

**Chapter 1 : - It Could Still Be a Leaf (Rookie Read-About Science) by Allan Fowler**

*It Could Still Be a Leaf (Rookie Read-About Science) [Allan Fowler] on calendrierdelascience.com \*FREE\* shipping on qualifying offers. Discusses different kinds of leaves, the forms and colors they may have, and their function.*

Video With more conventional styling and a longer range, the redesigned Nissan Leaf all-electric hatchback is more mainstream and practical than ever. But Nissan missed an opportunity to fix some of its glaring shortcomings. Plus, the new Leaf has a lower starting price and longer range than its predecessor. But shoppers who want a driving range of more than miles still need to look elsewhere for now, though a more powerful - and more expensive - longer-range version of the Leaf is slated to arrive as a model. When it debuted as a model, the Nissan Leaf brought the possibility of all-electric driving to the masses. And perhaps best of all, its EPA-estimated driving range has increased from to miles on a full charge. One of the biggest changes for is how the Leaf looks. The original Leaf hatchback had a distinctive, bulbous shape that was different from most everything else on the road, communicating to your fellow drivers that this was not some ordinary gas-powered car. In its Normal drive mode, the Leaf accelerates smoothly and builds speed quickly enough. The suspension tuning is firm, but there is a harshness in its response that is out of place in a modern car. The ride can also feel choppy on certain surfaces, like concrete. That said, another editor thought it rode better than the Bolt EV. With the higher-capacity battery comes longer charging times. On volt electrical service, the battery takes as little as 7. On a volt household outlet, it will take about 35 hours. Tilt-and-telescoping steering wheels are commonplace in new cars, but the Leaf, like its predecessor, still has only tilt adjustment. Meanwhile, the position of the rear bench seat relative to the floor results in an uncomfortable knees-up seating position for adults, as was the case in the old Leaf. Likewise, the huge ledge between the cargo floor and the folded back seat is even more disappointing now than it was in the first-generation Leaf. What stands out Looks: More like other cars Range: Big improvement, but still shy of rivals Comfort: Lacking in the back seat Nissan Leaf What: A compact electric hatchback When: On sale now What makes it go: Electric motors equal to horsepower combined with a battery pack good for up to miles of range per charge. How long to a full charge: The original Leaf was revolutionary. This one is a nice evolution and a solid player among EVs.

Chapter 2 : Leaf's tips STILL burning and dying. Could it be soil's PH? | Rollitup

*Get this from a library! It could still be a leaf. [Allan Fowler] -- Discusses different kinds of leaves, the forms and colors they may have, and their function.*

Bad tie rods or steering rack Sticking brake caliper If you blow through a pothole or climb over a curb or two, your alignment can get out of whack. It could be a broken spring or control arm. Other times, it could involve a few hours in the shop and complete replacement of key suspension components. Either way, ignoring this problems only makes things worse. Back to top 2. Feeling Every Bump in the Road A rough ride is a clear indicator your shocks or struts could be worn and in need of replacement. Try the bounce test—when your car is parked, put all of your weight on the front end, release, and observe how the vehicle responds. Worn Shock Absorbers Mean Big Problems Shock absorbers, true to the name, are the main culprit when your car feels "bumpier" than ever. Shocks have fluid which dampen the bouncing. When they leak, their performance suffers and the absorbers will eventually fail. You can double check the possibility of a busted leaf spring by checking if the car or truck seems to "lean" back in a standing position. Many trucks are designed to be "nose down" to accommodate extra weight in the rear. If your pickup truck appears to sit level, it could be extra proof of an issue with a leaf spring. Even the slightest damage from an accident can cause shocks to leak and permanently damage them beyond repair. Get it checked out. The relationship between the shock and the spring is the main contributor to this problem. A blown shock may cause an overcompression of the spring and lower sitting height. Test Springs by Pushing Down on the Trunk The easiest way to diagnose spring problems is by pushing down on the trunk of the car or truck, releasing, and listen to how the suspension reacts. Even the slightest loss of height in one or multiple corners of the vehicle could indicate a leak or failure in your shocks or springs. Of course, with extreme handling, you could force these things to happen in a vehicle with a brand new suspension system. Any number of components in your power steering system could be a source of these issues, including: Low power steering fluid Worn or loose power steering belt Faulty power steering pump.

