1. The correct statement about saving water is 關於節約用水的正確說法是



- A. To turn off electrical equipment when they are not in use 關閉不使用 的電氣設備
- B.Taking a walk or cycle to a nearby place 步行或騎自行車到附近的地方
- C.To collect rainwater and use it to wash the floor outside your house 收集雨水並用它來清洗屋外的地板
- D.Pack items that can be recycled and bring them to a recycling center 將可回收的物品打包並送到回收中心
- 2. The correct statement about saving energy is _____.關於節能的正確 說法是



- A.To turn off electrical equipment when they are not in use 關閉不使用的電氣設備
- B.Taking a walk or cycle to a nearby place 步行或騎自行車到附近的地方
- C.To collect rainwater and use it to wash the floor outside your house 收集雨水並用它來清洗你家外面的地板
- D.Pack items that can be recycled and bring them to a recycling center 將可回收的物品打包, 送到回收中心

3. Soil is made of 土壤是由



- A.weathered rocks and minerals 風化 岩礦
- B.dead plants and animals 死去的動植物
- C.air and water 空氣和水
- D.all of the above 以上所有
- 4. What are the main sources of water pollution? 水污染的主要來源是什麼?



- A.Plastic, Paper, and Metal 塑料、紙和金屬
- B.Snails in water 水中的蝸牛
- C.There is a boot with a snake inside of it that somehow in the nearby lake. 附近的湖里有一隻靴子, 裡面有一條蛇。
- D.Agriculture, Industry, and Community 農業、工業和社區
- 5. Answer the following question based on the following statements: Assertion(A): A man takes wooden logs on his head from the ground to the top of the hill. The work done by man on logs and logs now have potential energy. Reason(R): Energy can neither be created nor be destroyed. It can only be converted from one form to another.

根據下列陳述回答下列問題: 斷言 (A):一個人頂著木頭從地上爬到山頂。 人在圓木和圓木上所做的工作現在具有勢能。 原因(R):

能量既不能被創造也不能被消滅。 它只能從一種形式轉換為另一種形式。



- A. Both A and R are true and R is the correct explanation of A. A 和 R 都為正確, R 是對 A 的正確解釋。
- B. Both A and R are true but R is not the correct explanation of A. A 和 R 都正確, 但 R 不是對 A 的正確解釋。
- C. A is true but R is false. A 為正確, 但 R 不對。
- D. A and R both are false A 和 R 都是不 對的
- 6. Which Fuel is used in thermal power plants. 火力發電廠使用哪種燃料。



A) Water 水

B) Uranium

鉗

C) Biomass 生物質

D) Fossil

fuel 化石燃料

7. Assertion: Wind energy farms cannot be established every where.

Reason: The wind energy farms can be established only at those places where wind blows for most part of the year

斷言:風能農場不可能在任何地方都建立起來。 理由:風電場只能建在一年中大部分時間都有

風的地方



- A. Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.
- B. The Assertion and the Reason are correct but the Reason is not the correct explanation of the Assertion.
- C. Assertion is true but the Reason is false.
- D. The statement of the Assertion is false but the Reason is true.
- A. 斷言 和 理由都是正確的, 理由 是對 斷言的正確解釋。
- B. 斷言和原因是正確但原因不是斷言的正確 解釋。
- C. 斷言為正確但原因為不正確。
- D. 斷言的陳述是錯誤的, 但理由是正確的。

8. Match the following 匹配以下問題

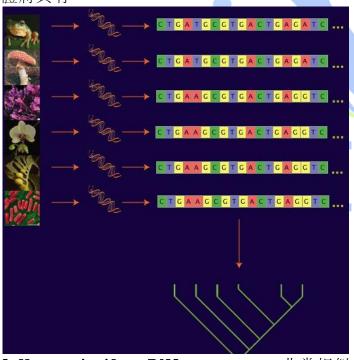
Q. Match column I with column II and select the correct option from the codes given below

