

16 The atomic radii and ionic radii for three elements in Period 3 are shown.

	atomic radius / nm	ionic radius / nm
element X	0.118	0.053
element Y	0.099	0.180
element Z	0.160	0.072

Using this data, which statement is correct?

- A** Element X has lower electrical conductivity than element Y.
- B** Element Y has a higher melting point than element X.
- C** Element Y and element Z react to form an ionic compound.
- D** Element Z forms ionic compounds by gaining electrons.

17 Sodium and sulfur react together to form sodium sulfide, Na₂S.

How do the atomic radius and ionic radius of sodium compare with those of sulfur?

	atomic radius	ionic radius
A	sulfur is greater	sodium is greater
B	sulfur is greater	sulfur is greater
C	sodium is greater	sodium is greater
D	sodium is greater	sulfur is greater