

how to make root beer

How to Make Root Beer: A Homemade Craft Soda Experience

how to make root beer is a question many soda enthusiasts and DIY lovers ask when they want to recreate the nostalgic taste of this classic American beverage right in their own kitchens. Root beer, with its unique blend of creamy, spicy, and sweet flavors, has been a beloved drink for generations. Making it at home not only allows you to customize the flavor profile to your liking but also gives you the satisfaction of crafting a naturally fermented soda with real ingredients.

If you're curious about the process or eager to try your hand at brewing your own batch, this guide will walk you through the essentials—from understanding the key ingredients to mastering fermentation techniques and bottling your root beer.

The Basics of Root Beer Brewing

Root beer traditionally originates from a mixture of roots, herbs, and spices, with sassafras root historically being the star ingredient. Although commercial root beers now often use artificial flavors due to safety concerns, homemade recipes can safely capture the essence using sassafras extract or natural substitutes.

What You Need to Know About Ingredients

The flavor of root beer is complex and layered. Here are some common components:

- **Sassafras or Sarsaparilla:** These roots provide the characteristic earthy and aromatic base flavor.
- **Wintergreen:** Adds a minty and slightly sweet note.
- **Vanilla:** Brings smoothness and creaminess to the drink.
- **Spices:** Cloves, cinnamon, anise, and nutmeg contribute warmth and depth.
- **Sweeteners:** Traditional recipes use sugar, honey, or molasses to balance bitterness and fuel fermentation.
- **Yeast:** A small amount of yeast is crucial for natural carbonation through fermentation.

Using fresh or dried roots and herbs, plus high-quality flavor extracts, can significantly elevate your homemade root beer compared to store-bought versions.

Step-by-Step Guide on How to Make Root Beer

Step 1: Preparing the Root Beer Base

Start by simmering your chosen roots and spices in water to extract their flavors. This infusion forms

the backbone of your root beer.

1. Combine water with sassafras root, sarsaparilla, wintergreen leaves, cinnamon sticks, cloves, and any other desired spices in a pot.
2. Bring to a gentle boil, then reduce heat and let it simmer for about 30-45 minutes.
3. Strain the mixture thoroughly to remove solids, leaving a clear, aromatic liquid.

Step 2: Sweetening the Brew

Once your root infusion has cooled to room temperature, sweeten it. Sugar is the most straightforward choice, but you can experiment with honey, maple syrup, or molasses for unique flavors.

- Add about 1 to 2 cups of sugar per gallon of root beer base.
- Stir until completely dissolved.

Sweetness level is important because it feeds the yeast later and balances out the herbal bitterness.

Step 3: Adding Yeast for Natural Carbonation

Natural root beer gets its fizz from fermentation. To achieve this:

- Use champagne yeast or ale yeast, which are clean fermenters.
- Add approximately 1/4 teaspoon of yeast per gallon of sweetened root beer.
- Stir gently to distribute.

Avoid over-pitching yeast to prevent off-flavors and overly vigorous fermentation.

Step 4: Bottling and Fermentation

After mixing, transfer your root beer into clean, food-grade bottles designed for carbonation, like swing-top glass bottles or plastic soda bottles.

- Leave some headspace to allow gas expansion.
- Seal the bottles tightly.
- Store them at room temperature away from direct sunlight for 1 to 3 days.

Check the carbonation level daily by gently squeezing plastic bottles or carefully opening glass bottles. Once you reach desired fizziness, refrigerate immediately to halt fermentation.

Tips for Perfecting Your Homemade Root Beer

Choosing Your Roots and Spices

Not all sassafras or sarsaparilla roots are created equal. Opt for organic, food-grade herbs and roots to ensure safety and flavor purity. If you can't find sassafras, sarsaparilla makes a wonderful substitute with a similar profile.

Controlling Fermentation

Temperature plays a crucial role. Too warm, and fermentation may produce off-flavors; too cold, and carbonation will be sluggish. Aim for a steady 65-75°F (18-24°C) during fermentation.

Experimenting with Flavor Enhancements

Once you master the basic recipe, try adding:

- A splash of vanilla extract for creaminess.
- Fresh ginger for a spicy kick.
- Citrus zest for brightness.
- Molasses or brown sugar to deepen sweetness.

