

Jen: no it is just what the question asks for

Annie: Hi

Doos: when you speak of the devil

Doos: hi annie

Annie: Hi Jen, Doos

Jen: it is the questions wording that got me so i gave 2 answers

Jen: hi annie

Annie: how are you

Jen: tired but goof

Doos: doing fine here

Jen: good

Annie: guten tag

Doos: guten abend

Annie: wie gehts den

Jen: ok the question is

Doos: sehr gut hier, wie gehts dort?

Annie: glad you can make it today Jen

Jen: How do Gemmologists describe hardness

Doos: uhm

Jen: are they looking for the definition there

Annie: are we defining

Jen: i do not know

Annie: Jen

Jen: see for my answer i gave the definition

Doos: It's a question from here study annie

Annie: how do gemmologists describe hardness - you asked

Doos: her*

Jen: and then the other answer i provided is

Jen: Moh's scale of hardness is used universally by gemmologists and mineralogists. This scale was created by the Austrian mineralogist Friedrich Mohs nearly 200 yrs ago

Doos: uhm

Annie: yes from 1 - 10 moh's version of hardness

Doos: that is nice to know, but you could have said "relative hardness"

Jen: see i don't know if they wanted definition or what gemmologists use to describe hardness

Jen: wht relative hardness

Jen: why*

Annie: the question was "how do you describe or you define "

Doos: it is a relative hardness scale in which the higher value is able to scratch the values below

Jen: yeah see and that is in my definition

Annie: yes, the resistance to abrasion

Jen: it was describe annie

Doos: there are other methods than mohs scale, infact diamond is 140 times (or so) harder than sapphire

Annie: ok, when they said, describe, tell me, or

Doos: in your own words

Annie: means they want you to define it first

Jen: i did define it

Annie: good,

Annie: yes, there are other methods too

Annie: as doos said

Annie: but they propably just want the mohs if that is what is being asked

Doos: yes, we only use Mohs

Annie: yes, here too

Jen: yes i would assume as moh's is the most used one and what they ask about most through the lesson

Jen: like they do explain Knoop's scale to

Annie: yes Jen

Jen: but don't go into it as much

Annie: yes, although we may need to know in theory - most important one is Mohs

Doos: Jen, they don't need to .. no one in our industry uses it

Jen: brb i am going to go to washroom, but please go on and explain i will read when i get back

Doos: but is good to know indeed and that Mohs scale is just relative

Annie: Doos, you got your site up, that's wonderful

Annie: after checking it out, the stones i graded may have been wrong

Doos: yes, but I'm having issues with it .. not loading etc

Annie: oh

Doos: nah, you did fine

Doos: the values I gave there were an average of all the graders gave

Doos: that sentence didn't go well

Annie: the first greenish blue, it was probably vslgB

Doos: I graded it a gB myself

Jen: ok i am back

Jen: my kids should be excited today

Annie: ok

Doos: they get candy?

Jen: we will get our first real snowfall

Jen: 5-10cm

Annie: really, so soon already

Doos: ah great, should I start packing my skiing trousers?

Jen: well it is October for us that is normal

Jen: we have long winters here

Annie: oh, great get the ski ready too Doos

Jen: oct/nov through to march/april

Annie: oh my god, i would never survive

Jen: oh yeah you would

Jen: in my house especially

Jen: we run wood heat so we stay really warm

Doos: jen lives near calgary annie, nice to know someone that you can crash on the couch

Jen: and snow is fun

Annie: in germany i always loved to make the snowmen

Doos: annie, you have very hot summers .. I would not survive that

Jen: we take the kids out in the hay fields and pull them around on sleds with the truck they love it

Annie:

Jen: and this year we will use the quad

Annie: yes we have stinking hot

Doos: heh, so would I

Annie: and humid weather right in middle of december

Jen: ok so with the definition and what i told you earlier do you think that covers the question

Doos: jen, you could also add some explanation in your own words, so they know you understand it

Annie: yes, doesn't hurt to put extra information

Jen: can i give you my complete answer and see what you think

Doos: shoot

Annie: yes ok

Jen: hardness is the power a mineral/gemstone has to resist abrasion when a pointed fragment of another substance is drawn across it without sufficient pressure to develop cleavage. Mohs scale of hardness is used universally by gemmologists

Jen: ect ect i gave you the rest of that

Doos: very good and now in your own words

Jen: it is hard for me to word it

Doos: okay, but you fully understand it?

Jen: yes

Jen: i do understand it very well

Annie: yes that is good Jen -

Doos: try to think about how you would explain it in your own words, train yourself in doing that

Jen: i think hardness is one of the easiest parts of this

Jen: ok i will

Doos: it will come slow at first, then you can do it on the fly

Annie: and you could point out that that scratching one stone to another in an conspicuous places not to damage the stone or apply too much pressure to develop any cleaveage

Jen: yes i do have that in another question

Annie: and the harder one will always scratch the other lower stone

Annie: oh ok

Jen: when asking where points and plates should be used

Annie: ok i didnt know

Jen: and that scratch tests are not the best or hardness tests

Jen: that there are other ways and hardness should be a last check

Jen: as it causes damage to the faceted stone

Annie: yes of course - the harder ones always take a better polish in the finished product

Jen: but with large ornaments

Doos: another nice thing to know is that dust/sand has quartz in it, so never wear a 7- stone when doing gardening

Jen: you can do a scratch test on the base and it won't be seen

Jen: yes

Annie: and only stones over hardness 7 should be cut for jewellery wear

Jen: i have explained that to everyone i know

Annie: this is a particular question in our exams here

Jen: or for regular everyday jewellery

Annie: it will ask something like = explain why this is so.... etc..