Chapter 3 : Why Are Trees Losing Leaves in June, August or Early Fall? | Davey Blog

*It could still be a leaf by Allan Fowler, , Childrens Press edition, in English.*

Print Advertisement Alan Dickman is curriculum director in the biology department at the University of Oregon in Eugene. He presents the following clarification to this frequently asked question: Leaves of all trees contain chlorophyll, a green pigment that has the unusual capability to capture light energy and with the help of other components in the leaf to convert that energy into a chemical form, such as sugar. Some of these "accessory" pigments are yellow, orange, or red and are called carotenoids because they belong to the same group of compounds as beta-carotene, the pigment that gives carrots their orange color and margarine its yellow. In the autumn, when deciduous leaves begin to get old, the leaf is able to break down some of the expensive pigments it has produced such as chlorophyll and absorb parts of them back into the stems for other uses. When the green color of chlorophyll is gone, the other colors are unmasked. You can see these colors when the leaves are still green if you separate the pigments by a process called chromatography. If you have ever watched water-soluble ink smear on paper when it gets wet, you have seen chromatography in action. Separating the pigments from leaves is a little harder, because they are often enclosed in membranes within the cells of a leaf. But if you have some filter paper try using a white coffee filter you could try to express some of the pigments onto it by placing the leaf on the filter and then rolling a quarter across the leaf several times to make a line of pigments on the paper. Then dip one end of the paper in rubbing alcohol, and you might be able to see some of the other colors in the leaf separate from the green chlorophyll. Some pigments in leaves--such as the reddish-purple in rhubarb or red cabbage--are not involved in photosynthesis at all. Perhaps they help protect the plant against too much sunlight? These compounds are held in other places in the cells of the leaf, and many of them are water-soluble, so if you cook the leaf or grind it in a blender, you will release this reddish pigment in the water. Patricia Hauslein is a member of the department of biological sciences at St. Cloud State University in St. She offers this primer: Here it is only the third week of August and already that tree on 9th Street is changing. Every year when we see the trees beginning to change color here in Central Minnesota we start to believe we must be heading for an early winter. I think if we paid attention, however, we would see that the same tree starts to change colors about the same time every year. So what is it that causes the leaves to take on their fall colors? What has changed in the last few weeks? It has been cooler and wetter here than usual, but last year at this time it was hot and dry and that same tree still changed colors. The thing that seems to happen at the same time every year is the shortening of the day or, more accurately, the amount that the daylight diminishes as the summer wanes. In fact, it is the length of the day, called the photoperiod, that triggers a mechanism in the tree to begin the process of dropping the leaves before winter. This process of shedding leaves is necessary for the tree, but it has the additional benefit to us of an explosion of color which we get to enjoy for a few short weeks in the fall. To fully answer the question, "Why do leaves change color and why those colors? We have already know when leaves change color: The leaves are the manufacturing plant of the tree. These sugars sustain the tree; any extra that is made allows the tree to grow larger. This process, called photosynthesis which means "light put-together" , also pulls water up the tree, where it then evaporates from the surface of the leaves. If the leaves stayed on all winter, the tree would continue to lose water without much chance to re-supply it once the ground had frozen. So the leaves drop off to conserve water. Now we can ask the next question. There are pigments in leaves which absorb that solar energy and send it off to sugar production. The most abundant pigment is chlorophyll, which we see as the green color of summer leaves. But the light from the sun is basically what is called white light. That means that sunlight is actually a combination of all colors. This combination of all colors is striking the leaves, but only certain colors are actually absorbed by the leaves; the others are reflected. We see reflected light as the color of an object. So we know that green light is reflected off the leaves. That means that the leaves use colors other than green to work in the production of sugars. In fact, chlorophyll absorbs mostly blue and some orange light. One thing we have learned about nature is that it does not waste anything. Although chlorophyll only absorbs blue and orange light, other pigments in the leaves absorb the other colors. Some of those other

pigments are called carotenoids. They absorb green light and reflect orange. Carrots have a lot of carotenoids. During the summer, there is so much chlorophyll in the leaves we simply cannot see the other pigments. But as the daylight shortens, the tree does not make as much chlorophyll. As the chlorophyll starts to fade away, we are able to see the other colors pigments in the leaf, mostly yellow ones. Where I live it is the aspens and poplars that turn bright yellow. The red and oranges are mostly seen in the sugar maples. Maples turn red because when the leaf-dropping process begins in these trees, some of the sugar that the leaves made remains trapped in the leaves. In this case, the color is dominated by a third type of light-absorbing pigment, one that reacts with the sugars and makes the red and orange color we see. The brighter the days are during fall, the more sugar gets trapped in the leaves and the more brilliant are the colors of the sugar maples. You might want to try some experiments. Cover a green leaf, still on a tree, with black paper. When the leaves around it have changed, uncover the leaf and see what color it is. Black paper absorbs all the light and turns it into heat I wonder what an aspen leaf would do compared to a maple, or an oak. I wonder what would happen if you took the leaf off the tree.

