

Chapter 1 : 10 Fun Family Night Ideas | HowStuffWorks

Family Science Night: Hands-on, Minds-on Fun! Guest post by Carol Wooten. As one walks the hallway on the evening of Family Science Night, the echoes of excited young scientists fill the school building.

Get the science experiments ready. All you need are curious minds, some household supplies, and a little science, of course. Families play an essential role in helping children navigate educational choices on the path toward a fulfilling career. Here are some tips for planning your very own Family Science Night. Pick a theme. Selecting a theme for the evening will ramp up the excitement and also fuel ideas for food, experiments, and more. Consider looking to pop culture for inspiration. Movies are a great place to start. Does your family love Star Wars? Create a Family Science Night that is centered around space and stargazing. More of a Mystery Science Theater fan? Spend the evening solving science mysteries. If nature is an area of interest, put on those hiking boots and bring science fun to the great outdoors. Stock up on snacks Snacks can be science, too! Does your family love popcorn? Popping popcorn is science. Watch while preparing the popcorn. Ask questions like why does popcorn pop? Is there a chemical reaction behind it? Talk about how ice cream is made, and even turn it into a science experiment. Grab a plastic bag and a few simple ingredients, and witness the science behind this dessert favorite. Experiments The main attraction of the night will be the science experiments. The internet is overflowing with hands-on ideas for all different science lessons. Keep it simple and pick something that is easy to set-up and allows the whole family to get fully involved. Here are some of our favorites: Strange Acting Goop Molecules are one of the basic units of matter. They have the ability to divide and still have the same chemical identity. During this experiment, your children will see the reaction between molecules when you squeeze the goop versus slapping it.

Chapter 2 : Family Science Night: Hands-on, Minds-on Fun!

Get this "make your own elephant toothpaste" experiment in PTO Today's free Family Science Night kit (free download)! Encourage families to take a few photos at your "Cell-fie Station" (see how much fun life sciences can be?!).

Guest post by Carol Wooten As one walks the hallway on the evening of Family Science Night, the echoes of excited young scientists fill the school building. From extracting strawberry DNA to investigating a car that runs on alternative fuel to constructing a Rube Goldberg machine from everyday materials, the students are actively engaged in learning that will impact them for a lifetime. Teach me and I remember. Involve me and I learn. Our focus was to involve all participants through stimulating hands-on investigations. As with science investigations during class, the emphasis was not on simply telling or teaching, but making science come to life for families. As a member of the planning committee for Family Science night and eventual chairperson for over a decade, I had the opportunity to directly observe the evolution of the evening and its amazing positive impact on both parents and students. Ten years ago, Family Science Night included five presentations from parents who were scientists and several university professors. The next year, students also became involved and conducted hands-on presentations for various sessions such as basic physics, landforms, and ecosystems. We included make-and-take stations where students and parents were able to construct and work on various challenges such as using science concepts to design and build the tallest straw tower. Within the past five years, the popularity of Family Science Night has grown to over thirty presentations and make-and-take stations. Hence, the attendance has increased from under one hundred participants to over The development of Family Science Night has flourished each year. As schools begin holding these exciting evenings of science, those organizing the event should remember to start small and then grow during consecutive years. Having parents and community involved in any aspect with the evening is vital to a successful event. The key element of Family Science Night is that the evening is hands-on and minds-on. When university professors and scientists in the community agree to present at Family Science Night, this agreement includes a hands-on and often inquiry-based session where participants are able to explore the concept rather than receive a lecture. In addition to outstanding speakers who incorporate hands-on learning for participants to explore a wealth of science concepts, schools may also integrate a science project into the Family Science Night. The cafeteria could be utilized to display these family science projects. Family Science Nights may also progress into various formats. For instance, students may share what they have learned from science class in stations using hands-on and inquiry based models, volunteers implement a variety of make-and-take stations, local scientists incorporate presentations that encompass hands-on and minds-on learning, or a combination of all of the above idea formats. How to Plan and Host a Family Science Night If schools are initiating a thrilling Family Science Night for the first time or for the hundredth time, the guidelines below will help to create an outstanding event that not only promotes science, but also involves the family and community in an astounding learning experience. The list below is a starting point for a Family Science Night. Since each school is unique, organizers should feel free to modify the list and event planning to meet the needs of the school. A more detailed general planning list is found at [http:](http://) It can be adapted to meet the needs of various schools. Develop a school team of interested members and delegate a chairperson. Establish meeting dates and begin to assign roles. Decide on the size of the event. Will you have five presentations or are you expanding to over thirty? Your size may also depend on your budget. Develop a theme for the event. Brainstorm a list of possible presenters and session topics. What types of content for presentations would yield high interest? Determine the number of make-and take stations and the content for each station. Examples of make-and-take stations include straw towers, bird feeders, UV bead bracelets, Rube Goldberg machines that are designed using scrap materials, Oreo moon phases, and silly putty. Distribute speaker invitation letters. Which presenters noted they were able to attend? Assign classrooms to the presenters and stations. Create a program for the event. A sample program can be found on the aforementioned website. Purchase and organize make-and-take materials. Include precise directions for the station in the box. Ask for additional help and decide what roles need to be completed the day of the event. An efficient method

