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# STEM

COLUMBIA RIVER GORGE



Back to School EDITION 2019



Inside:  
Parent's Tips  
for Back to  
School!



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## How to involve your kids in back-to-school preparations

Preparing for the school year can cause a fair amount of tension and upheaval for kids. A great way to mitigate this stress is to involve them in the process of getting ready. Here's how to include them.

### Buying and labeling school supplies

Bring your kids along with you when you go shopping for school supplies. Let them choose some of the items and ask for help with labeling them. Going out to buy school supplies could become a fun activity that your child looks forward to every year.

### Preparing backpacks and lunchboxes

Allowing your children to pack their own bags and lunchboxes is a great way to make them feel like they're in charge. This is likely to calm their worries and reduce the number of unknowns they have to get used to. However, it's a good idea to check that they don't forget anything essential.

### Planning the weekly routine

Let your kids have a say in the planning of your family's weekly schedule. For instance, ask them where in the house they'd like to do their homework and study.

To ensure a smooth transition between the summer holidays and the return to school, start the new routine a few days before classes begin, especially with regards to bedtime.

Involving your child in the necessary back-to-school preparations is a great way to transform a stressful time into a fun experience that'll make them feel more independent.



# Profile

## Christy Christopher

**S**TEM Hub Director Christy Christopher was experienced in STEM before the term was even being used. “Growing up in Hood River, I was fortunate to have so many great teachers. But one in particular, Ms. Holt-Mohar at Mid Valley Elementary, really left a lasting impact on me. She engaged students in countless hands-on projects, connecting everything to the world around us. Learning felt so authentic, challenging, and fun.” As a parent of another of Holt-Mohar’s former students recently said, “she was doing STEM before there was STEM.”

Inspired by the education she gained in Hood River, and the opportunities it opened for her, Christy went on to teaching after graduating from Cornell University. “I realized in college how privileged I was to get a great public-school education, but that many kids in our country aren’t so fortunate. And I wanted to do something about that.”

She entered the intense Teach for America program, which preps teachers in a bootcamp-style preservice training and places them in high-needs areas for two years. Her placement was high school math in San Jose, California. “That first year I had two big realizations. One was how incredibly difficult teaching is. The other was how frustrating it is to both teach and learn a subject when it’s not connected to the real world, as math standards were at that time.”

Christy continued teaching for seven years, taking “breaks” to found an educationally-focused toy store and attend graduate school.

In 2017, Christy returned to Hood River and was hired as the Columbia Gorge STEM Hub Director. “I always wanted to return to the Gorge, but the timeline was unclear. Having my son in 2016 made that decision easy and I was incredibly fortunate to find a role that was such a good fit.”

## starting STEM early

- Encourage experimentation – children learn about themselves and their world this way.
- Ask lots of questions and explore – help your child develop their own curiosity.
- Celebrate “mistakes” – that’s how we learn!
- Count, sort, compare sized, and put things in order. This helps children develop mathematical intuition.
- Use technology wisely and minimally, if at all. For children these years are all about bonding with loved ones, learning, language, and discovering themselves.

# What are STEM Hubs?

**T**here are 13 STEM Hubs across Oregon, funded primarily by the Oregon Department of Education and covering nearly every county. Similar organizations exist across the world and are one of the top recommendations from the White House’s National Science and Technology Council for promoting STEM Education. As the Council’s 2018 report explains, “Now more than ever the innovation capacity of the United States—and its prosperity and security—depends on an effective and inclusive STEM education ecosystem. Individual success in the 21st century economy is also increasingly dependent on STEM literacy.”

The Hubs are designed to use Collective Impact to expand STEM opportunities from preschool through college. This boils down to connecting all the players in a region who value STEM to work together—rather than in their own siloes—on that shared goal. Nearly everything Columbia Gorge STEM Hub does is a partnership with other organizations, such as Girls Engineering Night with local libraries, Maker Clubs with local school districts, and the Gorge STEM Fair with Hood River Valley High.

The Columbia Gorge STEM Hub is part of the Columbia Gorge Education Service District in The Dalles. The Hub’s region covers five Oregon counties (Hood River, Wasco, Sherman, Wheeler, and Gilliam); partnerships also reach into Klickitat and Skamania counties. With such an ambitious mandate, the Columbia Gorge STEM Hub’s work is constantly evolving.

