

GETTING AHEAD



ALTON

Start to develop skills that are relevant to your course before you join HSDC this September!

Chemistry – A Level

Can you find out about the Chemistry which explains the following facts?

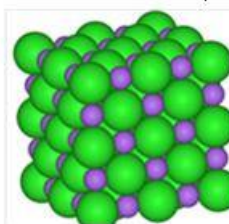


Unlike many substances, water expands as it freezes. An ice cube takes up about 9% more volume than the water used to make it.

Photo; <https://pixabay.com/en/ice-cubes-cold-water-melt-drink-1224804/>

There is about 250g of salt (NaCl) in the average adult human body, how many moles of salt is that?

Image; <https://pl.wikipedia.org/wiki/Plik:Sodium-chloride-3D-vdW.png>



If you pour a handful of salt into a full glass of water, the water level will actually go down rather than overflowing the glass (try it out for yourself). Similarly, if you mix ½ litre of alcohol (ethanol) with ½ litre of water, the total volume of the liquid will be less than 1 litre (maybe don't try that out for yourself – expensive!!)

Photo; <https://pxhere.com/en/photo/1274085>

What is the chemical name for water?



What is the name and formula for the chemical which makes the surface of Mars red? Why is this chemical a "nuisance" on Earth?

Image; <https://www.flickr.com/photos/robglover/2121486286>

Hydrofluoric acid is so corrosive that it will dissolve glass. Although it is corrosive, hydrofluoric acid is considered to be a "weak acid".

Photo; https://commons.wikimedia.org/wiki/File:Hydrogen_fluoride.JPG



We look forward to seeing you in September!

For further information about your College and being a student at HSDC, please visit hsdc.ac.uk/Alton