of structuring and assigning your helpers is to use a program such as Sign Up Genius. It is also beneficial to confirm what types of technology the speaker needs for the presentation. The thank you notes are always greatly appreciated. On the day of the event, greet speakers and monitor to make sure all technology needs are met. Following Family Science Night, evaluate the evening. What areas would you improve? Passport System Encourages Participation During our first several years implementing a Family Science Night, we realized that attendees were definitely drawn to the make-and-take stations such as the pine cone bird feeders or straw towers. But how could we ensure that all presenters were visited equitably? This question led to the design of a passport system. With this system, attendees received a passport handout with their program upon arrival at the Family Science Night. After attending each session, they would earn a sticker from the presenter or volunteer to place on this form. [Click the page of passport sticker image on the right to download our passport packet.](#) Once all stickers were earned, the participants returned the form to the main table to receive a prize. Furthermore, Family Science Night provides an excellent opportunity to create leadership roles for students, especially fourth and fifth graders. Student ambassadors work to assist with sign design, greeting presenters, distributing programs, and creating thank you notes for all presenters. Schools may have students apply for this position, or the role can be teacher selected. Students take pride in their roles and work diligently to ensure they fulfill their assigned ambassador duties. With each year, we embark on Family Science Night as a new and exciting experience.

Chapter 3 : California Classroom Science » Family Science Nights

"Our Family Science Night event had a tremendous turnout and the response was fantastic. It definitely generated a lot of interest in doing some hands-on science! " Family Movie Night was a huge success thanks in part to the informative event planning kit and Movie Licensing USA.

