Homework Tips

1. Set up a homework spot where all the materials are available for your child to succeed on each assignment.

2. Determine a time to do the homework and make it routine.

3. Create a system for incentives. This could be a fun activity or time on their cell phone after homework is done.

4. Create a contract with your child and have them pick out their goals and penalties if they don’t reach their goals. Then you both sign it.

5. Allow your kids to have choices when doing homework. Let them pick which assignment order or what their “reward” will be.

Cereal Box Guitar

Make a guitar out of an old cereal box by using the directions from a Pebbles Cereal Post:
- 1 PEBBLES™ Cereal box
- 1 empty paper towel roll
- Large rubber bands (different sizes and widths will produce different sounds)
- Wrapping or construction paper
- Duct tape
- Clear tape
- Pen or pencil
- Craft knife or scissors (let the adults be in charge!)

1. Tape the empty cereal box shut.
2. Using the role of duct tape, trace a sound hole on the front of the box.
3. Have an adult use the craft knife to cut out the hole.
4. Stretch rubber bands—try between 3 and 5 total—length-wise around the box. Make sure you leave room for the towel roll, which will become the guitar's neck.
5. Wrap all four sides of the box in duct tape. Not only will this look cool, it will keep the rubber bands in place.
6. Using a pen or pencil, trace a circle that’s a tiny bit wider than the paper towel roll. Then have an adult cut out the circle with the craft knife. The hole should be snug enough that the towel roll will fit inside it but not fall to the bottom of the box.
7. Using paper or duct tape, wrap the paper towel roll. Then wedge it into the hole. Secure it with clear tape. If you want, add some bling with markers, glitter, stickers or other decorations.

Bobbing for Apples

Question: Do apples float?

Go ahead and test out your theory. Take an apple and put it in a bowl of water. What happens?

You can slice the apple horizontally into rounds and make little sails out of toothpicks and paper for an added flair.

The apple has lots of little pockets of air in it. This means that the apple is less dense than the water. Therefore the apple floats.

You can take that knowledge to your future fall party with a bobbing for apples activity!
The Spirit of Leadership

Engineers find innovative ways to solve problems and improve our way of life.

- Cindy Hoover

Expo Newsletter had the opportunity to interview Cindy Hoover who is Vice President and Chief Engineer for Operations at Spirit Aerosystems and is also the President of SWE.

Q. How did you get involved with SWE, and why do you like SWE?
A: I joined SWE when I was in college. This was over 30 years ago, and there were only a few women in my graduating class in engineering school. I joined SWE to meet other women like myself and in the process made a lot of lifelong friends. I have also met many new friends along the way, including Colleen who convinced me to start diving! I have also traveled to many new and exciting places with SWE, including India where I was able to see a new culture and meet more wonderful women in engineering.

Q. What do you hope to accomplish as the president of SWE? What do you hope for in the next year?
A: As President of SWE my goal is to drive the mission of the organization forward. Specifically, I want to advocate for all of our 40,000+ members and help them succeed in their careers. I also want SWE to provide tools and messaging for our schools, colleges and companies around the importance of having a diverse and most importantly an inclusive environment for everyone.

Q. How can I become so accomplished like you?
A: What I want is for you to be whatever you want to be. Don’t let anyone tell you that you can’t do something, especially a career in engineering or the STEM fields. Engineering is not an easy career—you do have to study hard and be good with math and science. However, it is a great career where you can make a difference. Keep on attending events like the expo and participate in activities like Girls Who Code, BEST Robotics and Project Lead The Way. Find your passion and follow it…SWE will be here to support you!!

For more Q & A visit the Website!

Oil Spill Activity

Use a large bowl or tub and fill it with water. Then drop a few tablespoons of any cooking oil you have in your pantry. Gather some items that float and that you are ready to throw away. Some good ideas would be ping pong balls, Styrofoam balls, pieces of apples, and feathers. Also, set up a cleaning station with paper towels and a plate.

First: Have your child notice that the oil floats on the water.

Second: Have your child place the items in the water and move them around in the oil.

