

25 Part of the Periodic Table is shown.

Which element is an inert gas?

A simplified periodic table with 18 columns and 4 rows. The columns represent groups, and the rows represent periods. The elements are labeled as follows:

- Row 1: Column 1 is 'A', Column 18 is empty.
- Row 2: Column 1 is empty, Column 17 is 'B', Column 18 is empty.
- Row 3: Column 16 is 'C', Column 17 is empty, Column 18 is empty.
- Row 4: Column 15 is 'D', Column 16 is empty, Column 17 is empty, Column 18 is empty.

24 Two statements about noble gases are listed.

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

Which statements about noble gases are 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 **not** correct.
- D** Statement 2 is correct but statement 1 is **not** correct.

21 The table shows some properties of noble gases.

noble gas	density in g/dm ³	boiling point in °C
helium	0.2	−269
neon	0.9	−246
argon	1.8	−186
krypton		
xenon	5.9	−108

Which row predicts the density and the boiling point of krypton?

	density in g/dm ³	boiling point in °C
A	1.4	−75
B	2.4	−195
C	3.8	−153
D	8.5	−213

23 Which statement about the elements in Group VIII is correct?

- A** They all form diatomic molecules.
- B** They all have eight electrons in their outer electron shells.
- C** They all react with oxygen to form oxides.
- D** They all are gases at room temperature.