

1. Release of which of the following gases is responsible for acid rain?

以下哪種氣體的釋放是造成酸雨的原因？



- A. Nitrogen dioxide 二氧化氮
- B. Water 水
- C. Carbon dioxide 二氧化碳
- D. None of the above 以上都不是

2. Which of the following is a factor responsible for pollution of rivers?

以下哪項是造成河流污染的因素？



- A. Washing clothes in the river 在河裡洗衣服
- B. Releasing chemical waste in the river 向河流排放化學廢物
- C. Dumping household waste in the river 將生活垃圾傾倒入河
- D. All of the above 以上所有

3. Which gas exist 21% in atmosphere  
大氣中佔21%的氣體是什麼



- A. Oxygen 氧氣
- B. Carbon dioxide 二氧化碳
- C. Monoxide dioxide 一氧化二氧化物
- D. Nitrogen 氮氣

4. The moon is a natural \_\_\_\_\_ of Earth.  
月球是地球的天然\_\_\_\_\_。

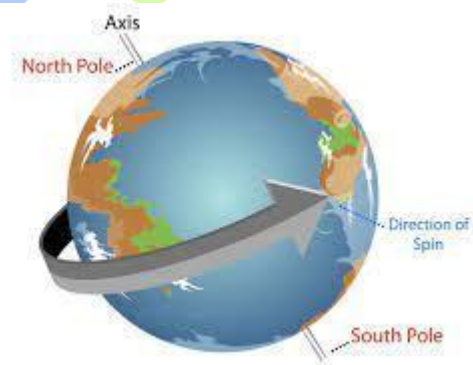


- A. comet 彗星
- B. axis 軸
- C. satellite 衛星
- D. space probe 太空探測器

5. Earth's \_\_\_\_\_ on its axis causes day and night.

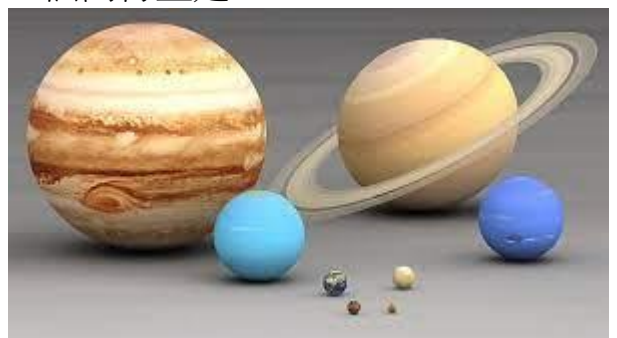
地球在其軸上的 \_\_\_\_\_ 導致白天和黑夜。

(North Pole: 北極 ; South Pole: 南極;  
Direction of Spin: 旋轉方向; Axis: 軸)



- A. rotation 自轉
- B. revolution 公轉
- C. phase 相
- D. comet 彗星

6. The four inner planets are:  
四個內行星是：



- A. Jupiter, Saturn, Uranus and Neptune 木星、土星、天王星和海王星
- B. Mercury, Venus, Earth and Pluto 水星、金星、地球和冥王星
- C. Mercury, Venus, Earth and Mars 水星、金星、地球和火星
- D. Jupiter, Saturn, Neptune and Pluto 木星、土星、海王星和冥王星

7. You perform an experiment taking similar bulbs and cells but two different solutions A and B. You find that the bulb in the setup A glows more brightly as compared to that of the setup B. You would conclude that 您使用相似的燈泡和電池進行實驗，但採用了兩種不同的溶液 A 和 B。您發現與設置 B 相比，設置 A 中的燈泡發光更亮。您會得出結論



- A. higher current is flowing through the circuit in setup A 更高的電流流過設置 A 中的電路
- B. higher current is flowing through the circuit in setup B 更高的電流流過設置 B 中的電路
- C. equal current is flowing through both the circuits 相等的電流流過兩個電路
- D. No conclusion 沒有結論

8. When current is passed through a mixture of water and lemon juice, bubbles rise from one of the electrodes. The bubbles are rising from the solution because 當電流通過水和檸檬汁的混合物時，其中一個電極會冒出氣泡。氣泡從溶液中升起，因為

- A. of the heating effect of current 電流的熱效應
- B. of the chemical effect of current 電流的化學效應

- C. current produces magnetic field around the electrodes 電流在電極周圍產生磁場
- D. current always produces air bubbles when passed through a liquid 電流通過液體時總是產生氣泡

