

EGEE 102, Lesson 2 Review

Let's see the review for Lesson 2. In Lesson 2, we talked about energy intensity. You need to know what energy intensity is. And you need to also know about these quadrillion BTUs. Quadrillion BTUs is 10^{15} BTUs. Trillion is 10^{12} , and quadrillion is 10^{15} .

And the highlights of world energy consumption and United States energy consumption are given here. You need to know about that. There was a mistake on screen 14 of the lessons, where when you put in, what is the percentage of fossil fuels? You put in 85%, and it says Wrong. But that is 85%. So just be aware of that.

And you should also know how to calculate doubling time. There was an equation that I'm going to provide you. But that equation is $\ln 2$ over rate of increase, gives you the doubling time. So that will be some numerical problems relating to this.

And basically, it comes from the equation $n = n_0 e^{rt}$. OK. So you need to know how to use this equation and calculate, or project, the energy demand in future.

And try to remember the differences between energy reserves and resources, and how long each of these reserves last. Approximate numbers. You don't need to remember exact numbers, but roughly, what is the lifetime for coal, oil, and natural gas, for both United States and the world. You don't have to worry about any other country.

Pretty much, those are the facts that you need to know for this chapter. I don't expect you to remember exact numbers, statistics. But you need to know the top ones. Like, most of the petroleum is used for transportation. Most of the coal is used to generate electricity.

You don't need to remember how much, but the majority. Or, most of the oil is used for transportation. And those kinds of details. Like which country has most of oil deposits. Or how do we do, in terms of deposits, et cetera.

Those are the basic things. And again, you don't need to remember any of the formulas or any of the conversion factors. I will provide you with those things. If you have any questions, you can always send me a question or post a question on the message board. And I will try to answer those.