

9.5 Noble gases

01. 0620_s21_qp_21 Q: 22

Why is helium used to fill balloons?

- A Helium is monoatomic.
 - B Helium is in Group VIII of the Periodic Table.
 - C Helium has a full outer electron shell.
 - D Helium is less dense than air.
-

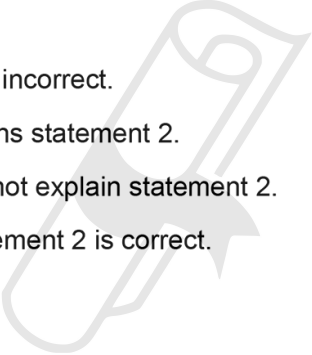
02. 0620_s21_qp_23 Q: 22

Helium and neon exist as monoatomic gases at room temperature and pressure.

statement 1 Helium and neon have eight electrons in their outer shell.

statement 2 Helium and neon are unreactive.

Which option is correct?

- A Statement 1 and statement 2 are incorrect.
 - B Statement 1 is correct and explains statement 2.
 - C Statement 1 is correct, but does not explain statement 2.
 - D Statement 1 is incorrect, but statement 2 is correct.
- 
- Ace | GCSE**
Paper Perfection, Crafted With Passion
-

03. 0620_w21_qp_21 Q: 24

The noble gases are in Group VIII of the Periodic Table.

Which statement explains why noble gases are unreactive?

- A They all have eight electrons in their outer shells.
- B They all have full outer shells.
- C They are all gases.
- D They are all monoatomic.

04. 0620_s20_qp_21 Q: 24

A balloon is filled with helium. Helium is a noble gas and makes the balloon rise up in the air.

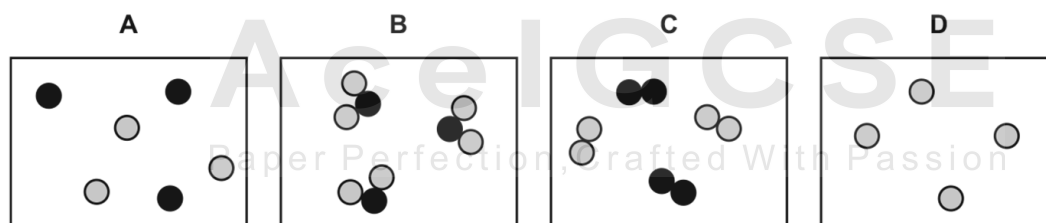
The density of air is 1.23 g/dm^3 .

Which gas is helium?

	density in g/dm^3	reaction with oxygen
A	0.0899	burns rapidly
B	0.179	does not react with oxygen
C	1.78	does not react with oxygen
D	3.75	does not react with oxygen

05. 0620_s20_qp_22 Q: 24

Which diagram shows a mixture of noble gases?



06. 0620_s20_qp_23 Q: 24

Which statement about the noble gases is correct?

- A Argon is used in light bulbs and balloons.
- B Helium reacts with oxygen in the air.
- C They all have full outer electron shells.
- D They are all diatomic molecules.

9.5. NOBLE GASES

07. 0620_w20_qp_21 Q: 27

A flammable gas needs to be removed from a tank at an industrial plant.

For safety reasons, an inert gas is used.

Which gas is suitable?

- A argon
 - B hydrogen
 - C methane
 - D oxygen
-

08. 0620_w20_qp_22 Q: 27

A flammable gas needs to be removed from a tank at an industrial plant.

For safety reasons, an inert gas is used.

Which gas is suitable?

- A argon
 - B hydrogen
 - C methane
 - D oxygen
-

09. 0620_m19_qp_22 Q: 26

Which statement explains why elements in Group VIII of the Periodic Table are unreactive?

- A They are monatomic gases.
 - B They form stable diatomic molecules.
 - C They have a full outer shell of electrons.
 - D They share electrons with each other.
-

10. 0620_s19_qp_21 Q: 22

Which statement about elements in Group VIII of the Periodic Table is correct?

- A They all have a full outer shell of electrons.
 - B They all react with Group I elements to form ionic compounds.
 - C They are all diatomic molecules.
 - D They are all liquids at room temperature.
-

9.5. NOBLE GASES

14. 0620_w19_qp_22 Q: 23

Helium is a noble gas.

Which statement about helium is correct?

- A It has eight electrons in its outer shell.
 - B It is a diatomic gas.
 - C It is reactive.
 - D It is used for filling balloons.
-

15. 0620_w19_qp_23 Q: 23

Which statement describes a gas which is in Group VIII of the Periodic Table?

- A A colourless gas that helps substances burn.
 - B A pollutant gas present in car exhausts.
 - C A gas that is less dense than air and makes a 'pop' sound with a lighted splint.
 - D A gas that is used in lamps.
-

16. 0620_w18_qp_21 Q: 23

An inert gas R is used to fill weather balloons.

Which descriptions of R are correct?

	number of outer shell electrons in atoms of R	structure of gas R
A	2	diatomic molecules
B	2	single atoms
C	8	diatomic molecules
D	8	single atoms

17. 0620_m17_qp_22 Q: 24

The noble gases are in Group VIII of the Periodic Table.

Which statement explains why noble gases are unreactive?

- A They all have eight electrons in their outer shells.
 - B They all have full outer shells.
 - C They are all gases.
 - D They are all monoatomic.
-

9.5. NOBLE GASES

22. 0620_s16_qp_23 Q: 24

Two statements about noble gases are given.

- 1 Noble gases are reactive, monatomic gases.
- 2 Noble gases all have full outer shells of electrons.

Which is correct?

- A Both statements are correct and statement 2 explains statement 1.
- B Both statements are correct but statement 2 does not explain statement 1.
- C Statement 1 is correct but statement 2 is incorrect.
- D Statement 2 is correct but statement 1 is incorrect.

23. 0620_w16_qp_23 Q: 24

Part of the Periodic Table is shown.

Which row correctly describes the properties of elements W, X, Y and Z?

	has variable oxidation states	reacts with cold water	very unreactive	has four outer shell electrons
A	W	Y	Z	X
B	X	W	Y	Z
C	Z	W	Y	X
D	Z	Y	X	W

SN	Paper	Q. No.	Answer
01	0620_s21_qp_21	22	D
02	0620_s21_qp_23	22	D
03	0620_w21_qp_21	24	B
04	0620_s20_qp_21	24	B
05	0620_s20_qp_22	24	A
06	0620_s20_qp_23	24	C
07	0620_w20_qp_21	27	A
08	0620_w20_qp_22	27	A
09	0620_m19_qp_22	26	C
10	0620_s19_qp_21	22	A
11	0620_s19_qp_22	22	D
12	0620_s19_qp_23	22	A
13	0620_w19_qp_21	23	C
14	0620_w19_qp_22	23	D
15	0620_w19_qp_23	23	D
16	0620_w18_qp_21	23	B
17	0620_m17_qp_22	24	B
18	0620_s17_qp_21	24	D
19	0620_w17_qp_21	24	D
20	0620_s16_qp_21	24	C
21	0620_s16_qp_22	24	B
22	0620_s16_qp_23	24	D
23	0620_w16_qp_23	24	C



Ace | GCSE

 Paper Perfection, Crafted With Passion