

硅的“春天”

参考答案和解析

14.B 【原文参考依据 -B 段 4-7 行】 Since solar cells became practical and affordable three decades ago, engineers have mostly favored using single-crystal silicon as the active material, says Michael Rogol, managing director of Germany-based Photon Consulting.

15.C 【原文参考依据 -G 段首句】 The cost of silicon solar cells is likely to fall as bulk silicon prices drop, according to the U.S. Energy Information Administration and the industry tracking firm Solarbuzz.

16.A 【原文参考依据 -D 段首句】 At his start-up company—Lexington, Mass.-based 1366 Technologies (the number refers to the flux of sunlight that strikes the earth's outer atmosphere: 1,366 watts per square meter)—Sachs is employing “a proprietary wet process that can produce thinner and taller” wires that are 20 by 20 microns.

17.A 【原文参考依据 -C 段首句】 Sachs, who has pioneered several novel ways to make silicon solar cells less costly and more effective, recently turned his focus to the details of multicrystalline silicon cell manufacture.

18.A 【原文参考依据 -A 段末句】 With additional tweaks, Sachs anticipates creating within four years solar cells that can produce juice at a dollar per watt, a feat that would make electricity from the sun competitive with that from coal-burning power plants.

19.T 【原文参考依据 -B 段倒数第二句】 Although single-crystal cells offer high conversion efficiencies, they are expensive to make. (Achilles's heel 致命的弱点)

20.F 【原文参考依据 -B 段末句】 The alternatives—multicrystalline silicon cells, which factories fabricate from lower-purity, cast ingots composed of many smaller crystals—are cheaper to make, but unfortunately they are less efficient than single-crystal cells.

21.NG 【原文参考依据 -F 段末尾】 And he has a few ideas regarding how to successfully make the substitution. “Unlike silver, copper poisons the performance of silicon PVs,” Sachs says, “so it will be crucial to include a low-cost diffusion barrier that stops direct contact between copper and the silicon.” In this business, it's always the little devilish details that count.

F 段倒数第 2 句只是说找到这种方法很重要并没有说 Emanuel Sachs 对其的研究已经到了哪个地步，题目中 an alternative metal for silver 在这里指的就是原文中的 copper

22.T 【原文参考依据 -G 段第 2 句】 A steep rise in solar panel sales in recent years had led to a global shortage of silicon because production capacity for the active material lagged behind, but now new silicon manufacturing plants are coming online. sharp=steep

23.multi-crystalline silicon cell

【 原文 参考 依据 -C 段 首 句 】

Sachs, who has pioneered several novel ways to make silicon solar cells less costly and more effective, recently turned his focus to the details of multicrystalline silicon cell manufacture. Particulars= details

24.proprietary wet process

【 原文 参考 依据 -D 段 首 句 】

At his start-up company—Lexington, Mass.-based 1366 Technologies (the number refers to the flux of sunlight that strikes the earth's outer atmosphere: 1,366 watts per square meter)—Sachs is employing “a proprietary wet process that can produce thinner and taller” wires that are 20 by 20 microns.

25.neighboring active material

【 原文 参考 依据 -D 段 第 2 句 】

The slimmer bus wires use less costly silver and can be placed closer together so they can draw more current from the neighboring active material, through which free electrons can travel only so far.

D 段第 2 句 finer=slimmer

26.Textured mirror surfaces

【 原文 参考 依据 -E 段 第 3 句 】

“We place textured mirror surfaces on the faces of these rolled wires.

27.total internal reflection

【 原文 参考 依据 -E 段 倒数 第 三 句 】

These little mirrors reflect incoming light at a lower angle—around 30 degrees—so that when the reflected rays hit the glass layer at the top, they stay within the silicon wafer by way of total internal reflection,”

挠痒和笑

答案

1 、 G 【 原文 参 考 依 据 -G 段 第 二 句 】

The brain's "funny bone" is located at the right frontal lobe just above the right eye and appears critical to our ability to recognize a joke.

2 、 C 【 原文 参 考 依 据 -B 段 第 二 句 】

Laughter also increases blood pressure and heart rate, changes breathing, reduces levels of certain neurochemicals (catecholamines, hormones) and provides a boost to the immune system.

3 、 F 【 原文 参 考 依 据 -F 段 末 句 】

However, different people find different jokes funny. That can be due to a number of factors, including differences in personality, intelligence, mental state and probably mood.

4 、 E 【 原文 参 考 依 据 -D 段 末 尾 】

How the brain uses this information about tension and surprise is still a mystery, but there is some evidence that the cerebellum (小脑) may be involved. ...It is suggested that tickling response is a reflex, which, like Darwin suggested earlier, is dependent on the element of surprise.

5 、 D 【 原文 参 考 依 据 -D 段 末 尾 】

Investigations support the notion that parts of the frontal lobe are involved in humor. Subjects' brains were imaged while they were listening to jokes. An area of the frontal lobe was activated only when they thought a joke was funny. In a study that compared healthy individuals with people who had damage to their frontal lobes, the subjects with damaged frontal lobes were more likely to choose wrong punch lines to written jokes and didn't laugh or smile as much at funny cartoons or jokes.

6 、 B 【 原文 参 考 依 据 -B 段 中 部 】

Yngve Zotterman from Karolinska Institute has found that tickling sensations involve signals from nerve fibers. These nerve fibers are associated with pain and touch.

7 、 G 【 原文 参 考 依 据 -G 段 末 尾 】

Eventually brain scans might be used to assess patients with depression and other mood disorders. The research may also explain why some stroke victims lose their sense of humor or suffer from other personality changes. The same part of the brain is also associated with social and emotional judgment and planning. The research may also explain why some stroke victims lose their sense of humor or suffer from other personality changes. The same part of the brain is also associated with social and emotional judgment and planning.

8 、 A 【 原文 参 考 依 据 -E 段 6-8 行 】

Darwin speculated surprise from another person touching a sensitive spot must have caused laughter.

9 、 C 【 原文 参 考 依 据 -E 段 倒 数 4-5 行 】

Further explorations to understand tickling and laughter were conducted by Christenfeld and Harris. Within "The Mystery of Ticklish Laughter" and "Can a Machine Tickle?" they explained that people laughed equally whether tickled by a machine or by a person. The participants were not aware

re that who or what was tickling them.

