BIOCHEMISTRY CLASS DISCUSSION

One university student decided to ask some questions. It is clear that sand and water cannot change into living creatures, as the evolutionists claim. This is science vs. evolution—a *Creation-Evolution Encyclopedia*, brought to you by Creation Science Facts.

This material is excerpted from the book, *PRIMITIVE ENVIRONMENT*. An asterisk (*) by a name indicates that person is not known to be a creationist. Of over 4,000 quotations in the books this *Encyclopedia* is based on, only 164 statements are by creationists.

Instructor: The first life form came into existence about 4.6 million years ago.

Student: But prof, how can we know it happened 4.6 million years ago?

Instructor: Because geologists theorized the date. The first living creature developed from inorganic materials.

Student: But prof, you mean dead things, like rocks and water, became alive?

Instructor: Well, we don't like to say it that way, but I guess that is what happened.

Student: But prof, how could something that was dead come to life?

Instructor: We think it was thick soup. A concentrated brew of chemicals in a primitive ocean produced the first life forms.

Student: But prof, there is no evidence today—or from the past—that any such concentration of diverse chemicals has ever existed outside of living plants and animals. And, if they could get together in the ocean in one instant, in the next they would separate out again because of the *law of mass action.* This is common knowledge among chemists. In addition, only a well-stocked laboratory would have the needed chemicals.

Instructor: It is thought that a lightning bolt energized the mixture and produced those first delicate creatures.

Student: But prof, whether it be delicate or rugged, a lightning bolt would kill any living creature.

Instructor: A continual source of energy was required for the task.

Student: But prof, a lightning bolt is neither a continual source of energy nor a low-level

source.

Instructor: As a result, a living creature immediately came into existence.

Student: But prof, the next instant it would die, unless hundreds of thousands of different functions and structures were not immediately formed within it. Instant success in every way was required.

Instructor: So life originated from nonliving materials.

Student: But prof, this is the theory of *spontaneous generation* warmed over! It is a superstitious belief from the Middle Ages, which Pasteur and other scientists disproved over a hundred years ago.

Instructor: After coming into existence, the first living creature gradually adapted itself to its environment as, over a period of millions of years, its food came into existence.

Student: But prof, that first living creature would have had to immediately have its food available—and that food would have to be organic; plants already living, animals, or both.

Instructor: After a lengthy time, this first creature would, by chance, evolve methods of division and reproduction.

Student: But prof, that first creature would have to be able to immediately produce additional cells and reproduce.

Instructor: It is fortunate that the oceans of the world are so large, for this increases the likelihood that the right chemicals might somehow, by chance, get into the proper, strong concentration to produce a living creature.

Student: But prof, chemicals dissipate in the ocean; they do not concentrate in it. In addition, chemists know that the chemicals needed to produce life must, in laboratories, be handled in fluids other than water! The presence of water inhibits the growth of complex chemicals.

Instructor: So we see that all these organic products were formed in the ocean_and then became alive.

Student: But prof, the problem of chemical precipitation would instantly nullify all that might be gained. The chemicals themselves would quickly inhibit and destroy the chemical compounds and enzymes produced. Many of the chemicals would also react with other chemicals, producing non-useful—and even toxic—compounds.

Instructor: In a similar manner fats, sugars, and nucleic acids were produced.

Student: But prof, they would all have to be produced simultaneously at the same time and in the same place. The problem of fluid condensation would doom them all to

destruction. This is because only by the careful removal of water can fats, sugars, and nucleic acids be produced from protein. Without controlled yet fairly rapid water loss, proteins could never form in water.

Instructor: Scientists have decided that the only practical place where life could have come into existence would be in the primitive ocean.

Student: But prof, every biochemist knows that the chemicals of life quickly decomposed in the presence of oxygen. So there could be no oxygen in the atmosphere—and no oxygen in the water. And that's part of what water is made of: 2 parts hydrogen and 1 part oxygen!

Instructor: We think that the original atmosphere was reducing, that is, without oxygen. It was composed of carbon dioxide, methane, hydrogen, ammonia, and nitrogen instead of our present carbon dioxide, water, nitrogen, and oxygen.

Student: But prof, there is no evidence anywhere in the rock strata that this planet has ever been without oxygen. The earliest rocks show evidence of oxidized iron, and there could be no water without oxygen. Every living creature has to have water, and it has to have oxygen!

Instructor: That is true, but we think that the oxygen came later.

Student: But prof, without oxygen, deadly peroxides would quickly form, killing all life. Without oxygen, there would be no ozone layer in the atmosphere. Without ozone, there would be no protection from lethal ultraviolet rays from the sun.

Instructor: It is thought that, perhaps, on the very day the first living creature came into existence,—the atmosphere suddenly changed.

Student: But prof, there is no possible way that that could happen!

Instructor: Fortunately, we know that life can come from nonliving matter, because it has been done in the laboratory.

Student: But prof, no life resulted from the lab experiment, only nonliving amino acids. And they were made without water, without oxygen, and in a very concentrated mixture of certain laboratory chemicals, aided by continued carefully controlled sparking.