

Unit 7 · Energy Solutions · 7A Powering the Planet

Word Study Guide · 20 Words

단어 · 품사 · 우리말 뜻 · 영영 뜻 · 외운 단어는 □에 체크하세요

Word	품사	뜻	English Definition	✓
1 finite	adj.	한정된, 유한한	Having limits or a limited quantity; not infinite.	☐
2 substitute	n. / v.	대체물 / 대체하다	A person or thing acting or serving in place of another.	☐
3 capacity	n.	용량, 생산 능력	The maximum amount that something can contain or produce.	☐
4 emission	n.	배출, 배출물	The production and discharge of something, especially gas into the air.	☐
5 initially	adv.	처음에, 초기에	At first; in the beginning.	☐
6 guarantee	v. / n.	보장하다 / 보장	To promise or ensure that something will happen.	☐
7 steep	adj.	급격한, 가파른	(Of a rise or fall) sharp and rapid.	☐
8 equivalent	n. / adj.	동등한 것 / 대등한	Equal in value, amount, function, or meaning.	☐
9 protest	v. / n.	항의하다 / 항의	To express strong disagreement or disapproval publicly.	☐
10 surplus	n. / adj.	잉여, 여분 / 과잉의	An amount left over when requirements have been met.	☐
11 decline	v. / n.	감소하다 / 감소	To become smaller, fewer, or less.	☐
12 dispose	v.	처분하다, 처리하다 (dispose of)	To get rid of something, especially by throwing it away.	☐
13 utilize	v.	활용하다, 이용하다	To make practical and effective use of something.	☐
14 eliminate	v.	없애다, 제거하다	To completely remove or get rid of something.	☐
15 convert	v.	전환하다, 변환하다	To change or transform something into a different form or use.	☐
16 obstacle	n.	장애물, 난관	Something that blocks one's way or prevents progress.	☐
17 constantly	adv.	끊임없이, 지속적으로	Continuously over a period of time; always.	☐
18 substantial	adj.	상당한, 실질적인	Of considerable importance, size, or amount.	☐
19 advocate	n. / v.	옹호자 / 옹호하다	A person who publicly supports or recommends a particular cause or policy.	☐
20 combination	n.	조합, 결합	A joining or merging of different parts or qualities.	☐

Unit 7 · Energy Solutions · 7A Powering the Planet

Vocabulary Test 1

총 19문항 · A 뜻 연결 · B 문장 완성 · C 동의어/반의어 · D 단어 쓰기

이름	
날짜	
점수	/ 19

A Definition Matching · 영영 뜻 연결

왼쪽 단어에 알맞은 영어 뜻을 오른쪽에서 골라 괄호 안에 기호를 쓰시오.

- | | | |
|--------------|--------------------------|--|
| 1 finite | ☐ | A To completely remove or get rid of something |
| 2 capacity | ☐ | B Having limits; not infinite |
| 3 eliminate | ☐ | C Equal in value, amount, function, or meaning |
| 4 equivalent | ☐ | D The maximum amount that something can produce |
| 5 surplus | ☐ | E An extra amount remaining after requirements are met |

B Contextual Sentence Completion · 문장 완성

보기에서 알맞은 단어를 골라 빈칸을 완성하십시오. (필요하면 형태를 바꾸시오.)

Word Bank

steep

convert

utilize

emissions

constantly

- Solar panels capture sunlight and _____ it directly into usable electricity.
- The sudden and _____ rise in oil prices forced researchers to find alternative energy sources.
- Space-based solar power stations can operate _____ because there is no nighttime in space.
- Many developing nations have begun to _____ nuclear energy to meet electricity demands.
- Solar energy is considered a clean alternative because it produces no carbon _____.

C Synonym Identification · 동의어 · 반의어

대문자로 쓰인 단어와 뜻이 가장 가까운 것을 고르시오.

- Researchers are looking for a suitable SUBSTITUTE for fossil fuels.
(A) replacement (B) origin (C) obstacle (D) cause
- Local homeowners gathered to PROTEST against the construction of noisy wind turbines.
(A) support (B) invest in (C) examine (D) object to

- 3 After the tsunami, the damaged reactor released SUBSTANTIAL amounts of radioactive waste.
(A) tiny (B) temporary (C) considerable (D) harmless
- 4 Space-based solar technology would INITIALLY require a lot of capital investment.
(A) finally (B) at first (C) continuously (D) rarely

D Active Vocabulary Writing · 단어 쓰기

설명에 알맞은 단어를 쓰시오.

- 1 To get rid of or throw away something (often followed by 'of').
Answer _____
- 2 To promise or ensure that a specific result will occur.
Answer _____
- 3 To become smaller, fewer, or decrease in number or quality.
Answer _____
- 4 A person who publicly supports or recommends a particular cause.
Answer _____
- 5 A joining or merging of different power sources or elements.
Answer _____

Unit 7 · Energy Solutions · 7A Powering the Planet

Vocabulary Test 2

총 19문항 · A 뜻 연결 · B 문장 완성 · C 동의어/반의어 · D 단어 쓰기

이름

날짜

점수

/ 19

A English Definition Matching · 영영 뜻 연결

왼쪽 단어에 알맞은 영어 뜻을 오른쪽에서 골라 괄호 안에 기호를 쓰시오.

Match each vocabulary word on the left with its correct English definition.

