

Feb 05 23:41:14 --> Scotsmaninfrance (~ac97f18f@bopm.chatjunkies.org)
has joined #yg
<Doos> hey frank
<Scotsmaninfrance> Hi Doos...Annie
<Doos> I see you didnt get trillian running
<Scotsmaninfrance> I just come back on.....I've got flu
<Scotsmaninfrance> been in bed
<Doos> darned kids
<Scotsmaninfrance> yes.little ones bad too
<Annie> Hi Frank
<Annie> How are you
<Scotsmaninfrance> Hi Annie...get your virus fixed?
<Scotsmaninfrance> I've got flu....don't know if I'll last the
distance
<Annie> no, Frank
<Scotsmaninfrance> got a hot toddie in front of me
<Annie> hope you feel better soon
<Scotsmaninfrance> ty...give me the name of the virus again...I'll
look at it in the McAfee library tomorrow
<Annie> hang on i am still getting dressed
<Doos> dont
<Scotsmaninfrance> can I peep
<Doos> lol
<Annie> lol
<Doos> we should chip in and give her a webcam
<Annie> wouldn't it be funny
<Annie> we we had webcam
<Scotsmaninfrance> here it's been snowing in Australia...in the
middle of summer
<Annie> yeah, there is a church nearby
<Scotsmaninfrance> hear
<Annie> and its a sunny morning
<Annie> but i feel cold
<some beep here>
<Doos> I need to read up on things and I forget them as easily .. you
have it all in your head
<Scotsmaninfrance> ah but we need you when the going gets technical
<Scotsmaninfrance> in head gem encyclopedia
<Annie> lol
<Scotsmaninfrance> if only I could download it all
<Scotsmaninfrance> but my mother (board) is a bit instable
<Doos> plugin in Annie's nostrals
<Scotsmaninfrance> I'd probably freeze up
<Scotsmaninfrance> lol.....Thats sick
<Doos> sneeze up?
<Annie> i don't want to send you viruses
<Scotsmaninfrance> lol...I'll wear a surgical mask
<Annie> lol
<Annie> Frank you are funny as Doos
<Doos> I'll wear the gloves and do an internal
<Scotsmaninfrance> lol.....talk about below the belt
<Annie> lol
<Doos> just trying to help, geez
<Annie> i think i need more coffe for this one
<Annie> brb
<Scotsmaninfrance> have a toddie...it's working for me
<Doos> I thought you'd need icecubes
<Scotsmaninfrance> me?

<Doos> the other nut
<Scotsmaninfrance> don't really like ice in my whiskey
<Scotsmaninfrance> it waters it down when it melts
<Doos> sometimes I feel like I'm the only sane one on this planet
<Doos> and I try to blow myself
<Scotsmaninfrance> yes.....a sure sign of mental health :)
<Scotsmaninfrance> I knew a boy who could at school
<Doos> okay enough of that .. help me to remind not to log this
<Scotsmaninfrance> lol...we'll start from now then.....or when Gem
Ma gets here
Feb 05 23:57:58 --> ars (~cf061fd5@bopm.chatjunkies.org) has joined
#yg
<Doos> hey ars
<ars> greetings all
<Scotsmaninfrance> I read all the hydrostatic SG stuff.....couldn't
think of any questions...:(
<Doos> then you can explain it to us Scotsmaninfrance
Feb 05 23:58:55 --> CGI-880 (~406c515f@bopm.chatjunkies.org) has
joined #yg
Feb 05 23:59:00 --- CGI-880 is now known as gemma
<Scotsmaninfrance> lol....ok
<gemma> hello.
<Doos> hi gemma
<gemma> hi hi hi!!!
<Scotsmaninfrance> will I get brownie points?
<ars> hello
<Scotsmaninfrance> Hi Gemma
<gemma> hi everyone. hi annie! just got in from chores. let me get my
coat off and ill be right back
<-- Scotsmaninfrance has quit (Quit: CGI:IRC (EOF))
<-- ars has quit (Client Quit)
<-- Annie has quit (Quit: CGI:IRC (EOF))
<-- gemma has quit (Client Quit)
Feb 06 00:00:46 --> ScotsmaninFrance (~ac97f18f@bopm.chatjunkies.org)
has joined #yg
<Doos> uhm
<ScotsmaninFrance> got disconnected
<Doos> like the rest
<ScotsmaninFrance> Ah...overload
Feb 06 00:01:26 --> ars2 (~cf061fd5@bopm.chatjunkies.org) has joined
#yg
<Doos> yah that is why it is better to avoid the web interface
Feb 06 00:02:00 --> CGI-199 (~406c515f@bopm.chatjunkies.org) has
joined #yg
Feb 06 00:02:12 --- CGI-199 is now known as gemma
Feb 06 00:02:23 --- ars2 is now known as ars
<gemma> hello. something is wrong her
<gemma> here
<Doos> yes, the web interface .. try to use trillian or mirc
Feb 06 00:03:04 --> Annie (~d254d843@bopm.chatjunkies.org) has joined
#yg
<gemma> this is the first problem i've had but ok
<gemma> hi again annie
<Annie> Hi
<Doos> Annie: connect through trillian .. you'll last longer
<gemma> was afraid youd left
<Annie> i froze
<gemma> do you have time for us to do that doos

