

Exercise 8

Heat pumps circulate a fluid refrigerant that cycles alternatively from its liquid phase to its vapor phase in a closed loop. The refrigerant, starting as a low-temperature, low-pressure vapor, enters a compressor driven by an electric motor. The refrigerant leaves the compressor as a hot, dense vapor and flows through a heat exchanger called the condenser, which transfers heat from the refrigerant to a body of air. Now the refrigerant, as a high-pressure, cooled liquid, confronts a flow restriction which causes the pressure to drop. As the pressure falls, the refrigerant expands and partially vaporizes, becoming chilled. It then passes through a second heat exchanger, the evaporator, which transfers heat from the air to the refrigerant, reducing the temperature of this second body of air.

(126 words)

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1. According to the passage, the role of the flow restriction in a heat pump is to
- (A) measure accurately the flow rate of the refrigerant mass at that point
 - (B) compress and heat the refrigerant vapor
 - (C) bring about the evaporation and cooling of refrigerant
 - (D) exchange heat between the refrigerant and the air at that point
 - (E) reverse the direction of refrigerant flow when needed

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Traditionally, the study of history has had fixed boundaries and focal points—periods, countries, dramatic events, and great leaders. It also has had clear and firm notions of scholarly procedure: how one inquires into a historical problem, how one presents and documents one's findings, what constitutes admissible and adequate proof. The recent popular psychohistory,

committed to Freudian psychoanalysis, takes a radically different approach. This commitment precludes a 10 commitment to history as historians have always understood it. Psychohistory derives its —facts not from history, the detailed records of events and their consequences, but from psychoanalysis of the individuals who made history, and deduces its theories 15 not from this or that instance in their lives, but from a view of human nature that transcends history. It denies the basic criterion of historical evidence: that evidence be publicly accessible to, and therefore assessable by, all historians. Psychohistorians, convinced of the 20 absolute rightness of their own theories, are also convinced that theirs is the —deepest explanation of any event that other explanations fall short of the truth.

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2. Which of the following best states the main point of the passage?

- (A) The approach of psychohistorians to historical study is currently in vogue even though it lacks the rigor and verifiability of traditional historical method.
- (B) Traditional historians can benefit from studying the techniques and findings of psychohistorians.
- (C) Areas of sociological study such as childhood and work are of little interest to traditional historians.
- (D) The psychological assessment of an individual's behavior and attitudes is more informative than the details of his or her daily life.
- (E) History is composed of unique and nonrepeating events that must be individually analyzed on the basis of publicly verifiable evidence.

3. The author of the passage puts the word —deepest in quotation marks most probably in order to

- (A) question the usefulness of psychohistorians' insights into traditional historical scholarship
- (B) draw attention to a contradiction in the psychohistorians' method
- (C) emphasize the major difference between the traditional historians' method and that of psychohistorians

- (D) disassociate her opinion of the psychohistorians' claims from her opinion of their method
(E) signal her reservations about the accuracy of psychohistorians' claims for their work

阅读 1:

Q1: flow restriction 在热泵中的作用是什么?

解析: 由 flow restriction 定位至 line 10: confronts a flow restriction which causes the pressure to drop. As the pressure falls, the refrigerant expands and partially vaporizes, becoming chilled。因此, 正确选项 C;

阅读 2: 搞清楚文章脉络, 先是 Traditionally, the study of history..., 然后是 The recent popular psychohistory, 而后又提到 Psychohistory derives its facts not from history, 接着说的都是 Psychohistory 怎样不遵从历史 evidence 等等。

Q1: main idea?

由以上分析可知, recent psychoanalysis 很火, 但是不客观。选 A

Q2: deepest 加引号想说明什么?

解析: 有文章后半部分基调可知, 作者并不赞同 modern psychohistorians, 所以, 当这些人觉得自己 deepest 时, 作者持保留意见。选 E

Eight percent of the Earth's crust is aluminum, and there are hundreds of aluminum-bearing minerals and vast quantities of the rocks that contain them. The best aluminum ore is bauxite, defined as aggregates of aluminum minerals, more or less impure, in which aluminum is present as hydrated oxides. Bauxite is the richest of all those aluminous rocks that occur in large quantities, and it yields alumina, the intermediate product required for the production of aluminum. Alumina also occurs naturally as the mineral corundum, but corundum is not found in large deposits of high purity, and therefore it is an impractical source for making aluminum. Most of the many abundant nonbauxite aluminous minerals are silicates, and, like all silicate minerals, they are refractory, resistant to analysis, and extremely difficult to process. The aluminum silicates are therefore generally unsuitable alternatives to bauxite because considerably more energy is required to extract alumina from them. (153 words)

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4. The author implies that a mineral must either be or readily supply which of the following in order to be

classified as an aluminum ore?