These tweaks help you craft a truly personalized root beer.

Why Make Root Beer at Home?

Homemade root beer offers a refreshing alternative to mass-produced sodas loaded with artificial ingredients and preservatives. When you brew your own, you control every aspect—from the quality of ingredients to the sweetness and carbonation level. Plus, it's a fun and rewarding project that connects you to a rich tradition of natural soda-making.

Beyond taste, making root beer at home means you can avoid high fructose corn syrup and artificial dyes, resulting in a cleaner, more natural beverage for your family or gatherings.

Common Challenges and How to Solve Them

Flat Root Beer

If your homemade root beer lacks fizz, it's likely due to insufficient fermentation. Ensure yeast is fresh and active, and fermentation temperature is optimal. Also, make sure bottles are sealed properly during fermentation.

Overly Yeasty or Alcoholic Taste

This can happen if fermentation runs too long or at too high a temperature. To avoid this, monitor your bottles daily and refrigerate once carbonation is right. Using less yeast can also help prevent strong yeast flavors.

Bottle Explosions

Pressure buildup is a risk with natural fermentation. Use sturdy bottles made for carbonation, and don't overfill them. Checking carbonation daily and refrigerating promptly minimizes this danger.

Additional Ways to Enjoy Your Homemade Root Beer

Once your root beer is chilled and ready, try these classic serving ideas:

- Serve over vanilla ice cream for a traditional root beer float.
- Mix with bourbon or spiced rum for a unique cocktail.
- Use as a marinade base for barbecue sauces or slow-cooked meats to add sweetness and depth.

The versatility of root beer goes beyond just being a refreshing soda—it's a flavorful ingredient that can enhance many culinary creations.

Making root beer at home is a delightful blend of science and creativity. By understanding the basics of infusion, fermentation, and flavor balancing, you can create a batch that rivals your favorite commercial brands—if not outshines them. Whether you're a seasoned homebrewer or a curious beginner, crafting root beer offers a rewarding experience that brings a bit of old-fashioned charm and natural goodness to your glass.

Frequently Asked Questions

What are the main ingredients needed to make root beer at home?

The main ingredients for homemade root beer typically include sassafras root or extract, sugar, water, yeast, and various flavorings such as vanilla, wintergreen, and licorice.

Can I make root beer without using yeast?

Yes, you can make root beer without yeast by using carbonated water and flavor extracts, but traditional homemade root beer uses yeast for natural carbonation.

How long does it take to ferment homemade root beer?

Fermentation usually takes about 2 to 5 days at room temperature, depending on the yeast activity and desired carbonation level.

Is it safe to use sassafras root in homemade root beer?

Pure sassafras root contains safrole, which is considered a potential carcinogen. It's safer to use sassafras extract that has been safrole-free or use other natural flavorings.

What type of yeast is best for making root beer?

Champagne yeast or ale yeast is commonly used for root beer because they ferment well and produce clean flavors without off-tastes.

How do I control the sweetness level in homemade root beer?

You can adjust the amount of sugar or sweeteners added to the recipe to control sweetness. Using natural sweeteners like honey or maple syrup is also an option.

Can I make root beer using store-bought root beer extract?

Yes, store-bought root beer extracts simplify the process; you just mix the extract with sugar, water, and yeast for fermentation.

How do I carbonate root beer naturally at home?

Natural carbonation occurs during fermentation when yeast consumes sugar and produces carbon dioxide. Bottling the root beer in airtight bottles traps the CO₂, carbonating the beverage.

What equipment is needed to make root beer at home?

Basic equipment includes a large pot, fermentation vessel or bottles, measuring cups, a funnel, and airtight bottles or swing-top bottles for carbonation.

Can I make alcoholic root beer by fermenting longer?

Yes, if you ferment root beer longer, the yeast will convert more sugar into alcohol, resulting in a mildly alcoholic beverage. However, controlling fermentation time and sugar content is important to avoid over-carbonation or bottle explosions.

Additional Resources

[How to Make Root Beer: A Detailed Exploration of Crafting the Classic Beverage](#)

how to make root beer is a question that has intrigued beverage enthusiasts and home brewers alike for decades. Root beer, a sweet, carbonated drink with a distinctive blend of herbal and spicy flavors, has a rich history rooted in traditional recipes and modern adaptations. The process of making

root beer at home or commercially involves understanding its key ingredients, fermentation methods, and flavor profiles. This article offers a comprehensive, analytical overview of how to make root beer, integrating relevant insights and practical guidance to assist both novices and seasoned brewers.