## Want to learn more?

Those interested in collaborating or learning more about the Hub can visit

**[www.gorgestem.org](http://www.gorgestem.org) or call  
541-296-2046.**

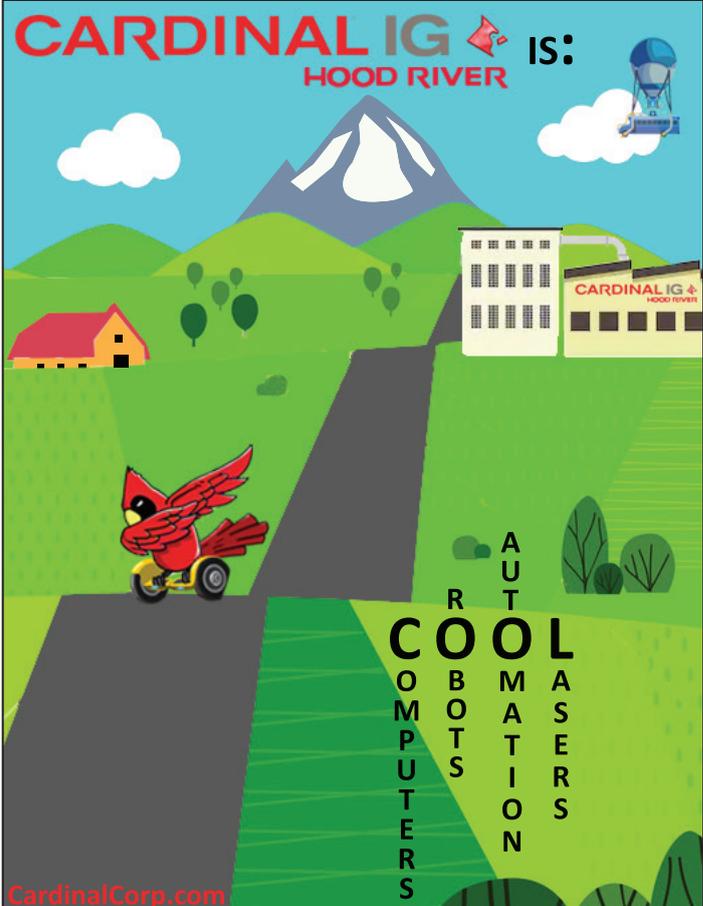


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# Coming to a **classroom** near you!

## **Renewable Energy from Cascade Mountain School**

Cascade Mountain School will be in classrooms exploring renewable energy resources in Gorge communities. We will be experimenting with technologies including solar panels, hydro power, and wind turbines. Over the course of four days students will work collaboratively to design, engineer and test wind turbine blades to determine the most efficient designs.

## **SECRETS from Gorge Ecology Institute**

Gorge Ecology Institute is entering its 23rd year providing its SECRETS program to nearly every 5th grade classroom in the Gorge. SECRETS is a nine-week ecology curriculum that teaches local youth key science concepts through the lens of their own surroundings. And the impact of SECRETS goes even beyond science. As Nancy Ihde of May Street explained, "SECRETS helps me as a teacher. When students are excited about science, it carries over to their time with just me and other areas of the curriculum."

## **Outdoor School**

Thanks to the passage of Measure 99 in 2016, all 5th or 6th graders in Oregon have access to outdoor school, funded by the state lottery. Gorge Ecology Institute and Cascade Mountain School both provide outdoor school offerings in the Gorge, hosting students from local schools and from beyond the Gorge.

## **Gorge Makerspace and STEMInists**

The Gorge Makerspace in White Salmon, and its founder Jack Perrin, will continue to lead open-ended design sessions this year with elementary through high school groups. Thanks to the American Association

of Woodturners and the Makerspace's newest mentor, Marjin Wall, the ever-evolving space now has four JET brand wood lathes. They have already been a big hit with kids at the makerspace during open studio. Marjin, a talented teacher and woodturning artist, will soon offer demos, workshops and classes. Perrin also leads White Salmon's STEMInists clubs, which introduce more than 40 girls from the White Salmon area to STEM concepts and careers throughout the year as part of the WSVSD afterschool program.

## **Just one click away**

For more information about your child's development check out these websites:

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[www.vroom.org](http://www.vroom.org)

[www.fourriversfamily.org](http://www.fourriversfamily.org)

[youththink.net/programs/t2t-parent/](http://youththink.net/programs/t2t-parent/)

### Maker Clubs

Six schools across Hood River and The Dalles piloted Maker Club after-school programming last year, in a partnership with the Columbia Gorge STEM Hub. The weekly activities are designed to introduce kids to the engineering design process and building with their own hands. Project themes included structural engineering, toy design, electronics, and simple machines. The Maker Clubs will continue at new and existing sites in 2019-20. The curriculum, developed locally through a national grant from Citizen Schools, is available open source to any organization that wants to try to expand access to maker learning. More info at [www.gorgestem.org](http://www.gorgestem.org).

