Writing and Language Test 1

35 MINUTES, 44 QUESTIONS

Turn to Section 2 of your answer sheet to answer the questions in this section.

DIRECTIONS

Each of the following passages is accompanied by approximately 11 questions. Some questions will require you to revise the passages in order to improve coherence and clarity. Other questions will require you to correct grammatical errors. Passages may be accompanied by graphs, charts, or tables that you must consider when making revisions. For most questions, you may select the "NO CHANGE" option if you believe that portion of the passage is clear, concise, and grammatically correct as is.

Within the passages, highlighted numbers followed by underlined text indicate which part of the text corresponds with each question. Bracketed numbers [1] indicate sentence number. These bracketed numbers are only relevant to problems that require you to add or rearrange sentences in a paragraph.

Refer to the passage below to answer questions 1–11.

Carpenters

Carpentry is one of the most resourceful construction occupations. Unlike electricians or plumbers, carpenters participate in all phases of building construction. Some insulate office buildings; while others install drywall or kitchen cabinets in homes. Carpenters who help construct tall buildings or bridges often install the concrete forms for cement footings or pillars. Some carpenters erect temporary shoring and scaffolding for buildings.

Because they are involved in many types of construction: from building highways to framing doors, carpenters work both indoors and outdoors. Carpenters may work in cramped spaces in which frequent lifting, standing, and kneeling can be tiring. Those who work outdoors are subject to variable weather conditions.
In fact, carpenters have higher rates of injury and illness than national averages.

Most carpenters earn a high school diploma and then learn their trade through 3- or 4-year apprenticeships. For each year of the program, apprentices complete both technical and on-the-job training. In their technical training, apprentices learn carpentry basics, blueprint reading, mathematics, building code requirements, and safety practices.

A carpenter, having finished an apprenticeship, is considered a journeyman and may perform tasks on his or her own. Several groups, including unions and contractor associations, sponsor apprenticeship programs, and some contractors have their own carpenter-training programs.

Becoming an independent contractor affords greater flexibility and the potential to raise income. General construction supervisors plan, coordinate, budget, and supervise construction projects from development to completion. Carpenters seeking advancement often undergo additional training provided by associations, unions, or employers.

The Bureau of Labor Statistics (BLS) projects a growth in carpentry positions of 24 percent from 2012 to 2022, much faster than the average for all occupations. It predicts that population growth will result in new-home construction—the largest segment employing carpenters—which drives the need for more workers. Home remodeling needs should also spur demand. Construction and maintenance of roads and bridges, though dependent on government spending, is another factor that is expected to contribute to job growth.

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Median Number of Days Spent Recuperating Among Occupations with the Highest Instances of Injury and Illness

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Median # of days spent recuperating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck drivers</td>
<td></td>
</tr>
<tr>
<td>Construction laborers</td>
<td></td>
</tr>
<tr>
<td>Stock handlers and baggers</td>
<td></td>
</tr>
<tr>
<td>Cooks</td>
<td></td>
</tr>
<tr>
<td>Cashiers</td>
<td></td>
</tr>
</tbody>
</table>


5. (A) NO CHANGE
   (B) However,
   (C) Ultimately,
   (D) As a result,

6. Which choice most effectively concludes the paragraph with relevant and accurate information based on the graph?

   (A) In fact, carpenters are eight times more likely to become sick or injured while working than the national average.
   (B) Carpenters miss more workdays due to injury and illness than any other profession.
   (C) Surprisingly, working as a cook or cashier can also be quite hazardous.
   (D) Even among high-risk professions, the average recovery period for an injured carpenter is matched only by that of a truck driver.

7. (A) NO CHANGE
   (B) a diploma
   (C) diplomas
   (D) high school diplomas

8. (A) NO CHANGE
   (B) After an apprenticeship is finished by the carpenter, he or she is
   (C) After finishing an apprenticeship, a carpenter is
   (D) The apprenticeship being finished, a carpenter is

9. Which of the following sentences most effectively introduces the topic of paragraph 4?

   (A) Carpentry is a physically demanding job, but most carpenters find the work rewarding.
   (B) Some people mistakenly assume that the rise of technology-oriented careers has reduced interest in manual labor jobs, such as carpentry.
   (C) Because they are exposed to the entire construction process, carpenters often have access to a wide range of specialties.
   (D) Carpenters must know how to use a wide variety of power tools.

10. (A) NO CHANGE
    (B) project
    (C) will project
    (D) projected

11. (A) NO CHANGE
    (B) They predict
    (C) This predicts
    (D) We predict
Refer to the passage below to answer questions 12–22.

**Antikythera Mechanism**

The 12 cyclical motions of the Sun, the Moon, and the planets determined many aspects of 13 normal, everyday life in ancient civilizations. Solar and lunar cycles often regulated communal activities, such as festivals and religious ceremonies; religious authorities 14 expressed certain astronomical events, such as solar and lunar eclipses, as harbingers of either doom or good fortune. As a result, nearly every ancient culture developed remarkably accurate methods for tracking the motions of celestial bodies. Possibly the most 15 impressive (and the most puzzling) astronomical measurement device from the ancient world comes to us from the Greeks.