- (A) An aggregate
- (B) Bauxite
- (C) Alumina
- (D) Corundum
- (E) An aluminum silicate

For the following question, consider each of the choices separately and select all that apply

5. The passage supplies information for answering all of the following questions regarding aluminous minerals

- ☐ A Are aluminum-bearing nonbauxite minerals plentiful?
- ☐ B Do the aluminous minerals found in bauxite contain hydrated oxides?
- ☐ C Are aluminous hydrated oxides found in rocks?

6. The author implies that corundum would be used to produce aluminum if

- (A) corundum could be found that is not contaminated by silicates
- (B) the production of alumina could be eliminated as an intermediate step in manufacturing aluminum
- (C) many large deposits of very high quality corundum were to be discovered
- (D) new technologies were to make it possible to convert corundum to a silicate
- (E) manufacturers were to realize that the world's supply of bauxite is not unlimited

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Tillie Olsen's fiction and essays have been widely and rightly acknowledged, particularly by contemporary feminists, as major contributions to American literature. Yet few of Olsen's readers realize the extent to which her vision and choice of subject are rooted in an earlier literary heritage—the tradition of radical political thought, mostly socialist and anarchist, of the 1910's and 1920's, and the Old Left tradition of the 1930's. I do not mean that one can adequately explain the eloquence of her work in terms of its political origins, or that left-wing politics were the single most important influence on it. My point is that its central

consciousness—its profound understanding of class and gender as shaping influences on people's lives—owes much to that earlier literary heritage.
(126 words)

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For the following question, consider each of the choices separately and select all that apply

7. According to the author, which of the following is NOT true of the heritage mentioned in the passage?

- ☐ A It emphasizes gender as the determinate influence on people's lives.
- ☐ B It includes political traditions that span three decades of the twentieth century.
- ☐ C It has been the most important influence on Olsen's work.

8. Select the sentence in which the author denies possible interpretations of an earlier assertion.

阅读 1: 文章讲了几种铝矿, 每种的存在量, 含铝的多少, 以及提取的难易程度。

Q4: 一种矿必须包含什么或者本身就是什么才能被定义为铝矿?

解析: 文章最先提到的是 **bauxite, it yields alumina**。然后是 **Alumina** 本身也会 **occurs naturally as the mineral corundum**, 最后说到 **silicate**, 可以 **extract alumina**, 所以正确选项 C;

Q5: 关于铝矿, 作者回答了哪几个问题?

解析: **A: nonbauxite minerals** 是否充足? 定位至文章 line 13: **many abundant nonbauxite aluminous**, 有回答;

B: bauxite 中的铝矿含有水和氧化物么? 定位至 line 6: **present as hydrated oxides**, 有回答;

C: rocks 里面有没有 **aluminous hydrated oxides**? 还是刚才那个地方, 有回答;

选 ABC;

Q6: 如果怎样, corundum would be used to produce aluminum?

解析: 定位至 line 10, **but corundum is not found in large deposits of high purity, and therefore it is an impractical source for making aluminum**, 选 C;

阅读 2: 典型的反驳观点题目;

Q7: 关于 heritage, 哪个不对?

解析: 由 **heritage** 定位至 line 6: **heritage—the tradition of radical political thought, mostly socialist and anarchist, of the**

1910's and 1920's, and the Old Left tradition of the 1930's。由此得出 B 是对的, 所以选 AC;

Q8: 找出一句话 author denies possible interpretations of an earlier assertion。

解析: 由 **deny** 看到 **I do not mean...** **that one can adequately explain the eloquence of her work in terms of its political origins, or that left-wing politics were the single most important influence on it.**

Our visual perception depends on the reception of energy reflecting or radiating from that which we wish to perceive. If our eyes could receive and measure infinitely delicate sense-data, we could perceive the 5 world with infinite precision. The natural limits of our eyes have, of course, been extended by mechanical instruments; telescopes and microscopes, for example, expand our capabilities greatly. There is, however, an ultimate limit beyond which no instrument can take us; 10 this limit is imposed by our inability to receive sense-data smaller than those conveyed by an individual quantum of energy.