### Mystery Science Curriculum

(The Dalles/Hood River)

Over the past two years Hood River and North Wasco County Schools began using “Mystery Science” to

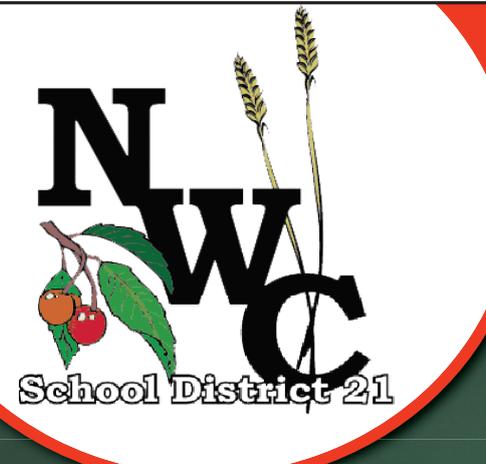
bring scientific inquiry to the elementary classroom. The modern curriculum creatively uses technology and lots of hands-on experiments to teach elementary learners to think like a scientist and master key science concepts.

### Gorge FabBus

Hood River County School District’s digital fabrication lab on wheels (the “Gorge FabBus”) will continue twice-weekly outreach to local schools in 2019-20. The FabBus, led by Jeff Blackman of HRVHS and his students, brings robotics and digital design lessons to elementary and middle school students in Hood River County. Through the use of engaging activities and diverse high school student leaders, the FabBus encourages learners of all backgrounds to see themselves as someone who could someday be an inventor or engineer.



Middle school students test their wind turbine blades during renewable energy instruction.



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# Doing STEM at Home: *Balloon Rockets*

Helping your child explore STEM concepts is fun and easier than you may think. The internet abounds with ideas, so much that it might be tough to know where to start. Here's an idea of a project you can do at home with a wide range of ages:

1. **Gather supplies:** string, scissors, Scotch tape, 1-2 straws, and 1-2 balloons.



2. **Set up:** Tie the string to one chair, put the straw on the string, and tie the other end of the string tightly to another chair. Have at least a 5-foot span. Now, blow up the balloon, hold the end shut, and tape the balloon onto the straw.

3. **Discuss and Hypothesize:** See science tips below.

4. **Test and Retest:** Countdown and release the balloon! You can do many "flights" with the same straw and balloon, just adding more tape for each round since the balloon may fall off at the end of its flight.



## How this is STEM:

- *Science concepts:* make hypotheses about the direction, speed, and distance the rocket will go. Test your predictions. Try different setups. Talk about what's surprising and why you observe certain results.
- *Math:* make comparisons (faster/slower, larger/smaller). For older children, select one variable to change (such as how much the balloon is inflated). Record data on the resulting changes in "flight" (such as how far the rocket goes) and look for patterns.
- *Engineering:* introduce new constraints and design around them. How can we make the rocket spin? How can it carry a LEGO person? How might we use different materials to improve the rocket's flight?
- *Technology:* check out NASA's website to learn about rocket design. Talk about how so many technologies had to come together to make rockets reach space.

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## How to prepare for a parent-teacher meeting

**The average parent-teacher meeting rarely lasts longer than 15 minutes. Here's what you can do to get the most out of it.**

### Prepare your questions ahead of time

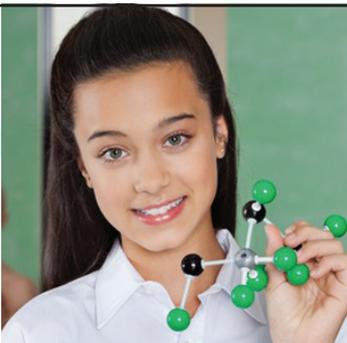
The best way to get a clear picture of how your child is doing in school is to prepare a set of questions to ask the teacher. How do they behave in class? Are they making progress? What can you do to help them? Write down questions as they arise over the course of the semester to make sure you don't forget anything.

### Share information about your child

Describe how you perceive your child's strengths, weaknesses and character traits. Additionally, you should inform the teacher about any important developments that may affect your child's behavior such as a divorce, death or medical diagnosis. The more information they have, the better they'll be able to respond to your child's needs.

