Biology Essay, Research Paper

Why is knowledge of chemistry important to biology?

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Biology is the study of all living things and chemistry is the study of chemicals and their interactions. So, how are they related?

Our bodies are made up of hundreds and hundreds of chemicals. We just don?t think of them like that. Did you ever wonder how your body turns food into energy? It?s a chemical reaction. That?s chemistry involved in biology. Our bodies have hundreds more chemical reactions. A chemical reaction is one chemical?s response when exposed to another. Two very similar chemicals can have very opposite reactions when exposed to the same thing, so nothing in chemistry is assumed. It all is taken down on paper through hypotheses and conclusions. Also, chemistry is involved with atoms of different elements combining to make a substance. If an atom of something has 2 electrons in it?s first shell, and 6 in it?s second shell, and another atom has 2 and 10, then it could combine to make a substance.

You can think of biology as the study of the larger parts of living things. Chemistry is the study of what makes up all living things: hundreds of working parts combined in a single unit smaller than most microscopes will focus. Chemistry studies how the different chemicals in your body react to make you react to things the way you do such as digesting food or using glucose in your brain. It studies what elements combine with what other elements to make your body function like it does instead of like another animal. If people didn?t study chemistry, then biology would only go so far because you can?t find out much about a living thing if you only know how something works and not why. If a living thing thinks, digests, or breathes, then they?re using a chemical reaction such as assimilating food with a certain chemical to turn it into useful energy or having oxygen go into your lungs and co2 come out after having the useful chemicals taken out of it.

Chemistry is important to all fields of biology whether it be genealogy or botany. Genealogy uses chemistry to determine which side of your family which genes come from and what?s hereditary and what can be changed by influence. All of that is as a result of a chemical reaction. Chemicals react differently when exposed to different elements so the iron in your body is useful for more than one thing, it can be used differently if it is exposed to different elements. It can have completely different functions with completely different purposes and results.

I think chemistry is a key part in biology and in conclusion, I also think that chemistry and biology are useless without each other. Advances in one field depend on advances in the other. So scientists have to keep studying both fields or they will have to not know past a point in either. Chemistry is key to biology and biology is key to biology.

Bibliography

none.