Jen: and should never leave stones/rings loose where they can rub each other in a jewellery box

Doos: very good jen

Annie: that is excellent,

Jen: becaus a loose daimond and say a emerald

Jen: if the diamond was to rub the emerald it could scratch

Annie: if Robert was here - he would give you 50+

Doos: lol, I missed something I think

Annie: did we miss

Jen: also when testing always wipe the dust away to make sure it isn't just dust from the other stone and to see there is actually a scratch on the stone being tested

Annie: Doos, what did you miss

Doos: actually I never used the scratch test, not even in the gemcalsses

Jen: in the reall world hardness is important

Doos: classes*

Doos: annie: the 50+ part, I don't get it

Jen: for someone to know that they can cause damage to thier stones with others harder

Jen: oir to understand what stones can be damaged from dust and to protect them from that

Annie: oh, Robert used to give us points for answering

Doos: heh, the good old days huh

Annie: that's what i meant,

Annie: yep

Jen: like ammolite

Doos: I think you understood it very well jen

Jen: you want to protect that

Jen: it is so soft

Jen: that is why they use a spinel or wuartz cap on it

Jen: quartz*

Jen: my typing sucks today

Jen: but see tanzanite is also soft

Annie: its fine,

Doos: jen, sounds to me like you will be doing well on this question ..
if you ever get such a question: don't be afraid to write that all down

Jen: i would be scared to wear it everyday

Jen: ok

Jen: specific gravity gets me though

Doos: when I took my FGA exams, I wrote about 20 pages orso

Jen: i shouldn't say that

Annie: what do you mean, SG

Annie: the formula ??

Jen: i g3et it but some of the ways they use i don't ge

Jen: or questions i should say

Annie: what are they asking for SG

Doos: density and sg?

Jen: well i understand it is the wqeight of body campared with and equal
volume of water at the right temp

Jen: 4 degree C

Doos: yes

Annie: yes Jen

Jen: ok but a wquestion here i did not understand again

Doos: what was the question

Annie: give us the question

Jen: briefly describe the theory of hydrostatic weighing

Annie: "describe" - the formula

Doos: they want you to use words like "weight in air" "weight in water" etc

Annie: weight in air

Annie: then weight in water

Jen: then loss of wieght

Annie: take away weight in air minus weight in water

Jen: then divide weight in air

Jen: from loss of weight

Annie: gives you a difference

Annie: then divide weight in air by the difference

Jen: that is all they were looking for

Doos: there is your answer, just elaborate on how you do it in practise

Annie: will give you the density or specific gravity of the stone

Jen: i thought they wanted how to set up device to do that

Annie: yep

Jen: which they describe also

Annie: mp

Annie: opps

Jen: ok well i can answer that in the space they give me

Doos: jen, you could say that aswell .. again make your answer as long as possible

Annie: thats what i meant by give the formula first

Annie: then show all your workings

Annie: if they given you any numbers to work with ??

Jen: oh ok well that is a really long drawn out thing on building the device

Annie: anothing thing to remember

Jen: no not in the question

Annie: put all the workings in grams

Jen: but they explain the formula with numbers

Annie: then the actual SG of the stone is only a value

Annie: ok

Annie: and take it to 2 decimal places - your reading may look like
2.56466659

Jen: yes that i also understand

Annie: so SG would be 2.56

Jen: oh but see here it will get confusing

Jen: because they do ask for the word formula for the specific gravity
obtained by hydrostatic weighing

Annie: which

Jen: which is basically what we just did

Annie: yes, the forumala is in words -

Jen: so why would they ask that 2 times but differently

Jen: that is what makes me think they are looking for something
different with the first question there

Doos: jen, you don't need to give the "perfect answer" as long as they
get the idea you understood it fully, it's fine

Jen: ok

Jen: next

Jen: nowhere can i find the answer to this

Jen: so here it is

Jen: and i looked

Annie: ok

Jen: maybe i am missing it

Jen: 2ml of di-iodomethane(methylene iodide) with a specific gravity of
3.33 are added to 8 ml of bromoform with a specific gravity of 2.88.
What is the specific gravity of the mixture?

Doos: you need to do some calculations

Jen: this is challenging with the spelling i think i need to do a spelling bee for gemmology

Doos: there you need some math

Jen: they don't explain how to calculate anywhere on that

Jen: on the heavy liquids

Doos: they expect you to know

Jen: great

Doos: they expect you to know some math

Annie: i can send you the SG of liquids

Jen: what math do you use there

Jen: that would be helpful annie

Annie: ok

Jen: oh well wait

Jen: i have the basic sg of liquids

Doos: jen: when you have 1 ml of sg 5 and 1 ml of sg 3, what will be the new sg of the mixture?

