

Jen: ok molecules would be like atoms correct
Doos: yes
Jen: ok i got it then
Jen: they talk about compounds and elements
Jen: i thought maybe it was one of those
Doos: a compound is a mixture of elements
Jen: yes
Jen: an atom is the smallest particle of a compound
Doos: of anything
AnnieGuest entered the room.
Doos: hi annie
AnnieGuest: Hi
Jen: so another name for building blocks of xhemistry would be atoms then
Jen: hi annie
AnnieGuest: sorry, hangon
Jen: chemistry*
AnnieGuest has left the room.
Jen: that gets confusing what do they want
Doos: who?
Jen: the course/school
Annie entered the room.
Jen: they say an atom is the smallest part of a compound and then a molecule
Jen: i guess
Annie: Hi
Jen: i will go with molecule
Jen: hi annie
Jen: how are you
Annie: how are you
Doos: a molecule is made of atoms/electrons/protons
Jen: oh wow ok
Annie: have we started
Doos: I guess
Jen: see ok the first question is
Doos: Jen wanted to know what building blocks are
Annie: yes
Jen: what is another name for the building blocks of chemistry
Annie: unit cell
Jen: and then the next question is when two or more of these building blocks are chemically combined in various whole number ratios what sort of substance is formed
Jen: what i am getting out of course notes is atoms make ions
Jen: ions make molecules
Annie: are these the questions
Jen: yes
Annie: right
Jen: so i am getting it then
Jen: but which one is the building block the atoms or the ions
Doos: yes, but don't dwell on that subject too long
Jen: because one of those must be it
Jen: as they work to build molecules
Jen: no it is the questyion i am stuck on
Annie: part of chemistry of the mineral structure
Doos: is that a question from the course?
Jen: yes
Jen: chemical comp

Jen: and chemical formula
Annie: the minerals are classed into 4 main bases
Jen: there are three questions here i have had a exceptionally difficult time with
Jen: thos 2 and the next one
Jen: ok i think i have that one
Annie: you know that they are dependant on
Annie: 1 internal phisical structure of crystal
Annie: 2 chemical composition
Jen: ??
Annie: 3 phisical and optical properties
Annie: and 4 mode of occurrence
Annie: that is part of general chemistry
Annie: when 2 or more atoms within the structure combine
Annie: they become an isomorph
Jen: ok
Annie: is that what you mean
Annie: i think that answers your questions you asked before
Annie: because the compo and structure are the fundamental of any mineral
Jen: yes
Jen: and this is what they briefly go over in lesson 1
Annie: ok
Jen: lesson 2 gets crystallography
Jen: that lesson scares me
Doos: will be fine
Annie: crystallography should be good
Annie: it relates to all everything one must know
Jen: yeah that is part of the problem
Jen: not good to barely get past it
Annie: what questions do you have to answer or learn on this
Jen: better to understand it
Jen: and it loses me
Jen: for crystals
Doos: it isn't really that hard Jen, we'll guide you through it in the next study
Jen: annie did you mean in the crystal saection
Doos: you said you had a 3rd question
Jen: yes
Jen: i may take 2 or 3 weeks to work on it
Annie: yes
Jen: and absorb it
Jen: oh i have it
Jen: so i think i am fine with it
Annie: on crystals -
Jen: oh there are lots of questions on crystals
Jen: it is one of the larger lessons
Doos: we could spread it over several weeks of course
Annie: yes of course but crstallography has to do with its inner structure of growth and the atoms or building blocks put together
Annie: that is why it is so important to understand
Jen: yes
Jen: and they talk about alot of it
Annie: don't be put off by it - it will become the best subject you will love down the track
Annie: yes

Jen: but wow axes, those throw me off
Jen: it probably will
Jen: once i undrstand it
Jen: and i can't wait for that day
Annie: axes are directions
Diamond-Grader entered the room.
Doos: hi diamond-grader
Diamond-Grader: yo
Annie: hello
Jen: hi diamond grader
Diamond-Grader: hi
Jen: don't believe we have met
Diamond-Grader: nope.
Jen: well that is good
Jen: ok well in the forum i am peridot
Diamond-Grader: i'm at work. i will get on again but from home . bye
Doos: bye for now
Diamond-Grader has left the room.
Jen: bye
Jen: gone
Jen: do you know them
Jen: maybe we are getting new people
Jen: that is cool
Doos: he's new I think
Jen: cool
Doos: what was your 3rd question Jen?
Jen: i got it
Doos: ah good
Jen: ok
Doos: so now you know everything about rock formation?
Jen: everything they want me to know
Jen: but not EVERYTHING
Jen: i am not that much of a brain
Doos: plutonic rocks etc is all understood?
Jen: they didn't mention those
Doos: uhm
Doos: do they mention igneous rocks?
Jen: igneus, sedimentary, metamorphic
Doos: igneous rather
Jen: igneous- formed by the cooling of molten materials
Doos: ah okay, that's a start
Annie: yes
Annie: it has 3 arbitrary categories
Annie: 1 plutonic
Annie: which rocks formed deep within the earth's crust
Jen: metamorphic-produced by the action os temperature and/or pressure upon
already existing rocks
Jen: yeah see they didn't seperate them
Jen: and i just went over course notes on this
Annie: hang on lets go back to igneous
Annie: 2 is hypabysall formed in a same way but at indemediate depths
Annie: and 3 is volcanic
Annie: which can be extrusive (formed of lava OVER the surface of earth
Annie: or
Annie: formed by intrusion of lava NEAR the surface of earth

