

Grade 7 中學1年級

1. 生物體最基本的生命特徵是 ____。The most fundamental characteristic of living organisms is ____.

- a. 繁殖 Reproduction b. 新陳代謝 Metabolism c. 生長 Growth d. 運動 Movement

2. 下列哪些可能是經常做運動的好處? Which of the following may be benefits of regular exercise?

- (1) 增強骨骼肌 Strengthening skeletal muscles
(2) 增加血液的帶氧量 Increasing oxygen-carrying capacity of the blood
(3) 增加身體對刺激作出反應的時間 Increasing the body's response time to stimuli

- a. (1) (2) b. (1) (3) c. (2) (3) d. (1) (2) (3)



3. 下列變化中屬於化學變化的是 ____。Among the following changes, which one is a chemical change?

- a. “乾冰”昇華 Sublimation of dry ice b. 車胎爆炸 Tire explosion
c. 鐵生鏽 Rusting of iron d. 燈泡通電發光 Light bulb lighting up

4. 解決地球上“淡水危機”的措施最合理的是 ____。

Which of the following measures is the most reasonable solution to address the "freshwater crisis" on Earth?

- a. 用經濟的辦法使海水淡化 Economically desalinating seawater
b. 讓海水流入河中 Allowing seawater to flow into rivers
c. 把冰川溶化 Melting glaciers
d. 少喝水 Drinking less water



5. 下列有關核電廠的句子，哪些正確？

Which of the following statements about nuclear power plants are correct?

(1) 若核電廠發生意外，反應堆會像原子彈一般地爆炸。

If an accident occurs in a nuclear power plant, the reactor will explode like an atomic bomb.

(2) 在核反應堆中用過的燃料棒經數千年時間仍帶輻射。

Used fuel rods in a nuclear reactor remain radioactive for thousands of years.

(3) 在正常操作下，核電廠排出的冷卻水帶有輻射。

Under normal operation, cooling water discharged from a nuclear power plant contains radiation.

a. (1)

b. (2)

c. (1)(3)

d. (2) (3)



Answers:

1. b

2. d

3. c

4. a

5. d

Grade 8 中學2年級

1. 一束光垂直射到鏡面上，其入射角為 _____。

A beam of light perpendicular to a mirror has an angle of incidence of _____.

a. 0°

b. 90°

c. 45°

d. 以上答案都不對 None of the above



2. 人耳能聽到聲音的條件是 _____。

The conditions for the ear to hear sound are _____.

a. 有介質 The presence of a medium

b. 有發聲體 The presence of a sound source

c. 有發聲體和耳朵 The presence of a sound source and an ear

d. 有發聲體、介質和耳朵 The presence of a sound source, a medium, and an ear

3. R^{3+} 離子核外有10個電子，則其核內的質子數為_____。

If an R^{3+} ion has 10 electrons outside its nucleus, then the number of protons inside its nucleus is _____.

- a. 8 b. 10 c. 13 d. 無法確定 Non defined

4. 在彈簧測力計的兩側沿水準方向各加6N拉力並使其保持靜止，此時彈簧測力計的示數為_____。

If a force of 6N is applied on each side of a spring balance in the horizontal direction, and the system is in equilibrium, then the reading on the spring balance is _____.

- a. 0 N b. 3 N c. 6 N d. 12 N

5. 懷孕就是指一粒“種子”植入子宮內膜上，這粒“種子”是指_____。

Pregnancy refers to the implantation of a "seed" into the uterine endometrium. This "seed" refers to _____.

- a. 胎兒 Fetus b. 胚泡 Blastocyst c. 胚胎 Embryo d. 受精卵 Fertilized egg



Answers: 1. a 2. d 3. c 4. d 5. d

Grade 9 中學3年級

1. 元素與氧元素的本質區別是_____。

The essential difference between an element and an oxygen element is _____.

- a. 質子數不同 Different number of protons
b. 電子數不同 Different number of electrons
c. 原子核數不同 Different number of atomic nuclei
d. 前者帶正電，後者帶負電 Former carries a positive charge, latter carries a negative charge

2. 使用下列簡單機械時，不可以省力的是_____。

The simple machine that does not provide mechanical advantage is _____.

- a. 杠杆 Lever b. 定滑輪 Fixed pulley
c. 動滑輪 Movable pulley d. 滑輪組 Pulley system

3. 在實驗室中做完實驗時，試管內殘留了下列物質，不能用稀鹽酸除去的是 _____。

The substance that cannot be removed using dilute hydrochloric acid from the residue in the test-tube after completing the experiment is _____.

a. 盛過石灰水後留下的白色固體 The white solid left after adding limewater.

b. 盛過生鏽鐵釘後留下的紅棕色固體 The reddish-brown solid left after adding a rusted iron nail.

c. 用氫氣還原氧化銅實驗後留下的一層金屬銅

The layer of metallic copper left after the experiment of reducing copper oxide with hydrogen gas.

d. 硫酸銅溶液與氫氧化鈉溶液反應後留下的藍色的固體

The blue solid left after the reaction of copper sulfate solution with sodium hydroxide solution.



4. 與呼吸作用有關的細胞器是 _____。

The organelle associated with respiration is _____.

a. 核糖體 Ribosomes

b. 高爾基體 Golgi apparatus

c. 質體 Plasmids

d. 線粒體 Mitochondria

5. 雷達的回聲定位功能是模仿哪種動物的本領？

The echo-location feature of radar is modeled after the ability of which animal?

a. 青蛙 Frog

b. 蝙蝠 Bat

c. 鳥 Bird

d. 蝗蟲 Locust

Answers:

1. a

2. b

3. c

4. d

5. b

Competition