
- 16) that
- 17) remembering
- 18) accurately
- 19) could
- 20) placed
- 21) similar
- 22) were arranged
- 23) that
- 24) the more
- 25) much
- 26) forgetting
- 27) is declining
- 28) retrieve
- 29) what
- 30) stored
- 31) that
- 32) that
- 33) remembering
- 34) accurately
- 35) could
- 36) placed
- 37) similar
- 38) were arranged
- 39) that
- 40) the more
- 41) much
- 42) forgetting
- 43) is declining
- 44) retrieve
- 45) organized
- 46) familiar
- 47) form
- 48) actually
- 49) accurately
- 50) placed
- 51) ordinary
- 52) manage
- 53) ability
- 54) develop
- 55) effectively
- 56) forgetting
- 57) retrieve
- 58) (B) (A) (C)
- 59) Looking for patterns works
- 60) memories so strongly linked that they are recalled more or less as a single unit
- 61) it doesn't just influence your way of remembering lists
- 62) it actually affects your entire way of thinking
- 63) how accurately they could remember the position
- 64) game

65) due to the grandmasters' and masters' ability to see the positions as a single chunk or schema

66) the more you develop schema, or patterns, the better you'll remember things

67) you are not using the correct memory technique to help you store and retrieve the information

2021학년도 EBS 수능특강 영어 17강 - 03번~04번

 1) 새로운 것은 인간과 동물 모두를 익숙하지 않은 것과 관계를 맺게 만든다.

2) 사실, 새로움에 대한 우리의 강한 욕구에는 진화적인 뿌리가 있는데, 그것은 우리로 하여금 우리 주변에 있는 친구와 위협적 인 존재 둘 다에 방심하지 않게 함으로써 우리의 생존 가능성 을 높여준다.
3) 갓 부모가 된 사람들이 빨리 알게 되듯이, 선택권이 주어지

명, 아기들은 익숙하지 않은 것들을 계속해서 쳐다보고, 듣고, 가지고 논다.

4) 부모가 된 초기 시절 내가 가장 좋아하는 순간 중 하나는 젖먹이 아들이 자기 손을 처음으로 알아차리는 것을 바라본 때 였다.
5) 아들의 발견은 쉽게 눈에 띄는 학습에 대한 암시이다. 그 이

상하고도 멋진 부속기관이 할 수 있는 것에 대한 그의 관심은 그것들을 조절하는 것을 향한 그의 첫 단계였다.

6) 새로움에 대한 선호는 미성숙한 인지 체계가 정보를 처리하는 효율적인 방법으로, 아기들이 자기 내부의 탐험가를 표출하기 전에 자신의 환경에 대한 변화에 대처하는 것을 도와준다.

7) 흥미롭게도, 인간의 유전적 특징에서 새로움에 대한 선호는 초기 인류가 지구의 먼 곳까지 이동한 것과 연관되어 왔다.

8) 최근의 연구에 따르면, 아프리카에서 가장 먼 곳까지 이주한 인간 집단은 새로움을 찾는 것과 관련된 더 많은 유전자를 가 지고 있었다.

9) 즉, 집에서 가장 먼 곳까지 여행한 사람들은 신비로운 새로 운 장소를 경험하려는 어떤 생물학적인 성향을 가지고 있었을 가능성이 있다.

10) 그러나 우리가 새로움을 찾는 것에 대한 강한 욕구를 지니고 태어나지만, 이러한 욕구는 시간이 가면서 약해진다.

11) 나이가 더 들어가면서 더 많은 예측 가능성을 원하는 것처 럼 다른 욕구들이 장악하게 된다.

12) 우리가 만들고 참여하는 조직들이 이러한 현실을 보여 주 는데, 이는 매주 또는 매달 같은 시간에 받는 봉급, 확립되어 있는 과정에 따른 평가, 이미 알려진 일련의 활동을 포함하는 직업과 같은 것이다.