10 、 F 【 原文 参 考 依 据 -B 段 倒 数 第 三 句 】
Zotterman has discovered tickling sensations to be associated not only with nerve fibers but also with sense of touch because people who have lost pain sensations still laugh when tickled.

11 、 D 【 原文 参 考 依 据 -F 段 末 句 】 (Peter Derks)
However, different people find different jokes funny. That can be due to a number of factors, including differences in personality, intelligence, mental state and probably mood.

12、 imaging equipment

【 原文 参 考 依 据 -D 段 第 二 句 】
In one new study, researchers used imaging equipment to photograph the brain activity of healthy volunteers while they underwent a sideplitting assignment of reading written jokes, viewing cartoons from.....

13、 cognitive processing

【 原文 参 考 依 据 -D 段 第 6-9 句 】
Preliminary results indicate that the humor-processing pathway includes parts of the frontal lobe brain area, important for cognitive processing; the supplementary motor arearea, important for movement; and the nucleus accumbens, associated with pleasure.

14、 wrong punch lines

【 原文 参 考 依 据 -D 段 末 句 】
In a study that compared healthy individuals with people who had damage to their frontal lobes, the subjects with damaged frontal lobes were more likely to choose wrong punch lines to written jokes and didn't laugh or smile as much at funny cartoons or jokes.

树冠的研究者

14.B 【原文参考依据 -B 段】

Tropical rainforest comprise the richest of ecosystem, revalled only by coral reel for its diversity a
nd complex interrelationships. And a great deal of that diversity lives up in the canopy--an estima
ted 70-90 percent of life in the rainforest exists in the trees; one in ten of all vascular plants are ca
nopy dwellers; and about 20-25 per cent of all invertebrates are thought to be unique to the cano
py. B 段说了地球上最富裕的生态系统，而且很多特征独一无二。好多树上的生命占了百分
之好几十好多好多。热带雨林拥有最丰富的生态系统。总之就是热带雨林很重要。重要当然
就有研究的必要性了。正好对应对 canopy 研究的生态意义。

15.C 【原文参考依据 -C 段前两句】

The first Briton to actually get into the canopy may have been Sir Francis Drake who, in 1573, gain
ed his first glimpse of the Pacific Ocean from a tall tree in Darien, Panama. However, the first seri
ous effort to reach and study the canopy didn't begin until 1929.

16.A 【原文参考依据 -A 段】

The forest canopy--the term given to the aggregated crowns of trees in a forest--is thought t
o host up to 40 per cent of all species, of which ten per cent could be unique to the forest roof. "
We're dealing with the richest, least known, most threatened habitat on Earth," "The problem
with our understanding of forests is that and yet we're dealing with trees that"

17.F 【原文参考依据 -F 段 5-7 行】

"However, we've all come to realise that a combination of methods, a long-term approach t
o ecological studies and a collaborative approach are the absolute best ways to advance canopy s
cience.

18.E 【原文参考依据 -E 段 5-7 行】

"Un-tethered balloons may allow widely distributed sites to be sampled, but cranes allow scientis
ts to study an area of at least a hectare from soil to canopy throughout the year, year after year."C
ranes beat any other access mode.

原文见 E 段第 6 行, ...year after year,"cranes beat any other access mode" "beat any other" 打
败其他所有的方式--最好的，最佳的；E 段最后一句话 加引号那个。ultimate solution 对应原
文 core research 。 ... in the future 对应 till now 吧。并且段中大量提到了 crane 现在的应用之
广，也能体现 till now，甚至未来很长一段时间都是最佳的选择

19. locals 【原文参考依据 -C 段 5-6 行】

The Oxford University Expedition to British Guiana, led by Major RWG Hingston, still ended up re
quiring the help of locals when it came to building an observation platform.

20. balloons 【原文参考依据 -C 段 9-11 行】

In terms of canopy access, the French have proved themselves to be excellent innovators, taking t
hings further with the development of 'lighter-than-air platforms'--balloons and related equipme
nt, to you and me.

21. raft/rafts 【原文参考依据 -D 段第 2 句】

The raft is a 'floating' platform, employed by French academics Dany Cleyet-Marrel and Laurent P
yot and is essentially an island in the treetops.

22. (static)crane/cranes

【 原文 参 考 依 据 -E 段 第 2 句 】

The next major innovation came from Alan Smith, who worked at the Smithsonian Tropical Research Institute in Panama. Smith had the idea of using a static crane to get into the treetops. 此类填空答案应从核心词往回数，要求几个词就数几个词，冠词可忽略。比如，此道题核心词为 crane，要求 two words，所以 crane 或 static crane 都是正确答案。当然，建议写 static crane，要求几个写几个，较保险。

23.D 【 原文 参 考 依 据 -C 段 12-14 行 】

Francis Halle; from the Laboratoire de Botanique Tropicale at Montpellier University took to a balloon in the mid-1980s in order to approach the canopy from above.

24.B 【 原文 参 考 依 据 -D 段 倒数 第 6 行 】

"...not very effective because you can only reach the tops of the trees, and are highly dependent on the weather," says Dr Wilfried Morawetz, director of systematic botany at the University of Leipzig. "Balloons can usually only be used in the early morning for two to four hours.

25.F 【 原文 参 考 依 据 -E 段 前 两 句 +5-6 行 】

The next major innovation came from Alan Smith, who worked at the Smithsonian Tropical Research Institute in Panama. Smith had the idea of using a static crane to get into the treetops. Untethered balloons may allow widely distributed sites to be sampled, but cranes allow scientists to study an area of at least a hectare from soil to canopy throughout the year, year after year. "Cranes beat any other access mode. They are cheap, reliable and fast.

E 段的第 1 行（Alan Smith 首先运用的起重机，innovation 是创造，不但是 innovative idea，事实上 Alan Smith 是一个发明者）+5 行（便宜稳定，是 Korner 的评价，但还是 Alan applied 过的）原文解释

26.E 【 原文 参 考 依 据 -E 段 8-10 行 】

Korner is using a static crane in a unique carbon dioxide-enrichment experiment in Switzerland, in an attempt to discover how forests might respond to the global increase in atmospheric carbon dioxide (see Swiss canopy-crane carbon experiment, right). Korner 利用起重机做了一个二氧化碳的实验

27.B 【 原文 参 考 依 据 -E 段 末尾 】

In order to increase the amount of canopy a crane can access, some have been mounted on short rail tracks. "In 1995, Dr Wilfried Morawetz was the first to use this technique, installing a crane on 150 metres of track in Venezuelan rainforest. "In my opinion, cranes should be the core of canopy research in the future," he says.