Jen: they just are not telling me how to do this question

Jen: thias isn't tyuping

Jen: ok answer to that 4

Doos: very good

Doos: let me explain that

Jen: ok thanks

Doos: what you did was: $5 + 3 = 8$, then you divided 8 by 2 (the number of components) = 4

Jen: oh ok

Jen: i can do that

Doos: I'll make it a bit more difficult: 1 ml of 5, 1 ml of 6 and 1 ml of 10

Doos: what is the sg of the mixture?

Jen: hang on

Jen: answer 7

Annie: yep

Doos:

Jen: cool ok i got it

Jen: thanks

Jen: but

Annie:

Jen: i don't got it

Doos: heh

Jen: we are talking different mls here

Jen: 2mls to 8 mls

Doos: they were examples on how to calculate

Jen: ok

Jen: so how do we calculate with different mls

Jen: would i go 3.33 times 2mls

Doos: so if you have 2ml of 3.33 and 8 ml of 2.77, you do: 2×3.33 and 8×2.77 .. then you add the results and divide them by 10

Jen: and then do the same for the bromo in 8mls

Jen: ok

Jen: so next question is

Annie: ok

Doos: uh what

Doos: jen, do you have a calculator there

Jen: 20mls of benzyl benzoate(SG1.12)are added to 40ml of di-iodomethane(SG3.33)and mixed well. What is the specific gravity

Jen: do not answer

Jen: i will work it out

Jen: ok is the answer 2.49

Doos: 2.56 here

Jen: srry 2.59

Annie: 2.59

Jen: did 4 instead of 5 by accident

Annie: ok

Jen: so that is correct then

Annie: yes

Jen: ok i got it

Annie: you goy it now

Doos: oh wait, I added 20.4 instead of 22,4

Doos: you are right jen and annie

Annie: you should have got 2.5933333

Annie: on the calculation

Jen: yes i did get that

Doos: very good jen, silly me .. trying to explain how it works and then doing it wrong myself

Doos:

Annie: its $22.40 + 133.20$ divided by 60

Doos: yes I did 20.4, silly me

Doos: I should get a calculator with a memeory function

Jen: great got that now thanks

Annie: lol that is great

Doos: this is fun huh jen

Annie: it makes sense

Jen: yes it is fun and makes sense

Annie: beaut

Jen: Clerica's solution

Jen: i can't find the solvent for it

Doos: do they still sell that?

Annie: i don't think these liquids are used in practice

Jen: oh i have it never mind

Jen: duh

Annie: bly me why they would ask you tose

Jen: understanding

Jen: no they are not

Jen: why because poisinous and expansive and corrosive

Annie: because they are health heazard

Annie: even the Ri liquid is alrady very toxic material

Jen: ok

Jen: last question

Jen: they ask

Jen: what is a pyncnometer and how does it work

Jen: i do not understand this

Doos: pyro?

Annie: thats a little jar

Jen: yes a goofy looking one

Jen: but how does it work

Doos: i never heard of that, or I forgot about it

Annie: yep with inverted little nose

Annie: i have forgotten too but can look it up if you want

Doos: yes please do

Jen: ok well we can work on it next week

Annie: look it up

Jen: and give you time to look it up

Annie: you can wait

Jen: yep i can

Jen: i will scan and email you both the page on it aswell

Doos: ah I googled for it, now I remember

Jen: ok email adresses please

Doos: <beep>@<beep>.nl

Doos: I'll blank them out in the logs (so we don't get spammed)

Annie: ok,

Annie: its a form of density bottle

Jen: annie

Annie: yes

Jen: i sent it to <beep>

Annie: ok

Annie: it holds a certain volume of liquid

Annie: like 25 cc cm

Jen: yes

Annie: it suggest that this is a method for testing large parcels

Jen: brb go ahead and explain i will catch up when i get here

Jen: brb

Annie: e.g. parcel of beryl could be checked in iquid of 2.70

Annie: like bromoform

Jen: well it seems that they are telling you how to determine the SG of the heavy liquids in the bottle

Doos: uh what

Doos: I don't thinks so

Jen: look at the page i sent you guys

Doos: ok

Annie: ok

Doos: aha

Doos: now I get it, I never heard of that method

Doos: guess I learned something today aswell

Jen: ok niether have i

Doos: I'm happy

Jen: why

Doos: because I learned aswell

Jen: oh ok

Jen: so is my answer to the question in there

Doos: I'll look into it and try to explain in my words next week

Jen: ok thanks

Jen: yeah i am tired

Jen: school wearing me out

Jen: i think i am done school for now

Doos: heh

Jen: but i have learned alot today

Jen: and will go back in fill in the blanks after

Annie: ok

Jen: i feel like just chatting now

Doos: okay, lets just chat now

This was followed by a long chitty chat