<Annie> Doos, connect through trillian
<Doos> Annie: you have trillian silly woman
<ScotsmaninFrance> I've got a message from jen saaaying she'll help me get connected through trillion (I can't get it to work)
<Annie> yuhooo
<Annie> can you hear me
<Annie> all
<Doos> no Annie
<ScotsmaninFrance> yes
<ScotsmaninFrance> lol
<gemma> im dowloading trillian right now
<gemma> do you need the link for it annie"
<Doos> she has it installed
<gemma> oh sorry
<ScotsmaninFrance> I can't get it configured :(.....I'll stay with this I guess)
<Doos> annie got disconneted and will try with trillian
<gemma> ok doos im gonna start trillan basic
<Doos> okay gemma
<-- Annie has quit (Quit: CGI:IRC)
<gemma> ok its open and i have an i
<gemma> id
<gemma> what do i do now
<Doos> follow the wizard to IRC
<ScotsmaninFrance> lol.....I've been asking that question all day
Feb 06 00:12:36 --> Annie (~Annie@53.cust15.vic.dsl.ozemail.com.au) has joined #yg
<Annie> Hello
<Doos> okay Annie, guide these people to setup trillian
<ScotsmaninFrance> Gemma if you click the white circle you go to the set up page
<gemma> im at the setup page
<gemma> and i have added irc plugin
<ScotsmaninFrance> Click on add a new connection then on the white circle.....you get an irc setup box
Feb 06 00:15:31 --> Tanzy (~Annie@50.cust10.vic.dsl.ozemail.com.au) has joined #yg
<gemma> duh. got it
<gemma> now what
<ScotsmaninFrance> Dunno what to type in which box....been trying all day
<Tanzy> hi there
<ScotsmaninFrance> Hi Tanzy
<Doos> you doing well annie?
<Doos> ScotsmaninFrance: what does it say for each box?
<-- Annie has quit (Ping timeout: 240 seconds)
<ScotsmaninFrance> The first says server alias
<Doos> there you type: your gemologist
<gemma> ok
<ScotsmaninFrance> dialogue box says..."you must enter a server name
<Doos> there you type: at.chatjunkies.org
<ScotsmaninFrance> next box says irc.trillion.com::6667
<ScotsmaninFrance> thats the at.chatjunkies box?
<Doos> change that to: at.chatjunkies.org:6667
<ScotsmaninFrance> next says nickname....then username....then the last says user info
<Doos> nickname = ScotsmaninFrance, usrename = ScotsmaninFrance, leave the info blank

<ScotsmaninFrance> do I have to leave the room to make the name available?

<gemma> ok the stuff is entered

<-- ars has quit (Quit: CGI:IRC (EOF))

<Doos> yah, or change you nickname in the previous ..

<gemma> now what

Feb 06 00:22:31 --- ScotsmaninFrance is now known as scot

<gemma> ok this seems to be working ok now

<Doos> good

<scot> I seem to be connected.....but I'm not in the room?

<Doos> you need to connect to #yg

<Doos> type in: /join #yg

<scot> I thought I was?

<scot> where?

<Doos> anywhere in trillian

<Doos> Tanzy: you still there?

<scot> I don't seem to have a type in box anywhaere

<gemma> hellow annie out there

<Doos> are you connected to chatjunkies?

<Tanzy> Hello

<Tanzy> ??

<Doos> Tanzy: help them use trillian

<Tanzy> i am a bit hold

<Tanzy> I am bit lost myself this morning Doos

<scot> Yes I found the type-in box...but /join#YG is an unknown command??

Feb 06 00:28:00 --> Scotsmaninfrance (user@AC97F18F.ipt.aol.com) has joined #yg

<Doos> a space between join an #

<Doos> woohooo

<Doos> there you are

<Tanzy> whooo

<scot> ty.....sorry to be such a diphead

<-- scot has quit (Quit: CGI:IRC)

<Doos> now help gemma

<gemma> hello

<Scotsmaninfrance> Hi gemma...you winning?

<Tanzy> hello gemma

<gemma> i seem to be doing ok here

<gemma> everyone see my words here?

<Doos> no gemma

<gemma> ok

<Tanzy> yeah we see you

<gemma> but something is wrong right?

<Scotsmaninfrance> dunno....cept I've got the flu

<Doos> yah ars left

<gemma> you cant. you had that last week.

<Scotsmaninfrance> and Annie

<Scotsmaninfrance> no last week the computer was sick

<gemma> oh yeah. ok

<Doos> now we got trillian out of the way .. do some bible study/

<Scotsmaninfrance> still is....needs open heart surgery

<Doos> ?

<gemma> yes. ready

<gemma> since i actually made it LOL

<Tanzy> guys are you all set up now...

<Tanzy> :'D

<Scotsmaninfrance> Yes.....Go gemma....ask and thou shalt receive the wisdom of the world
<gemma> i am happy with what i have going here if everyone else is
<Scotsmaninfrance> Yes I'm happy
<Tanzy> hey you even got some cute smilies
<Scotsmaninfrance> gosh what a lot of emoticons
<Tanzy> this is my favourite : "D
<Tanzy> opps : 'D
<Tanzy> what happened to Ars
<Doos> too much bullshit for him I think
<Scotsmaninfrance> yes got bored I spect
<gemma> kind of like a lot of giggling before class
<Doos> yah
<Scotsmaninfrance> he might come back
<Doos> I hope so
<Scotsmaninfrance> did you unpack the SG balance Gemma
<Doos> shall we get somethings done?
<gemma> no lol
<gemma> and yes please
<Scotsmaninfrance> Ok I'll start and you can all join in
<Doos> shoot
<Scotsmaninfrance> As far as I understand it...when any object is placed in a container full of water two things happen
<gemma> your feet get wet and . . .
<Scotsmaninfrance> first the water is displaced by the volume of the object
<Scotsmaninfrance> and second the water pushes the object with a force equal to it's volume
<Doos> that is correct
<Doos> archimedes principle
<Scotsmaninfrance> This is known as archimedes principle
<Tanzy> yippee that is very much the archimedes principle
<gemma> is it displaced by the volume or the mass or are they the same thing
<gemma> i thought volume was space and mass was density
<Doos> volume
<gemma> k
<Scotsmaninfrance> volume is the amount of space an object takes up
<Tanzy> gota go to the loo
<gemma> oh yeah like the floating boat
<Doos> you all know how archimedes got to that discovery?
<Scotsmaninfrance> mass is like weight....though without the effect of gravity
<Doos> +c somewhere
<Scotsmaninfrance> in the bath
<Scotsmaninfrance> sloshing water on the tiles
<Doos> yes the bath story
<Scotsmaninfrance> he cries eureka
<Doos> yes
<gemma> thus the eureka container
<Scotsmaninfrance> which means....shit I've got it....in greek
<Scotsmaninfrance> yes
<Doos> anyone knows what he was thinking about?
<Scotsmaninfrance> but most stones are too small for the eureka pot I think
<gemma> too small?
<Scotsmaninfrance> probably the slave girl who was washing him
<Doos> lol no