业余自然科学家的数据

27 B 【原文参考依据 -B 段第 2 句】

These data sets, and others like them, are proving invaluable to ecologists interested in the timing of biological events, or phenology.

28 C 【原文参考依据 -C 段首句】

Sparks became aware of the army of "closet phenologists", as he describes them, when a retiring colleague gave him the Marsham records....As news of his quest spreads, people tip him off to other historical records, and more amateur phenologists come out of their closets.

29 H 【原文参考依据 -H 倒数三行】

And getting people involved is great for public relations. "People are thrilled to think that the data they've been collecting as a hobby can be used for something scientific -it empowers them," says Root.

people are thrilled to 对应 surprise, be used for something scientific 对应 function in science。29 题的同义替换: casual 与 collecting as a hobby, surprise function 与 empower。

30 G 【原文参考依据 -G 段末句】

"It's very difficult to collect data on a large geographical scale without enlisting(... 的支持或合作) an army of observers," says Root.

31 E 【原文参考依据 -E 段 7-10 行】

Terry Root, an ecologist at the University of Michigan in Ann Arbor, has collected birdwatchers' counts of wildfowl taken between 1955 and 1996 on seasonal ponds in the American.

birdwatcher's counts of waterfowl... 31 后面 E 段中间已经说了 hint at how nature will change in the future.后面说用那个鸟类观察者记录的数据。。。分析发现未来的气候将会。。。活生生的一个 example

32 D 【原文参考依据 -D 段末句】

The competition has taken place annually on the Tenana River in Alaska since 1917, and analysis of the results showed that the thaw now arrives five days earlier than it did when the contest began.

33 A 【原文参考依据 -A 段末句】 Successive Marshams continued compiling these notes for 211 years.

34 beekeeping(notes)

【原文参考依据 -A 段第 2 句】

The book's yellowing pages contain beekeeping notes made between 1941 and 1969 by the late Walter Coates of Kilworth, Leicestershire.

35 life cycle(s)

【原文参考依据 -A 段倒数第 4 行】

Around two centuries before Coates, Robert Marsham, a landowner from Norfolk in the east of England, began recording the life cycles of plants and animals on his estate - when the first wood anemones flowered, the dates on which the oaks burst into leaf and the rooks began nesting.

36 drought(s)

【原文参考依据 -G 段末

尾】 Her analysis shows that the increased droughts that the models predict could halve the breeding populations at the ponds. "The number of waterfowl in North America will most probably dr

op significantly with global warming," she says.

decrease 的原因是什么 increase, 所以定位应该往前, the increase droughts 和 halve the breeding population. global warming 是根据 droughts 推断出来的, 而且根据雅思考试的就近原则, 所以填 droughts

37 C 【原文参考依据 -F 段首句】

But not all professionals are happy to use amateur data. "A lot of scientists won't touch them, they say they're too full of problems," says Root.

F 段第一行说数据存在很多问题就是说数据不可靠啊。amateur data 本身就是不专业的, 但是有些专家质疑这个数据并不是因为它不专业, 而是因为它存在很多问题。就题而论, 原文要表达的意思就是不是所有专家都愿意用业余的数据, 因为一些科学家认为他们存在太多的问题。

38 D 【原文参考依据 -F 段倒数第 4 行】

"We need to know pretty precisely what a person's been observing - if they just say 'I noted when the leaves came out', it might not be that useful." carefully and systematically they were taken,, 后面也说了如果他们只是。。。, it might not be that useful.

也就是 useful=valuable 的 information 就是那些 be taken carefully and systematically 的 accurate one

39 A 【原文参考依据 -G 段】

"They get at the raw power of science: careful observation of the natural world," says Sagarin. But the professionals also acknowledge the need for careful quality control. Root, for example, tries to gauge the quality of an amateur archive by interviewing its collector....Others suggest that the right statistics can iron out some of the problems with amateur data. Together with colleagues at Wageningen University in the Netherlands, environmental scientist Arnold van Vliet is developing statistical techniques to account for the uncertainty in amateur phenological data. With the enthusiasm of amateur phenologists evident from past records, professional researchers are now trying to create standardized recording schemes for future efforts.

G 段都在说明这个选项

40 D 【原文参考依据 -H 段首行】

Phenology also helps to drive home messages about climate change. "Because the public understand these records, they accept them," says Sparks.

艾费雷德 · 诺贝尔

参考答案:

1 FALSE 【 原文 参 考 依 据 -A 段 末 句 】

The foundations for the prize were laid in 1895 when Alfred Nobel wrote his last will, leaving much of his wealth to the establishment of the Nobel Prize.

2 NOT GIVEN 【 原文 参 考 依 据 -B 段 末 尾 】

There, his sons were given a first class education by private teachers. The training included natural sciences, languages and literature. By the age of 17 Alfred Nobel was fluent in Swedish, Russian, French, English and German. His primary interests were in English literature and poetry as well as in chemistry and physics. Alfred's father, who wanted his sons to join his enterprise as engineers, disliked Alfred's interest in poetry and found his son rather introverted. 原文中并未体现诺贝尔的父亲期望诺贝尔接受比他自己更好的教育。

3 FALSE 【 原文 参 考 依 据 -E 段 首 句 】

The market for dynamite and detonating caps grew very rapidly and Alfred Nobel also proved himself to be a very skillful entrepreneur and businessman.

4 FALSE 【 原文 参 考 依 据 -F 段 末 尾 】

Several years after the death of Alfred Nobel, the Norwegian Storting (Parliament) decided to award the 1905 Nobel Peace Prize to Bertha von Suttner.

5 TRUE 【 原文 参 考 依 据 -G 段 倒 数 第 二 句 】

Alfred Nobel was born in Stockholm on October 21, 1833....They set about forming the Nobel Foundation as an organization to take care of the financial assets left by Nobel for this purpose and to coordinate the work of the Prize-Awarding Institutions. 诺贝尔死于 1896 年，遗嘱执行人按照他的意愿设立了 foundation

6 TRUE 【 原文 参 考 依 据 -G 段 倒 数 第 二 句 】

Nobel was very interested in social and peace-related issues and held what were considered radical views in his era.

