## Do things have to be scientifically proven to be true?

Usually things do have to be scientifically proven to become true. For instance in a law suit in which the court is trying to determine if a certain man is a father of a baby, just as an example, a scientific process must take place in which the DNA of the father and the baby are tested for similarities. Then the truth will appear once the results from a genetic laboratory arrive. Another example is if they want to find the murderer of a crime and there was blood of the murderer at the crime scene they could also scientifically check if the true murderer is the same as the person accused. Other than lawsuits, things also have to be scientifically proven true to be accepted by the society. For instance global warming, if someone simply states that global warming is amongst us the fact that people are going to find it true is very slim. However if that same person backed his claim scientifically with evidence, such as stating that the Glaciers are melting, plants and animals are being forced from their habitat, and the number of severe storms and droughts is increasing, then his claim would be accepted.

However, there is the argument that people thought that their theories were the truth however now as more advancements in science are being made we realize that these theories are incorrect. For instance, in the late 1800's Joseph John Thomson perceived that an atom is a charged sphere with electrons inside, and according to his theory he came up with the "plum cake" model. At that time, his model was good enough to explain many physical and chemical phenomena such as electrolysis and electron emission, and for that reason, it was accepted in the society. However, Ernest Rutherford with the microscope and radiation of alpha particles he was able to arise to a new conclusion in which he came up with a new model known as the planetary model of the atom.

There is also another perspective to scientific truth, that it can never be attained since there is no possibility that something is a hundred percent true, there are always exceptions to every rule. Also there is no possible way to prove the existence of many things for instance gravity, however we believe that the law of gravity is true yet there is no direct proof of its existence. Another example would be the rule that states that an object will move in a straight line unless a force acts on it to change that motion, there is no way to prove that rule since there will always be a force acting on it whether it is the force of gravity, or even the gravitational pull between two objects. Nevertheless this rule is believed to be scientifically true. As Nicholas Alchin mentioned in his book Theory of Knowledge, "This is the essence of scientific truth: it can never be proved experimentally that it is correct, but it can be proved that it is wrong."