<Doos> it was an assignment
<gemma> aahem boys back to the subject
<Doos> from his king
<gemma> what the slave girl?
<Scotsmaninfrance> Yes a 1 carat stone doesn't really displace enough water for an accurate measurement
<Doos> (forgot his name .. some sicilian mobster)
<gemma> i was thinking a eureka container could be any size
<Scotsmaninfrance> He was trying to find a way to prove the quality of gold
<gemma> right
<Scotsmaninfrance> by scientific measurement
<Doos> very good Scotsmaninfrance
<gemma> oh bugger i know what you're getting at now
<Scotsmaninfrance> so he discovered specific gravity
<Doos> go on
<Scotsmaninfrance> gold is heavy
<Doos> or dense
<Scotsmaninfrance> so if you mix some stuff in with it
<Scotsmaninfrance> yes...better word
<Scotsmaninfrance> I don't have any books here they're downstairs...so If I goof up here then shout stop
<Doos> no need for shame, we all goof up
<Scotsmaninfrance> The weight of water is recognised as being the value 1
<Scotsmaninfrance> everything else can be given a value which is the proportion of it's volume to an equal volume of water
<Scotsmaninfrance> because it's a propotion there is no need to worry what values you measure in
<Tanzy> ok, so expressed as a value not units
<Scotsmaninfrance> yes
<Tanzy> if something weights 5 times heavier , the sg is 5 ... right Frank
<Scotsmaninfrance> Yes
<Tanzy> please continue
<Tanzy> Frank, you doing well
<Scotsmaninfrance> you can calculate it by weighing the object in air
<Doos> (5 times heavier copared to water)
<Scotsmaninfrance> ty
<gemma> (understood)
<Tanzy> thanks Doos compared to 5 times as much equeal of volume of water
<Scotsmaninfrance> so if the water pushes back at any object suspended in it
<Scotsmaninfrance> with a force equal to it's volume
<Scotsmaninfrance> by weighing the stone in air
<Scotsmaninfrance> then weighing it in water
<Tanzy> ok, lets put example with it if weight of stone is 0.56689
<Scotsmaninfrance> using the formula weight of object in air divided by the weight of the object in water
<Tanzy> then weight in water is 0.37589
<gemma> wait, i thought it was weight in air minus weight in water first
Feb 06 00:50:47 --> Jen (~Jen@66.244.234.131) has joined #yg
<Tanzy> ok,, shall we do a calculation on this example
<Tanzy> gemma
<Scotsmaninfrance> SG 2.96
<Tanzy> would you like to go

<Jen> hi all
<Doos> hi jen
<Scotsmaninfrance> hi Jen
<Jen> sorry i am late
<Tanzy> sorry i mean would you liketo calculate for us
<Tanzy> Hi Jen
<Scotsmaninfrance> it's ok
<gemma> well, i was reading franks explanation and i thought it shoud
have been weigh in air minus weight in water, not divided by
<Scotsmaninfrance> yes Gemma...sorry I skipped the step
<gemma> ok. just making sure i understood
<Tanzy> the difference of those is dived
<Tanzy> by the weight in air
<gemma> yes
<Doos> the formula is: wieght in air / wieght in it - weghtn water
<Doos> let me type that again
<gemma> well, weight in air divided by the difference, right?
<Tanzy> thanks, the assumption was there, and I think we all
understand it
<gemma> just making sure i understood
<Doos> the formula is: wieght in air / weight in it - weight in water
<Doos> holy crap, I cant type anymore
<Scotsmaninfrance> yes sorry my brain included that step but never
typed it
<Jen> so is here a special guest expected today
<Doos> the formula is: weight in air / weight in air - weight in
water
<Jen> and what is our topic for the day
<Scotsmaninfrance> were doing SG jen
<Scotsmaninfrance> in particular hydrostatic SG
<Jen> ok that is a good refresher
<Jen> lol
<Scotsmaninfrance> the weight in air - the weight in water is the
weight of the displaced water
<Tanzy> Frank, just in regards to Sg - for accuracy of your work,
water is usually room temp at 4 deg. which water reach its greatest
density, therefore SG is = 1
<Scotsmaninfrance> becauseit's a value and not a unit measurement the
formula can be written in several ways
<Scotsmaninfrance> but for SG of gemstones doos' formula is correct
<Tanzy> sure
<gemma> and remember us silly yanks would think 4 deg farenheit
<Scotsmaninfrance> yes I understand that Tanzy...it's the reason
fish don't get encased in ice each winter
<Doos> okay people, once more .. the stone weighs 0.56689 in air and
0.37589 in water .. what is the SG and why?
<Scotsmaninfrance> it's hard to freeze water when at it's densest
<Scotsmaninfrance> no Gemma
<gemma> give us a minute doos
<Doos> ok
<Scotsmaninfrance> 4 degrees fahrenheit is below freezing
<Tanzy> 4 deg C
<Doos> smartypants
<Scotsmaninfrance> yes always degrees c
<gemma> i know -- what i am saying is if you say 4 degrees we
automatically think farenheit
<gemma> we have to mentally correct it
<gemma> we are backwards