- | | | |
|----------------------|--------------------------|--|
| 1 substitute | ☐ | A Of considerable importance, size, or large amount |
| 2 constantly | ☐ | B A person or thing acting or serving in place of another |
| 3 substantial | ☐ | C Continuously over a period of time; always |
| 4 convert | ☐ | D A person who publicly supports or recommends a cause |
| 5 advocate | ☐ | E To change or transform something into a different form |

B Contextual Sentence Completion · 문장 완성

보기에서 알맞은 단어를 골라 빈칸을 완성하십시오. (필요하면 형태를 바꾸시오.)

Complete each sentence using the most appropriate word from the word bank.

Word Bank combination initial guarantees obstacles converting

- Solar panel systems capture sun energy and focus on _____ it into usable electricity.
- Space-based solar technology would initially face financial _____ before becoming cost-effective.
- Advocates claim that collecting solar power from space _____ a reliable, continuous energy supply.
- Rather than relying on a single source, a smart _____ of green energies is necessary for the future.
- The high _____ cost of solar panels makes many homeowners hesitant to install them.

C Synonym & Antonym Selection · 동의어 · 반의어

지시에 맞는 단어를 고르시오.

Choose the correct word according to the instructions in each question.

- Which word is CLOSEST in meaning to SUBSTANTIAL in [Paragraph L]?

"The damaged reactor released substantial amounts of radioactive waste."

- (A) slight (B) considerable (C) invisible (D) temporary

2 Which word is OPPOSITE in meaning to FINITE in [Paragraph A]?

"Most people are aware that the supply of fossil fuels is finite."

- (A) endless (B) limited (C) costly (D) dangerous

3 Which word is CLOSEST in meaning to PROTEST in [Paragraph F]?

"Some homeowners gathered to protest wind-power development near the park."

- (A) contribute to (B) invest in (C) evaluate (D) object to

4 Which word is CLOSEST in meaning to STEEP in [Paragraph F]?

"Incentives designed to decrease oil dependence led to a steep increase in wind power."

- (A) gradual (B) low (C) rapid (D) unpredictable

D Active Vocabulary & Word Form Writing · 단어 쓰기

설명에 알맞은 단어를 쓰시오.

Read the clues or prompts and write the correct vocabulary word in the blank.

1 Write the verb that means "to make practical and effective use of something":

Answer _____

2 Write the noun form of the verb "dispose" (often used in "waste _____"):

Answer _____

3 Write the noun that means "an amount of something left over when requirements are met":

Answer _____

4 Write the noun that refers to a unit of power equal to one million watts:

Answer _____

5 Write the verb that means "to become smaller, fewer, or decrease gradually over time":

Answer _____

Unit 7 · Energy Solutions · 7A Powering the Planet

Practice Test Set 1

총 25문항 · 객관식 + 서술형 · Reading [Powering the Planet]

이름	
날짜	
점수	/ 25

다음 물음에 답하십시오.

객관식은 알맞은 답을 고르고, 서술형은 영어로 답을 쓰시오.

Reading Comprehension · 독해

- 1 What is the main idea of Reading [Powering the Planet]?
 - (A) Fossil fuels will remain the dominant energy source due to low production costs.
 - (B) Nuclear energy is universally accepted as the safest and most efficient power source.
 - (C) Alternative energy sources each have unique advantages and challenges, requiring a combined approach.
 - (D) Solar energy from space is currently replacing all coal power plants in Asia and Europe.
- 2 According to [Paragraph B], how do solar panels produce electricity?
 - (A) By trapping wind heat and storing it in underground pipes
 - (B) By burning clean carbon fuel inside solar thermal stations
 - (C) By utilizing nuclear reactions from sun radiation
 - (D) By collecting sunlight directly and converting it into electricity
- 3 Which statement about solar energy is supported by [Paragraph C]?
 - (A) Solar power generates over 20 percent of the world's energy today.
 - (B) Solar panels produce less energy on cloudy days and during nighttime.
 - (C) Solar panel prices have dropped enough to make them universally affordable.
 - (D) Solar energy requires no backup power sources or storage batteries.
- 4 Why do proponents advocate for space-based solar power stations in [Paragraph D]?
 - (A) Because space has no clouds or nighttime, allowing continuous energy production.
 - (B) Because building solar stations in space requires very little money initially.
 - (C) Because space solar panels generate power from cosmic dust instead of sunlight.
 - (D) Because power generated in space does not need to be transmitted back to Earth.
- 5 According to [Paragraph E], what causes wind power?
 - (A) Ocean tides pushing air currents across land
 - (B) Direct sunlight reflecting off solar thermal panels
 - (C) Carbon emissions rising from coal plants
 - (D) The sun's heat rather than its light