[1] From 1900 to 1901, 16 artifacts were recovered from a shipwreck off the coast of the Greek island of Antikythera. [2] Among the ruins, they discovered 82 bronze fragments that once made up a single device. [3] For more than half a century, the fragments remained little more than an archaeological curiosity. [4] Appropriately, the device that the fragments once belonged to was named the “Antikythera Mechanism.” [5] When they were discovered, the fragments were too corroded for researchers to decipher any of their details. [6] However, beginning in the 1970s, researchers returned to the perplexing fragments armed with x-ray technology. [7] X-ray scans of the fragments revealed that they once belonged to an astronomical measurement device. [8] Essentially, the device measured the movements of a number of noteworthy heavenly bodies.
[1] However, the x-ray images of the fragments still left many features unclear, whereas inscriptions on the Antikythera Mechanism’s fragments remained indecipherable, and its inner workings remained obscured. [2] Then, in 2006, modern technology revealed more of the secrets hidden within the fragments. [3] Researchers at Cardiff University in Wales took CT scans (computerized x-ray scans) of the Antikythera Mechanism’s fragments. [4] Analysis of these scans revealed more information about the mechanics and origins of the elusive device.

Thus, after spending over a century shrouded in mystery, the Antikythera Mechanism is finally being recognized as an amazing intricate analog computer. The Antikythera Mechanism was about the size of a jewelry box, and probably looks similar to a modern analog clock. The circular face accommodated at least seven hands, they marked the motions of the Sun, the Moon, and the planets visible to the naked eye (Mercury, Venus, Mars, Jupiter, and Saturn). Thus, each hand rotated at a different rate and moved by means of a series of interconnected bronze gears. The device was powered by winding two dials, which connected to the gears. On the back of the device, small pins followed grooved paths that marked the dates of major athletic festivals. Most researchers suspect that the Antikythera Mechanism was created in the 2nd or 3rd century BCE and was probably based on similar, now-lost devices.
Refer to the passage below to answer questions 23 – 30.

Leitmotifs

An audience has certain expectations when watching a film. A rousing brass fanfare should accompany a hero's arrival, and sinister strings should underscore a villain's speech. These recurrent musical themes, commonly called "leitmotifs," have pervaded film since its infancy. Leitmotifs are miniature “theme songs” that play whenever a particular character, object, or situation is present on screen. Leitmotifs can provide an audience with information not conveyed directly through dialogue. If an audience wants to know whether a character is good or evil, they need only listen to that character's leitmotif.

The use of leitmotifs begins with 19th century German opera, and one of the most extensive uses of leitmotifs is found in German composer Richard Wagner's *The Ring Cycle*. Composed over the course of 26 years, *The Ring Cycle* actually consists of four connected operas meant to be performed back-to-back over the course of four days. In total, *The Ring Cycle* takes approximately 15 hours to perform. As the title suggests, the story of *The Ring Cycle* centers on a magical ring that gives its owners the power to dominate the world. Influenced heavily by Norse mythology, the plot includes three generations in which gods, mortals, and mythical creatures vie for possession of the ring. At the center of the struggle is Wotan, ruler and leader of the gods in *The Ring Cycle*, who tries to retrieve the ring from two giants. Over the course of its 15-hour running time, *The Ring Cycle* introduces a huge cast of characters, many of them have leitmotifs.

23. (A) NO CHANGE  
(B) undermine  
(C) undercut  
(D) understand

24. Which choice most effectively combines the sentences at the underlined portion?

(A) screen, so they  
(B) screen; however, leitmotifs  
(C) screen, and consequently they  
(D) screen, meaning that these leitmotifs

25. (A) NO CHANGE  
(B) a person  
(C) it  
(D) someone

26. (A) NO CHANGE  
(B) German composer, Richard Wagner's *The Ring Cycle*.  
(C) German composer, Richard Wagner's *The Ring Cycle*.  
(D) German composer Richard Wagner's *The Ring Cycle*.

27. (A) NO CHANGE  
(B) Being composed  
(C) Having been composed  
(D) Composing it

28. (A) NO CHANGE  
(B) traverses  
(C) encloses  
(D) spans

29. (A) NO CHANGE  
(B) ruler of the gods,  
(C) who rules over the rest of the gods,  
(D) who leads the other gods as their ruler,

30. (A) NO CHANGE  
(B) which  
(C) who  
(D) whom
As one would expect, Wagner uses leitmotifs to suggest characters’ allegiances. A soaring horn leitmotif introduces Siegfried, Wotan’s grandson and a major hero in The Ring Cycle, while a lumbering percussive leitmotif announces the presence of the evil giants. Moreover, Wagner occasionally uses leitmotifs to express a character’s thoughts or feelings. At the beginning of The Ring Cycle, a triumphant-sounding leitmotif introduces the wise and powerful god Wotan. However, by the midpoint of the opera, when his fortunes have turned for the worse, Wotan’s leitmotif switches to a minor key, giving it a mournful sound that matches his own despair.