7 chemical engineering 【 原文 参 考 依 据 -C 段 首 句 】

In order to widen Alfred's horizons his father sent him abroad for further training in chemical engineering.

8 Ascanio Sobrero 【 原文 参 考 依 据 -C 段 第 3 句 】

In Paris, the city he came to like best, he worked in the private laboratory of Professor T.J. Pelouze, a famous chemist. There he met the young Italian chemist Ascanio Sobrero, who, three years earlier, had invented nitroglycerine, a highly explosive liquid.

9 gunpowder 【 原文 参 考 依 据 -C 段 7-9 行 】

Although its explosive power greatly exceeded that of gunpowder, the liquid would explode in a very unpredictable manner if subjected to heat and pressure.

10 Stockholm 【 原文 参 考 依 据 -D 段 5-7 行 】

They forbade further experimentation with nitroglycerine within the Stockholm city limits and Alfred Nobel had to move his experimentation to a barge anchored on Lake Malaren.

11 detonator 【 原文 参 考 依 据 -D 段 7-9 行 】

In 1867, he patented this material under the name of dynamite. To be able to detonate the dynamite rods, he also invented a detonator(blasting cap) which could be ignited by lighting a fuse.

12 pneumatic drill 【 原文 参 考 依 据 -D 段 倒 数 第 二 句 】

These inventions were made at the same time as the pneumatic drill came into general use.

13 cost 【 原文 参 考 依 据 -D 段 末 句 】

Together these inventions drastically reduced the cost of blasting rock, drilling tunnels, building canals and many other forms of construction work.

The Last True Know-It-All 托马斯·杨

1 TRUE 【原文参考依据 -A 段倒数第四行】
The phrase, which Robinson takes for his title, also serves as the subtitle of two other recent biographies:原文提及这个头衔也被赋予过给其他人。

2 FALSE 【原文参考依据 -A 段首句】
Thomas Young (1773-1829) contributed 63 articles to the Encyclopedia Britannica, including 46 biographical entries and substantial essays on "Bridge," "Chromatics," "Egypt," "Languages" and "Tides".

【原文参考依据 -B 段首句】
Young, of course, did more than write encyclopedia entries. He presented his first paper to the Royal Society of London at the age of 20 and was selected a Fellow a week after his 21st birthday.

3 FALSE 【原文参考依据 -C 段末句】
These are the landmark achievements of a man who was a child prodigy and who, unlike many remarkable children, did not disappear into oblivion (遗忘) as an adult. 跟很多天才儿童不一样的是, Young 成人后也并未被人遗忘, 而是有着很多的成就。

4 NOT GIVEN 【原文参考依据 -E 首句】
Young's skill as a physician, however, did not equal his skill as a scholar of natural philosophy or linguistics. 题干中是 other skills, 而原文中只比较了 skill as a scholar of natural philosophy or linguistics, 并未提及其他技能。

5 TRUE 【原文参考依据 -E 段 8-9 行】 His opinions were sought on civic (local) and national matters(national issue), such as the introduction of gas lighting to London and methods of ship construction.Young 的想法有被采纳。

6 TRUE 【原文参考依据 -F 段倒数 2-3 句】
Young was introduced into elite society, attended the theatre and learned to dance and play the flute. In addition, he was an accomplished horseman. Young 参加了很多社交活动, 例如去剧院, 学习跳舞等等。

7 NOT GIVEN 文中并未提及晚年 Young 是否受到疾病的困扰。

8 46 【原文参考依据 -A 段首句】
Thomas Young (1773-1829) contributed 63 articles to the Encyclopedia Britannica, including 46 biographical entries

9 humaneye / human eye accommodation 【原文参考依据 -B 段第 3 句】
Young, of course, did more than write encyclopedia entries. He presented his first paper to the Royal Society of London at the age of 20 and was elected a Fellow a week after his 21st birthday. In the paper, Young explained the process of accommodation in the human eye --

10 Indo-European 【原文参考依据 -C 段倒数第 2 句】 In another entry, he coined (杜撰, 创造) the term Indo-European to describe the family of languages spoken throughout most of Europe and northern India..

11 Richard Brocklesby 【原文参考依据 -D 段 5-9 行】
After leaving school, he was greatly encouraged by his mother's uncle, Richard Brocklesby, a physician and Fellow of the Royal Society. Following Brocklesby's lead, Young decided to pursue a career in medicine.

12 Royal Institution 【原文参考依据 -E 第二句】
Earlier, in 1801, he had been appointed to a professorship of natural philosophy at the Royal Institution.

ution, where he delivered as many as 60 lectures in a year.

Royal Society 不行。因为题目问的是 professor of natural philosophy 这个职位在哪得到的。你所说的 Royal Society 获得的是 secretary 这个职位。

13 gas lighting 【 原文 参 考 依 据 - E 8-9 行 】

His opinions were sought on civic and national matters, such as the introduction of gaslighting to London and methods of ship construction.

青少年的青春期

1. B 【原文参考依据 -C 段第三句】 (Middle adolescence)
Their concerns about peers are more directed toward their opposite sexed peers.
2. B 【原文参考依据 -C 段末句】 (Middle adolescence) Delinquency behavior (犯罪行为) may emerge since parental views are no longer seen as absolutely correct by adolescents....., middle adolescence is a period during which young people are oriented toward what is right and proper.
3. A 【原文参考依据 -B 段末句】 Early adolescence is also a period of intense conformity to peers. (和 同 伴 高 度 一 致 的 时 期)The worst possibility, from the view of the early adolescent, is to be seen by peers as 'different'.
4. A 【原文参考依据 -B 段首句】
During the early years young people make the first attempts to leave the dependent, secure role of a child and to establish themselves as unique individuals, independent of their parents. first at tempt 与题中 beginning 对应
5. C 【原文参考依据 -D 段倒数第 2 句】 Their needs for peer approval are diminished (减少) and they are largely psychologically independent from their parents.
6. B 【原文参考依据 -C 段句】
Middle adolescence is marked by the emergence of new thinking skills. The intellectual world of the young person is suddenly greatly expanded.
7. E 【原文参考依据 -E 段】 (Professor Robert Havighurst)
One developmental task an adolescent needs to achieve is to adjust to a new physical (adj. 身体的、物理的) sense of self. ... an individual undergo such rapid and profound physical changes as during early adolescence.Also, the young person experiences the emergence (n. 出现) and accentuation of those physical traits (n. 特征) that make him or her a boy or girl. The effect of this rapid change is that the young adolescent often becomes focused on his or her body. 此段整段说的都是与 physical 方面相关。
8. C 【原文参考依据 -F 段倒数第二句】
(High school courses) School curricula are frequently dominated by inclusion of more abstract, demanding material, regardless of whether the adolescents have achieved formal thought.
9. A 【原文参考依据 -G 段首句】
(Adolescence) During adolescence, as teens develop increasingly complex knowledge systems and a sense of self, they also adopt an integrated set of values and morals (n. 道德).
10. D 【原文参考依据 -F 段末句】
(thinking patterns) Since not all adolescents make the intellectual transition at the same rate, demands for abstract thinking prior to achievement of that ability may be frustrating.
vary from...to... 大概是要理解成“...与...不同”，所以这句并不是说人对人的改变，而是“人与人不同”，即“思维模式的发展速度因人而异”，对应 F 段倒三
not all adolescents make the intellectual transition at the same rate.
11. FALSE 【原文参考依据 -F 段第 3 句】
During adolescence, young people begin to recognize and understand abstractions. The adolescence