- 13) to engage
- 14) improving
- 15) both
- 16) given
- 17) was
- 18) when
- 19) notice
- 20) stands
- 21) do
- 22) controlling
- 23) them
- 24) helping
- 25) been linked
- 26) had
- 27) may
- 28) to seek
- 29) other
- 30) reflect
- 31) to engage

- 32) improving
- 33) both
- 34) given
- 35) was
- 36) when
- 37) notice38) stands
- 39) do
- 40) controlling
- 41) them
- 42) helping
- 43) been linked
- 44) had
- 45) may
- 46) to seek
- 47) other
- 48) reflect
- 49) engage with
- 50) odds
- 51) given
- 52) notice
- 53) discovery
- 54) controlling
- 55) efficient
- 56) migration
- 57) novelty
- 58) biological
- 59) seek
- 60) predictability
- 61) reflect
- 62) (B) (C) (A)
- 63) Novelty
- 64) improving our survival odds by keeping us alert to both friends and threats in our environment
- 65) notice his hands for the first time
- 66) stands out as a metaphor for learning
- 67) preference for novelty
- 68) efficient way for immature cognitive systems to process information
- 69) linked to the migration of early humans to the far reaches of the earth
- 70) That is

71) may have had some biological propensity to experience mysterious new places

72) fades over time

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 여러분은 틀림없이 '상황이 어려워지면 강인한 이들은 쇼핑 하러 간다!'라는 옛 속담을 들어 본 적이 있을 것이다.
 그것이 바로 박테리아가 자신들이 심각한 곤경에 빠져 있다 는 것을 알게 될 때 하는 일이다.
 그들은 곤경으로부터 그들이 벗어나도록 도와줄 수 있는 유 용한 유전자를 찾아 쇼핑하러 간다.
 어떤 생물체나 유기체도 그 생애에서 완전히 다른 것을 시 도해야만 하는 시기가 온다.
 스포츠 팀에서는 이것이 '작전 버리기'로 불려 왔고, 이것이 바로 과돌연변이가 수반하는 것이다.
 박테리아 군체가 위태로운 상황에 처하면, 즉 생존이 위태로 우면, 아주 이상한 일이 일어나는데, 박테리아가 갑자기 엄청나 게 빠른 속도로 돌연변이하기 시작한다. 7) 그렇게 할 때, 그들은 그들이 처한 위기에서 그들을 벗어나 게 할 수 있는 돌연변이체를 만들어 낼 수 있기를 바라면서 미 생물의 대출 도서관을 뒤지고 있는 것이다. 8) 굶주린 '대장균' 군체는 영양이 충분한 군체에서 대개 그럴 경우의 속도보다 1,000배 더 빠른 속도로 (과)돌연변이한다. 9) 심각한 스트레스의 징후가 처음 보이면 즉시 과돌연변이 모 드로 갑자기 바뀔 채비를 갖추고 가 만히 있는, 정상적이거나 영양이 충분한 군체 내의 특정한 과돌 연변이 유발 유전자들을 발견하기까지 할 수도 있다. 10) Frank T. Vertosick이 매우 유머러스하게 표현했듯이, "이 과돌연변이 유발 유전자들은 약간 제정신이 아니지만 대단히 창의적인, 미생물계의 반 고흐 같은 존재들이다." 11) going 12) what 13) themselves 14) to get 15) when 16) completely 17) has been called 18) happens 19) hoping 20) them 21) that 22) sitting 23) going 24) what 25) themselves 26) to get 27) when

- 2/) when
- 28) completely
- 29) has been called
- 30) happens
- 31) hoping
- 32) them
- 33) that
- 34) sitting
- 35) doubt
- 36) precisely
- 37) useful
- 38) completely
- 39) involves
- 40) happens
- 41) mutation
- 42) colony
- 43) certain
- 44) creative
- 45) (C) (A) (B)
- 46) help to get them out of the mess
- 47) when it has to try something completely different
- 48) mutating at an extraordinarily rapid rate
- 49) come up with a mutation that might get them out of their crisis
- 50) ready to spring into a hypermutational mode at the first sign of serious stress
- 51) somewhat insane, but infinitely creative

