| | density (kg/m³) | | density (kg/m³) |
|-----------------------|--------------------|-----------------|--------------------|
| Interstellar space | | iron | |
| hydrogen | | lead | |
| helium | | mercury | |
| air | | uranium | |
| wood (average) | | gold | |
| lithium | | | |
| water | | Sun's core | |
| plastics | | neutron star | |
| aluminium | | black hole | |

Homework

2) Calculate the mass of a block of wood of volume 0.050 m^3 and density 600 kg/m^3.

3) Calculate the mass of a block of wood of volume 0.050 m^3 and density 600 kg/m $^3\!.$

4) When a small stone is immersed into the water inside a measuring cylinder the level increases from 20.0 to 27.5 ml. Calculate the density of the stone in g/cm^3 if its mass is 60g.

5) Calculate the density in g/cm 3 and kg/m 3 of a metal cylinder of radius 2cm, height 3cm and mass 400g.

6) Calculate the mass of a teaspoon full (1 cm³) of a neutron star. Density of a neutron star = $1.0 \times 10^{17} \text{ kg/m}^3$.

7) Calculate the weight of a gold ingot of dimensions ($20 \times 10 \times 4$) cm. The density of gold is 19 300 kg/m³.