nt must adjust to increased cognitive (adj. 认知的) demands at school.

during adolescence, 能 recognize and understand abstraction。原文与题目相反

12. TRUE 【 原文 参 考 依 据 -H

段 】 ...they must develop new verbal skills to accommodate more complex (adj. 复 杂 的) concepts and tasks. Their limited language of childhood is no longer adequate (adj. 足 够 的). Adolescents may appear less competent because of their inability to express themselves meaningfully.

the adolescent must develop expanded verbal skills. 和 their limited language of childhood is no longer adequate. 而 12 题的 deficit 是不足的意思 所以是 T

13. TRUE 【 原文 参 考 依 据 -I 段 倒 数 第 2 句 】

Yet, to be an adult implies a sense of independence, of autonomy, of being one's own person. Adolescents may vacillate(动 摇 , 犹 豫 不 决) between their desire for dependence and their need to be independent.

新手与专家

1-5 填空题

1. principles and rules 【原文参考依据 --A 段第二句】

The novice needs to learn the guiding principles and rules of a given task in order to perform that task.

2. mentor 【原文参考依据 --A 段第五行】

Generally, a novice will find a mentor to guide her through the process.

3. journeyman 【原文参考依据 --B 段首句】

In time, and with much practice, the novice begin to recognize patterns of behavior within cases and, thus, becomes a journeyman.

4. patterns of behavior 【原文参考依据 --B 段一二句】

In time, and with much practice, the novice begin to recognize patterns of behavior within cases and, thus, becomes a journeyman. With more practice and exposure to increasingly complex cases, the journeyman finds patterns not only within cases but also between cases. 本题中 patterns 与 patterns of behavior 相比, 意思有所欠缺, 在符合语法及字数的前提下, 建议填写更为完整的 patterns of behavior。

5. complex 【原文参考依据 --B 段第二句】

With more practice and exposure to increasingly complex cases, the journeyman finds patterns not only within cases but also between cases.

6-10 判断题

6. False 【原文参考依据 --F 段倒八行】

A novice, for example, might group objects together by color or size, whereas an expert would group the same objects according to their function or utility. Experts comprehend the meaning of data and weigh variables with different criteria within their domains better than novices. 文中“whereas”一词为转折, 表明新手与专家所用的分组方式不同。“better than novices”也明确提出了新手与专家理解方式不同。

7. Not Given 【原文参考依据--G 段】G 段首句提到 long-term memory, 但对新手的“focus”和“training”方面的内容在原文中未提及。

8. True 【原文参考依据 --G 段第四行】

Experts spend more time thinking about a problem to fully understand it at the beginning of a task than do novices, who immediately seek to find a solution. 此处 immediately=straight away, 意为新手总是直接寻找解决方式。

9. False 【原文参考依据--G 段、H 段】这一题错在“always”, 虽然 G 段第二句说到“在解决问题时, 专家比新手更快、犯的错误更少”, 但并不代表在解决问题的整个过程中, 专家都比新手更快。“always”有“始终、总是”之意, 而 G 段倒四行说“专家在着手解决问题时, 会花更多的时间去彻底思考”, 因此, 在这个阶段, 专家是比新手更慢、效率不如新手的。

10. True 【原文参考依据 --H 段】H 段共三句, 均解释了专家在出现问题时比新手“more aware”“check their solutions more often”, 题干与原文意思相符, 因此本题为 True。

11-13 Summary

11. models 【原文参考依据 --J 段第二句】

Some have argued that experts, like all humans, are inconsistent when using mental models to make predictions. 题干的 cognitive 替换了文中的 mental。

12. human biases 【 原文 参 考 依 据 --J 段 第 四 行 】

A number of researchers point to human biases to explain unreliable expert predictions.

13. consensus 【 原文 参 考 依 据 --J 段 倒 三 行 】

Despite such efforts, the literature shows little consensus regarding the causes or manifestations of human bias. 文中“little”一词表否定，题干“did not yet”与原文相符。

茶的历史

1-8 List of Headings

1. v 【原文参考依据--A 段】A 段全文都在描述神农氏（炎帝）发现并发明茶的过程。
2. viii 【原文参考依据 --B 部分第二段第三行】Because of this early association, tea in Japan has always been associated with Zen Buddhism. “religion(宗教信仰)”对应文中的“Zen Buddhism(禅宗佛教)”；“connection”替代文中的“be associated with”。
3. ii 【原文参考依据 --C 部分首句】Tea was elevated to an art form resulting in the creation of the Japanese Tea Ceremony. 题干的“ritual”替代“ceremony”。
4. x 【原文参考依据 --D 部分第一段首句】While tea was at this high level of development in both Japan and China, information concerning this then unknown beverage began to filter back to Europe. 由于茶在中国、日本非常盛行，消息传到了欧洲。“news”对应“information”，“continent”此处指“欧洲大陆”。
5. vii 【原文参考依据--E 部分】E 部分共两句，均阐述了茶叶价格高，为富人所享。
6. i 【原文参考依据 --F 部分第四行】As the consumption of tea increased dramatically in Dutch society, doctors and university authorities argued back and forth as to the negative and/or positive benefits of tea. 茶叶在荷兰虽然盛行，但博士与高校则对其褒贬不一。“argued back and forth”对应题干的“good or bad”。
7. vi 【原文参考依据 --G 部分第一段首句、末句】As the craze for things oriental swept Europe, tea became part of the way of life. ... Tea remained popular in France for only about fifty years, being replaced by a stronger preference for wine, chocolate and exotic coffees. 首句叙述了茶在欧洲的流行，“became part of the way of life”；末句则描述了茶在欧洲的过时，“replaced by.....”。
8. iii 【原文参考依据 --H 部分倒五行】The trip was 11,000 miles long and took over sixteen months to complete. 路途远、耗时长，足以说明进口茶叶的困难。Import: 进口，引进。

