States of Matter

CHEM

Name _____ Class _____ Date _____

1 Compared to the **freezing point** of **1.0 M KCl(aq)** at standard pressure, the freezing point of **1.0 M $CaCl_2$(aq)** at standard pressure is

A lower
B higher
C the same

2 A solid substance was tested in the laboratory. The test results are listed below.

- dissolves in water
- is an electrolyte
- melts at a high temperature

Based on these results, the solid substance could be

A Cu
B $CuBr_2$
C C
D $C_6H_{12}O_6$

3 At **1 atmosphere** of pressure, water and ice can exist in **equilibrium** at a temperature of

A 212°C
B 100°C
C 32°C

4 When a substance **melts**, it undergoes the process called

A condensation
B fusion
C sublimation
D vaporization

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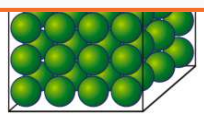
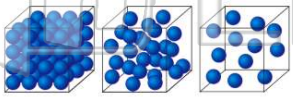
C Cl_2
D I_2



C remain the same

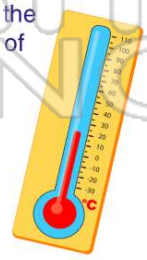
9 Which change of phase is **exothermic**?

A solid to liquid
B gas to liquid
C solid to gas
D liquid to gas



10 Water will **boil** at **22°C** if the **pressure** on the surface of the water is

A 760.0 mmHg
B 92.5 mmHg
C 19.8 mmHg
D 4.6 mmHg



ANSWER KEY

Compared to the **freezing point** of **1.0 M KCl(aq)** at standard pressure, the freezing point of **1.0 M $CaCl_2$(aq)** at standard pressure is

A lower
B higher
C the same

a

A solid substance was tested in the laboratory. The test results are listed below.

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Based on these results, the solid substance could be

A Cu
B $CuBr_2$
C C
D $C_6H_{12}O_6$

b

At **1 atmosphere** of pressure, water and ice can exist in **equilibrium** at a temperature of

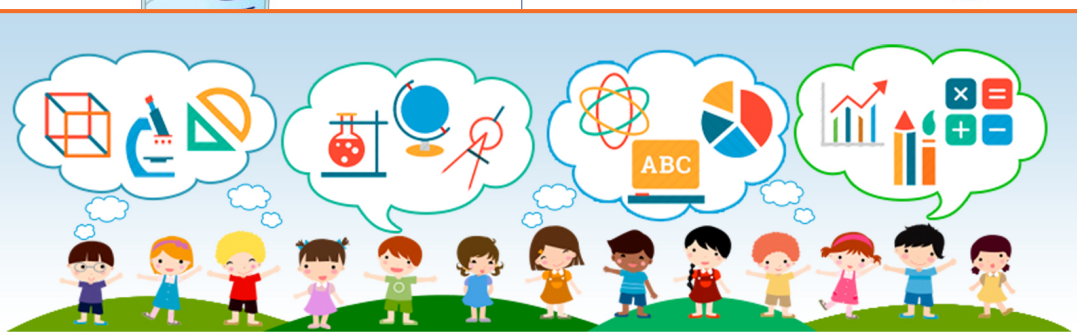
A 212°C
B 100°C
C 32°C
D 0°C

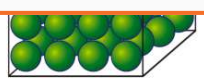
d

When a substance **melts**, it undergoes the process called

A condensation
B fusion
C sublimation
D vaporization

b





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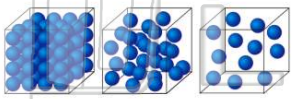

b

Water will **boil** at **22°C** if the **pressure** on the surface of the water is

A 760.0 mmHg
B 92.5 mmHg
C 19.8 mmHg
D 4.6 mmHg

c