- 6 According to [Paragraph F], which region produces the highest amount of wind power worldwide?
- (A) Asia with around 230,000 megawatts
 - (B) Europe with 180,000 megawatts
 - (C) North America with 105,000 megawatts
 - (D) South America with 250,000 megawatts
- 7 Why are some locals in England protesting wind turbines near Lake District?
- (A) They claim wind turbines cause extreme temperature drops.
 - (B) They argue that turbines prevent rain from falling over national parks.
 - (C) They believe the turbines are noisy, ugly, and ruin high-quality landscapes.
 - (D) They protest because wind turbines produce dangerous radioactive waste.
- 8 What happens when wind power produces an energy surplus during strong winds?
- (A) Energy companies store all extra power in cheap space batteries.
 - (B) Power companies are forced to sell extra electricity at a reduced rate.
 - (C) The turbines automatically convert wind power into natural gas.
 - (D) Governments shut down all residential solar panels in the area.
- 9 According to [Paragraph J], why did the use of nuclear power decline in the 1980s and 1990s?
- (A) Nuclear fuel became more expensive than burning wood and oil.
 - (B) Global governments banned nuclear power due to high carbon dioxide emissions.
 - (C) Solar panels completely replaced nuclear power plants worldwide.
 - (D) Public concerns arose over accidents, nuclear waste storage, and high building costs.
- 10 Which country generates the highest percentage of its electricity (75%) from nuclear power?
- (A) China
 - (B) India
 - (C) France
 - (D) Japan
- 11 Which statement best rewrites the following sentence from [Paragraph M]?
- "In the end, are any of these sources alone the answer to our current energy problems? The short answer is no..."
- (A) A single alternative energy source can easily solve all global power needs.
 - (B) No individual alternative energy source on its own can solve our energy problems.
 - (C) Finding substitutes for fossil fuels is completely impossible for modern science.
 - (D) Fossil fuels will automatically resolve global energy shortages over time.
- 12 What is mentioned in [Paragraph J] as a major benefit of nuclear power compared to coal or gas?
- (A) It produces vast amounts of electricity cheaply with no carbon emissions.
 - (B) It requires zero construction costs.
 - (C) It relies on wind heat rather than radioactive materials.
 - (D) It can be safely built inside residential homes.

- 13 Based on [Paragraph A], state TWO alternative energy sources researchers are investigating to replace finite fossil fuels.

Answer _____

- 14 According to [Paragraph B], what is the capacity of the solar power station in Tamil Nadu, India in terms of people served?

Answer _____

- 15 According to [Paragraph L], what natural event hit the Fukushima nuclear power plant in Japan, leading to the release of radioactive materials?

Answer _____

Reading Skill · Identifying Pros and Cons

- 16 Based on the text and Skill Chart on page 110, which of the following is considered an ADVANTAGE of both wind and solar power?

- (A) They enable people to generate their own energy where they live.
- (B) They produce energy constantly without needing battery storage.
- (C) They have very low initial equipment installation costs.
- (D) They operate at maximum capacity regardless of weather or daylight.

- 17 Which energy source is correctly matched with its DISADVANTAGE?

- (A) Wind Energy - Releases substantial carbon emissions into the air.
- (B) Nuclear Energy - Cannot operate unless strong winds blow continuously.
- (C) Solar Energy - Affected by weather conditions like clouds and darkness.
- (D) Solar Energy - Generates severe noise pollution that disturbs local park owners.

- 18 According to [Paragraph G], what major storage issue do BOTH wind and solar power currently face?

Answer _____

Vocabulary Practice · 어휘

- 19 "Most people are aware that the supply of fossil fuels on Earth is _____. "

- (A) equivalent
- (B) substantial
- (C) sustainable
- (D) finite

20 "Government incentives designed to decrease dependence on oil led to a _____ increase in wind energy."

- (A) calm
- (B) steep
- (C) decline
- (D) unrealistic

21 Which word means "a machine that uses water, steam, or wind to turn a wheel to produce electricity"?

- (A) panel
- (B) megawatt
- (C) turbine
- (D) battery

22 Which word means "to completely remove or get rid of something"?

- (A) convert
- (B) eliminate
- (C) protest
- (D) utilize

23 Complete the sentence using the correct noun form of the verb [DISPOSE].

"Public concerns regarding nuclear waste storage and _____ caused a decline in nuclear plant development."

Answer _____

24 Complete the sentence using the correct vocabulary word (**substitute**, **capacity**, or **surplus**).

"When wind turbines generate an energy _____, the extra power must be sold at a lower price."

Answer _____

25 Complete the sentence using the correct vocabulary word (**utilize**, **guarantee**, or **protest**).

"Developing space-based solar stations would _____ continuous clean energy for everyone on Earth."

Answer _____

Unit 7 · Energy Solutions · 7A Powering the Planet

Practice Test Set 2

총 25문항 · 객관식 + 서술형 · Reading [Powering the Planet]

이름	
날짜	
점수	/ 25

다음 물음에 답하십시오.

객관식은 알맞은 답을 고르고, 서술형은 영어로 답을 쓰시오.

