

Are viruses living or nonliving?



**ASSIGN  
BUSTER**

Are viruses living or nonliving? Scientist all over are debating whether or not a virus is in fact a living organism. There are many different opinions about this touchy topic from many different scientists. My job was to read through all of these different opinions and decided which side I agreed with.

Do I think that viruses are living or nonliving? The answer to that question is, I absolutely believe viruses are nonliving and ill tell you why. Just because a virus seems alive doesn't mean it is alive. After all, it's not even a single celled organism. To determine whether a virus is alive or not, you could compare the virus's characteristics to what many biologists consider the requirements of life.

All living things have several common characteristics. Some nonliving things may have one or more of the characteristics, but not all of them. For a virus then to be classified as alive it must be able to reproduce, obtain and use energy, grow, develop, and die, and also respond the environment. Lets see if they fit the requirments, Viruses cannot use their genetic material by themselves. They need a living cell in order to function and reproduce; otherwise they are playing dead.

Also because a virus is not a cell it has no activity within it so it does not need food. So, because food is an energy source and they don't need it they are not obtaining or using energy. All living things also grow or get bigger. A virus does nothing inside its protein coat; therefore it does not grow.

The last question that needs to be answered is a little iffy. Do viruses respond to their environment? Viruses cannot move themselves which you would think would make it impossible to adapt but, the virus's DNA or RNA

can evolve over time, this is increasing its chances for survival and adapting to the environment. Viruses must have a host cell to live and reproduce. Outside of the host cell, viruses are pieces of genetic molecules that can do nothing by themselves.

Getting a definite answer if viruses are alive or not may never happen, but as far as I am concerned they are nonliving.