Column I		Column II	
Α	Cornea	(i)	Provides opening for light to enter
В	Iris	(ii)	Transduces blue, green and red light
С	Lens	(iii)	Controls the amount of light that enters
D	Optic nerves	(iv)	Alters the shape of lens
E	Pupil	(v)	Transmit information to the ${\cal CNS}$
F	Ciliary muscles	(vi)	Focus light directly on retina
G	Fovea	(vii)	Bends light and protects inner eye

列行 I	列
A角膜	(i)提供光線進入的開口
B虹膜	(ii)換能器,綠光和紅光
C鏡片	(iii)控制進入的光量
D 視神經	(iv) 改變鏡片的形狀
E瞳孔	(v) 向中樞神經系統傳輸
	信息
F睫狀肌	(vi) 將光線直接聚焦在視
	網膜上
G 中央凹	(vii) 彎曲光線並保護內眼

A.A-(vii),B-(iii),C-(vi), D-(v),E-(i),F-(iv),G-(ii) B.A-(i), B-(ii), C-(iii), D-(iv), E-(v), F-(vi), G-(vii) C.A-(vii), B-(vi), C-(v), D-(iv), E-(iii), F-(ii), G-(i) D.A-(vii), B-(iv), C-(vi), D-(v), E-(i), F-(iii), G-(ii)

9. Two organisms that are closely related would have 兩個密切相關的生物 體將具有



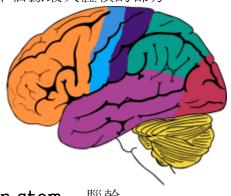
A.Very similar DNA sequence 非常相似的 DNA 序列

B.Exactly the same DNA sequences 完全相同的 DNA 序列

C.No proteins in common 沒有共同的蛋白質

D.Completely different DNA sequence 完全不同的 DNA 序列

10. Identify the part of the brain that takes up the greatest volume 確 定大腦中佔據最大體積的部分



- A.Brain stem 腦幹
- B.Cerebellum 小腦
- C.Pons 腦橋
- D.Cerebrum 大腦

11. Which of the following is part of the peripheral nervous system? 以下哪項是周圍神經系統的一部分?



A.Brain 大腦 髓

B.Spinal chord 脊

C.Heart muscle.心肌 D.Taste buds on tongue 舌頭上的味蕾

12. What is the name of the female gamete in humans? 人類的雌性配子叫什麽名字?



A.Sperm 精子 C.Ovary 卵巢 B.Zygote 合子 D.Ovum 卵子 13. What type of fertilization is happening here? 這裡發生了什麼類型的受精?



A.Internal fertilisation 體內受精 B.External fertilisation 體外受精 C.Internal reproduction 內部複製 D.External reproduction 外部複製

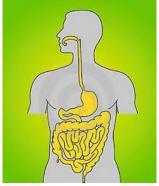
14. The green pigment used in photosynthesis is ______用於光合作用的綠色色素是



A. Phytochrome 光敏色素 Chlorophyll 葉綠素 C. Hemoglobin 血紅蛋白 None 無

D.

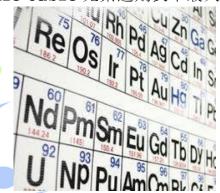
15. Which is the correct sequence of body parts in the human alimentary canal? 人體消化道中哪個身體部位的正確順序是?



(A) Mouth \rightarrow stomach \rightarrow small intestine \rightarrow large intestine \rightarrow oesophagus \Box 腔 \rightarrow 胃 \rightarrow 小腸 \rightarrow 大腸 \rightarrow 食道

- (B) Mouth → oesophagus → stomach → small intestine → large intestine \Box 腔→食道→胃→小腸→大腸
- (C) Mouth \rightarrow stomach \rightarrow oesophagus \rightarrow smallintestine \rightarrow large intestine $\neg \text{EM} \rightarrow \text{EM}$
- (D) Mouth \rightarrow oesophagus \rightarrow stomach \rightarrow large intestine \rightarrow small intestine $\neg \text{EM} \rightarrow \text{EM$