Reading Comprehension · 독해

- 1 What is the primary objective of [Paragraph M] in Reading [Powering The Planet]?
 - (A) To summarize that a combination of alternative energy sources is key to eliminating fossil fuel dependence.
 - (B) To argue that nuclear power should completely replace solar energy worldwide.
 - (C) To prove that space solar stations are too expensive to ever be useful.
 - (D) To explain why fossil fuel supplies will never run out in our lifetime.
- 2 According to [Paragraph A], why are researchers urgently seeking alternative energy sources?
 - (A) Because fossil fuel prices are declining rapidly.
 - (B) Because governments have banned the burning of coal and natural gas.
 - (C) Because solar panels have become cheaper than traditional electricity.
 - (D) Because fossil fuel supplies are finite, costly, and increasingly difficult to find.
- 3 According to [Paragraph C], why does solar power currently provide less than 2 percent of global energy?
 - (A) Solar panel installation costs remain very high.
 - (B) Solar energy causes severe air pollution in cities.
 - (C) Solar energy cannot be converted into electricity.
 - (D) Solar panels only work in polar regions.
- 4 In [Paragraph D], what key advantage does space offer for gathering solar energy?
 - (A) Space is much closer to ocean tide turbines.
 - (B) Space provides free storage batteries for Earth residents.
 - (C) Space solar stations require no financial investment to build.
 - (D) Space has no clouds and no nighttime, allowing constant power generation.
- 5 How does wind power differ from solar power regarding weather conditions according to [Paragraph E]?
 - (A) Wind power only works on bright, sunny days with clear skies.
 - (B) Wind power works well even on cloudy days because it relies on sun heat, not light.
 - (C) Wind power cannot generate electricity during daytime hours.
 - (D) Wind power requires continuous sunlight to turn mechanical wheels.

- 6** According to [Paragraph F], how much wind energy does Asia produce compared to large coal plants?
- (A) 105,000 megawatts, equivalent to 50 coal plants
 - (B) 180,000 megawatts, equivalent to 100 coal plants
 - (C) 230,000 megawatts, equivalent to 230 large coal plants
 - (D) 450,000 megawatts, equivalent to 450 large coal plants
- 7** What is a major problem for energy companies when wind blows too strongly [Paragraph G]?
- (A) Strong winds destroy all solar panels in nearby cities.
 - (B) Turbines automatically shut down and burn fossil fuels instead.
 - (C) Too much power is generated, forcing companies to sell surplus energy at reduced rates.
 - (D) Local homeowners build private coal plants in response.
- 8** According to [Paragraph I], what is a distinct advantage of small-scale wind and solar power?
- (A) They generate electricity without needing any sunlight or wind.
 - (B) They enable individuals to generate their own power locally where they live.
 - (C) They eliminate the need for electrical wires and battery storage completely.
 - (D) They cost zero dollars to purchase and maintain.
- 9** According to [Paragraph K], how many nuclear plants operate worldwide today, and what fraction of global power do they generate?
- (A) About 100 plants generating 50 percent of world power
 - (B) About 450 plants generating 11 percent of world power
 - (C) About 1,000 plants generating 75 percent of world power
 - (D) About 2,500 plants generating 2 percent of world power
- 10** Which two Asian countries are highlighted in [Paragraph K] for expanding their nuclear energy usage?
- (A) China and India
 - (B) Japan and South Korea
 - (C) Thailand and Vietnam
 - (D) Singapore and Malaysia
- 11** In [Paragraph F], what does the word "They" refer to in the quote: "They shouldn't be putting those things in here"?
- (A) Local residents living near national parks
 - (B) Solar panel manufacturers in India
 - (C) Wind energy companies or developers installing turbines
 - (D) Coal plant workers in North America

12 Which statement best captures the meaning of [Paragraph C]?

"Clouds and darkness also cause solar panels to produce less energy. This requires that additional power sources (such as batteries) be available."

- (A) Solar panels produce maximum power at night when connected to batteries.
- (B) Batteries prevent solar panels from functioning properly during sunny days.
- (C) Solar energy output increases sharply during cloudy weather without battery help.
- (D) Solar energy is unreliable without backup systems like batteries because weather affects output.

13 According to [Paragraph B], how many solar panels are installed in the Tamil Nadu solar station in India?

Answer _____

14 According to [Paragraph F], what is the wind power output of North America?

Answer _____

15 According to [Paragraph J], what environmental benefit does nuclear power offer compared to fossil fuels during operation?

Answer _____

Reading Skill · Identifying Pros and Cons

16 According to the Reading Skill table on page 110, which advantage is shared by BOTH Solar and Wind energy?

- (A) Has a constant, uninterrupted power supply on Earth
- (B) Has zero construction or panel purchase costs
- (C) Produces no carbon emissions
- (D) Requires no battery storage systems on calm days

17 Based on page 110, which energy source has a specific disadvantage regarding "history of safety issues"?

- (A) Solar Energy
- (B) Nuclear Energy
- (C) Wind Energy
- (D) Space-based Solar Energy

18 State ONE major advantage of space-based solar power stations compared to Earth-based solar panels as described in [Paragraph D].

Answer _____

- 19 "Asia produces around 230,000 megawatts, the _____ of 230 large coal-powered plants."
 (A) equivalent
 (B) surplus
 (C) capacity
 (D) substitute
- 20 "High construction costs and safety concerns caused nuclear power use to _____ in the 1990s."
 (A) guarantee
 (B) convert
 (C) utilize
 (D) decline
- 21 Which word means "an extra amount of something left over when requirements are met"?
 (A) surplus
 (B) finite
 (C) turbine
 (D) emission
- 22 Which word means "to make practical and effective use of something"?
 (A) protest
 (B) utilize
 (C) dispose
 (D) eliminate

- 23 Complete the sentence using the correct verb form of the noun [COMBINATION].

"We must _____ different renewable sources to reduce our dependence on fossil fuels."

Answer _____

- 24 Complete the sentence using the correct vocabulary word (**initially**, **constantly**, or **substantially**).

"Space-based solar technology would _____ require a huge financial investment before becoming profitable."

Answer _____

- 25 Complete the sentence using the correct vocabulary word (**guarantee**, **protest**, or **convert**).