<Tanzy> ok, thats great
<Scotsmaninfrance> sorry doos but I got fahrenheit and celcius at school
<Doos> we should actually use kelvin
<Scotsmaninfrance> old imperialist britain
<Scotsmaninfrance> yes but 274? k is hard to swallow
<gemma> 2.97
<Doos> true, one day we'll all get it hopefully
<Doos> how did you get that gemma?
<Tanzy> show all calculations, so the exam will say..
<Tanzy> Can you show us please
<gemma> ok
<Tanzy> great
<Scotsmaninfrance> I got 2.96 up the page.....calculator differences?
<Tanzy> thats fine
<Tanzy> you won't be penalised for that
<Doos> rounding
<Tanzy> this is usually a 5 mark guys the easierst of all
<gemma> $0.56689 - 0.37589 = 0.191$
<Tanzy> good
<gemma> then $0.56689 / 0.191 = 2.97$
<gemma> SG
<Tanzy> there should be something else
<Doos> very good, now all in one go ...
<gemma> or don't you use the SG
<gemma> what else should there be?
<Tanzy> its actually 2.9680104
<Tanzy> then round it off to 2.97
<Tanzy> if you round down to 2.96 will still be correct
<gemma> oh, i just rounded it
<Tanzy> but because the 4th number is higher than 5
<Tanzy> you ok to round up
<gemma> would i be expected to show more decimal places?
<gemma> i didn't know that
<Tanzy> no only 2 decimal places
<Tanzy> will do
<Tanzy> that is only a value
<Tanzy> not a unit
<Tanzy> but there is something we forgot
<gemma> but you said I missed something
<Tanzy> the value is in grams
<Tanzy> like 0.56689 grams
<Scotsmaninfrance> only if you measured it in grams
<Tanzy> when you come to SG you leave out grams
<Scotsmaninfrance> because it's not a unit
<Tanzy> its a measure
<Tanzy> of value
<gemma> i thought it was a ratio so there was no unit . hmm
<Doos> SG is a ratio
<Tanzy> sg is ratio of a value
<gemma> value of grams
<Scotsmaninfrance> if the original measurement was in carats
<Scotsmaninfrance> as long as the second measurement is in the same unit
<Scotsmaninfrance> it would'nt make a difference
<Tanzy> ok, guys listen up, when i said show all calculations for full marks
<Tanzy> class, are you listenin ?

<gemma> yes
<Doos> yes
<Tanzy> oh great
<Tanzy> when i said before show all calculations
<Tanzy> i meant
<Tanzy> you must show all your formula in words
<Tanzy> and in calculations of your measurements
<Tanzy> show the grams \
<Tanzy> and don't forgoet the last 2.96 with no grams
<gemma> do you want me to try again and then stop me if i am going wrong?
<Tanzy> understand what i mean
<Tanzy> sure, have another go
<Tanzy> ok start, in words now
<gemma> the weight of the stone in air is 0.56689 grams
<gemma> the weight of the stone in water is 0.37589
<Tanzy> (GRAMS)
<gemma> grams
<gemma> lol
<Tanzy> LOL
<gemma> subtract the water weight from the air weight (0.56689 grams - 0.37589 grams)
<Tanzy> very good
<gemma> to get the weight of the water displaced (0.191)
<gemma> grams
<Tanzy> 0.191 is still in grams
<gemma> then divide the air weight of 0.56689 grams by the displaced weight of 0.191 grams for the specific gravity ratio of
<gemma> 2.96801 grams
<gemma> or
<gemma> 2.97
<Doos> I'm happy with it, but I need to make one remark
<gemma> ok
<Tanzy> very good 2.97 (no grams)
<Doos> you start out with stating the formula
<Tanzy> Go ahead
<Tanzy> yes
<Jen> so you state the formula in words then do the math
<Tanzy> yes always state your formula up the top
<gemma> do we put the weight values in as you sate the formula
<gemma> then do the math?
<Tanzy> then show all your calculation according to the formula
<Doos> then if you make an error in your calculations, they will know you understood it and it was just an simple error in typing in the values
<Tanzy> and finish with SG = 2.97
<Tanzy> yes, so true Doos is absolutely correct
<Tanzy> it shows the examiner you understood everything and you miscalculated
<Jen> i am glad i already made SG= a habit
<Tanzy> and they won't penalise you or deduct marks
<gemma> show us exactly hwat you would write doos
<gemma> so i completely understand
<Doos> so you might still get 50 or more points, even though you got the answer wrong
<Doos> SG
<Jen> gemma
<gemma> so i would start out saying the formula for finding sg
<Jen> i may get the order wrong here