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1) 사회적 제재는 공식화의 정도가 다양하다. 2) 대부분의 안정적인 단체에는 그 공로가 회원들의 안녕에 기 여했다고 생각되는 사람들을 예우하기 위한 그리고 그 활동이 유해한 것으로 여겨졌던 사람들의 불신임 혹은 추방 의식과 같 은 매우 공식적인 절차가 있다. 3) 예를 들어, 우리 사회에는 매우 복잡해서 전문가만이 이해할 수 있는 사법 재판소와 범죄자들을 심판하는 수단이 있다. 4) 일부 사회학자들은 그러한 고도의 공식화된 제재에 굉장한 중요성을 부여하고 심지어 조직화된 집단을 공식적인 제재를 통해 사회 구조가 보호되고 강화되는 집단으로 규정하기까지 했다. 5) 그러한 규범은 의심의 여지 없이 일탈 행위를 제어하는 것 이지만, 대부분의 사람들에게는 덜 공식적인 제재, 즉 승인이나 못마땅함의 자연스러운 표현이 더 효과적이라는 것이 드러난다. 6) 어떤 규칙을 막 위반하려 하는 사람들은 흔히 다른 사람들 쪽에서의 즐거움(→ 불쾌감)의 표시에 의해 (하려던 것을) 급히 멈추게 된다. 7) 조롱과 험담은 특히 효과적이다. 8) 경우에 따라서 일탈자들은 심지어 그들이 그 집단에서 구성 원의 자격을 계속 유지하고 있을 때조차도 비공식적으로 배척 당할지도 모른다. 9) 상호 서비스의 박탈, 즉 위반자의 역할 권리 주장을 존중하 는 것을 다른 이들이 거부하는 것은 비공식적인 제재 중에서 가장 효과적인 것에 속한다. 10) 역할은 권리 주장과 의무를 서로 주고받는 것으로 구성되 기 때문에, 그것들은 보완적인 역할을 하는 다른 이들의 협조 없이는 유지될 수 없다. 11) 어떤 사람이 동료에게 말할 때, 그는 보통 그(동료)가 어떤 방식으로든 응답해야 한다는 최소한의 권리 주장을 가진다. 12) 그러나 다른 사람들은 자신들의 못마땅함을 나타내는 하나 의 방법으로 예의를 갖춰야 할 의무에 부응하기를 거부할지도 모른다. 13) highly 14) whose 15) to have contributed 16) whose 17) harmful 18) that 19) highly 20) defined 21) in which 22) prove 23) are 24) others 25) be excluded 26) is 27) honor 28) consist 29) cannot be maintained 30) indicating 31) highly 32) whose 33) to have contributed 34) whose 35) harmful 36) that 37) highly 38) defined 39) in which 40) prove

41) are

- 42) others
- 43) be excluded
- 44) is
- 45) honor
- 46) consist
- 47) cannot be maintained
- 48) indicating
- 49) associations
- 50) considered
- 51) complex
- 52) protected
- 53) effective
- 54) violate
- 55) gossip
- 56) continue
- 57) deprivation
- 58) maintained
- 59) claim
- 60) indicating
- 61) (C) (B) (A)
- 62) in degree of formalization

63) for honoring those whose services are believed to have contributed to the well-being of the membership and for the discredit or exclusion of those whose activities have been considered harmful

- 64) for example
- 65) so complex that only specialists can understand them

66) one in which the social structure is protected and reinforced through formal sanctions

67) the spontaneous displays of approval or disapproval

68) stopped short by the show of displeasure on the part of others

- 69) Ridicule and gossip
- 70) deviant parties

71) Among the most effective of the informal sanctions is the deprivation of mutual services, the refusal of others to honor the claims of the violator's role

72) without the cooperation of others in complementary roles73) however

74) to live up to their obligation to be polite as a way of indicating their disapproval