"Local homeowners gathered near the national park to _____ against the construction of wind towers."

Answer _____

Unit 7 · Energy Solutions · 7B City of the Future

Word Study Guide · 20 Words

단어 · 품사 · 우리말 뜻 · 영영 뜻 · 외운 단어는 □에 체크하세요

Word	품사	뜻	English Definition	✓
1 metropolis	n.	대도시, 주요 도시	A very large and densely populated city.	☐
2 comprehensive	adj.	포괄적인, 종합적인	Including or dealing with all or nearly all elements of something.	☐
3 sustainable	adj.	지속 가능한	Able to be maintained at a certain rate without depleting resources.	☐
4 unrealistic	adj.	비현실적인	Not reasonable, sensible, or practical to expect.	☐
5 regulation	n.	규정, 규제	An official rule or directive made and maintained by an authority.	☐
6 efficiency	n.	효율, 효율성	The ability to accomplish a task with minimum waste of time or energy.	☐
7 resident	n.	주민, 거주자	A person who lives in a particular place.	☐
8 distribute	v.	분배하다, 배치하다	To spread or disperse over a particular area.	☐
9 wealthy	adj.	부유한, 풍부한	Having a great deal of money, resources, or wealth.	☐
10 cooling	n. / adj.	냉방 / 식히는	The process of becoming or making something less warm.	☐
11 audacity	n.	대담함, 무모함	A willingness to take surprisingly bold risks.	☐
12 evolve	v.	진화하다, 발전하다	To develop gradually, especially from a simple to a more complex form.	☐
13 footprint	n.	(생태) 발자국, 자국	The impact that a person, city, or business has on the environment.	☐
14 close-knit	adj.	긴밀히 결속된	Bound together by strong relationships and common interests.	☐
15 reflective	adj.	반사하는	Capable of reflecting light, heat, or sound.	☐
16 myth	n.	통념, 근거 없는 믿음	A widely held but false belief or idea.	☐
17 model	n.	모범, 모델	A system or thing used as an example to follow or imitate.	☐
18 intend	v.	의도하다, 계획하다	To have a course of action as one's purpose or intention; plan.	☐
19 insulation	n.	단열, 절연	Material used to prevent the passage of heat, electricity, or sound.	☐
20 orientation	n.	(건물의) 향, 방향	The positioning of a building relative to the points of a compass or sun.	☐

Unit 7 · Energy Solutions · 7B City of the Future

Vocabulary Test 1

총 19문항 · A 뜻 연결 · B 문장 완성 · C 동의어/반의어 · D 단어 쓰기

이름

날짜

점수

/ 19

A Definition Matching · 영영 뜻 연결

왼쪽 단어에 알맞은 영어 뜻을 오른쪽에서 골라 괄호 안에 기호를 쓰시오.

- | | | |
|-----------------|----------------------|---|
| 1 metropolis | <input type="text"/> | A An official rule set forth by an authority |
| 2 regulation | <input type="text"/> | B A widely held but false belief or idea |
| 3 myth | <input type="text"/> | C A very large and densely populated city |
| 4 comprehensive | <input type="text"/> | D Able to be maintained without depleting natural resources |
| 5 sustainable | <input type="text"/> | E Including or dealing with all or nearly all aspects |

B Contextual Sentence Completion · 문장 완성

보기에서 알맞은 단어를 골라 빈칸을 완성하십시오. (필요하면 형태를 바꾸시오.)

Word Bank

efficiency

residents

distribute

reflective

insulation

- Green buildings use improved _____ to stop heat from escaping or entering.
- The city painted building roofs with _____ material to block sun heat.
- Over five hundred homes were evenly _____ along the tree-lined streets.
- Local _____ in the green district produce zero waste by recycling everything.
- Smart sensors control indoor lights to maximize energy _____ in modern offices.

C Synonym Identification · 동의어 · 반의어

대문자로 쓰인 단어와 뜻이 가장 가까운 것을 고르시오.

- Dubai transitioned from a small town into a WEALTHY global metropolis.
(A) prosperous (B) poor (C) crowded (D) ancient
- A decade ago, building a zero-emission town in the desert was considered UNREALISTIC.
(A) essential (B) traditional (C) impractical (D) affordable
- To appreciate the AUDACITY of Dubai, one must look at its bold architectural achievements.
(A) fear (B) laziness (C) weakness (D) boldness

- 4 City officials created a COMPREHENSIVE transit system including driverless trains.
(A) partial (B) all-inclusive (C) expensive (D) temporary

D Active Vocabulary Writing · 단어 쓰기

설명에 알맞은 단어를 쓰시오.

- 1 The environmental impact or resource consumption of a city or person.

Answer _____

- 2 A closely united group of people bound by strong community ties.

Answer _____

- 3 To plan, mean, or have a specific goal in mind for the future.

Answer _____

- 4 The positioning or direction of a building relative to the sun.

Answer _____

- 5 To develop or transform gradually from a simple to a complex form.

Answer _____

Unit 7 · Energy Solutions · 7B City of the Future

Vocabulary Test 2

총 19문항 · A 뜻 연결 · B 문장 완성 · C 동의어/반의어 · D 단어 쓰기

이름

날짜

점수

/ 19

A English Definition Matching · 영영 뜻 연결

왼쪽 단어에 알맞은 영어 뜻을 오른쪽에서 골라 괄호 안에 기호를 쓰시오.