(97 words)

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9. Which of the following describes a situation most analogous to the situation discussed in the last sentence?

(A) A mathematician can only solve problems the solution of which can be deduced from known axioms.

(B) An animal can respond to no command that is more complicated syntactically than any it has previously received.

(C) A viewer who has not learned, at least intuitively, the conventions of painting, cannot understand perspective in a drawing.

(D) A sensitized film will record no detail on a scale that is smaller than the grain of the film.

(E) A shadow cast on a screen by an opaque object will have a sharp edge only if the light source is small or very distant.

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Of Homer's two epic poems, the Odyssey has always been more popular than the Iliad, perhaps because it includes more features of mythology that are accessible to readers. Its subject (to use Maynard Mack's 5 categories) is —life-as-spectacle, for readers, diverted by its various incidents, observe its hero Odysseus primarily from without; the tragic Iliad, however, presents —life-as- experience : readers are asked to identify with the mind of Achilles, whose motivations render him a 10 not particularly likable hero. In addition, the Iliad, more

than the Odyssey, suggests the complexity of the gods' involvement in human actions, and to the extent that modern readers find this complexity a needless complication, the Iliad is less satisfying than the Odyssey, with its simpler 'scheme' of divine justice. Finally, since the Iliad presents a historically verifiable action, Troy's siege, the poem raises historical questions that are absent from the Odyssey's blithely imaginative world.

(148 words)

10. The author uses Mack's —categories (lines 4-5) most probably in order to

- (A) argue that the Iliad should replace the Odyssey as the more popular poem
- (B) indicate Mack's importance as a commentator on the Iliad and the Odyssey
- (C) suggest one way in which the Iliad and the Odyssey can be distinguished
- (D) point out some of the difficulties faced by readers of the Iliad and the Odyssey
- (E) demonstrate that the Iliad and the Odyssey can best be distinguished by comparing their respective heroes

11. The passage is primarily concerned with

- (A) distinguishing arguments
- (B) applying classifications
- (C) initiating a debate
- (D) resolving a dispute
- (E) developing a contrast

12. It can be inferred from the passage that a reader of the Iliad is likely to have trouble identifying with the poem's hero for which of the following reasons?

- (A) The hero is eventually revealed to be unheroic.
- (B) The hero can be observed by the reader only from without.
- (C) The hero's psychology is not historically verifiable.
- (D) The hero's emotions often do not seem appealing to the reader.
- (E) The hero's emotions are not sufficiently various to engage the reader's attention

阅读 1:

Q9: 最后一句话意思是：然而仪器都有无法超越的一个极限。这个极限就是因为我们无法接受比个人所传达的能量量子还小的 sensedata 造成的。由此，选 D； smaller than 可以算是个关键词吧

阅读 2:

先上翻译：就荷马的两部史诗巨著而言，奥德赛总是比伊利亚特更为人们喜爱。这也许是因为奥德赛具备更多易为读者所接受的神话特征。奥德赛的主题（按 Maynard Mack 的分类）是把“人生作为外部景观”的，因为读者被形形色色的事件所分散，主要从英雄奥德赛的外在表现来观察他；然而悲剧伊利亚特却表现了“人生作为内心体验”的主题：它促使读者与阿卡琉斯的内心产生共鸣，而阿卡琉斯的动机却使他成了一个不特别招人喜爱的英雄。此外，伊利亚特比奥德赛更多地暗示了众神对人的行为的影响具有复杂性，而现代读者认为这种复杂性是多余的复杂化，从这个程度来讲，伊利亚特不如奥德赛，因为后者更简单地体现了神的公正性。最后，因为史诗伊利亚特中提到了特洛伊围城这一有史可查的事件，因而会引发一些历史学上的争议，但奥德赛因为描绘的是一个充满想象的世界，所以就没有这样的问题。

Q10: 作者引用了 Mack's categories 是要干什么？

解析：看到 line 4-5, 这个 categories 说了什么，一个是 life-as-spectacle，另一个是 life-as-experience，说以是想说明二者有什么不同。选 C；

Q11: 文章主要讲什么？

解析：文章主要就是作对比，选 E；

Q12: Iliad 的读者 identify with the poem's hero 有困难是什么原因？

解析：由 identify with 定位到 line 8: readers are asked to identify with the mind of Achilles, whose motivations render him a not particularly likable hero. 选 D；