O Level Combined Chemistry MCQs

Periodic Table Test 2.0

Q1

Rubidium is below potassium in Group I of the Periodic Table.

Which statement is most likely to be correct?

- Rubidium can displace potassium from aqueous potassium chloride. Α
- Rubidium has a higher melting point than potassium. B
- Rubidium is less dense than potassium.
- Rubidium reacts with water less vigorously than potassium. D

Q2

The diagram shows the positions of elements L, M, Q, R and T in the Periodic Table.

These letters are not the chemical symbols of the elements.



Which statement about the properties of these elements is correct?

- L reacts more vigorously with water than does M. Α EDUCATION
- L, M and Q are all metals. В
- T exists as diatomic molecules. C
- T is more reactive than R. D

Q3

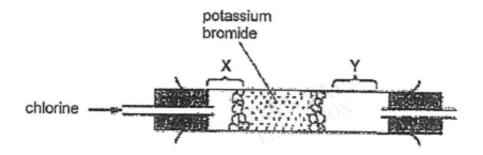
In the Periodic Table, element X is in the same group as chlorine but has a lower boiling point.

Which statement about X is correct?

- A It has a lighter colour than chlorine.
- B It is a liquid at room temperature.
- C It has an atomic number greater than 17.
- D It loses an electron when it reacts with metal.

Q4

In the diagram below, chlorine was passed through a tube. After a short time, coloured substances were seen at X and Y.



What would be observed at X and Y?

| | X | Υ | | | | |
|---|----------------------|----------------------|--|--|--|--|
| A | greenish yellow gas | greenish yellow gas | | | | |
| В | greenish yellow gas | reddish brown vapour | | | | |
| C | reddish brown vapour | greenish yellow gas | | | | |
| D | reddish brown vapour | reddish brown vapour | | | | |

Q5

Rubidium is an alkali metal.

Which statement about rubidium is not correct?

- A Rubidium is more reactive than potassium
- B Rubidium forms an ion with a positive charge.
- C Rubidium is a silvery solid at room temperature.
- D Rubidium has a higher melting point than potassium.

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Q6

The diagram shows the positions of elements L, M, Q, R and T in the Periodic Table.

These letters are not the chemical symbols of the elements.

| | | | | | | | | | | |
|---|---|-------|---|--|--|--|--|------|----|---|
| | | | | | | | | | R | T |
| L | | | | | | | | | | |
| М | Q | a T N | 1 | | | | | - 1 | NL | |

Which statement about the properties of these elements is correct?

- A L reacts more vigorously with water than does M.
- B L, M and Q are all metals.
- C T exists as diatomic molecules.
- D T is more reactive than R.

In the Periodic Table, element X is in the same group as chlorine but has a lower boiling point.

Which statement about X is correct?

- A It has a lighter colour than chlorine.
- B It is a liquid at room temperature.
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Q8
Which statement about the trends in Group VII of the Periodic

Which statement about the trends in Group VII of the Periodic Table is correct?

On descending Group VII, the elements have ______

- A decreasing boiling point
- B increasing reactivity
- C lower density
- D darker colour

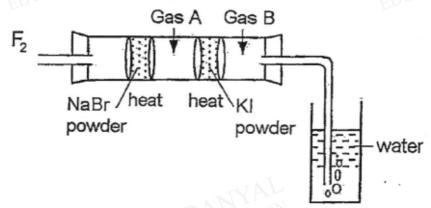
Silicon, Si, is in the same Group of the Periodic Table as carbon. □What would the complete combustion of silane, SiH4, in oxygen be expected to produce?

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- A Si and H₂O
- B SiO and H₂O
- C SiO and H₂
- D SiO₂ and H₂O

Q10

The diagram shows the displacement of halogens.



What are the colours observed for Gas A, B and in the water during the experiment?

| | Gas A | , Gas B | water | | | | |
|---------------|---------------|---------------|-----------------|--|--|--|--|
| A pale yellow | | reddish brown | violet | | | | |
| В | pale yellow | violet | violet brown | | | | |
| C | | violet | | | | | |
| D | reddish brown | brown | reddish brown | | | | |





Answers

Periodic Table Test 2.0

Q1 A

Q2 B

Q3 A

Q4B

Q5 D

Q6 B

Q7 A

Q8 D

Q9 D

Q10 C

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