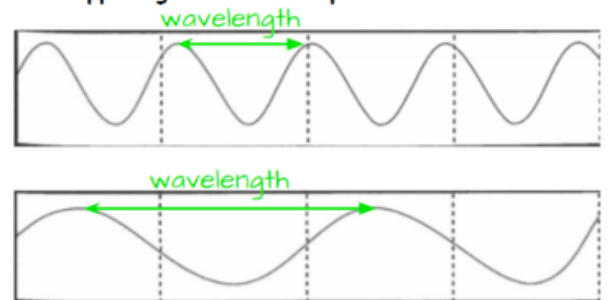
9. The volume of a sound is measured in units called \_\_\_\_\_. 聲音的音量用稱為\_\_\_\_\_的單位來衡量



- A. decibels 分貝
- B. hertz 赫茲
- C. frequency 頻率
- D. amplitude 振幅

10. What is changed in the second picture? 第二張圖有什麼變化？  
(wavelength: 波長)

What is happening in these two pictures?



- A. Someone is talking louder in picture 2 圖2中有人說話的聲音更大
- B. Someone is talking softer in picture 2 圖2中有人說話的聲音更輕
- C. Someone is talking lower pitch in picture 2 有人在圖2中說話的音調更低
- D. Someone is talking higher pitch in picture 2 有人在圖2中說話的音調更高



11. Which would NOT be a way of reducing friction?

哪一種不是減少摩擦力的方法？



A.making the surfaces smoother使表面更光滑

B.using lubricants such as waxes, oils, or grease使用蠟、油或油脂等潤滑劑

C.changing from sliding friction to rolling friction using ball bearings使用滾珠軸承從滑動摩擦改為滾動摩擦

D.Using kitty litter on snow and ice to help your car gain traction在冰雪上使用貓砂來幫助您的汽車獲得牽引力

12. What surface would have the most friction? 什麼表面的摩擦力最大？



A.Glass玻璃

B.Marble彈珠

C.Pool table台球桌

D.Sandpaper砂紙

13. Matt had a toy truck weighing 15 grams and a toy car weighing 6 grams. Using the same amount of force on each toy, he pushed them both across his desk. The car reached the other side of the desk in 1.5 seconds, but it took the truck 3.5 seconds to reach the other side of the desk. Why did the car travel the same distance in a shorter amount of time? 馬特有一輛重 15 克的玩具卡車和一輛重 6 克的玩具車。他對每個玩具都用了相同的力氣，把它們都推到桌子的另一邊。汽車在 1.5 秒內到達了桌子的另一邊，而卡車卻用了 3.5 秒到達了桌子的另一邊。為什麼汽車在更短的時間內行駛了相同的距離？



A.The car had less mass and traveled at a faster speed than the truck. 汽車質量更小，行駛速度比卡車快。

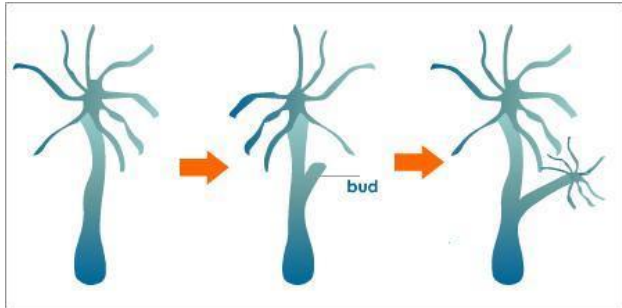
B.The car had more mass and traveled at a faster speed than the truck. 汽車的質量更大，行駛速度比卡車快。

C.The truck had more mass and traveled at a faster speed than the car. 卡車的質量更大，行駛速度比汽車快。

