

07ZZ02-07

02-1-M-07

Which of the following occurs when solid iodine is changed into a vapour?

- A The iodine particles become lighter.
- B The distance between the particles decreases.
- C The forces of attraction between particles increase.
- D The particle begins to move more freely and randomly.

07ZZ02-08

02-1-M-08

The following table shows the melting points and boiling points of some substances.

Substance	Melting point/°C	Boiling point/°C
P	5	78
Q	780	1413
R	-5	102
S	-186	-85

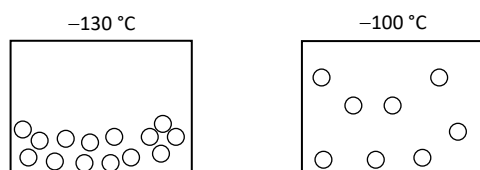
From the data given above, which of the following statements is incorrect?

- A P is a liquid at 100°C.
- B S is a gas at room temperature (25°C).
- C R is a liquid at room temperature.
- D Q is a solid at 100°C.

07ZZ02-09

02-1-M-09

The diagrams show the spacing of molecules in a substance at a pressure of 1 atm but at two different temperatures.



Which substance could the diagrams represent?

Substances	Melting point/°C	Boiling point/°C
A	-183	-69
B	-169	-104
C	-135	-0.5
D	-115	-85

07ZZ02-10

02-1-M-10

The atmosphere of Venus contains mainly oxygen, argon and nitrogen. The melting and boiling points of these gases are shown in the table below.

Gas	Melting point/°C	Boiling point/°C
Oxygen	-219	-183
Argon	-189	-186
Nitrogen	-210	-196

If only liquid oxygen is to be obtained, what temperature should the sample of air be decreased to?

- A -180°C
- B -185°C
- C -187°C
- D -198°C

07ZZ02-11

02-1-M-11

Which of the following substances could be condensed by passing through a water condenser like a Liebig Condenser?

	Substance	Melting point/°C	Boiling point/°C
A	Propane	-190	-45
B	Pentane	-130	38
C	Carbon dioxide	-78.5	-78.5
D	Butane	-135	0