From these examples, one can conclude that Wagner’s leitmotifs serve two concurrent functions. Superficially, leitmotifs provide musical cues that help audiences orient themselves to the events of the opera; audiences know which characters to expect on stage based on the leitmotifs that precede their arrival. Consequently, leitmotifs add emotional weight to the events of The Ring Cycle. Wotan’s despair is heightened by the melancholy reflected in his leitmotif. Thus, it should come as no surprise that the use of leitmotifs has endured for nearly a century and a half. Leitmotifs are especially prominent in action and adventure films.

31. Which choice most effectively sets up the information that follows?
(A) NO CHANGE
(B) Most composers agree that leitmotifs effectively introduce important themes and characters.
(C) However, it is fairly uncommon for a minor character to have a leitmotif.
(D) Furthermore, different instruments may play a leitmotif each time it repeats.

32. (A) NO CHANGE
(B) Additionally,
(C) Conversely,
(D) Quizzically,

33. Which choice most effectively concludes the passage?
(A) NO CHANGE
(B) Leitmotifs are also employed in literature, where recurrent phrases replace musical themes.
(C) Leitmotifs convey a wealth of information using nothing more than a musical phrase.
(D) Film composer John Williams has created some of the most recognizable leitmotifs.
Planetary Formation

[1] Since the Big Bang, the universe has produced an incredible number of stars and planets. [2] Scientists estimate that, in the Milky Way alone, hundreds of billions of planets orbit approximately one hundred billion stars. [3] Although no two of these heavenly bodies are identical, they all share at least one common feature: their shape. [4] To determine why this is, it helps to understand how stars and planets form.

Most solar systems, including our own, form in a swirling cloud of particles called a nebula. The nebula's gravity draws other nearby particles, causing the nebula to grow. Gradually, particles cluster in the middle of the nebula, drawn together by their mutual gravitational attraction. As more particles gravitate toward the center of the nebula, it begins to spin more faster. This is the same process that causes an ice skater to accelerate when she brings her arms and legs closer to her body while spinning. The center of the nebula continues to spin, accelerating as it has acquired more mass. The center of the nebula becomes a star when the cluster of spinning particles is massive enough—and its gravitational field is strong enough—to undergo nuclear fusion.

34. (A) NO CHANGE
   (B) feature, their shape!
   (C) feature (their shape).
   (D) feature—their shape.

35. To maintain the cohesion of paragraph 1, where should the following sentence be placed?

   Even the largest known star, which is millions of times larger than the Sun, has the same spherical shape as Earth.

   (A) After sentence 1
   (B) After sentence 2
   (C) After sentence 3
   (D) After sentence 4

36. (A) NO CHANGE
   (B) captivates
   (C) evokes
   (D) lures

37. (A) NO CHANGE
   (B) rally
   (C) convene
   (D) assemble

38. (A) NO CHANGE
   (B) rapid.
   (C) more fast.
   (D) faster.

39. (A) NO CHANGE
   (B) acquiring
   (C) acquired
   (D) acquires

40. (A) NO CHANGE
   (B) it's
   (C) its'
   (D) it is
The newly formed star sits at the center of the nebula being surrounded by a spinning cloud of particles that includes gases and space debris. Because they have a greater gravitational pull, the heavier particles in this cloud cluster together, heating up as they form the molten cores of rocky planets. Gas giants, on the other hand, form much like stars, but gas giants never acquire a sufficient amount of mass to undergo the process of fusion.

Ultimately, gravity is the key player in the formation of nebulae, stars, and planets. Gravity ensures that, during formation, every particle tries to get as close to the center as possible, evenly distributing gravitational pull. The only three-dimensional shape that allows for this configuration is a sphere. All points on the outside of a sphere are equidistant, after all. Celestial objects smaller than 100 miles in diameter generally lack sufficient mass, and therefore sufficient gravity, to compress into spheres.

41. (A) NO CHANGE
(B) nebula, surrounded by a spinning cloud ofarticles that includes gases and space debris
(C) nebula, surrounding itself
(D) nebula, the star is surrounded

42. (A) NO CHANGE
(B) but gas giants never become massive enough to undergo fusion.
(C) yet, in terms of mass, gas giants never have enough to go through fusion.
(D) but gas giants can never begin the process of fusion because they are not massive enough.

43. Which of the following most effectively combines the sentences at the underlined portion?
(A) sphere, this is because all points
(B) sphere, indicating that the points
(C) sphere, yet every point
(D) sphere; all points

44. Which sentence best concludes the final paragraph of the passage?
(A) This explains why comets and asteroids have irregular, non-spherical appearances.
(B) However, forces other than gravity contribute to the formation of spheres, too.
(C) The strength of an object’s gravitational field is proportional to the object’s mass.
(D) Without Isaac Newton’s pioneering research into the nature of gravity, all this information might remain unknown even today.