9-13 Matching

9. C 【原文参考依据 --C 部分第二段第二行】A special form of architecture (chaseki) developed for “tea houses”, based on the duplication of the simplicity of a forest cottage. 文中“tea houses”即为题干所描述的“house”。
10. A 【原文参考依据 --G 部分第一段末句】Tea remained popular in France for only about fifty years, being replaced by a stronger preference for wine, chocolate and exotic coffees. 原文指出，茶在法国仅风靡了五十年，之后被红酒、巧克力及咖啡所取代。replaced=substituted。
11. F 【原文参考依据--H 部分倒三行】The average caravan consisted of 200 to 300 camels. 文中“camel”意为“骆驼”，且由上下文易知由俄国所为。
12. B 【原文参考依据 --F 部分第四行】As the consumption of tea increased dramatically in Dutch society, doctors and university authorities argued back and forth as to the negative and/or positive benefits of tea. “the consumption of tea increased dramatically”说明茶在荷兰十分受欢迎，但博士与高校方面仍对茶叶“argued back and forth”，与题干的“dispute”同义。

13. D 【原文参考依据 --A 部分末句、B 部分首句】 As a scientist, the Emperor was interested in the new liquid, drank some, and found it very refreshing. And so, according to legend, tea was created. Tea consumption spread throughout the Chinese culture reaching into every aspect of the society.
ruler=Emperor, 而“specialised knowledge”对应文中的“scientist”。“favor of tea”则在 B 部分首句得以体现。

乐观与健康 2

14-18 Summary

14. 7 years 【原文参考依据 --D 段 第二行】

For example, a study of 660 volunteers by the Yale University psychologist Dr Becca Levy, found that thinking positively adds an average of 7 years to your life.

15. 670

16. lung function 【原文参考依据 --D 段 倒五行】

A Harvard Medical School study of 670 men found that the optimists have significantly better lung function.

17. immune system 【原文参考依据 --D 段 倒四行】

The lead author, Dr Rosalind Wright, believes that attitude somehow strengthens the immune system.

18. heart patients 【原文参考依据 --D 段 末句】

Preliminary studies on heart patients suggest that, by changing a person's outlook, you can improve their mortality risk.

19-23 matching

19. G 【原文参考依据 --E 段 第二行】

.....American magazine Adweek found that about half the population counted themselves as optimists, with women slightly more apt than men (53 percent versus 48 percent) to see the sunny side. 题干中的“according to gender”对应原文中的“women slightly more apt than men”。

20. D 【原文参考依据 --C 段】

Chad Wallens, a social forecaster at the Henley Centre who surveyed middle-class Britons' beliefs about income, has found that “the people who feel wealthiest, and those who feel poorest, actually have almost the same amount of money at their disposal. Their attitudes and behaviour patterns, however, are different from one another.” 同样数量的钱，有人觉得富有，有人觉得穷。他们的态度行为也各不相同。因此快乐与金钱之间并没有绝对的联系。

21. B 【原文参考依据 --F 段 前两句】

Although some optimists may be accurate in their positive beliefs about the future, others may be unrealistic-their optimism is misplaced, according to American Psychological Association. Research shows that some smokers exhibit unrealistic optimism by underestimating their relative chances of experiencing disease. 这两句话说明 American Psychological Association 的研究表明有些人的乐观十分不现实，过于乐观导致一些吸烟者低估了他们患病的几率。

22. A 【原文参考依据 --A 段 末句】

Optimism is a piece of evolutionary equipment that carried us through millennia of setbacks. 由该句往前找，易知此为 Brice Pitt 的观点。

23. E 【原文参考依据 --I 段 第二行 末】

They add that resilient people learn to hold on to their sense of humour and this can help them to keep a flexible attitude when big changes of plan are warranted. 题干的“occurrence of emergency”替代文中的“big changes of plan are warranted”；“in a positive way”替代“keep a flexible attitude”。

24-27 判断题

24. Yes 【原文参考依据 --B 段 首句】

It has been known that optimistic has something to do with the long life, and optimists have plenty to be happy about.

25. Not Given 【原文参考依据一无】通篇未提及乐观者比悲观者有更好的人际关系。

26. No 【原文参考依据—K 段首句】

If you are handicapped by having had a happy childhood, then practicing proactive optimism can help you to become more resilient. 原文说如果你不幸拥有了一个快乐的童年，通过练习乐观可助你成为坚韧的人。通过全文可以看出，童年不幸的人，反而坚韧、乐观，而童年幸福的人则因为一帆风顺而很少遇到挫折，容易沮丧。题干与原文不符。

27. Yes

【原文参考依据—K 段末句】 hard times can bring out the best in you. 题干的“experience of difficulties”替代了原文的“hard times”；“the fortune”替代了“the best”。The best 包含许多方面，包括 fortune，且 fortune 可译为财富、运气等。

远程工作

28-35 Summary 选择题

28. F 【 原文 参 考 依 据 --C 段 末 句 】

Changes in non-commuting travel on weekends: home-bases workers ,which includes a substantial population of people who are not telecommuters, spend more time shopping out of the home than traditional workers.

29. A 【 原文 参 考 依 据 --D 段 首 句 】

Half-time telecommuting could reduce carbon emissions by over 51 million metric tons a year--the equivalent of taking all of New York's commuters off the road.

30. C

31. I 【 原文 参 考 依 据 --D 段 第 二 行 】

Additional carbon footprint savings will come from reduced : office energy, roadway repairs, urban heating, office construction, business travel, paper usage (as electronic documents replace paper).

32. M 【 原文 参 考 依 据 --D 段 末 句 】

The three major areas where energy can be conserved are: Vehicle-related materials and resources; Highway-related materials and resources; and work-related materials and resources.

