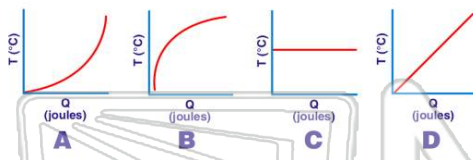


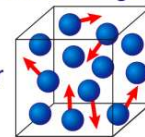


Name _____ Class _____ Date _____

- 1 Which graph best represents the relationship between the **heat absorbed (Q)** by a solid and its **temperature (T)**? [Assume the specific heat of the solid to be a constant.]



- 2 A given mass of a gas is enclosed in a rigid container. If the **velocity of the gas molecules** colliding with the sides of the container **increases**, the



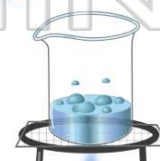
- A density of the gas will increase
- B pressure of the gas will increase
- C density of the gas will decrease
- D pressure of the gas will decrease

- 3 The **absolute temperature** of a fixed mass of ideal gas is **tripled** while its **volume remains constant**. The **ratio** of the final pressure of the gas to its initial pressure is

- A 1 to 1
- B 1.5 to 1

- 4 Compared to the boiling point of pure water, the **boiling point** of a **salt-water** solution is

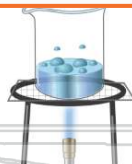
- A lower
- B higher
- C the same



PREVIEW

7 Please [Sign In](#) or [Sign Up](#) to download the printable version of this worksheet

- A 1.0 kcal
- B 9.0 kcal
- C 5.8 kcal
- D 3.2 kcal



- A 5.0 kcal
- B 41 kcal
- C 78 kcal
- D 204 kcal

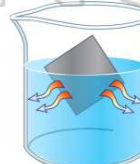


- 9 A 0.20-kilogram sample of ethyl alcohol is at a temperature of 28°C. The **phase of ethyl alcohol** at a temperature of **400 K** and **1 atmosphere** is

- A gas, only
- B liquid, only
- C solid, only
- D liquid and gas

- 10 An **aluminum block** at a temperature of **100° Celsius** is immersed in **water at 20° Celsius**. Compared to the internal energy gained by the water, the **internal energy lost** by the aluminum is

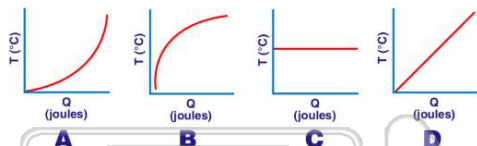
- A less
- B greater
- C the same





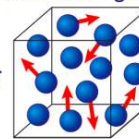
ANSWER KEY

Which graph best represents the relationship between the **heat absorbed (Q)** by a solid and its **temperature (T)**? [Assume the specific heat of the solid to be a constant.]



(d)

A given mass of a gas is enclosed in a rigid container. If the **velocity of the gas molecules** colliding with the sides of the container **increases**, the



(b)

- A density of the gas will increase
- B pressure of the gas will increase
- C density of the gas will decrease
- D pressure of the gas will decrease

The **absolute temperature** of a fixed mass of ideal gas is **tripled** while its **volume remains constant**. The **ratio** of the final pressure of the gas to its initial pressure is

- A 1 to 1
- B 1.5 to 1
- C 3 to 1

(c)

Compared to the boiling point of pure water, the **boiling point** of a **salt-water** solution is

- A lower
- B higher
- C the same



(b)



PREVIEW

Please [Sign In](#) or [Sign Up](#) to download the printable version of this worksheet

- B 9.0 kcal
- C 5.8 kcal
- D 3.2 kcal



- B 41 kcal
- C 78 kcal
- D 204 kcal



A 0.20-kilogram sample of ethyl alcohol is at a temperature of 28°C. The **phase of ethyl alcohol** at a temperature of **400-K** and **1 atmosphere** is

- A gas, only
- B liquid, only
- C solid, only
- D liquid and gas

(a)

An **aluminum block** at a temperature of **100° Celsius** is immersed in **water at 20° Celsius**. Compared to the internal energy gained by the water, the **internal energy lost** by the aluminum is

- A less
- B greater
- C the same



(c)