The Origins and Evolution of Root Beer

Before delving into the technicalities of how to make root beer, it is essential to appreciate its origins. Root beer originated in North America during the 19th century, traditionally made by indigenous peoples and later adapted by European settlers. Early recipes typically involved boiling roots such as sassafras and sarsaparilla with sweeteners and spices to create a naturally carbonated beverage.

Modern commercial root beers often use artificial flavors and sweeteners, but the craft of making root beer at home emphasizes natural ingredients and fermentation techniques. Understanding this background helps frame the approach to crafting authentic root beer that balances taste, aroma, and carbonation.

The Essential Ingredients in Root Beer Production

Key Flavor Components

The signature flavor of root beer comes from a combination of roots, herbs, and spices. Traditionally, sassafras root was the principal ingredient, known for its aromatic qualities. However, due to health concerns about safrole (a compound found in sassafras), many home brewers and commercial producers now use safrole-free sassafras extract or substitute with sarsaparilla.

Other common flavoring agents include:

- **Sarsaparilla root:** Adds a slightly bitter, woody note.
- **Wintergreen leaves or oil:** Provides a minty, fresh aroma.
- **Vanilla bean or extract:** Contributes smooth, creamy undertones.
- **Licorice root:** Imparts sweetness and complexity.
- **Spices:** Such as cinnamon, clove, anise, and nutmeg, which enhance the depth of flavor.

Sweeteners and Carbonation Agents

Sweetness is a defining characteristic of root beer. The choice of sweetener affects not only flavor but

also the fermentation process and mouthfeel. Common sweeteners include:

- **Sugar (white or brown):** Traditional and effective for fermentation.
- **Molasses or honey:** Adds complexity and richer flavor notes.
- **Corn syrup or high fructose corn syrup:** Often used in commercial recipes but less favored in home brewing.

For carbonation, root beer can be naturally fermented using yeast or artificially carbonated through forced carbonation with CO₂. Natural fermentation typically produces subtle carbonation and a slight alcoholic content, while forced carbonation is faster and alcohol-free.

Step-by-Step Process: How to Make Root Beer at Home

1. Preparing the Root Beer Base

The initial phase involves creating a root beer concentrate or syrup. This is done by simmering the roots, herbs, and spices in water to extract their flavors. Careful control of temperature and timing is critical to prevent over-extraction, which can introduce bitterness.

2. Sweetening and Flavor Balancing

Once the base is strained and cooled, sweeteners and additional extracts (such as vanilla) are added. It is essential to taste and adjust these components to achieve the desired balance. Since sweetness levels influence fermentation kinetics, accurate measurement is recommended.

3. Carbonation Method Selection

Choosing between natural fermentation and forced carbonation depends on the brewer's preference and available equipment.

- **Natural fermentation:** Involves adding a small quantity of yeast to the sweetened root beer mixture, bottling it, and allowing it to ferment at room temperature for a few days. This method produces gentle carbonation but requires monitoring to prevent over-carbonation and bottle explosions.
- **Forced carbonation:** Utilizes a soda siphon or keg system to infuse CO₂ under pressure, resulting in immediate and consistent fizz without fermentation byproducts.

4. Bottling and Storage

After carbonation, root beer is bottled in sterilized containers. Natural fermentation batches benefit from refrigeration to slow yeast activity and preserve carbonation. Root beer made by forced carbonation can also be refrigerated but is less sensitive to temperature changes.

Comparative Analysis: Homemade vs. Commercial Root Beer

Homemade root beer offers several advantages, including customization of flavors, control over ingredients, and avoidance of artificial additives. However, it demands time, ingredient sourcing, and attention to sanitation and fermentation conditions.

Commercial root beers provide consistency, convenience, and longer shelf life. They often rely on artificial flavorings and sweeteners, which may detract from the natural complexity achieved in homemade recipes. Additionally, commercial brands use advanced carbonation techniques for uniform fizz.

Pros and Cons of Homemade Root Beer

- **Pros:** Personalized flavor profiles, natural ingredients, educational experience.
- **Cons:** Requires patience and precision, potential for fermentation errors, limited shelf life.

