

Question 1

The mass of one carbon-12 atom is 12 u.
The mass of one oxygen-16 atom is 16 u.
A balloon contains 88 g of carbon dioxide (CO_2).

How many moles of gas particles are contained within this balloon?

1. 0.5 mol
2. 1 mol
3. 2 mol
4. 3 mol
5. 6 mol

Question 2

The temperature of a glass of warm water is initially at 30°C . The water is heated to 60°C .

Which of the following is/are correct regarding the temperature change of the water **as measured in Kelvin?**

1. The temperature doubles.
2. The temperature increases by 303 K.
3. The temperature increases by 30 K.
4. The temperature increases by 60 K.