



Name _____ Class _____ Date _____

- 1 When a car is driven over snow, the snow under the tires may melt because the
- A pressure of the tires lowers the melting point of the snow
 - B pressure of the tires raises the melting point of the snow
 - C snow loses heat energy to the tires
 - D specific heat of the snow is decreased

- 2 The temperature of a water sample is increased 5 Celsius degrees from its freezing point. The sample's rise in temperature on the Kelvin scale was
- A 5 K
 - B 9 K
 - C 278 K
 - D 378 K

- 3 What do the laws of thermodynamics indicate about the energy and entropy of the universe?
- A Energy is decreasing and entropy is increasing.
 - B Energy is increasing and entropy is decreasing.
 - C Energy is constant and entropy is
 - D

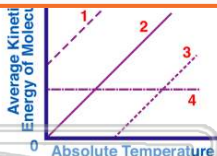
- 4 Which graph best represents the relationship between pressure (P) and absolute temperature (T) for a fixed mass of an ideal gas in a rigid container?



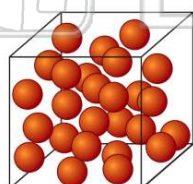
PREVIEW

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- 7
- A 1
 - B 2
 - C 3
 - D 4
- B increases, only
C remains the same
D cyclically increases and decreases



- 9 As the number of gas molecules in a rigid container at constant temperature is increased, the pressure on the walls of the container
- A decreases
 - B increases
 - C remains the same



- 10 How much heat is required to raise the temperature of 1.00 kilogram of liquid alcohol from its melting point to 0°C?
- A 2.43 kJ
 - B 196 kJ
 - C 284 kJ
 - D 476 kJ





ANSWER KEY

When a car is driven over snow, the snow under the tires may melt because the

- A pressure of the tires lowers the melting point of the snow
- B pressure of the tires raises the melting point of the snow
- C snow loses heat energy to the tires
- D specific heat of the snow is decreased

(a)

The temperature of a water sample is increased 5 Celsius degrees from its freezing point. The sample's rise in temperature on the Kelvin scale was

- A 5 K
- B 9 K
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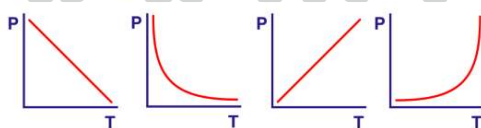
(a)

What do the laws of thermodynamics indicate about the energy and entropy of the universe?

- A Energy is decreasing and entropy is increasing.
- B Energy is increasing and entropy is decreasing.
- C Energy is constant and entropy is decreasing.
- D Energy is constant and entropy is

(d)

Which graph best represents the relationship between pressure (P) and absolute temperature (T) for a fixed mass of an ideal gas in a rigid container?



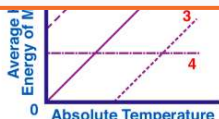
(c)



PREVIEW

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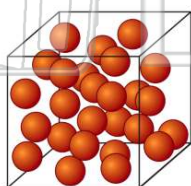
- B 2
- C 3
- D 4



- C remains the same
- D cyclically increases and decreases

As the number of gas molecules in a rigid container at constant temperature is increased, the pressure on the walls of the container

- A decreases
- B increases
- C remains the same



(b)

How much heat is required to raise the temperature of 1.00 kilogram of liquid alcohol from its melting point to 0°C?

- A 2.43 kJ
- B 196 kJ
- C 284 kJ
- D 476 kJ



(c)