Question 1

* 1. Match the following process with the name (6)

|  |  |
| --- | --- |
| Process | Name |
| Becomes smaller when cooled | Boiling |
| solid→ liquid | Contraction |
| gas→ liquid | Melting |
| Becoming larger when heated | Freezing |
| Liquid→solid | Condensation |
| Liquid→gas | Expansion |

* 1. Using the idea of particles, explain why
     1. It is easy to pour a liquid (2)
     2. A gas will completely fill any container. (2)
     3. Define diffusion. (2)
  2. **DENSITY OF MATTER**.

Density describes the amount of mass in a given volume. The formula used to calculate density is:

Density =

1.3.1. A brick of mass 10 kg has a volume of 10m3. Calculate its density. (4)

1.3.2 A bag of maize has a volume of 250 cm3 and a density of 25 g/cm3 . Calculate the mass. (4)

1.3.3 A plastic bucket has a mass of 50 kg and a volume of 150 cm3. Calculate its density. (4)

**Round off your answers to the nearest whole number.**

* 1. **Look at the following density values and answer the questions.**

|  |  |
| --- | --- |
| **substance** | **Density (kg/m3)** |
| **Cream** | **994** |
| **Skimmed milk** | **1033** |
| **glycrine** | **1260** |

* + 1. Will cream float on milk? Explain your answer. (2)
    2. Will milk float on glycerine? Explain your answer (2)
    3. Will glycerine float on cream? Explain your answer. (2)