Third: have your child take the items out of the water and try to clean them.

It is really difficult to clean oil off of items. This is because oil is non polar, and water is polar. The two will not mix. Sometimes we get oil into rivers, lakes, ponds, and maybe even an ocean. This is really bad for the environment and the wild life. If a bird has lots of feathers—how can you clean all the oil out of the feathers?

There are engineers who are Environmental Engineers. They help keep guidelines so that companies and people don’t contaminate natural recourses like rivers, streams, lakes and oceans. They also help clean up when a spill does happen.

Maybe you can figure out how to clean the oil out of the water?
Refresh with some Lemonade

You will need:
- 1-2 lemons
- 1 Teaspoons of baking soda
- Cold water
- 1-2 Teaspoons of sugar
- Citrus juicer
- Glass
- Spoon
- And kitchen measuring utensils

*Note: we eat baking soda in a lot of things, but that doesn’t mean it is safe to eat a lot of. Watch your kids to make sure they are sticking to the recipe.

Step 1: Juice your lemons into the glass.
Step 2: Add 1/2 Teaspoon of baking soda and watch it fizz. Then you can add the other 1/2 teaspoon of baking soda.
Step 3: Measure out about equal amount of water to lemon juice. An equal amount of water will be a fairly sour glass of lemonade. Use more water if you like your lemonade a little less sour.
Step 4: Add sugar by the tablespoons to the water to taste.
Step 5: Add the sugar water to the lemon mixture and enjoy!

What is happening? Lemon juice is an acid and baking soda is a base. When you mix them together they react to release CO2 gas and neutralize.

For more you can visit here.

Family Fun STEM Websites

The STEM Laboratory
Family fun activities and games for pre-K through second grade. Check out the website here: Click Here

Hippo Campus
Find dozens of videos on a variety of math and science topics to help your student with homework or interests. Click Here

How to Smile
A website full of activities like these on the newsletter. Click on the following link and search for thousands of science and math activities to help your child learn and have fun. Click Here
2020 Vision

We have some exciting new things coming soon from the Engineering Expo team. Keep up with what is going on by visiting our website and following our social media.

www.wichitaengineeringexpo.org

Our Other Social Media to follow:
Follow the event on Facebook: Here
Follow SWE on Facebook at Here
Follow us on Instagram Here

How Do Sponsors Help Expo?

Expo has been very fortunate to have many sponsors! Usually the Engineering Expo team will talk with a local company and ask if they want to help Expo. More often than not they will send some money and we put it to good use! The first thing that Expo has to pay for is the “venue”, which is a fancy term for the location that Expo will be at. Another big purchase for Expo is all the supplies for Expo activities. Some expensive booths last year were the drones, lava lamps, temporary tattoos, and button maker. We also have to spend a little money for the bags, t-shirts, flyers, and maps that everyone receives when they walk in the doors. We have noticed that people and families have a really good time at Expo, and when there are good signs and maps for booths – it really helps them have a good experience.

Some other ways that sponsorship helps is for publicity. The team at Expo is really passionate about making sure all kids have an opportunity to experience STEM in a fun way. Therefore we spend a little money making sure that local TV, radio, and billboards will advertise for the event so your mom, dad, guardian, or friend will hear about it and want to come! Social media has also been really helpful and we use the social media sites that are linked above to help everyone know about the event!

There are a few other areas that sponsorship helps, but they are a little more boring. Some finances go towards planning tools, storage for supplies, and other less interesting avenues that are important to keep Expo running year after year.

However, money is not the only sponsorship that Expo receives. There are individuals and some companies that have supplies that they donate to Expo. Early in the year we will advertise what kinds of supplies and materials we will need for the next Engineering Expo and ask if anyone is interested in donating the items. Sometimes people offer donations and we realize that those items would be really helpful – even if we had not thought of it!

So, as you can see, Expo is a big event that has support from so many people, as individuals, groups, or companies!

Please let us know if you are interested, or know anyone interested, in helping with Engineering Expo 2020!

Contact us at exposponsorship@wichitaswe.org