**Chapter 4 : Mulching tree leaves: an alternative to disposal**

*The Paperback of the It Could Still Be a Leaf by Allan Fowler at Barnes & Noble. FREE Shipping on \$ or more!*

September 1, Every autumn, we look forward to seeing tree leaves transform. But what does it mean when trees lose leaves much sooner? Now, it has lost almost all its leaves. What is wrong with my tree? There are three general reasons why trees lose their leaves early. The canopy is crowded. Some trees may have grown more leaves than they can support, so they drop leaves to conserve water in hot, dry weather. See what summer pest could be hurting your tree leaves. Too much or too little water can cause late summer leaf loss. Why is my oak tree losing leaves in summer? Find out what type of oak tree you have. But if the fallen leaves are discolored or look unhealthy, that could mean a pest or disease. Oak wilt is a common one. First, leaves turn yellow, then brown right before they fall off starting at the top of the tree. These symptoms call for an arborist. Why is my maple tree losing leaves in summer? Your maple might be suffering from a petiole borers infestation or tar leaf spot disease. Did you know the small piece that connects a tree leaf to its stem is called a petiole? Tiny petiole borers feed on that, which makes leaves break from the stem and fall off. Tar leaf spot is more noticeable. It turns maple leaves yellow, then black before they fall off. You can help manage the disease by raking and disposing of fallen leaves. Why is my ash tree losing leaves in summer? Anthracnose, a tree fungus, can cause ash trees to lose their leaves early. Moist, humid weather allows the fungus to thrive and turns leaves a blotchy brown. Anthracnose tends to not be a huge issue for ash trees. Raking and destroying diseased leaves can help minimize the harm. And remember, a tree without infestation symptoms may just need water.

**Chapter 5 : Baltimore Sun - We are currently unavailable in your region**

*Review: Nissan turns a new Leaf, but it still could be better. The nation's first modern all-electric car now has longer range but not as long as some rivals.*