Match each vocabulary word on the left with its correct English definition.

- | | | |
|---------------|----------------------|--|
| 1 audacity | <input type="text"/> | A A widely held but false belief or idea |
| 2 footprint | <input type="text"/> | B A willingness to take surprisingly bold or daring risks |
| 3 myth | <input type="text"/> | C The environmental impact or resource consumption of a city |
| 4 orientation | <input type="text"/> | D Capable of reflecting back light, heat, or sound |
| 5 reflective | <input type="text"/> | E The positioning or direction of a building relative to the sun |

B Contextual Sentence Completion · 문장 완성

보기에서 알맞은 단어를 골라 빈칸을 완성하십시오. (필요하면 형태를 바꾸시오.)

Complete each sentence using the most appropriate word from the word bank.

Word Bank

insulation

intend

close-knit

evolved

residents

- Dubai originally started as a fishing village and _____ into a massive global metropolis.
- Building green houses close together creates a cozy and _____ community feel.
- City planners _____ to generate 75 percent of Dubai's energy from solar power by 2050.
- Green buildings use improved wall _____ to reduce the amount of indoor air that escapes.
- All _____ living in the eco-district are required to recycle organic waste.

C Synonym & Antonym Selection · 동의어 · 반의어

지시에 맞는 단어를 고르시오.

Choose the correct word according to the instructions in each question.

- Which word is CLOSEST in meaning to WEALTHY in [Paragraph B]?

"Oil discoveries transformed Dubai into a wealthy, modern metropolis."

(A) prosperous

(B) ancient

(C) crowded

(D) polluted

- 2 Which word is OPPOSITE in meaning to SUSTAINABLE in [Paragraph C]?
"Economic growth is not sustainable without taking action on carbon emissions."
(A) renewable (B) eco-friendly (C) unmaintainable (D) comprehensive
- 3 Which word is CLOSEST in meaning to COMPREHENSIVE in [Paragraph C]?
"Dubai invested in a comprehensive public transportation system."
(A) partial (B) costly (C) temporary (D) all-inclusive
- 4 Which word is OPPOSITE in meaning to UNREALISTIC in [Paragraph E]?
"A decade ago, building a fully sustainable community was thought to be unrealistic."
(A) impractical (B) practical (C) impossible (D) complex

D Active Vocabulary & Word Form Writing · 단어 쓰기

설명에 알맞은 단어를 쓰시오.

Read the clues or prompts and write the correct vocabulary word in the blank.

- 1 Write the noun that means "an official rule set forth by an authority":
Answer _____
- 2 Write the adjective form of the noun "ecology":
Answer _____
- 3 Write the noun form of the verb "emit":
Answer _____
- 4 Write the verb that means "to spread or disperse evenly throughout a given area":
Answer _____
- 5 Write the noun that means "the ability to accomplish a task with minimum waste":
Answer _____

Unit 7 · Energy Solutions · 7B City of the Future

Practice Test Set 1

총 25문항 · 객관식 + 서술형 · Reading [City of the Future]

이름	
날짜	
점수	/ 25

다음 물음에 답하십시오.

객관식은 알맞은 답을 고르고, 서술형은 영어로 답을 쓰시오.

Reading Comprehension · 독해

- 1 Why does the author begin Reading [City Of The Future], with a detailed description of Ski Dubai?
 - (A) To encourage tourists to visit ski resorts in desert regions
 - (B) To illustrate the extreme wealth, audacity, and energy consumption of Dubai
 - (C) To argue that winter sports facilities are essential for urban development
 - (D) To show how solar energy is currently powering indoor ski slopes
- 2 According to [Paragraph B], what event in the 1960s changed Dubai's fortunes forever?
 - (A) The construction of its first indoor ski resort
 - (B) The installation of large solar panel farms
 - (C) The building of driverless train networks
 - (D) The discovery of oil reserves in the region
- 3 What environmental consequence resulted from Dubai's rapid growth by 2006 [Paragraph B]?
 - (A) It became one of the places with the largest ecological footprints in the world.
 - (B) Its air pollution caused all fishing industries to close permanently.
 - (C) Its water reserves were completely depleted by solar power plants.
 - (D) It lost its status as the largest city in the United Arab Emirates.
- 4 Which transportation improvement did Dubai implement to lower emissions [Paragraph C]?
 - (A) A comprehensive public transit system featuring gleaming driverless trains
 - (B) Free gasoline vouchers for electric car owners
 - (C) Underground bicycle tunnels powered by nuclear reactors
 - (D) Wind-powered sailing ships along its coastlines
- 5 According to [Paragraph C], what requirement must ALL new buildings in Dubai meet?
 - (A) They must feature indoor ski parks on top floors.
 - (B) They must comply with strict energy regulations like smart lighting and solar water heating.
 - (C) They must be constructed exclusively from imported recycled wood.
 - (D) They must be at least one hundred stories high.

