	melting point in °C	density in g/cm ³	colour	electrical conductor
A	114	4.9	purple	no
в	659	2.7	grey	yes
С	1677	4.5	grey	yes
D	3727	2.3	black	yes

1 Which of the following could be a transition element?

2 The table gives information about four elements, P, Q, R and S.

	melting point in °C	electrical conductivity of element when solid	density in g/cm ³	colour of iodide of element
Р	98	good	0.97	white
Q	-39	good	13.53	red
R	1410	poor	2.33	colourless
S	1535	good	7.87	green

A P, Q and S **B** Q and S only **C** R and S only **D** S only

3 Osmium is a transition element.

Which row gives the expected properties of osmium?

	melting point	density	compounds formed
A	high	high	coloured
в	high	high	white
С	high	low	white
D	low	hìgh	coloured

4 The table gives information about four elements.

Which element is a transition metal?

-	electrical conductivity	density in g/cm ³	melting point in °C
A	good	0.97	98
в	good	7.86	1535
С	poor	2.33	1410
D	poor	3.12	-7

5 Which properties of the element titanium, Ti, can be predicted from its position in the Periodic Table?

	can be used as a catalyst	conducts electricity when solid	has low density	forms coloured compounds
A	1	1	1	x
в	1	1	x	1
С	1	x	1	1
D	x	1	1	1

- 6 Which is **not** a characteristic property of transition metals?
 - A act as catalysts
 - **B** form coloured compounds
 - **C** high melting point
 - **D** low density
- 7 An element X has the two properties listed.
 - 1 It acts as a catalyst.
 - 2 It forms colourless ions.

Which of these properties suggest that X is a transition element?

	property 1	property 2
Α	\checkmark	✓
в	\checkmark	x
С	x	\checkmark
D	X	X

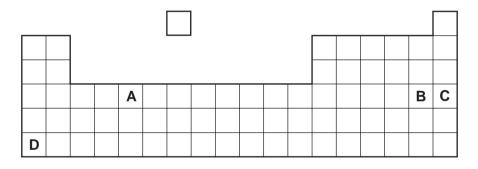
8 An element melts at $1455 \,^{\circ}$ C, has a density of $8.90 \,\text{g/cm}^3$ and forms a green chloride.

Where in the Periodic Table is this element found?

										Α
в										
					С					
									D	

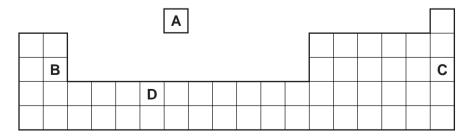
9 An element has a melting point of 1084 °C and a density of 8.93 g/cm³. It's oxide can be used as a catalyst.

In which position in the Periodic Table is the element found?



10 The positions of four elements are shown on the outline of the Periodic Table.

Which element forms a coloured oxide?



11 Which element is a transition metal?

	colour of chloride	melting point of element/°C
A	white	113
B white		1495
С	yellow	113
D	yellow	1495

12 Platinum is a transition metal.

Which statement about platinum is correct?

- **A** It does not catalyse reactions.
- **B** It forms coloured compounds.
- **C** It has a low density.
- **D** It has a low melting point.
- 13 The table gives information about four elements.

Which element is a transition metal?

	colour of element	electrical conductivity of element	colour of oxide
A	black	high	colourless
в	colourless	low	white
с	grey	high	red
D	yellow	low	colourless

14 Which properties of the element titanium, Ti, can be predicted from its position in the Periodic Table?

-	can be used as a catalyst	conducts electricity when solid	has low density	forms coloured compounds
A	1	1	x	1
в	1	1	1	x
С	1	x	1	1
D	x	1	1	1

- 15 An element has the following properties.
 - It forms coloured compounds.
 - It acts as a catalyst.
 - It melts at 1539 °C.

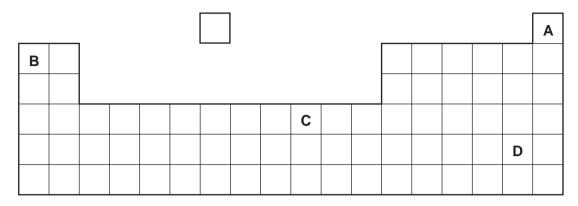
In which part of the Periodic Table is the element found?

- A Group I
- B Group IV
- C Group VII
- **D** transition elements
- 16 Which compound is likely to be coloured?

A $KMnO_4$ B KNO_3 C K_2CO_3 D K_2S	Α
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17 An element melts at 1455 °C, has a density of 8.90 g/cm^3 and forms a green chloride.

Where in the Periodic Table is this element found?



18 The table gives information about four elements.

Which element is a transition metal?

	colour of element	electrical conductivity of element	colour of oxide
Α	black	high	colourless
в	colourless	low	white
с	grey	high	red
D	yellow	low	colourless

19 The sulfate of element F is green.

Which other properties is element F likely to have?

	density	melting point
A	high	high
в	high	low
С	low	high
D	low	low