D. None of them以上都不是

14. Hydra produce offspring by growing the new individual on the body of the parent. This is an example of...

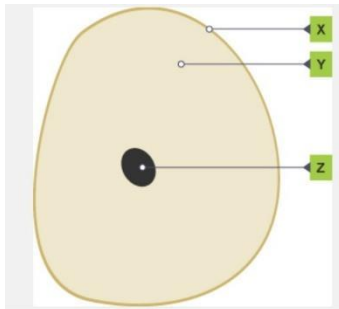
水螅通過在父母的身體上培養新的個體來產生後代。這是一個.....的例子



- A.budding. 萌芽      B.fission. 裂變  
C.regeneration. 再生      D.tubers. 塊莖

15. Name the organelle labelled Y.

命名標記為 Y 的細胞器。



- A.cell membrane細胞膜      B.nucleus細胞核  
C.cytoplasm細胞質      D.cell wall細胞壁

16. Which of the following represents mitochondrion?

以下哪項代表線粒體？

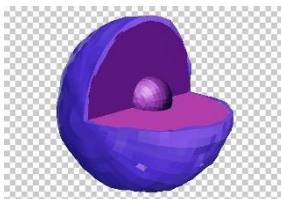
A



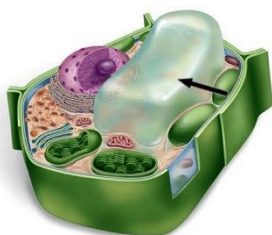
B



C



D



17. Large scale cutting of trees are called  
大規模砍伐樹木被稱為



- A.Reforestation再造林  
B.Afforestation造林  
C.Deforestation去森林化  
D.None of these這些都不是

18. Which of the following pairs of natural resources are exhaustible?

以下哪對自然資源是可耗盡的？

(以下給出了自然資源清單。)

Wind: 風

Coal: 煤炭

Minerals: 礦物質

Petroleum: 石油

Sunlight: 陽光

Biomass: 生物質

A list of natural resources is given.

I. Wind	II. Coal
III. Minerals	IV. Petroleum
V. Sunlight	VI. Biomass

- A.II and(和) IV      B.I and(和) V  
C.IV and(和) VI      D.V and(和) VI



19. What must be present for Fossil Fuels to form?

化石燃料的形成必須存在什麼？

(Coal: 煤炭; Oil: 石油; natural gas: 天然氣;  
Kerosene: 燈油; Propane: 丙烷)



A. Bones and Sediment 骨骼和沉積物

B. Dead Organisms and Layers of Sediment 死亡生物和沉積物層

C. Dead Organisms, Layers of Sediment, and Heat & Pressure over time 死亡生物，沉積物層以及隨時間推移的熱量和壓力

D. Bones, Layers of Sediment, and Heat & Pressure over time 骨頭，沉積物層以及隨時間推移的熱量和壓力

20. What is the difference between a natural and synthetic material?

天然材料和合成材料有什麼分別？



A. Natural material is made from chemicals and synthetic is made from nature 天然材料由化學品製成，合成材料由天然製成

B. Natural material is made directly from nature and synthetic material is made from chemicals 天然材料直接取自自然界，合成材料取自化學製品

C. Natural material is made from petroleum and synthetic material is made from wool 天然材料由石油製成，合成材料由羊毛製成

D. Natural material is made from trees and synthetic materials are made from plastics 天然材料由樹木製成，合成材料由塑料製成

21. How long does it take the earth to rotate once in hours?

地球自轉一圈需要多長時間(以小時為單位)？



Answer (only in number) 答案 (只用數字來表示) : \_\_\_\_\_

22. What is the temperature when the water boils in degree Celsius?

水沸騰時的溫度是多少攝氏度？



Answer (only in number) 答案 (只用數字來表示) : \_\_\_\_\_

23. One hour equals \_\_\_\_\_ seconds.

一小時等於\_\_\_\_\_秒。



Answer (only in number) 答案 (只用數字來表示) : \_\_\_\_\_

24. The average weather pattern taken over a long time is called the climate of the place. About how many years are taken into consideration?

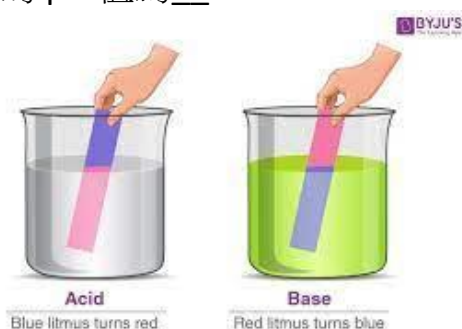
長時間內的平均天氣模式稱為該地點的氣候。大約多少年被考慮在內？



Answer (only in number) 答案 (只用數字來表示) : \_\_\_\_\_

25. If a solution is neither acidic or basic it has a number pH of \_\_\_\_.

如果溶液既不是酸性也不是鹼性，則它的 pH 值為\_\_。



Answer (only in number) 答案 (只用數字來表示) : \_\_\_\_\_

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