- 6 Where is Dubai's Sustainable City located [Paragraph D]?
- (A) In the center of the downtown shopping district
 - (B) Directly inside the Ski Dubai resort complex
 - (C) On an artificial island off the coastline
 - (D) Where the city's suburbs meet the desert to the south
- 7 According to [Paragraph D], how are houses arranged in the Sustainable City to provide natural shade?
- (A) They all face north and are positioned close together.
 - (B) They are built as high-rise towers facing east.
 - (C) They are separated by wide, asphalt highway lanes.
 - (D) They are built inside underground caves.
- 8 What effect do reflective windows and wall paint have on buildings in the Sustainable City [Paragraph D]?
- (A) They convert rain water into drinking water.
 - (B) They reduce the heat absorbed from the sun.
 - (C) They generate wind energy for neighboring suburbs.
 - (D) They prevent driverless trains from making noise.
- 9 According to [Paragraph D], how much less energy do residents of the Sustainable City consume compared to other parts of Dubai?
- (A) 10 percent less
 - (B) 25 percent less
 - (C) 50 percent less
 - (D) 90 percent less
- 10 What myth does Faris Saeed address in [Paragraph E] regarding sustainable living?
- (A) The myth that green cities can only exist in cold climates
 - (B) The myth that solar panels stop working in the desert
 - (C) The myth that living sustainably has to be more expensive
 - (D) The myth that electric cars cause more carbon emissions
- 11 According to [Paragraph F], what percentage of energy does Dubai intend to obtain from renewable sources by 2050?
- (A) 25 percent
 - (B) 50 percent
 - (C) 75 percent
 - (D) 100 percent
- 12 According to the caption on page 114, how is organic waste processed in the Sustainable City?
- (A) It is burned to generate steam power.
 - (B) It is shipped to neighboring countries for landfill.
 - (C) It is converted into fuel for gas-powered cars.
 - (D) It is used in domed greenhouse farms to grow vegetables.

- 13 Based on [Paragraph B], how many residents live in Dubai today, and how many high-rise towers does it have?

Answer _____

- 14 According to [Paragraph C], what do smart lighting and cooling systems in Dubai buildings do when no people are present in a room?

Answer _____

- 15 According to page 114 caption, what types of vehicles are allowed for resident transportation in the Sustainable City?

Answer _____

Reading Skill · Identifying an Author's Opinion

- 16 In Reading [City of the Future], what is the author's general attitude toward Dubai's transition to a green city?

(A) Critical of the high taxes imposed on local residents
(B) Disappointed by the lack of technology used in green buildings
(C) Admiring and hopeful about its bold and audacious sustainability plans
(D) Completely indifferent toward environmental issues in the Middle East

- 17 In Reading Skill page 117, which set of words reflects a strongly NEGATIVE opinion about coal reliance?

(A) "vital", "abundant", "carbon-rich"
(B) "dirty", "dangerous", "recklessly", "foolhardy"
(C) "formed deep underground", "power stations", "rock"
(D) "inexpensive", "extract", "worldwide"

- 18 In [Paragraph F], the author uses phrases like "model for the future" and "guilt-free skiing". Explain in 1-2 sentences what opinion the author holds about Dubai's vision.

Answer _____

Vocabulary Practice · 어휘

- 19 "Dubai evolved from a small fishing village into a wealthy, modern _____."

(A) metropolis
(B) regulation
(C) emission
(D) footprint

- 20 "Climate experts argue that economic growth is not _____ if it causes massive carbon pollution."
(A) unrealistic
(B) steep
(C) reflective
(D) sustainable
- 21 Which word means "an official rule or directive made and maintained by an authority"?
(A) resident
(B) myth
(C) capacity
(D) regulation
- 22 Which word means "the ability to accomplish a task with minimum waste of time or energy"?
(A) audacity
(B) efficiency
(C) orientation
(D) substitute

- 23 Complete the sentence using the correct noun form of the verb [EMIT].

"Dubai is investing heavily in solar energy to reduce its greenhouse gas _____."

Answer _____

- 24 Complete the sentence using the correct vocabulary word (**comprehensive**, **unrealistic**, or **wealthy**).

"A decade ago, the idea of building a zero-emission town in the desert was considered _____."

Answer _____

- 25 Complete the sentence using the correct vocabulary word (**distributed**, **intended**, or **evolved**).

"Low-rise green houses were evenly _____ along attractive, tree-lined streets in the community."

Answer _____

Unit 7 · Energy Solutions · 7B City of the Future

Practice Test Set 2

총 25문항 · 객관식 + 서술형 · Reading [City of the Future]

이름	
날짜	
점수	/ 25

다음 물음에 답하십시오.

객관식은 알맞은 답을 고르고, 서술형은 영어로 답을 쓰시오.

Reading Comprehension · 독해

- 1 What is the best alternative title for Reading [City of the Future]?
 - (A) The Discovery of Oil in the United Arab Emirates
 - (B) Why Indoor Ski Parks are Bad for the Environment
 - (C) Building a Sustainable City for the Future
 - (D) The Financial Decline of Modern Metropolises
- 2 In [Paragraph A], what contrast does the cartoon thermometer on the souvenir T-shirt highlight?
 - (A) The extreme temperature change from +50°C outside in the desert to -8°C inside
 - (B) The price difference between skiing and shopping
 - (C) The amount of solar power generated on winter versus summer days
 - (D) The temperature inside electric buses compared to gas cars
- 3 Why did Dubai develop a massive ecological footprint after the 1960s [Paragraph B]?
 - (A) Because it imported all of its water from European glaciers
 - (B) Because powering its cars and air-conditioning released huge amounts of CO2 from fossil fuels
 - (C) Because its government banned solar energy and wind turbines
 - (D) Because it built thousands of nuclear reactors along the coastline
- 4 In [Paragraph C], what climate specialist statement is quoted regarding Dubai's growth?
 - (A) "Dubai will run out of electricity within five years."
 - (B) "Indoor skiing is the greenest sport in the world."
 - (C) "Solar panels are too expensive to be used in desert regions."
 - (D) "Economic growth is not sustainable without taking action on emissions."
- 5 How does the Sustainable City feel compared to much of Dubai [Paragraph D]?
 - (A) Like a close-knit village community with tree-lined streets
 - (B) Like a crowded, noisy industrial zone
 - (C) Like an isolated tourist resort with high-rise towers
 - (D) Like an abandoned fishing village