Make your own music with simple household items! Build your own colorful bead bottle to amaze your friends! Use an indicator made from red cabbage juice to determine whether household products are acids or bases. Use a heavier than air gas to suspend soap bubbles. This will allow you to more closely examine the unique properties of bubbles. Ever played with a Lightstick? In this activity you examine the chemiluminescent reaction that makes a Lightstick glow in the dark. Use ordinary clear soda to make raisins dance. Will a bowling ball sink or float in water? The answer seems obvious, but this experiment will show otherwise. Use common liquids you can find around your house to make a density column and a rainbow in a glass. Clean the tarnish off of silverware. Some wire, a couple of magnets, and a battery – and you can build your own electric motor. The power of wind is harnessed in this experiment. Suspend a balloon in air without using your hands! In this activity you will examine the behavior of rubber as it is affected by heat, a form of energy. What makes certain materials "glow" under a black light? This experiment will tell you why. The color of many candies come from dyes. This experiment will separate some of those dyes out using a process called chromatography. With just a few household chemicals you can turn a glass of colored liquid into a froth that overflows its container. What is the easiest way to pop a balloon? With a needle of course. Is there a way to put a needle into a balloon without popping it? A fire can weaken the rubber in a balloon and cause it to burst. In this experiment you will find out how you can hold a balloon directly in a flame without breaking it. Many people have water softeners in their houses. What is the purpose of a water softener? What does it mean to have "hard" water? How much force does it take to crush an aluminum can? Is there a way to crush a can using only air pressure? Have you ever turned a liquid into a solid just by tapping on it? In this experiment you will make a liquid that behaves in a very unpredictable way. Do this experiment to understand why. Why does the sky look red during sunrises and sunsets? We can learn why during this experiment. Create a "cartesian diver" inside a 1 or 2 liter plastic bottle. This diver will sink or float on command! Static electricity can be a problem whenever the humidity is low. In this experiment you will use static electricity to "bend" water. Build your own apparatus to test the electrical conductivity of solutions!

Chapter 4 : STEM Activities for Kids

Since our Family Dinner Book Club already gives you a themed book list and a themed menu, all you need are these family science activities to make your night complete! Family Science Night Activities Start by heading over to Growing Book by Book for your complete list of curiosity themed books.

Hosting a family science night is a great way to encourage kids and their families to do hands-on science together. A basic family science night consists of hands-on science stations with simple instructions set up in tables in the cafeteria or outside in a common area. Teachers cover one to three stations, depending on how complex they are, to help families do the activities. Older students can also be enlisted to run a station, and kids love to show off the science they have learned. Stations can often be easily made using the hands-on materials in your science curriculum. I have found that FOSS experiments are particularly ready to use. Write up some simple instructions with some good open-ended questions to foster inquiry. In my district, I try to get as many of them translated into Spanish as I can. Some examples of hands-on stations I have used are: Stream tables to experiment with erosion. What types of things stick to a magnet? Electromagnets with various extra circuit components and questions about how to make them stronger. Make the phases of the moon with a chart, a bright light, and Styrofoam balls on a stick. Observing living things with hand lenses and various supplies to investigate behavior—mealworms, land snails, sow bugs. Minerals and supplies to observe their properties—scratch test, streak plate, magnet, vinegar. Telescopes outside—invite members of your local astronomical society. Microscopes with pond water, compost in water, fermenting yeast. If you have a microscope camera and a projector, then participants can share their discoveries. Light up a bulb with a battery and two wires. Van De Graff generator. How many drops of water can you fit on a penny and what variables can you change and test? Break open rocks with rock hammers safety goggles provided and identify the minerals inside. Use magnets in plastic bags to find magnetite in the playground sand. Food Web card concentration—play a version of concentration in which the first player to build a five step food web wins. Human body systems floor puzzle. Identifying animals by their skeletons. Building tops and timing how long they stay up. Generating electricity with a wind turbine and testing changes to the blades. Straw rocket design and testing. Finding the focal length of different lenses by projecting images. There is money in Title I for parent involvement, both at the site and district levels. Some schools might choose to use some of these funds for family nights. This might be used to purchase supplies or to pay teachers for time in setting up the event. You can organize a family science night with different themes or purposes. Some events we have held are: Instruction sheets for some of the activities can be found on the CSTA website at www.csta.org. CSTA represents science educators statewide—in every science discipline at every grade level, Kindergarten through University.

Chapter 5 : Family Math Night- Ideas for Teaching, Resources for Lesson Plans, and Activities for Unit Plan

Family Science Night Submitted by Cheryl Weaver, a retired administrator and teacher in Dublin, California, with input from Susan Wijeyesekera, an elementary science specialist at Livermore Valley Charter School in Livermore, California.

