Density – 2022 June O Level 5054

1. June/2022/Paper_11/No.5

A plastic cube, of density ρ , is compressed so that each of its sides becomes one-half of its original length.

What is the new density of the material of the cube?

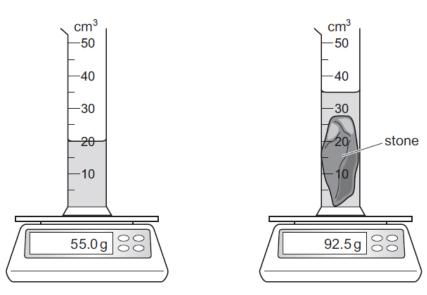
- **A** 0.125*ρ*
- **B** 0.50ρ
- **C** 2.0 ρ
- **D** 8.0ρ

2. June/2022/Paper_12/No.6

A measuring cylinder containing water is placed on a balance.

A stone is placed into the water.

The diagram shows the readings on the balance and on the measuring cylinder.



What is the density of the stone?

- $A 1.1 g/cm^3$
- $\mathbf{B} \quad 1.5\,\mathrm{g/cm^3}$
- **C** $2.5 \,\mathrm{g/cm^3}$
- $D = 2.6 \,\mathrm{g/cm^3}$