### Keep an open mind

Listen to what the teacher has to say before forming an opinion and be prepared to hear both the good and the bad. Don't dismiss the possibility that your child may benefit from tutoring, counseling or some other type of intervention.


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Michelle Ochsner, mgr.

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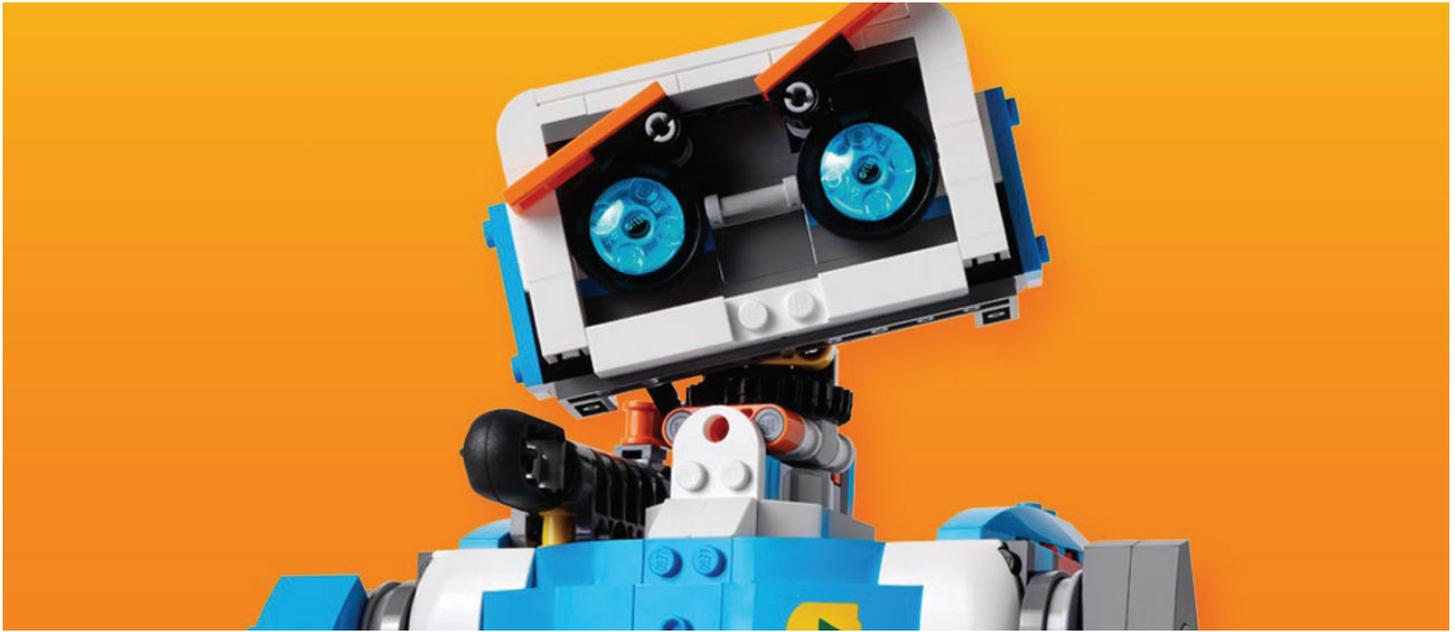
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# Robotics **in the** Gorge

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From vacuuming our floors to helping us perform complex surgical procedures, robots have become an important part of our lives. As robot revolution continues, it is important for our children to understand and make the most of it.

In education, robotics introduces broad, multidisciplinary concepts, including ways to think about technology and how it will continue to impact society. Providing hands-on experience with robotics to young learners exposes them to skills necessary to thrive in our rapidly changing world, including ways of thinking, questioning, and working together.

Robotics teaches students to identify problems and come up with unique solutions — essential traits for the future.

In the Gorge, we are fortunate to have several opportunities for learners to get involved in robotics. Some

schools feature in-school robotics classes for their students and other students participate in robotics through after-school programming.

With FIRST LEGO League (FLL) Robotics, elementary and middle school students research, design, and program robots to complete missions based on a changing mission theme. To compete in the tournament, students must construct a unique robot using sound engineering principles complete with arms and attachments capable of moving levers, objects, and mission components around a set playing field. Children as young as age 6 can get involved.

Check out <https://www.firstinspires.org/robotics/frc> for more info.

Just like scouting and sports, some parent involvement is key. Volunteers are always needed to help chaperone, mentor, or assist with the many tournaments and practices. No prior technology or robotics experience is required.