You already have what you need to pull this off! You need just 3 things: Psst – do you have a LEGO bin? Looking to include little ones? Take turns adding to a big sheet of paper. The first person starts drawing, and tells their part of the story, and then passes it on. The next person adds to the same story. Modify It – Little ones can join right in on this one! This is the paper version! Everyone starts with a piece of paper and a pencil. Each person draws a picture, then passes the paper to the person next to them. That person writes the caption of that picture. Then folds the paper down covering only the picture, not the caption, and hands the paper to the next person. The next person in line then reads the caption, draws a picture for it, folds the paper over the caption, and hands it to the next person! Keep passing the paper until you get your paper back. Make sure that the little ones are the ones who get to draw. The person before them will whisper their sentence to them. Or let them tell you can try to get them to whisper, but good luck! The little ones may be loud with their sentence, but I guarantee you they will be funny! Divide into 2 teams, and each team goes into one room. Each team creates a list of items agree on a number for the other team to find. Exchange lists, and see who can complete the list first. Or come up with the list together and then each team tries to find it. Our tip – be specific. Just make sure to read the items to the little ones. I would read one or two items at a time. Remembering a big list might be hard for the little ones. Divide equally into 2 teams. Each team chooses a tv show, quote, movie, song, or book for other team to take turns acting out. For complete rules, click here. Similar to charades, but you draw rather than act out the clues. We have the adults and older kids do most of the drawing, and the littlest join in energetically for the guessing! Each person creates a grid of 6 by 6 boxes. Agree on 5 categories, and choose a 5 letter word. Set the timer for 10 minutes, and try to come up with an item in each category for each letter of the word. This is one we play every time my extended family is together. We love it so much, check out this post for classification rules. And finally – the best part! No picking up pieces that rolled under the chair or digging in couch cushions for dice. Just recycle your paper and put the pencils away. Clean up is done!

Chapter 6 : Science Is Fun Home Experiments

Hosting a Family Science Night is an easy way to create engaging STEM experiences at home. All you need are curious minds, some household supplies, and a little science, of course.

STEM stands for science, technology, engineering, and math. You can make STEM and science exciting, educational, and inexpensive for young kids. Fun and easy science for kids starts here! Create passion, Create an opportunity for kids to push the limits of what they can do. See details at bottom of page. Now how cool is that. We are enjoying quite a few edible science projects lately because I have a growing kiddo who loves to help out in the kitchen. Science that involves tasting is always a hot ticket event around here. Follow along with days of summer STEM activities. My son is 8 and we started around 3 years of age with simple science activities for kids. We show you what to work with from around your house. Kids are curious and always looking to explore, discover, check out, and experiment to find out why things do what they do, move like they move, or change like they change! Indoors or outdoors , science is definitely amazing! Science surrounds us, inside and out. Kids love checking things out with magnifying glasses, creating chemical reactions with kitchen ingredients, and of course exploring stored energy! There lots of easy science concepts that you can introduce kids to very early on! You might not even think about science when your kid pushes a car down a ramp. See where I am going with this list! What else can you add if you stop to think about it? Science starts early, and you can be a part of that with setting up science at home with everyday materials. Or you can bring easy science to a group of kids! We find a ton of value in cheap science activities and experiments. We will be sharing a monthly STEM calendar sent to subscribers a week before the end of the month! As we try awesome new science, I will leave the activities here for you to check out. This collection will make a terrific resource filled with go-to science ideas that are sure to please.

Chapter 7 : Science Project Enrichment Tools

Family Science Night: Fun Tips, Activities, and Ideas By Shelley S. Connell, Ed.D. (Eye on Education/Routledge, - Learn more) Reviewed by Catherine Pierce. *Family Science Night: Fun Tips, Activities, and Ideas* by Shelley S. Connell will be a great resource for elementary grades as well as older children.

