

<p>The study of cells is very important. To understand what a cell is you have to know all the parts that it is made of. Cell parts have a special scientific name...what is it?</p>	<p>Those would be called prokaryotic cells and they are always single-celled, but what type of organism am I if my DNA is bound by a membrane inside my cells?</p>
<p>we would have to thank Robert Hooke for that. He was the first to see cells. Unfortunately though his research went unnoticed for many years so who should we really thank?</p>	<p>The cell wall is what you are thinking about. Nothing gets by this guy...he's like superman!! But wait...how do we know all of this about a cell?</p>
<p>The magical substance you describe is called cytoplasm! But wait...there is another cell part that supports and protects too...not in the same way the cytoplasm does, but what is that?</p>	<p>Organelle...each cell part is called an organelle. There are several different organelles in every cell and some organelles help us classify them into 2 groups. One group is cells that <u>don't</u> have their genetic material bound by a membrane... what kind of cells are these?</p>
<p>There is...and it is really strange. These "things" are neither alive nor dead and can only reproduce by invading a host cell. There are no cures for these but you can get vaccinated in hope to prevent them!!</p>	<p>We should really thank 3 German scientists who got the ball rolling on that nearly 200 years after Hooke was dead and buried!</p>
<p>You are the nucleus, but don't you have another organelle inside you that is responsible for making ribosomes?</p>	<p>You are talking about the cell membrane <u>again</u>...letting things in and out...of course it will let the waste out. But what happens if there is a lot of waste being created by the cell, can it be stored while it waits for a lysosome to take care of it?</p>
<p>Yes...that would be the nucleolus, but what do ribosomes do?</p>	<p>They made everyone realize where living things came from. Most people thought things spontaneously generated but they discovered that cells only came from other cells that already existed.</p>
<p>You are talking about Schleiden, Schwann, and Virchow. Even though they didn't study the parts of the cell, other scientists were intrigued by their work and began doing extensive research. I wonder what was intriguing about their work?</p>	<p>Duh...that would be the chloroplast. But this would be meaningless if it weren't for the organelle that converts this energy made into a more useful energy that is then released to the whole cell.</p>
<p>Because they determine the characteristics of the cell or organism and are used to build other cell structures like the one that transports things around the cell.</p>	<p>Finally, they concluded that every living thing, whether it is a mushroom, tree, or animal, was made of one or more cells. But why do we care so much about this?</p>
<p>Because, without the study of cells, we would be completely lost about many things like disease for example. I wonder what causes disease?</p>	<p>Absolutely...you are talking about one of the most important things about a cell. Because of this all the life processes can take place and the organelles aren't crashing into each other...the cell gets to stay alive with the help of this magical substance.</p>
<p>WATER!!! Speaking of water, isn't there a cell part that is made mostly of water?</p>	<p>You are obviously talking about the mitochondria and they can't convert the energy and release it without producing any waste, so what happens to the waste (mainly carbon dioxide) created by them?</p>
<p>You mean the cell membrane. But what if it stays inside the cell, where does it get the energy it needs to do its job or where is the energy produced inside the cell for any cell part to do their job?</p>	<p>You mean bacteria...but not all are harmful and cause disease...many live inside your body right now...helping you stay alive. But there is another thing that causes disease too.</p>
<p>They also noticed that cells were the basic units of structure and function inside every living thing.</p>	<p>You must be talking about the endoplasmic reticulum, but from there these things have to be packaged up and shipped off to other places, so what does that?</p>
<p>There are 2 things mainly. It can be caused by a living thing that doesn't have an organized nucleus and reproduces like crazy.</p>	<p>You are talking about viruses but they aren't as cool as cells!!</p>
<p>All waste in the cell is gobbled up by the lysosome which has special chemicals in it to break stuff down, or it takes it to the part of the cell that allows it to leave.</p>	
<p>You are a eukaryotic organism, but what is that organelle called that has this DNA bound by a membrane and controls all the activities of the cell?</p>	
<p>Of course it can...the vacuole is perfect for that. Vacuoles store all kinds of things like food, oxygen, nutrients, and most importantly...</p>	
<p>They make all the proteins for the cell, but why are proteins so important?</p>	
<p>That is the Golgi body and it will ship things off to this cell part who decides whether it stays inside the cell or can go out.</p>	