**People interested in learning more about robotics or leading a team, can contact the following local leaders:**

• **Jessica Metta**,  
Gorge Technology  
Alliance Director  
[jessica@crgta.org](mailto:jessica@crgta.org) or  
541-296-2266

• **Lu Seapy**  
Wasco County 4-H,  
[lu.seapy@oregonstate.edu](mailto:lu.seapy@oregonstate.edu)

• **Jack Perrin**  
White Salmon  
Makerspace,  
[jack@gorgemakerspace.com](mailto:jack@gorgemakerspace.com)



*Lu Seapy is STEM Outreach Program Coordinator for Wasco County 4-H Youth Development, through the Oregon State University Extension Service.*



*Lisa Bren, STEM Communication & Project Assistant is a Klickitat County parent who grew up in White Salmon, Lisa understands some of the challenges rural families face.*



# Youth robotics training info for parents

The new school year is here and brings a new crop of students itching to get their hands on a robot! One of the easiest ways to help youth find their way to a robot is to get involved with FIRST robotics. FIRST is a national program with a sports-like model where students meet as teams over several months to prepare for a competition. There are FIRST programs in the Gorge for students ages 6 to 18.

Parents who have students interested in robotics are encouraged to consider coaching a team. FIRST LEGO League (FLL) for students ages 9 to 14 is a great way to introduce students to robotics. Teams of three to ten students begin meeting as school starts to prepare for one of the Gorge Qualifying Tournaments held Dec. 7, 8 and 14. Parent coaches do not need to understand robots or programming; their main duty is helping the students focus and navigating the competition challenges.

A free workshop is planned for Saturday, Sept. 21 to help parents and volunteers serve as FLL coaches. The Gorge Tech Alliance (GTA) will be

bringing an Oregon Robotics Tournament and Outreach Program to the OSU Extension in Hood River for an 8:30 a.m. to 4:30 p.m. coach training. This is a great workshop for brand-new coaches, parents and mentors or those who have been involved but want to brush up their knowledge. Activities include an introduction to FLL, coaching and mentoring techniques and robot techniques. Pre-registration is required but the event is free. Additionally, the GTA has free robots and laptops for loan to support teams and can also point teams toward scholarships for school-based teams. Find registration links and more information about robotics in the Gorge at [GorgeRobotics.org](http://GorgeRobotics.org), a service of the GTA.

The GTA's equipment for loan and support of robotics events is made possible by our regional tech businesses including Google, Insitu and others. The GTA is a non-profit industry association that seeks to support, connect and develop the technology community of the Gorge. Learn more at [crgta.org](http://crgta.org).