Annie: is that ok to understand
Jen: yes
Doos: volcanic = extrusive, plutonic = intrusive
Doos: intrusive
Annie: yes
Jen: yes
Annie: so this is the first process
Annie: in which gemstones can crystallise as it cools
Annie: the rate of cooling will influence its grain
Doos: volcanic rocks are mainly basalts since they cool faster and therefore mainly create smaller crystals
Annie: is it slow cool
Annie: will allow large crystals
Annie: if rapid cooling it will be fine grained
Annie: usually in igneous environment certain gems will be heavier due to iron and magnesium
Annie: and will be rich and dark
Annie: which tends to crystallise and settle out of melt
Jen: hmm maybe they go into all that later in the course, as what lesson 1 is is an introduction
Jen: see some of this we went over, like rapid cooling, but just briefly
Doos: usually they start with that Jen
Annie: and the igneous rocks is based upon rock texture or grain size and silica content
Annie: those that have high silica are usually light coloured and light weight
Annie: these are acidic
Annie: like granite or rhyolites or obsidian
Annie: anything with low silica content have no free quartz, these are dark and heavy
Annie: heavy as we said they will be dark in colour
Annie: these are basic rocks
Annie: is that clear
Annie: you have any questions so far
Jen: yes it is
Jen: you should be a teacher
Annie: i am trying to use basic language
Doos: I guess we start to bring Annie an apple each week
Annie)
Annie: my brain is not working that well = so i am not sure if i make it understandable
Jen: well you made it understandable to me
Annie: Doos correct me
Doos: it's in nice plain English Annie
Annie: ok
Doos: and I'll log it so we can read it back for reference
Annie: the acid igneous group is the pegmatite are most important gem bearing types
Annie: ok
Jen: ok
Annie: so the pegmatite where gems grow is the last portion of the magma
Annie: magma
Annie: like the stomach
Annie: where they will be nourished
Doos: (in the plutonic rocks)
Jen: ok

Jen: i love how you put that together, very understandable
Annie: so lets run some of gems that may grow in that
Jen: kinda like robert and the bedsheets
Annie: yes
Jen: i am not typing well this morning
Annie: robert is very good in explaining things simpler
Jen: yes he is
Jen: especially for someone who hasn't had alot of school and gets lost in scientific stuff really easy
Annie: i had made up my own like this Tof Tof Begs Ma
Doos: for who?
Jen: like me
Jen: i never did alot of science
Annie: Tof Tof Begs Ma to remember which
Jen: i never finished school
Jen: so i get lost easy
Annie: Soooo - Tourmalines,
Annie: Feldspar for F
Annie: Then "To" again which was Topaz
Annie: F again for Fluorite
Annie: Be for Beryl
Annie: S for Spodumene
Annie: M for Mica
Annie: a for apatite
Doos: ah now I get what you meant by that
Annie: and of course Quartz varietes
Annie: you can make up any acronym you want
Annie: is that easy
Jen: yes i will have to remeber to try to build those type of things
Annie: then after a while it all falls into place
Jen: well i am also sure that as i get going on this course and now i have a place to work and quiet that it will all fall into place eventually anyhow
Annie: yeahy, we'll work on that
Jen: maybe i should scan my outline of my course and email it so you two know what is ahead for lessons
Annie: yeah, that's also an idea
Annie: but in conjunction with other texts and Robert's YG pages
Annie: it should be ok
Annie: and you have Peter Read's book
Jen: yes i do have that book
Annie: that's also a good plain book to undertstand
Jen: and i have gemstones of the world
Jen: and the rock and mineral audobon
Annie: by all mean, do not hesitate to ask
Jen: yes i know
Annie: next is your metamorphic
Annie: i think you defined that before
Jen: yes
Annie: alteration by hitting and changing shape by heat and pressures
Jen: brb ok
Annie: ok
Annie: i think she is making coffee for us
Doos: I hope the applepie is out of the oven already
Annie: yeah, that would go well together
Jen: back

Jen: lol
Doos: heh
Jen: i can't be here to much longer
Annie:
Jen: i have to shower and get ready to head up to the inlaws
Jen: fun fun
Doos: well we basically covered it
Annie: ok
Jen: to look forward to is seeing my grand daughter though
Jen: but i have a few minutes to chat
Annie: should be fun
Jen: yes
Doos: so next week crystallography?
Jen: yes
Jen: and for the next year lol
Annie: ok,
Jen: just kidding
Doos: heh
Doos: just do it in portions
Jen: doos lose the first h and you could be canadian eh
Jen: lol
Doos: eh
Annie: eh
Jen: well i may be on later deopends when we get everything up there done
Jen: probably not till tonight though
Doos: I'll be in bed by then
Annie: oh
Jen: i have to pick up the dryer, not sure if we are doing that today or tommorrow
Annie:
Jen: yeah i know time differences suck
Jen: why cant they bee the same
Annie:
Jen: well annie you should pop in for chit chat this week
Jen: miss you there
Annie: where at Doos's place
Jen: yep
Doos: I'll wax the floor then
Annie: as long as there is fire wood burning
Jen: you better
Annie: get the red carpet
Jen: and clean under the stove so i can cook
Jen: lol
Doos: oh dear
Annie:
Jen: ok well i got to go
Annie: you got a lot to do Doos
Jen: if you see gemma tell her i said hi
Doos: bye jen, till soon
Annie: take care
Doos: will do
Annie: bye Jen
Jen: you two take care too
Jen: bye
Jen has left the room.

Annie:
Doos: lol
Annie: lol
Doos: holdon, let me log this
Annie: ok