<gemma> is air / (air-water)
<Doos> Weight in air / weight in air - weight in water
<gemma> right
<Jen> but type in the word formula first
<gemma> im just being lazy and i shouldn
<Tanzy> weight of stone in air
<Tanzy> weight of stone in air minus (-) weight of stone in water
<gemma> right
<Jen> or as doos says USE LOTS OF PAPER lol
<gemma> then fill in the numbers
<Doos> $0.56689 / 0.56689 - 0.37589 - 2.97$
<gemma> ok. so write the formula in words like annie
<Tanzy> weight of stone in air
<gemma> then write it out in formul with numbers
<Tanzy> loss of weight in water (the difference 0
<Tanzy> (the difference)
<Scotsmaninfrance> $0.56689g / 0.56689g - 0.37589g$
<gemma> with hopefully the correct answer
<Tanzy> then that gives you the long sg - 2.96801194
<Scotsmaninfrance> remember the g
<Tanzy> always
<Jen> but gemma what they are saying is if you write the word formula it shows you are understanding it
<Scotsmaninfrance> this is a standard in all tests
<gemma> but it should be $0.56689g / (0.56689g - 0.37589g) = 1.91$
<Jen> so if you have a typo in the number the word formula says this person does do what he/she needs to know
<Scotsmaninfrance> show you know the formula
<Doos> very good Jen
<Scotsmaninfrance> or the mathematical rule
<Scotsmaninfrance> by stating it
<Tanzy> there is a few things you need to remember to get it correct whilst measuring
<Tanzy> you have some limitations
<Jen> i was terrified of SG
<Tanzy> shall we list them here
<Scotsmaninfrance> yes please
<Jen> till doos made me understand it then it was easy
<Jen> i just forgot alot already
<gemma> what limitations annie
<Tanzy> your stone must be a measureable size (not too small)
<Tanzy> but they will make sure of that anyway
<gemma> 3 carats
<gemma> 3
<gemma> 3 plus!
<Tanzy> 2. you need to make sure you do not lean against the bench
<Tanzy> 3. you need to make sure there is clean distilled water filled to cover your suspended basket
<Tanzy> 4. make sure while you measuring it there are no bubbles in water
<gemma> excuse me, annie, you mean filled right to the brim of the container?
<Tanzy> (this is usually checked before hand but you never know what the person before you will do)
<Doos> and not to forget at what part of the globe you are in
<Tanzy> just enough over the suspended basket where the gem will sit for you to measure the gem immersed in water
<Doos> that is what makes hydro SG sucks dogs

<gemma> oh so you mean totally immersed
<Scotsmaninfrance> ddos.....globe?
<Tanzy> if there is a bubble in water, you must eliminate this problem
<Tanzy> this is usually done by a tiny drop of normal detergent into
the water
<Tanzy> or wait until the water settles itself
<Doos> gravity frank, at the poles gravity is different than at the
equator (minor I agree)
<Tanzy> and the stone cannot be a drilled or porous stone
<Scotsmaninfrance> ah...ok ty
<Tanzy> or a doublet or triplet
<Tanzy> nor you can do an SG on GTD's
<Scotsmaninfrance> what about gas bubble inclusions?
<Tanzy> you know the paste bottom natural top stones
<Doos> inclusions also have an effect indeed
<gemma> but back to the limitations for a moment
<Scotsmaninfrance> or really heavy metallic inclusions?
<Tanzy> that makes no difference..
<Tanzy> the inclusions like doos said is not effected
<Scotsmaninfrance> what is a reasonable spread of value for any
particular species of stone?
<Doos> in emerald that is a profound distinction
<Jen> does everyone understand how to write the formula ect.
<gemma> from my reading i took it that the stone has to be totally
immersed below the level of the water, is that right
<Jen> or can I do a question out of CGA to demonstrate
<Tanzy> Gemma, yes go back to limitations (you said)
<Tanzy> sure Jen
<Doos> yes gemma
<Tanzy> gemma, please ask
<gemma> can i ask one more question
<Tanzy> sure
<Jen> go ahead gemma
<gemma> why doesn't the detergent alter the reading
<Doos> no gemma, you asked too much
<gemma> FYD
<Doos> too late
<gemma> lol
<Doos> it does gemma
<Jen> now for some reason this doesn't look correct according to how you
did it
<Tanzy> the detergent is the tiniest drop - just elimination of the
bubbles in water
<Doos> it has to do with surface tension
<Jen> but you can correct me if it is incorrect
<gemma> oh so for a flat stone it would be worth the alteration
<gemma> like a toothpick touching detergent then touching water
<Scotsmaninfrance> not another bloody mackle:-D
<Jen> oh ok i am looking at water displacement
<gemma> to break the tension
<gemma> is that correct?
<Tanzy> to break the tension
<Tanzy> yes
<gemma> thanks annie
<Doos> no kiss for me?
<Tanzy> kisses to doos too
<gemma> gemma turns her head away()
<Scotsmaninfrance> Annie do you personally use SG a lot in gem ID

<gemma> oh yeah oh yeah
<gemma> thanks frank
<gemma> that was another question
<Tanzy> yes, it can be very diagnostic
<Doos> liar
<Scotsmaninfrance> yw.....doos sprung the your the man on me cos I
couldn't think of any questions
<Tanzy> if you are finding difficult to get an ri reading, it usually
can be spot on
<Jen> ok should i show for water displacement
<gemma> in a message to me aobut SG, Robert said SG was becoming more
important than ever and i was wondering why
<Jen> or hydrostatic
<Scotsmaninfrance> yes go Jen
<Jen> which one first
<Tanzy> Jen, you had a question please
<Scotsmaninfrance> whichever you wish jen
<Jen> ok water displacement
<Jen> weight os stone/displaced water=SG
<Doos> yes
<Jen> weight of stone is 7.25g and weight of displaced water is 2.05g
<Doos> sapphire?
<Jen> so $7.25g / 2.05g = 3.53$
<Scotsmaninfrance> too low
<Doos> topaz
<Jen> $SG = 3.53$
<Tanzy> topaz
<Jen> yes doos
<Tanzy> blue
<Jen> topaz
<Jen> they just said topaz
<Doos> just doing some hastily headmath
<Jen> so that is written correctly then
<Scotsmaninfrance> lol
<gemma> i have another question. i come up with 3.54
<gemma> it seems i round up
<gemma> and you other round down
<Scotsmaninfrance> I didn't round
<gemma> well, hell i am round but . . .
<Scotsmaninfrance> just ignored the remaining digits and read the
first two
<Doos> yes you did Scotsmaninfrance, you always do that
<Jen> but yeah gemma is correct
<Scotsmaninfrance> I would round up / down in an exam though
<gemma> get 'im doos
<Jen> it comes up 3.5365....
<Doos> :)
<Jen> so should you round up or just stop on the second decimal
<Tanzy> remember what we said you can round up if the 4th digit is
higher than 5
<Tanzy> so you 4th digit is 6 - Jen
<Tanzy> you can say 3.54
<Doos> tecnically you should round 5 up and 4 down
<Jen> that ytu can but don't have too
<gemma> higher than 5 or 5 or higher?
<Tanzy> yes, but its not a major problem
<Tanzy> at all
<Scotsmaninfrance> doesn't matter