Pros and Cons of Commercial Root Beer

- **Pros:** Convenience, consistent taste, wide availability.
- **Cons:** Artificial additives, less flavor complexity, fixed formula.

Advanced Techniques and Variations

For enthusiasts seeking to refine their root beer-making skills, experimenting with yeast strains, alternative sweeteners like agave or maple syrup, and additional botanicals can yield unique results.

Some brewers incorporate probiotic cultures for health-focused variations, while others age root beer for enhanced flavor maturation.

Additionally, understanding the chemistry of fermentation and the interaction between sugar types and yeast activity can optimize carbonation levels and flavor clarity. Temperature control during fermentation plays a vital role in preventing off-flavors and ensuring safety.

Health and Safety Considerations

When making root beer at home, sanitation is paramount. All equipment must be properly sterilized to prevent contamination and spoilage. The use of safrole-free sassafras is recommended due to potential carcinogenic concerns associated with natural sassafras oil.

Monitoring fermentation to avoid excessive pressure build-up in bottles is critical to prevent accidents. Using plastic bottles for fermentation can help gauge carbonation levels by flexibility before transferring to glass bottles for storage.

Crafting root beer is an intricate blend of art and science. Understanding the historical context, ingredient selection, and fermentation techniques provides a foundation for producing a flavorful, effervescent beverage. Whether opting for traditional methods or modern shortcuts, the process of how to make root beer invites experimentation and appreciation for a classic American favorite.

How To Make Root Beer

how to make root beer: Homemade Root Beer, Soda & Pop Stephen Cresswell, 2012-10-19
Add some fizzy sparkle to your life and discover the delicious and refreshing world of homemade soft drinks. Drawing on centuries-old traditions from American general stores and pharmacy soda fountains, this fun and informative guide has recipes for perennial favorites like birch beer and ginger beer, as well as more adventurous concoctions like Molasses Switchel and Dandelion Champagne. Stephen Cresswell provides easy-to-follow directions that cover everything from extracting the earthy undertones of sassafras for an exciting root beer to whipping up a caffeine-charged Coffee Whizzer.

how to make root beer: How to Build a Fire Erin Bried, 2010-12-14 Chock-full of how-to tips and sage advice from America's grandfathers, this is a handy guide to life As members of the Greatest Generation, our grandfathers were not only defined by the Depression but also by their heroic service to the country in World War II. Courageous, responsible, and involved, they understand sacrifice, hard work, and how to do whatever is necessary to take care of their loved ones. They also know how to have a rollicking good time. Sensible, fun, and inspiring, How to Build a Fire offers a rare glimpse into the hearts and minds of grandfathers near and far by sharing their practical skills and sweet stories on how to be stronger, smarter, richer, and happier. Inside are more than one hundred essential step-by-step tips for fixing, leading, prospering, playing, and hosting, including how to • buck up and be brave in the face of adversity • play hard and break in a baseball mitt • bait a hook and catch a big fish • look dapper and tie a perfect tie • get a raise and earn more • write a love letter and ignite romance • change a flat tire and save the day • stand up

and give a sparkling toast • play the harmonica and make your own music Loaded with charming illustrations, good humor, and warm nostalgia, *How to Build a Fire* is the perfect handbook for guys or gals of any age. The first of its kind, this collection of our grandfathers' hard-earned wisdom will help you build confidence and get back to what's really important in life.

how to make root beer: Handbook of Effective Literacy Instruction Barbara M. Taylor, Nell K. Duke, 2014-07-21 The intent of this handbook is to provide a comprehensive, forward-looking, research-based resource for teachers, teacher-educators, and researchers on the key, inter-connected components of effective literacy instruction. The book is designed so that it is a readily useable resource for pre-service and practicing teachers as well. Every chapter in sections I, II, III, and IV includes substantial suggestions for implementing research-based practices in the classroom and for engaging in professional learning to help teachers increase their effectiveness as literacy instructors. Every chapter in section IV also includes substantial suggestions for fostering collaboration among staff and, when applicable, parents within schools--

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how to make root beer: The Druggists' Circular and Chemical Gazette , 1869 Includes Red book price list section (title varies slightly), issued semiannually 1897-1906.