33. K 【 原文 参 考 依 据 --E 段 首 句 】

A tremendous amount of energy is required to produce transportation equipment such as automobiles, buses, trains and jet aircraft.

34. H 【 原文 参 考 依 据 --E 段 第 五 行 】 Fuel resources and gases needed to operate this equipment will be reduced.....

35. D 【 原文 参 考 依 据 --E 段 第 五 行 】

Fuel resources and gases needed to operate this equipment will be reduced , as well the building and repair of highways and maintenance requires a large consumption of energy, not only in the operation of the highway construction and repair equipment, but also in the manufacture and transportation of the required materials.

36-39 Matching

36. A 【 原文 参 考 依 据 --G 段 第 二 行 】

More time working is usually associated with increased stress, domestic tension and other factors that reduce quality of life.

37. C 【 原文 参 考 依 据 --F 段 倒 五 行 】

The loss of teamwork.....such as Oracle's 'Functional' offices. Designed to increase communication and interaction when people are at the office, they are bright, and focused around a central cafe to stimulate ideas and face-to-face contact.

38. F 【 原文 参 考 依 据 --H 段 首 句 】

When you work in an office or a cubicle and something goes wrong with any hardware or software you have the option of calling in the IT man. In fact, all of the equipment that you use at the office is supported by technical staff.

39. D 【 原文 参 考 依 据 --H 段 末 句 】

When you work from home, you'll surely encounter technical problems and when you do, where do you get the support and help you need? If your computer hard drive crashed today, would you

have the funds to replace it?

40 选择题

40. C 【原文参考依据--通篇】 作者对远程办公持积极态度的内容占文章大多数。本题亦可使用排除法：作者对远程办公的快速发展感到惊讶(A)、对未来发展方向漠不关心(B)、对电子方面问题的担忧(D)在本文并未显著描写，故答案选择 C。

遗传对孩子的影响

14-18 填表题

14. Genetic 【原文参考依据 --B 段 第五行】

How much of who you are today was shaped by your genetic inheritance, and how much is a result of your life time of experiences? 题干“background”替代文中“inheritance(遗传)”。且根据 B 段第十行的两句原文可知，此处为表格中第一行的内容。由此也可向前找，推出该题答案 genetic。

15. all of siblings

16. 10% (或者 10 per cent) 【原文参考依据 --D 段 末句】

It may also refer to all of siblings of a family, but the rate of influence is less than 10 per cent.

17. Non-shared environment

18. 40% 【原文参考依据 --E 段 末句】

Non-shared environment, it may refer to part of siblings of a family, the rate of influence to children is 40% to 50%.

19-21 Summary

19. interrupt 【原文参考依据 --F 段 倒八行】

Research in recent years suggested that the impact from parents will be easy to be interrupted by the influence from the children of the same age. 题干的“peers(同龄人)”替代了原文的“the children of the same age”。

20. variations 【原文参考依据 --F 段 倒六行】

That also showed that variations of knowledge that children get from other culture is increasing.

21. interests 【原文参考依据 --F 段 末句】

A number of interests between, whatever, fathers and mothers or parents and their children are conflicting.

22-25 判断题

22. Not Given 【原文参考依据--无】原文未提及“一个家庭的孩子越多，环境给予其的影响越大”这方面内容。

23. Yes 【原文参考依据 --E 段 倒二句】

However, the best available evidence for the importance of environmental influence comes from this same quantitative genetic research because genetic influence never explains all of the variance for complex phenotypes, and the remaining variance must be ascribed to environmental influences. 由该句向前追溯，可知该句是与 twin study 有关内容。

24. Not Given 【原文参考依据--无】原文未出现题干所描述的内容。

25. No 【原文参考依据 --G 段 第五行】

Turkheimer and Waldron (2000) have noted that non-shared environmental influences-which include all of the random measurement error-may not be systematic, but instead may operate idiosyncratically and in ways that cannot be ascertained. 题干“can be a generally agreed idea”与原文“may not be systematic”意思不符。

26 选择题 26. B 【原文参考依据 --G 段 第五行】

Turkheimer and Waldron (2000) have noted that non-shared environmental influences-which include all of the random measurement error-may not be systematic, but instead may operate idiosyncratically and in ways that cannot be ascertained. 选项 B 的“not sufficiently proved”与原文“may not be systematic”意思相符。

汽车发展史

15-19 Matching

15. D 【原文参考依据 --B 段末句】

Karl Benz built his first automobile in 1885 in Mannheim. Benz was granted a patent for his automobile on 29 January 1886, and began the first production of automobiles in 1888 in a company that later became the famous Mercedes-Benz.

16. A 【原文参考依据 --C 段末句】

This was facilitated by Henry Ford who did two important things. First he priced his car to be as affordable as possible and second, he paid his workers enough to be able to purchase the cars they were manufacturing.

17. B 【原文参考依据 --F 段第八行】

BMC's revolutionary space-saving Mini, which first appeared in 1959, captured large sales worldwide.

18. G 【原文参考依据 --H 段第一二句】

On the technology front, the biggest developments in post-war era were the The hottest technologies of the 1960s were NSU's "Wankel engine", the gas turbine, and the turbocharger.

19. F 【原文参考依据 --E 段】 ...and made a huge leap in sale during World War II, as well as the postwar period.

20-26 问答题

20. Petrol-fueled internal combustion. 【原文参考依据 --A 段末句】

In 1806, the first cars powered by an internal combustion engine running on fuel gas appeared, which led to the introduction in 1885 of the ubiquitous modern petrol-fueled internal combustion engine. 题干要求的是 "late 19th century (19 世纪末期)", 因此答案不是 "internal combustion".

21. Token of identity. 【原文参考依据 --C 段第四行】

Everyone in town knew who owned what car and the cars were soon to become each individual's token of identity.

22. 1 hour 33 minutes (或者 93 minutes). 【原文参考依据 --D 段第三行】

The large-scale, production-line manufacturing of affordable automobiles was debuted Ford's cars came off the line in fifteen minute intervals, much faster than previous methods, increasing productivity eight fold (requiring 12.5 man-hours before, 1 hour 33 minutes after). 文中的 15 分钟是指生产两辆车之间的间隔。Interval: 间隔, 间距。

23. Polluting gas-guzzler. 【原文参考依据 --H 段第六行】

Mazda had much success with its "Rotary" engine which, however, acquired a reputation as a polluting gas-guzzler. 文中 "reputation" 意为 "名声, 荣誉".