<Jen> so it should be $SG = 3.54$
<gemma> i am only wondering cause that is the way i was taught and wanted to know if i had to unlearn something
<Scotsmaninfrance> my old teacher used to say...if it's a five put it in the answer
<Doos> 3.536 should be 3.54 and 3.534 should become 3.3
<gemma> good way frank. no quibble then, aye?
<Tanzy> any questions ???
<Tanzy> so far
<Scotsmaninfrance> 3.3??????
<Jen> i think i understand
<Scotsmaninfrance> lol
<gemma> no. i don't think so for me.
<Doos> uh 3.5
<Scotsmaninfrance> head maths.....want a toddie?
<Jen> now i want to redo this lesson i actually remember it being fun
<gemma> another toddie you mean
<gemma> yes, jen, it is fun
<Jen> ok going to get some ice cream brb
<Scotsmaninfrance> lol..this ones cold and hardly touched
<Doos> gimmy a break, <beep>
<Tanzy> and mind you we've just practiced a bit of prac
<gemma> are we talking of doos again frank
<Doos> I'll delete that from the log
<Tanzy> only a fraction of theory
<gemma> wait annie, i m lost.
<Scotsmaninfrance> lol.....don't worry doos
<gemma> i think you are being serious about something and i missed it
<Tanzy> what gemma ??
<gemma> what is only a fraction of the theory
<Scotsmaninfrance> batchelors are notoriously sexually starved
<Tanzy> where are you lost
<Scotsmaninfrance> whatever they say
<Tanzy> we talked about archimedes principle
<gemma> yes
<Doos> now lets get practicle
<Tanzy> I love how doos spells practicle
<gemma> and this is only a fraction of the theory . . .
<Scotsmaninfrance> it's the dutch way
<Scotsmaninfrance> on hydrostatic yes
<gemma> ok that's what i thought was meant.
<Scotsmaninfrance> but there are many ways to measure SG
<gemma> no annie im not lost
<Tanzy> well yeah if you understand that this fat bugger archimedes went into bath full of water and displaced all the water after himself in the water
<gemma> yes, or so the legend goes lol
<Jen> there are many ways to do SG
<Tanzy> yes, thanks to archimedes
<Scotsmaninfrance> the king was pleased though
<Jen> are you taking a course frank
<Tanzy> if you still don't get it
<Tanzy> fill up the water in your bathtup
<Tanzy> lol
<gemma> no, i got it. thanks. i'll use my shower. lol
<Tanzy> yes of course Jen, there are many ways to do SG
<Tanzy> but this is what concerns us for now and you'll be expected to do this in the exam

<Scotsmaninfrance> yes jen I'm doing the ISG.....and probably signing up for the FGA in a few weeks.....but I'm still a thinking the money could buy goodies

<Doos> listen guys, robert and annie make you believe that hydro SG is a big deal because they have stocks in some japanese company

<gemma> SONY

<gemma> lol

<Doos> lol

<Tanzy> lol

<Scotsmaninfrance> lol

<gemma> annie's not laughing, must be true

<gemma> lol

<Tanzy> no (LOL)

<Tanzy> i am

<Tanzy> this is funny

<Tanzy> i only believe in what is practical

<Scotsmaninfrance> doos isn't a big fan of SG

<Doos> the real daily use of it is in measurment

<Tanzy> if we are on the field, we would certainly use a different method to measure

<gemma> fer shur

<Scotsmaninfrance> thinks it's the test of last resort

<Tanzy> but when you are in the lab

<Tanzy> you should be equiped with the modern tech

<Scotsmaninfrance> sony again?

<Jen> frank

<Scotsmaninfrance> I think it's a lot of work for a value

<gemma> is it thought to be becoming more critical because synthetics are getting "better"?

<Scotsmaninfrance> if other values are around

<gemma> well, i would probably work well with opaques

<Tanzy> well with synthetics, the SG is not going to help

<gemma> non porous opaques . . .

<Scotsmaninfrance> but when the RI or something is difficult then it's got it's place

<gemma> yes annie go ahead

<Tanzy> you need to understand their process of syn nature and inclusions

<gemma> i was just wondering if one had a really good synthetic . . .

<Doos> the real value of SG lies in practical use, converting diamond charts to emeralds, sapphires and the rest of them

<Tanzy> guys, sorry, i hope you don't mind my saying ("you need to") bit

<gemma> no

<Tanzy> great

<Tanzy> i wouldnot want you to misunderstand what i am trying to interpret

<gemma> no you've been there, you know

<Scotsmaninfrance> It seems to me that the natural vs synthetic needs a microscope

<Tanzy> aren;t you lucky i am not falling asleep on my keyboard

<Tanzy> :-)

Feb 06 01:45:30 * Doos waves HELLO HELLO can I get some attention here?

<Tanzy> definatly a microscope is the best source

<Tanzy> hello Doos

<gemma> oh, syn and natural would have same sg

<Scotsmaninfrance> what is it doos honey?

