## **PHYSICS**

A golden-coloured cube is handed to you. The person wants you to buy it for \$100, saying that is an old nugget. You pull out your old geology text and look up gold in the mineral table, and read that its density is 19.3g/cm. you measure the cube and find that it is 2cm on each side, and weighs 40g. What is its density? Is it gold? Should you buy it?