Unfortunately, enthusiasm for this autumn splendor is tempered by the knowledge that homeowners, professional grounds managers and golf course superintendents will soon face the inevitable task of leaf disposal. Tree leaves can shade the turf, robbing it of precious photosynthetic activity in the late fall. Even thin layers of tree leaves trap humidity at the turf surface and increase the chance of snow mold during winter. Thicker layers of leaves can smother and completely kill the turf. Removing the interference from fallen tree leaves also allows your late season nitrogen applications to reach the turf more effectively, and improves the efficacy of late-season broadleaf herbicide applications. Therefore, for optimum turf health, it is critical to remove the tree leaves, or at least break them up. Dwindling options Years ago, we raked leaves into piles and either burned them, moved them to the curb for garbage pick-up or hauled them to the local landfill. Today, burning tree leaves is banned or at least restricted in most municipalities. Yard-waste bans prevent us from hauling tree leaves to landfills and garbage haulers often no longer take tree leaves left on the curb. If you are lucky, you have your own compost pile or a composting center where you can still dispose of leaves, but this still requires a lot of labor and expense. Land-applying leaves-spreading them on agricultural land and tilling them in-is good method of disposal, but it is expensive. The easiest and cheapest way to dispose of leaves is to mulch them into the turf. This is not a new idea, but universities have only recently compiled enough data to determine that tree-leaf mulching has no long-term negative effects on the turf. Studies at Michigan State, Cornell, Rutgers and Purdue have concluded that mulching tree leaves is an excellent disposal method that does not harm healthy turf. At Purdue, we are just finishing up a 5-year study looking at the effects of mulching maple leaves into turf. Every October since , we collected maple leaves, ran them through a garden shredder to facilitate handling and applied them to a low-maintenance perennial ryegrass stand. We applied the leaves at 2, and 4, pounds per acre in a single application and set aside check plots where we applied no leaves. We selected these rates because a typical forested area will drop about 3, pounds of tree litter per acre each year, including twigs and leaves. Our 4,pound rate was the equivalent of about 6 to 8 inches of piled leaves. After application to the plots, we immediately mowed the leaves with a mulching mower. Because we felt that the high carbon-to-nitrogen ratio C: N in the tree leaves would eventually limit nitrogen in the turf stand, we annually applied nitrogen using three different rates. Beginning in the spring of , we applied 1. However, by summer , the ryegrass receiving no nitrogen had declined dramatically. Therefore, we adjusted the rates to 1. The turf plots received regular irrigation to prevent drought stress, and herbicide applications to limitbroadleaf and annual weeds. We collected data monthly for clipping weights, visual quality and color ratings, and annually evaluated the turf mat, soil pH and soil nutrient concentrations. We also checked soil microbial biomass and activity, and water infiltration. We found that even the high rate of tree leaves had no effect on turf visual quality, color or growth. Although we expected tree leaves to tie up nitrogen in the soil, we saw no long-term effects of tree leaves on turf growth regardless of the nitrogen rate we applied other than the original plots that received no nitrogen at all. Other studies have shown short-term nitrogen depletion as the tree leaves break down. However, we feel this would not be a problem in most areas because fall fertilization of the turf will almost certainly ensure adequate nitrogen for the grass plants. We also suspected long-term nitrogen depletion would increase diseases such as red thread, pink patch and dollar spot, but we saw no increase in these diseases regardless of leaf or nitrogen treatment. No differences in weed infestation occurred, regardless of treatments. No substantial buildup of leaf mat occurred in the soil, though you might expect this to occur after many years of leaf mulching. However, we did see an increase in microbial activity caused by mulching the tree leaves, which apparently prevented the leaf mat from accumulating. The increased microbial activity is perhaps the most interesting finding of this study. Increased soil microbial activity indicates improved soil quality. Therefore, we expect that the heavy clay soils on which many new subdivisions are now built should improve as the trees mature and their leaves are mulched into the turf. Our

data suggested an increase in water-infiltration rates. This data was not conclusive but, combined with the increased soil microbial activity, suggests mulching tree leaves improves soil properties. We observed no effect on nutrient availability or pH in the soil. However, we were applying maple leaves with a basic pH to a fertile silt-loam soil with significant buffering capacity. Theory and practical experience tell us that if low-pH leaves, such as oak, are mulched into a poorly buffered soil, such as sand, the pH may decrease significantly after many years of leaf mulching. Of course, corrective measures such as lime applications can counteract this. But is it practical? Professional turf managers tell us that mulching tree leaves saves tremendous amounts of time for their crews, allowing them to take on more important or profitable jobs. One person can mulch tree leaves on an entire property where it might have taken a crew of four or five to pick up the leaves. Mulching tree leaves minimizes expenses for equipment such as large vacuums and specialized trailers or trucks for hauling. It also eliminates disposal fees at compost sites or landfills. For some in-house operations, this might be a "no-brainer. Why should maintenance contractors eliminate leaf pick-up and disposal when it can be a good source of revenue? This is an important question, and one that may have different answers, depending on the property and the maintenance operation. Your company could still offer a leaf management service, but it could take the form of late-season mulching rather than leaf pick-up and disposal. Leaf mulching can even be an effective bidding tool, because an overall maintenance program that includes fall leaf disposal could be performed for less money if you employ leaf mulching. Further, maintenance practices perceived as environmentally responsible hold great weight with some clients, so this could be a way to portray yourself as an "eco-friendly" operator. Is tree leaf mulching for everyone? Probably not--every situation is different. A heavily wooded lawn, already thinned from shade, might not be able to withstand the extra abuse of mulching the tree leaves. It is not realistic to expect every property to adopt a leaf-mulching program. However, it is reasonable to evaluate each account and recommend mulching where appropriate. Saving time and money without harming turf makes leaf mulching a winning strategy.

## Chapter 6 : It Could Still Be a Leaf (Rookie Read-About Science) () by Allan Fowler

*It Could Still Be a Leaf (Rookie Read-About Science) by Fowler, Allan. Childrens Pr. Used - Very Good. Former Library book. Great condition for a used book! Minimal wear.*

## Chapter 7 : It could still be a leaf ( edition) | Open Library

*Nissan's highly anticipated long-range Leaf with a 60 kWh battery pack is expected to finally reach the market next year, and the biggest question still looming is how much it will cost.*