<Tanzy> yes, very much so... syns are not going to change
<gemma> im at attention doos sorry
<Tanzy> in their physical properties
<gemma> thank you annie
<Scotsmaninfrance> wanna go toilet?
<gemma> ?
<Scotsmaninfrance> sorry it's what I say to the kids when they ask / demand attention
<gemma> doos, we are waiting. speak
<gemma> (please)
<Doos> do you all understand the relationship between volume and SG?
<Tanzy> please explain a bit doos
<Scotsmaninfrance> yes
<gemma> i think so yes
<gemma> volume of object displaces volume of water
<Doos> okay gemma, here goes a diamond weighs 1 ct, how much would it weigh if it was a sapphire when cut in the same dimensions?
<Tanzy> i am going to get a couple of toasts
<Scotsmaninfrance> density of objects of same volume gives SG ratio
<gemma> well i'd have to know the sg of sapphire wouldn't I/
<Doos> 4
<gemma> oh god i did this calc earlier today. my brain is now blank (embarrassed) i need to think
<gemma> diamond sg is 3.54?
<gemma> is that the sg for diamond?
<Doos> this is where 90% of SG boils down to
<Doos> yes, 3.52
<gemma> thanks
<gemma> 1.14ct
<Doos> would the sapphire weigh more or less than the diamond?
<gemma> more
<Doos> weigh*
<Doos> why?
<gemma> higher sg
<Scotsmaninfrance> i got 1.1335
<Scotsmaninfrance> ct
<gemma> i got it first lol
<gemma> nyah
<gemma> lol
<Doos> phew
<Scotsmaninfrance> no I waited for you8-0
<gemma> you said i was a B doos and you see i am lol
<Scotsmaninfrance> cos sapphire is denser
<Doos> :)
<gemma> so is doos
<gemma> lol
<gemma> im sorry doos
<Scotsmaninfrance> so for the same size it must be heavier
<gemma> dopeslap
<Doos> I'm a sweetie
<Doos> ask my mommy
<gemma> how about jen trying one
<Scotsmaninfrance> by the proportion of 3.99 / 3.52
<gemma> oh hell
<gemma> should i have given the formula first
<gemma> im serious
<Tanzy> back
<Scotsmaninfrance> course

<Scotsmaninfrance> lol
<gemma> was that what you were looking for too doos
<gemma> this is so informal i wasn't thinking about that at all
<Doos> no, just the answer .. but a calculation is always better for
poits
<Doos> points*
<Tanzy> my god, i was just thinking about this see if we all
understood
<gemma> i will try to remember to ask
<Doos> okay now I have a basic one
<gemma> yeah right
<Jen> doos what was it we used sin for
<Jen> my memory sucks at this
<Scotsmaninfrance> sin or sine?
<Jen> ok sine
<Doos> archimedes used a gold crown to test SG .. how did he find out
the crown was not from pure gold
<gemma> i prefer the sin . . .
<Scotsmaninfrance> Critical angle?
<Jen> here it is sin on my claculator
<Jen> ok
<Jen> maybe
<Doos> Jen: refraction
<Jen> ok thats right
<gemma> ah yes, read that today too, just not the formula
<Scotsmaninfrance> I assume he worked out the SG of pure gold by the
usual method
<gemma> biting it with his teeth?
<Scotsmaninfrance> then when he tested the sg of the crown it had a
different SG value
<Doos> KISS
<Jen> burr i'm cold now
<Doos> flap yur arms
<Jen> and what FLY
<gemma> wait, i want the rest of tthe crown story
<Jen> well ice cream doesn't go well with -24
<Jen> and about half a foot of snow at least
<gemma> your the silly one eating it
<Scotsmaninfrance> did he have logarith tables?
<gemma> :-)
<Scotsmaninfrance> logarithm
<Doos> okay what archimedes did was the following
<Doos> he weight the crown
<Jen> weighed
<Doos> uh yes
<Scotsmaninfrance> leave him be.....english is his third language,
maybe fourth
<Doos> then he took a piece of gold that weighed the same
<Jen> brb
<Doos> he filled up a barrel with water
<Doos> till the top
<Doos> then lowered the gold in it
<gemma> oh density
<Doos> so water was spilling over the edges
<Doos> no volume
<gemma> bummer go on
<Doos> then he took out the gold
<Doos> so the water level dropped in the barrel

<Doos> if he would have lowered the same goldbar in the barrel again
.. the water would rise to the edgae again
<Doos> agreed?
<gemma> yes
<gemma> but it didn't right?
<Doos> but he didnt do that
<Doos> he lowered the crown in it
<gemma> thats what i meant
<Doos> water spilled over the edge, proving there was more volume in
the crown than in the gold bar .. even though they weight the same
<Doos> so it has to have been mixed with something other than gold
<gemma> so this illustrates that the formula we are working with today
really does involve volume
<Tanzy> same is so true for our different gems of equal size but
different densities
<Jen> back
<Doos> all about volume gemma
<gemma> that was a good story doos
<Doos> that is the eureka story gemma
<gemma> i hope i remember that when i think of the formula until it
becomes burned in
<gemma> yes, but
<gemma> the eureka story gets halted with the guy in the bath lol
<Tanzy> i find that students remember best when stories are told
<gemma> this makes it more serious
<gemma> i looked at it with a different perspective
<Scotsmaninfrance> yes he was a clever fat Greek
<gemma> i agree annie
<gemma> i cant believe weve spent this much tme discussing SG. i
thought everyone would be really bored
<gemma> it was good i think
<Scotsmaninfrance> yawn.....eh what???
<gemma> FYF lol
<Scotsmaninfrance> lol.....I've enjoyed it
<Tanzy> there is someone
<gemma> lol
<gemma> so have i
<Scotsmaninfrance> I don't mind how often we do each lesson
<Tanzy> i have too
<Scotsmaninfrance> theres always something new comes up
<gemma> so good to see you annie. have you come to the forum and seen
how much we miss you?
<Tanzy> gemma, i haven't been to forum lately, with this shit computer
of mine
<Tanzy> did you miss me ??
<gemma> oh im sorry
<gemma> of course
<gemma> you should see :-)
<gemma> we sang for you to make you come back
<gemma> but you did not hear :-(
<Tanzy> did you sing me a tanzy song ??
<Doos> we lit candles
<gemma> well, a little tanzy ditty
<Scotsmaninfrance> a song of Africa
<Tanzy> :)
<Tanzy> oh i like the african songs
<gemma> yes, and we chanted tan-zy! tan-zy!
<Tanzy> lol :'D

