nervous tissue. When those tissues come together to form a more complex structure, that's what we call an organ. In the human body alone , we have like 11 organ systems. Not every organism has that many but trees have the ability to push fluids through their cells into the leaves and that's their organ system. if you have a population of trees of the same species, they're all the same organism. The word is also used to describe a living cell like a bacteria as an organism.

The final pinnacle of biological interaction and study is our planet Earth, which we call the biosphere. It involves everything within an area and all of the nonliving interactions such as rainfall, temperature, nutrient flow and cycling. Metabolism is just all of the chemical reactions that occur inside your cells. When you eat fats and sugars and proteins, your body breaks them down, that 's our form of metabolism. Plants on the other hand, get energy straight from sunlight or from artificial light that we may put inside of a building but light is their energy source and then they take the chemicals from the air like carbon dioxide and water from the soil, and they can convert those into their own food molecules.

We depend upon the sun to essentially make them their own food and then use it and process it. On the other hand, animals are pretty much the main consumers of this planet. They essentially break down waste products. Animals can only extract about 10% of the energy of the food which we eat. All life must maintain what we call homeostasis. Some organisms can live in hydrothermal vents, areas that are so hot that you and I would not be able to survive in. Entropy, heat is a byproduct as a result of that, it's wasted energy as it has been given up. So that 's what your body's doing when you shiver. You are heating your body up. your body does not function well at 100 degrees Fahrenheit.

Most reproduction on our planet is what we call asexual reproduction or mitosis. Mitosis is the actual physical process of the cell splitting, but the overall process of cellular reproduction as we call it is called asexual reproduction. In some scenarios when your temperature gets up to 104, 105, this is the danger zone because at that temperature, your cells start to die. Your cells do not work at 105 or 106 degrees Fahrenheit. Most animals undergo a different process which we call meiosis or sexual reproduction. Sexual reproduction has the greatest evolutionary advantage because species that reproduce sexually have the greatest amount of genetic variation. 99% of species that have lived on this planet have died, even though a good number of them have been sexually reproducing. The