- 6 What feature on building roofs contributes to energy efficiency in the Sustainable City [Paragraph D]?
- (A) Diesel generators
 - (B) Indoor ski slopes
 - (C) Rooftop solar panels
 - (D) Windmill water pumps
- 7 How do living costs in the Sustainable City compare to other neighborhoods in Dubai [Paragraph E]?
- (A) Living in the Sustainable City is ten times more expensive.
 - (B) Living costs are similar to some of Dubai's other neighborhoods.
 - (C) Living in the Sustainable City is completely free for all residents.
 - (D) Living costs are much cheaper because no electricity is provided.
- 8 What ultimate environmental goal does Dubai's government want to achieve according to [Paragraph F]?
- (A) To construct the largest oil refinery in the Middle East
 - (B) To replace all trees with indoor shopping malls
 - (C) To eliminate all public transportation systems
 - (D) To have the smallest ecological footprint in the world
- 9 According to the diagram "What Makes a Green Building?" on page 115, how does building orientation affect energy usage?
- (A) Facing a building toward highways increases rainwater collection.
 - (B) Building orientation determines the number of residents allowed inside.
 - (C) Positioning a building away from or toward the sun impacts heating and cooling needs.
 - (D) Facing a building south eliminates the need for smart motion sensors.
- 10 According to page 115, how do rooftop plantings (green roofs) help green buildings?
- (A) They produce solar energy during nighttime.
 - (B) They retain rainwater and help keep cities cooler.
 - (C) They replace the need for wall insulation.
 - (D) They allow residents to drive gas-powered cars on roofs.
- 11 In [Paragraph F], what does the pronoun "It" refer to in the sentence: "It also wants to have the smallest ecological footprint in the world"?
- (A) The Sustainable City
 - (B) Solar energy production
 - (C) The indoor ski resort
 - (D) Dubai's government / leadership
- 12 Which statement best rewrites the quote by Faris Saeed in [Paragraph E]?
- "It's a myth that sustainable has to be more expensive."
- (A) It is incorrect to believe that eco-friendly living must cost extra money.
 - (B) Sustainable living is always more expensive than traditional living.
 - (C) Only wealthy people can afford to build sustainable cities.
 - (D) Expensive green technology never saves energy in the long run.

- 13** According to [Paragraph B], what was Dubai originally before oil was discovered in the 1960s?

Answer _____

- 14** According to page 114 caption, where is power generated from solar panels in the Sustainable City? (State TWO locations)

Answer _____

- 15** According to page 115 diagram, how do motion detection sensors save energy in green buildings?

Answer _____

Reading Skill · Identifying an Author's Opinion

- 16** In [Paragraph B], when the author writes "But the rapid growth has come at a price," what opinion or tone is implied?

- (A) Critical/Concerned that economic expansion caused severe environmental harm
- (B) Enthusiastic that oil prices will continue to rise indefinitely
- (C) Satisfied that pollution is a necessary part of modern growth
- (D) Confused about why Dubai built high-rise towers

- 17** In [Paragraph F], why does the author describe Dubai's plan as "audacious"?

- (A) Because the plan is small, weak, and likely to fail immediately
- (B) Because the government refuses to spend money on solar panels
- (C) Because residents are protesting against driverless trains
- (D) Because setting a goal to obtain 75% renewable energy and have the smallest footprint is extremely bold and daring

- 18** In Reading Skill [City of the Future] (page 117), the author describes continuing to rely heavily on coal as "foolhardy and irresponsible." What is the author's opinion on coal energy?

Answer _____

Vocabulary Practice · 어휘

- 19** "Babcock Ranch in Florida is a solar-powered town where future _____ live in high-tech homes."

- (A) regulations
- (B) emissions
- (C) residents
- (D) footprints

20 "Improved insulation increases energy _____ by preventing air from escaping."
(A) footprint
(B) efficiency
(C) myth
(D) audacity

21 Which word means "a widely held but false belief or idea"?
(A) metropolis
(B) myth
(C) regulation
(D) resident

22 Which word means "spread or dispersed evenly throughout an area"?
(A) distributed
(B) sustainable
(C) reflective
(D) comprehensive

23 Complete the sentence using the correct adjective form of the noun [ECOLOGY].

"By 2006, Dubai had one of the largest _____ footprints in the world."

Answer _____

24 Complete the sentence using the correct vocabulary word (**wealthy**, **close-knit**, or **unrealistic**).

"The Sustainable City feels more like a _____ village community than a crowded metropolis."

Answer _____

25 Complete the sentence using the correct vocabulary word (**intend**, **evolve**, or **protest**).

"Dubai leaders _____ to obtain 75 percent of the city's energy from solar power by 2050."

Answer _____