Key Objective Generate enthusiasm among students and families for the science program and science fairs by giving families a chance to explore science together. **Applicability** All grades **Description** Family Science Night is an evening of hands-on science activities for students and their families to do together. The event should include enough activities to represent many different facets of science. Family Science Night does require some advance planning. The first step is to solicit support. Are there any scientific corporations or government organizations in your area? Perhaps employees could help to create science activities. If each interested teacher organizes just one activity and agrees to staff it the night of the event, preparation becomes much easier. Since we have provided activity ideas below, getting them ready is just a straightforward task of gathering supplies. Talk to other teachers and see if they are willing to help in other capacities, such as welcoming visitors or directing them where to go. Alternatively, you could ask parent volunteers to assist with planning activities. Work with the PTA to find interested parents. The key is to stress that volunteering for this event is not a burdensome, long-term commitment. Instead, each parent could work on getting one activity ready and then staff that activity the night of the event. Choose your activities in advance so that you can publicize them and have time to get them ready. Below is a chart of the types of activities that teachers who are experienced with the Family Science Night tool do and do not recommend: We have suggested easy, high-impact activities that use readily available and low-cost materials. Plan activities based on attendants. Think about your expected attendance and how many families could participate in one activity at once. Here are some tips: Eight hands-on activities, plus one or two murals For a larger group: Livermore Valley Charter School, a school of around students, has activities each year at its Family Science Night. As a crowd-control strategy, set up mural projects, where many families can participate at once. When possible, set up more than one of each activity. For example, if you are doing a project, such as Bubble-ology, you could have several different jars of the same type of solution so that many families can participate at once. Decide where to have the event. In smaller schools, each teacher could monitor one activity in his or her classroom, and Family Science Night participants could tour each classroom. In larger schools, the multi-purpose room, gym, or cafeteria might make the most sense. Publicize the event through the school newsletter, website, and teacher emails to their students. Make your description of the event concrete by listing some of the specific activities that families will have the chance to do. Recruiting multiple teachers to attend will boost the attendance of the night, since teachers are likely to encourage their students to go. Set up the event. Start setting up the event a few hours before it begins. Make sure that each activity station has two volunteers to supervise the children. Do a trial run at each station to make sure that the experiment or activity is working smoothly. Establish a welcome area with one or two volunteers to answer questions and direct visitors where to go. Enjoy watching students, families, and staff members participate in science together! **Resources** Check out the Project Ideas section of the Science Buddies website for experiments that can be adapted as hands-on activities for Family Science Night. Here are several ideas:

Chapter 8 : 5 Crazy Simple (& Free!) Ways To Fill Family Game Night With Fun

"Family Fun Nights: Ways to Get Families Science Night O Family Math by Stenmark, Thompson, and Cossey O Local scientists - astronomy, engineers.

Have you ever been to a family science night? This month our Family Dinner Book Club is ready to make it super easy for you to have a fun Family Science Night at home, and we have lots of ideas to get you started. This post contains affiliate links. See my Disclosure Policy for details. Zoey is a curious young girl who uses science, along with some magical animal friends, to help solve problems. This is a fantastic series for kids ages 6 and up, and will have your kids begging to try some science experiments themselves. Since our Family Dinner Book Club already gives you a themed book list and a themed menu, all you need are these family science activities to make your night complete! Choose one or more to read together to start preparing for your family science night. Next, grab your free printable science journal for kids. Print one for each member of the family and for each activity that you will try, so that you can take notes on your experiments and record your findings! These are all simple science activities that your entire family can enjoy. Choose the ones that you think your kids will love the most and above all, have fun! Make Potions When I was a kid I loved making potions with my best friend. This is a super fun and simple science activity for kids. See how to set up a kids potion making station from Mama Papa Bubba here. And be sure to try these kindness potions from The Imagination Tree. They are perfect for your family science night! See how we like to play with paper airplanes here. And check out how Tinkerlab figured out which paper airplane design works best here. Make a Rocket Is there anything cooler than rocket science? My boys will go crazy for these ideas and they are perfect for backyard summer fun.