24. Oil crisis. 【原文参考依据 --G 段第二行】

But everything changed in the 1970s as the 1973 oil crisis, automobile emissions control rules, Japanese and European imports, and stagnant innovation wreaked havoc on the American industry.

25. Power. 【原文参考依据 --I 段第二行】

Once the automobile emissions concerns of the 1970s were conquered with computerised engine management systems, power began to rise rapidly.

26. Fuel (或者 gasoline or diesel). 【原文参考依据 --J 段第一二句】

Most automobiles in use today are propelled by an internal combustion engine, fueled by gasoline or diesel. Both fuels are known to cause air pollution and are also blamed for contributing to climate change.

mate change and global warming.

27 选择题

27. B 【原文参考依据--通篇】本文通篇叙述的都是汽车设计发展与革新，B 答案与此内容相符。而 A、C 答案是文中的某部分，不够完整；D 答案的人类发展史则并未提及。

珊瑚礁

14-19

14. A 【原文参考依据--A 段前半部分】A 段前半部分均在列出世界上各个地方珊瑚礁所占比例。

15. C

16. C 【原文参考依据--C 段】整个 C 段都是举例说明珊瑚的经济，旅游的价格估值，以及大量数据。

17. D 【原文参考依据 --D 段第一二句】
Unfortunately, coral reefs are dying around the world. In particular, coral mining, agricultural and urban runoff, pollution (organic and inorganic), disease, and the digging of canals and access into islands and bays are localized threats to coral ecosystems.

18. E 【原文参考依据 --E 段倒四行】
Whenever people grab, kick, and walk on, or stir up sediment in the reefs, they contribute to coral reef destruction.

19. D 【原文参考依据 --D 段第七行】
Some current fishing practices are destructive and unsustainable.

20-25 判断题

20. True 【原文参考依据 --A 段第十一行】
They provide a home for 25% of all marine species, including fish, mollusks, worms, crustaceans, echinoderms, sponges, tunicates and other cnidarians.

21. True 【原文参考依据 --A 段第二行】
The Indo-Pacific region accounts for 91.9% of this total area. 91.9% 分布集中在印度-太平洋区域。符合地理上的 disproportionately（不均衡，不平均）。

22. Not Given 【原文参考依据--无】原文未提及题干内容。

23. Not Given 【原文参考依据--无】原文未提及题干内容。

24. True 【原文参考依据 --C 段第十四行】
Further, reef tourism is important source of employment, especially for some of the world's poorest people.

25. Not Given 【原文参考依据--无】原文未提及题干内容。

26 选择题

26. C 【原文参考依据--通篇】本文主要内容为珊瑚礁的所带来的益处及其目前不容乐观的处境，C 答案与此相符。而 A、B、D 答案则只是文中的部分内容。

复印机的发明

勘误：填空题 7-13，由原本 no more than two words 改为 no more than three words

1-6 判断题

1. False 【原文参考依据 --A 段第五行】

When the Sumerians transposed spoken words into stylus marks on clay tablets more than 5,000 years ago, they hugely extended the human network that language had created.

2. Not Given 【原文参考依据--无】文中 B 段前半部分提及 Johann Gutenberg 发明了复印机，但并未提及使用前需要如何培训的内容。

3. Not Given 【原文参考依据 --B 段第九行】

The first true mechanical copier was manufactured in 1780, when James Watt, who is better known as the inventor of the modern steam engine, created the copying press. 注意这一题修饰 James Watt 的定语从句中使用的是“is”，说明“better known as the inventor of the modern steam engine”是一个客观事实，是为了将 James Watt 介绍给读者的一种方式，而不是指 1780 年时他已经因发明蒸汽机而著名。如果要表达“在 1780 年，James Watt 已经因为发明蒸汽机而著名”应该将“is”改为“was”。因此原文并未明确表示 1780 年 Watt 已经发明了蒸汽机。本题陷阱很难发现，同学们对比原文和题干的时候要更认真、仔细噢！

4. True 【原文参考依据 --C 段第四行】

Competing manufacturers soon introduced other copying technologies and marketed machines called Duplition, Dial-A-Matic Autostat, Verifax, Copease and Copymation. All required expensive chemically treated papers.

5. False 【原文参考依据 --C 段倒五行及 D 段首句】

The machines were displaced, beginning in the late 1800s, by a combination of two 19th century inventions: the typewriter and carbon paper. For those reasons, copying presses were standard equipment in offices for nearly a century and a half.None of those machines are still manufactured today. 文中指出 typewriter and carbon paper 是 standard equipment(标准设备)，且存活了一个半世纪，如此一来，就不可能因卖的不好而很快淘汰。其次，根据 D 段首句的原文可知，它确实已经被取代了。因此，题干前半部分是对的，但后半部分与原文不符。

6. False 【原文参考依据 --D 段第五行】

In 1959, it introduced an office copier called the Haloid Xerox 914, a machine that, unlike its numerous competitors, made sharp, permanent copies on ordinary paper -- a huge breakthrough. 题干说 Haloid Xerox 914 需要特殊的纸张，而文中说该机器只需“ordinary paper”，题干意思与原文不符。

7-13 Summary

7. (normal) inventor 【原文参考依据 --E 段倒八行】

Compare with competitors, Carlson was not a normal inventor in 20th-century.

8. corporations 【原文参考依据 --E 段倒七行】

He made his discovery in solitude in 1937 and offered it to more than 20 major corporations, among them IBM, General Electric, Eastman Kodak and RCA.

9. turned him down 【原文参考依据 --E 段倒四行】

All of them turned him down, expressing what he later called “an enthusiastic lack of interest” and thereby passing up the opportunity to manufacture what Fortune magazine would describe as “the most successful product ever marketed in America”.

10. commercial triumph 【 原文 参 考 依 据 --F 段 首 句 】

Carlson's invention was indeed a commercial triumph.

11. wealthy【原文参考依据--G 段首句】Xerography eventually made Carlson a very wealthy man.

12. possessions 【 原文 参 考 依 据 --G 段 倒 六 行 】

His possessions seemed to be composed of the number of things he could easily do without.

13. charities 【 原文 参 考 依 据 --G 段 倒 四 行 】

He spent the last years of his life quietly giving most of his fortune to charities.