how to make root beer: *San Antonio in the 1920s and 1930s* Mary E. Livingston, 1999-10-01 While recounting the story of a childhood in San Antonio, Mary Livingston also tells the story that exemplifies the opportunities and struggles faced by countless people growing up during this time of opportunity and change in America. The author's memories and reflections are illustrated by over 100 photographs, providing readers with an authentic view of life in San Antonio in the early twentieth century. From detailed accounts of canning fruits and vegetable during the Depression, watching movies at the Majestic Theater, and life on a domestic zoo, to colorful anecdotes about making tamales, shopping for shoes using an X-ray machine, and visiting the San Antonio parks and missions, this entertaining and educational book will give older readers and younger readers a glimpse of a way of life that is long gone, but not forgotten.

how to make root beer: Backcountry Cooking Sierra Adare, 2011-07-05 Goodbye to mundane, expensive, freeze-dried camping food and welcome to tasty, environmentally conscious, inexpensive dishes. Seasoned outdoor cook Sierra Adare spices her creative and easy-to-follow recipes with Western culinary history and first accounts that are informed by the traditions of the trail. Inside the book are lists of grocery items you can buy beforehand at your local store, along with instructions to dehydrate your own food to avoid the high prices of outdoor markets. Your stomach just isn't prepared for the great outdoors without *Backcountry Cooking*—your number one source for easy camp cooking, recipes adaptable for all types of camping, and the best ideas for making your next outdoor adventure remarkable and delicious.

how to make root beer: *Earth Eats* Annie Corrigan, Daniel Orr, 2017-03-20 "An eye-popping, mouth-watering celebration of local food and the people who produce it . . . I gobbled it down like a bowl of Curried Kale Chips."—Christine Barbour, author of *Indiana Cooks!* Focusing on local

products, sustainability, and popular farm-to-fork dining trends, *Earth Eats: Real Food Green Living* compiles the best recipes, tips, and tricks to plant, harvest, and prepare local food. Along with renowned chef Daniel Orr, *Earth Eats* radio host Annie Corrigan presents tips, grouped by season, on keeping your farm or garden in top form, finding the best in-season produce at your local farmers market, and stocking your kitchen effectively. The book showcases what locally produced food will be available in each season and is amply stuffed with more than 200 delicious, original, and tested recipes, reflecting the dishes that can be made with these local foods. In addition to tips and recipes, Corrigan and Orr profile individuals who are on the front lines of the changing food ecosystem, detailing the challenges they and the local food movement face. With more than 140 color photos, *Earth Eats* showcases local food at its finest and features everything the local grower and food enthusiast needs to know all year round, including how to cook up a healthy compost heap, nurture a failing bee colony, create an all-natural deer repellent, and ferment delicious vegetables. "Lively interviews and vibrant photographs flesh out this tribute to a great radio show and our vibrant local food culture."—*Limestone Post Magazine* "Together, Annie Corrigan and Daniel Orr form an awesome powerhouse of sustainable living knowledge and local food resources and recipes."—*Little Indiana* "A good first go-green reference."—*Booklist*

how to make root beer: *Food and Drink in American History* Andrew F. Smith, 2013-10-28 This three-volume encyclopedia on the history of American food and beverages serves as an ideal companion resource for social studies and American history courses, covering topics ranging from early American Indian foods to mandatory nutrition information at fast food restaurants. The expression you are what you eat certainly applies to Americans, not just in terms of our physical health, but also in the myriad ways that our taste preferences, eating habits, and food culture are intrinsically tied to our society and history. This standout reference work comprises two volumes containing more than 600 alphabetically arranged historical entries on American foods and beverages, as well as dozens of historical recipes for traditional American foods; and a third volume of more than 120 primary source documents. Never before has there been a reference work that coalesces this diverse range of information into a single set. The entries in this set provide information that will transform any American history research project into an engaging learning experience. Examples include explanations of how tuna fish became a staple food product for Americans, how the canning industry emerged from the Civil War, the difference between Americans and people of other countries in terms of what percentage of their income is spent on food and beverages, and how taxation on beverages like tea, rum, and whisky set off important political rebellions in U.S. history.

how to make root beer: *Tasty* Victoria Grace Elliott, 2023-12-05 How did cheese happen? Who pickled the first pickle? Explore the history of innovative food in this non-fiction graphic novel filled with facts, legends, and recipes. Have you ever wondered how some of our favorite foods came to be? How was cheese created and who realized it belonged on everything? Was soda always meant to be a drink? A team of whimsical food sprites are excited to show you the yummy history of food experiments from all over the world! Learn about the true stories behind pickles! Get a recipe for how to make your favorite pizza! With a story and recipe for every chapter, this graphic novel will give you something to read and taste.