Chapter 9 : 20 Fun Family Game Night Ideas

Bring the Maryland Science Center to your school for an evening devoted to family fun, community-building, and learning. Family Science Night is a two hour program designed to engage students and their families in STEM related activities.

Winter , funactivities A friend of mine has a fun family tradition. Every year, he spends one night with his children where there are no rules. I repeat, no rules. This night is crazy! Each No Rules Night is different than the last. The kids can do whatever they want within reason and it has created so many memories for his family. His kids talk about it all year and constantly ask when the next one will be. Nights like these are what kids remember about their childhood. Do you ever find yourself running out of ideas for fun family activities? Here is how to do a No Rule Night and 19 other ideas for your future family nights. Have two people in your family be the judges and the rest can be contestants. A karaoke machine is a fun way to spice this night up as well. Guest of Honor Night. Have this night be focused on one person in your family or outside your family. Create a unique list of questions to ask this person during dinner that highlights things about their personality unbeknownst to the rest of the family. Another option is to invite a willing guest to share in their area of expertise. Leave time for your kids to ask them questions. All kids love to see themselves when they were younger. Break out videos of their younger days or create a slideshow using pictures of them growing up. Just make sure to fast forward if your video is 6 hours long. The point is not to bore them to death. Sign up to volunteer at a local place that needs help. Specifying your volunteer work to something your child is interested in is a great way to start. If your child loves animals, volunteer at the humane society. For other ideas, here are more ideas for how to teach your kids to help others. Having a family with multiple children can often make it hard to spend one-on-one time together. Have a night where you and your spouse take your children out individually and let them be the center of attention for the night. Try one of these 8 date ideas for mom and kids. Popping up the tent in the backyard is a great way to have a convenient vacation. Remember to include all the things that you normally would at a campsite: Be sure to play some fun camping games too! Have your kids help you pick out the layout, colors, and design. Gather together around the computer and decide what information to include on the site. If you decide to do a blog, gather around the computer on a specific night of the week and have the kids tell you what they think should be included. You may be laughing right now when you think of your kids in a museum, but hear us out! Making a scavenger hunt within the museum is a great way for kids to interact with the exhibits. With some modern art, your family could try to guess what the artist was thinking when they created their work. This night is pretty self-explanatory; however, there are two rules. The activities still need to be safe and you still need to consider other people. If your kids want to play outside at 3 a. For a more in-depth description of what to do on this night, the All Pro Dad Director explains how he does it here. Concert or Comedy Night. Outdoor concerts in the summer are great because they are more relaxed. In the winter, take your kids to a symphony. Sometimes orchestras customize their concerts to put a twist on some songs that your kids might know! Make it a contest to see who can buy the best item for the family just using that amount. Let them know that they can buy numerous items and combine them to make their final purchase. Go to a consignment shop or Goodwill and have them pick out a funny outfit. Then, go for a picnic in the park as a group of random personalities. Make sure to take pictures of this night! This night has a lot of possibilities: You can even set up a family history interview with the use of these questions. Another option is to invite a friend over who is a war veteran over to share their experiences with your kids. Have your kids dress in their best and get out the good china! Take this opportunity to teach your kids some lessons at the table. This will also be a great time of laughing while your kids try to play grown up. Sometimes these activities can get old after a while, so add a little twist. Have specific instructions for each hole or frame. Have a fun photo shoot with your kids by inviting a friend over who does photography as a hobby. Take them to the store and let them pick their favorites to print off. Split your family up or compete against another family who wants to have a family night. Give each team a digital camera to document their findings. Examples of fun things to add to the scavenger hunt search list include a wacky hairstyle can you say mullet?

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Watch a movie together as a family. Some ways to keep this family-friendly and interactive include watching a film with a controversial message and discussing it afterward or hanging a sheet on a wall outside of your house and having your own drive-in type show. What is your favorite family activity?