

<p>a) An ornamental sphere is formed of an alloy of two metals, A and B. Metal A has density <math>12\text{g/cm}^3</math> and metal B has density <math>25\text{g/cm}^3</math>. The sphere is formed using 180g of metal A and 450g of metal B.</p> <p>Calculate the surface area of the ornamental sphere, giving your solution to three significant figures.</p>	<p>a) An ornamental sphere is formed of an alloy of two metals, A and B. Metal A has density <math>12\text{g/cm}^3</math> and metal B has density <math>25\text{g/cm}^3</math>. The sphere is formed using 180g of metal A and 450g of metal B.</p> <p>Calculate the surface area of the ornamental sphere, giving your solution to three significant figures.</p>
<p>b) An ornamental sphere is formed of an alloy of two metals, A and B. Metal A has density <math>18\text{g/cm}^3</math> and metal B has density <math>10\text{g/cm}^3</math>. The sphere is formed using 450g of metal A and 390g of metal B.</p> <p>Calculate the density of the ornamental sphere, giving your solution to three significant figures.</p>	<p>b) An ornamental sphere is formed of an alloy of two metals, A and B. Metal A has density <math>18\text{g/cm}^3</math> and metal B has density <math>10\text{g/cm}^3</math>. The sphere is formed using 450g of metal A and 390g of metal B.</p> <p>Calculate the density of the ornamental sphere, giving your solution to three significant figures.</p>
<p>c) An ornamental sphere is formed of an alloy of two metals, A and B. Metal A has density <math>20\text{g/cm}^3</math> and metal B has density <math>x\text{ g/cm}^3</math>. The sphere is formed using 200g of metal A and 450g of metal B.</p> <p>Given that the sphere has radius 1.81cm to 2 decimal places, find the value of <math>x</math>.</p>	<p>c) An ornamental sphere is formed of an alloy of two metals, A and B. Metal A has density <math>20\text{g/cm}^3</math> and metal B has density <math>x\text{ g/cm}^3</math>. The sphere is formed using 200g of metal A and 450g of metal B.</p> <p>Given that the sphere has radius 1.81cm to 2 decimal places, find the value of <math>x</math>.</p>