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fire a clay pot, craft homemade Christmas ornaments, repair leather shoes, rid your home of pests, plant your garden according to the moon's phases, and much more. Curated by famed Texas folklorist Jerry Mack Johnson, *Old-Time Country Wisdom & Lore* is a homespun encyclopedia of classic country know-how.

how to make root beer: *Grandma's House* Andrew J. Arbuckle, 2011-02 He was almost two years old when 'Black Monday' the stock market's Great Crash occurred. Andrew recounts a host of memories he lived throughout its aftermath. Set in the years following the Great Crash he unleashes decades old memories that fleetingly linger in the mind and heart. Travel with him from pre-school days toward his teens reliving your own cherished experiences, sometimes happy, sometimes sad, and yes sometimes tearful and heart wrenching. Enhanced with original illustrations by his wife Marilyn, this book promises to be a delightful romp through personal memories for fans of all ages.

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how to make root beer: *Home Made Beverages - The Manufacture of Non-Alcoholic and Alcoholic Drinks in the Household* Albert A. Hopkins, 2017-08-25 Discover the secrets of concocting a wide array of beverages, both alcoholic and non-alcoholic, in this vintage guide to the art of preparing drinks. First published in 1919, Albert A. Hopkins' guide to homemade beverages includes detailed instructions to help you prepare ice cream drinks, juices, beers, wines, punches, ciders, frappés, and much more. Whether you're hosting a gathering or looking to start a new hobby, this vintage volume offers a wealth of recipes that are the perfect addition to any kitchen.

how to make root beer: *Kitchen Science Lab for Kids: EDIBLE EDITION* Liz Lee Heinecke, 2019-06-11 Explore the science of making food with 52 delicious recipes designed for kids, from healthy homemade snacks to scrumptious main dishes and mind-boggling desserts. When you step into your kitchen to cook or bake, you put science to work. Physics and chemistry come into play each time you simmer, steam, bake, freeze, boil, puree, saute, or ferment food. *Kitchen Science Lab for Kids: EDIBLE EDITION* guides you through the physics, biology, and chemistry of food to give you the basic tools you need to be a great chef. Bodacious Bubble Tea, Flavorful Fruit Leather, Super Spring Rolls, Mouthwatering Meatballs...divided by course, each lab presents a photo-illustrated step-by-step recipe for a delicious drink, snack, sauce, main dish, dessert, or decoration. Have fun learning about: Bacteria and the chemical process of fermentation by making your own pickled vegetables. Emulsion as you create your own vinaigrette. How trapped water vapor causes a popover to inflate as you make your own. Crystals by making your own ice cream. And much more! Along with the fun-filled recipes, find: Accessible explanations of the "Science Behind the Food." Labels for each recipe showing the challenge level, allergen alerts, time to make, and yield. Suggestions for pairing and combining the recipes. Safety tips and hints. Mix and match the recipes to pair pasta with your favorite sauce, make ice cream to serve in homemade chocolate bowls, or whip up the perfect frosting for your cake. There are plenty of fun, edible decorations included for the art lovers in the crowd. Before long, you'll have the confidence to throw together a feast, bake and decorate show-worthy cakes, or use what you've learned to create your own recipes. For those with food allergies, all recipes are nut-free and other allergens are clearly labeled throughout. Let's get cooking—and learning! The popular Lab for Kids series features a growing list of books that share hands-on activities and projects on a wide host of topics, including art, astronomy, clay, geology, math, and even how to create your own circus—all authored by established experts in their fields. Each lab contains a complete materials list, clear step-by-step photographs of the process, as well as finished samples. The labs can be used as singular projects or as part of a yearlong curriculum of experiential learning. The activities are open-ended, designed to be explored over and over, often with different results. Geared toward being taught or guided by adults, they are enriching for a range of ages and skill levels. Gain firsthand knowledge on your favorite topic with Lab for Kids.

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