<Jen> frank did you get trillion all figured out
<Doos> then we went potty and slept
<gemma> lol
<gemma> LOL
<Scotsmaninfrance> yes thanks jen.....doos did me and gemma just before you arrived.....sorry I missed you earlier
<Jen> oh ok so gemma is on trillion now
<Doos> doos did me and gemma just before you arrived
<Doos> what is that all about?
<gemma> annie, if you are having probs with your PC and think i can help in any way, email me what's going on
<gemma> doos did will?
<Doos> lol
<gemma> heheheh
<Jen> there is some more cool stuff you can do with it , i will tell you about them later
<gemma> yeah, jen, i'll hve to have a lesson on trillion soon
<Scotsmaninfrance> lol....well if your up for it doos take all the credit you can
<Scotsmaninfrance> me too jen
<gemma> i don't know any of this chat stuff have been avoiding it for years
<Doos> I could be a heck of a reporter
<Scotsmaninfrance> clark bent?
<gemma> are you sure you meant up for it frank?
<Doos> lol
<Scotsmaninfrance> he's single.....he's always up for it
<Doos> he screws with terry
<Scotsmaninfrance> is that the cat?
<gemma> well, he's getting confused with blond and blonde. im not so sure how long this should go on
<Jen> well i am going to work on school in ISG
<Jen> Doos catch me before you leave ok
<Doos> ok
<Jen> just pm me
<gemma> bye jen
<Scotsmaninfrance> I'm for a "hot" toddy and bed.....the dog can have this one
<Jen> see you later
<gemma> i need to leave too. insulin for the cat, coke and pizza for me
<Scotsmaninfrance> cya jen
<Tanzy> bye Jen
<Jen> good bye all
<Tanzy> nice to see you girls
<Doos> bye gemma
<Jen> yes you too
<gemma> good night everybody -- and email me annie with the pc probs
<Tanzy> bye Gemma
<gemma> bye love
<gemma> good night boys
<Scotsmaninfrance> bye gemma
<-- gemma (~406c515f@bopm.chatjunkies.org) has left #yg
<Tanzy> boys are going too ? well i suppose its time to go
<Scotsmaninfrance> yes I'm a virus ridden wreck....slept all afternoon so I could make it here tonight
<Scotsmaninfrance> but I'm running out os steam
<Scotsmaninfrance> next weeks subject?

<Scotsmaninfrance> shall we finish polarisation?
<Scotsmaninfrance> or have modo in for a report on tucson?
<Doos> yes, annie .. you want to handle it?
<Tanzy> didn't we handle that
<Tanzy> is modo back from tucson yet
<Tanzy> hey today is 5th she probably is still there now
<Scotsmaninfrance> not the convergant and circular.....she's gone
now...back on Tuesday
<Tanzy> oh ok
<Tanzy> convergant and circular
<Scotsmaninfrance> I think so.....maybe I got it wrong....dood?
<Scotsmaninfrance> doos?
<Doos> convergent was a typo Scotsmaninfrance, I meant ellipt .. geez
give me a break
<Scotsmaninfrance> elliptical and circular?
<Doos> yah
<Scotsmaninfrance> ok..ty
<Scotsmaninfrance> you up for that Annie?
<Tanzy> yeah, Frank sure, i will see how i go
<Tanzy> if i can bend my head, i will straighten it somehow
<Tanzy> i think ??
<Doos> we will mark you on it Tanzy
<Tanzy> not sure yet though
<Jen> frank check your messages in forums
<Scotsmaninfrance> ok.....well I'm going to bed.....thanks for
everything.....be well
<Jen> i sent you something
<Scotsmaninfrance> ok Jen
<Jen> bye
<Doos> night Scotsmaninfrance, till soon again
<Tanzy> Bye Frank
<Tanzy> see ya later, be good and take care, get well soon
<Scotsmaninfrance> bye all
<Doos> bye Tanzy, kiss hun
<Scotsmaninfrance> ty.....and you get cheery
<Jen> bye annie
<-- Scotsmaninfrance (user@AC97F18F.ipt.aol.com) has left #yg
<Tanzy> bye Jen
<Tanzy> are we all gone
<Doos> almost
<Jen> i am leaving now
<Tanzy> i guess so
<Jen> talk to you guys tommorrow
<-- Jen (~Jen@66.244.234.131) has left #yg
<Tanzy> we all have to go to bed get some sleep
<Doos> night all .. till soon again
<Tanzy> bye thanks Doos
<Doos> night annie, thanks for a good chat
<Tanzy> no thank you also for th phone call
<Doos> and for making me think not all ozzies sound terrible
<Doos> :)
<Tanzy> oh :-)
<Tanzy> well being an european aussie, i think i am doing well with a
brit, german and south african accent
<Doos> lol yes and you even sound cheerfull on the phone
<Tanzy> yeah, :)
<Doos> I'll call you this week (hope I dont wake you)
<Tanzy> no it will be fine i think

<Tanzy> must remember wednesday now
<Doos> I'll remind you
<Tanzy> ok : 'D
<Doos> bye for now .. get some more sleep
<Tanzy> thank you - you too Alain
<Doos> :)
<Tanzy> Bye for now
**** ENDING LOGGING AT Sun Feb 6 02:24:53 2005