16. What is the biggest group on the periodic table 元素週期表中最大是什麼?



A.Metals.金屬

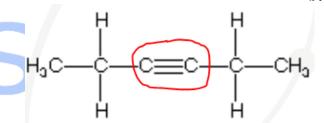
B.Nonmetals 非金

屬

C.Metaloids 類金屬 D.Halogens

鹵素

17. The carbons circled in red... 紅色圈出的碳...



A.Are double bonded 雙鍵

B.Are sharing two pairs of electrons 共享兩對電子

C.Are sharing three pairs of electrons 共享三對電子

D.Are sharing three electrons 共享三個電子

18. What do we hear thunder after we see a flash of lightning, usually sometime later? 我們在看到 閃電之後聽到雷聲是什麼意思,通常是在稍後的某個時間?

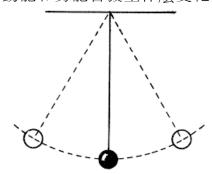


A.Sound travels at a speed of 300,000,000 m/s. while light travels at a speed of 330 m/s. 聲音以 300,000,000 米/秒的速度傳播。 而光以 330 m/s 的速度傳播。

- B. Sound travels at a speed of 330 m/s while light travels at a speed of 3,000,000 m/s. 聲音以 330 m/s 的速度傳播, 而光以 3,000,000 m/s 的速度傳播。
- C. Sound travels at a speed of 330 m/s while light travels at a speed of 300,000,000 m/s. 聲音以 330 m/s 的速度傳播, 而光以 300,000,000 m/s 的速度傳播。

D.Because imagine dragons thunder, feel the thunder. 因為想像龍打雷, 感受雷聲。

19. As a pendulum swings from its highest to lowest position, what happens to its kinetic and potential energy? 當鐘擺從最高位置擺動到最低位置時,它的動能和勢能會發生什麼變化?



A.Both the potential energy and kinetic energy decrease 勢能和動能都減少

- B.The potential energy decreases while the kinetic energy increases 勢能減小,動能增大
- C.The kinetic energy decreases while the potential energy increases 動能 減少,勢能增加
- D.Both the potential energy and kinetic energy increase 勢能和動能都增加

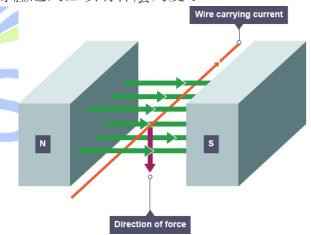
20. What is the value of gravity on Earth?地球上的引力值是多少?



A.8.9 m/s-2 C.9.8 m/s-2

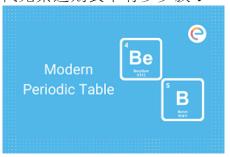
B.9.3 m/s-2 D.8.66 m/s-2

21. What angle must there be between a magnetic field and a conductor in order for the maximum force to be exerted? 為了施加最大的力,磁場和導體之間必須有什麼角度?



Answer (only in number) 答案 (只有數字):____

22. How many groups are there in modern periodic table? 現代元素週期表中有多少族?



Answer (only in number) 答案 (只有數字) :

23. How many carbons are there in the figure? 圖中有多少個碳?

Answer (only in number) 答案 (只有數字):_____

24. What valency number of hydrogen is...... 氫的價數是多少......



Valence Electrons in Hydrogen (H)

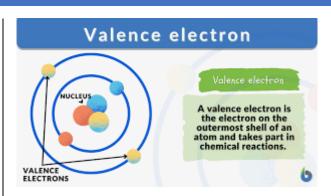
Answer (only in number) 答案 (只有數字):_____

25. X⁺

The atomic number of an element X is 19. The number of electrons in its ion will be:

X+

元素 X 的原子序數為 19。其離子中的電子數為:



Answer (only in number) 答案 (只有數字) :_____