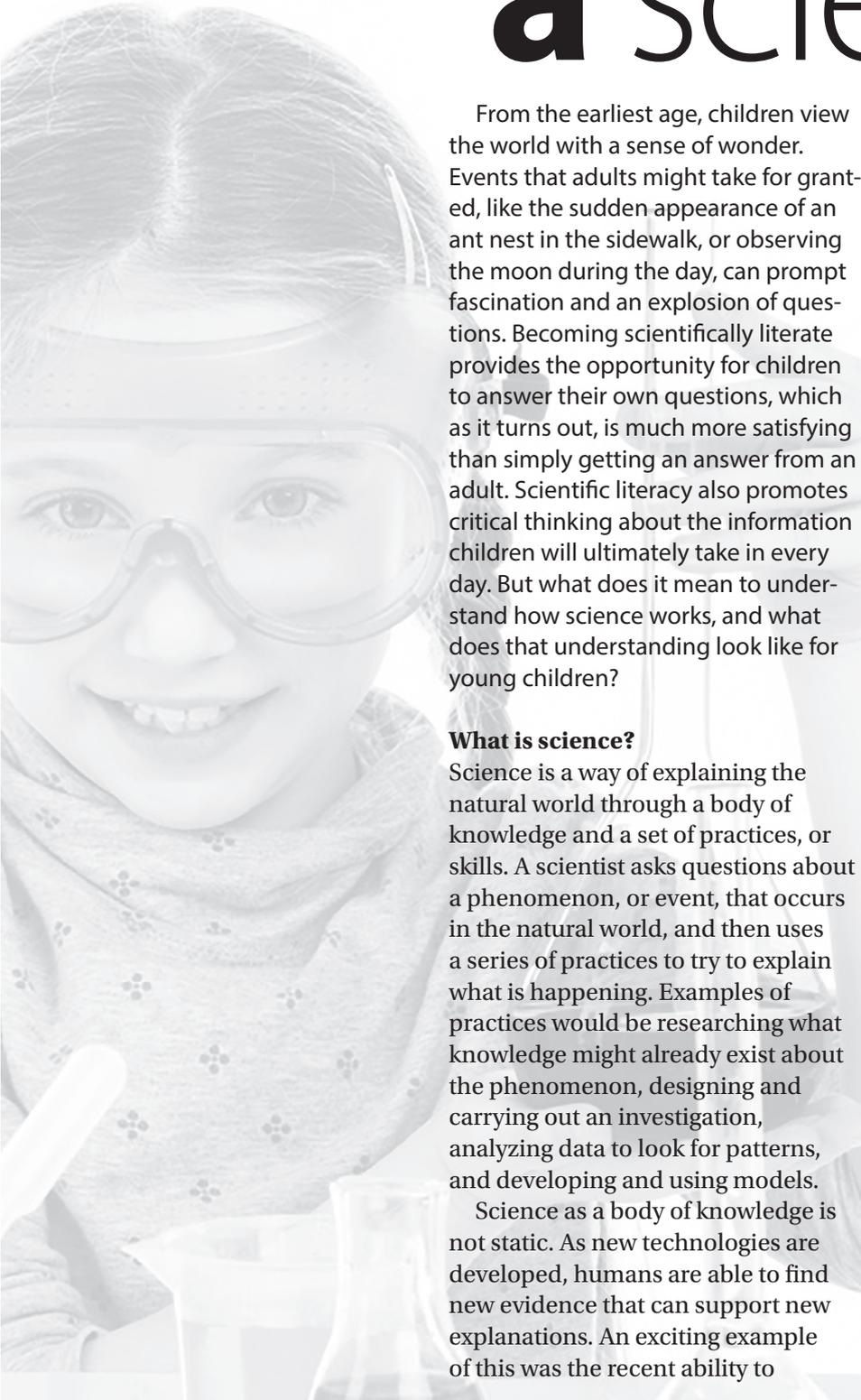
## Save the Date

What:  
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Coach Training

When:  
Saturday,  
Sept. 21, 8:30 a.m.

More info:  
**[GorgeRobotics.org](http://GorgeRobotics.org)**

# Thinking **like** a scientist



From the earliest age, children view the world with a sense of wonder. Events that adults might take for granted, like the sudden appearance of an ant nest in the sidewalk, or observing the moon during the day, can prompt fascination and an explosion of questions. Becoming scientifically literate provides the opportunity for children to answer their own questions, which as it turns out, is much more satisfying than simply getting an answer from an adult. Scientific literacy also promotes critical thinking about the information children will ultimately take in every day. But what does it mean to understand how science works, and what does that understanding look like for young children?

## **What is science?**

Science is a way of explaining the natural world through a body of knowledge and a set of practices, or skills. A scientist asks questions about a phenomenon, or event, that occurs in the natural world, and then uses a series of practices to try to explain what is happening. Examples of practices would be researching what knowledge might already exist about the phenomenon, designing and carrying out an investigation, analyzing data to look for patterns, and developing and using models.

Science as a body of knowledge is not static. As new technologies are developed, humans are able to find new evidence that can support new explanations. An exciting example of this was the recent ability to

photograph a black hole for the first time, which provided new evidence to support our understanding of the universe. At a time when we face issues such as a changing climate, pollution in our air and water, and a growing population, one could argue it is more important than ever before for our children to understand how science works, and how to use the findings of science to make informed decisions in their lives.

## **What does this look like at home?**

We often hear the phrase that children are “natural scientists.” As a parent, I’ve observed that my two-year-old daughter is constantly gathering information about how the world works. She throws objects in the water, she tries coloring on all kinds of surfaces, she rolls objects down slopes, and she sticks her hands into foods and squishes them around. All of these explorations give her instant feedback about the world and the properties of the objects she encounters every day. Is she doing science? Not exactly. We can help children move from their natural explorations to doing science by supporting them to be more systematic in their investigations, recording data and analyzing that data.

For example, when my daughter was playing in our wading pool, I asked her: “Will this ball sink, or will it float?” She answered “float,” and then tested her prediction. When she is in preschool, we’ll try sorting objects based on whether they float or sink.

When she's a first grader, we can start recording what objects sink and what objects float to see if we can find any patterns in our data. When she is in 4th grade, we can try building boats out of clay, to observe how the same piece of clay can sink or float depending on its shape. When she is in middle school, we can create a model of buoyancy which shows the different forces pushing and pulling on a floating or sinking object. This is an example of how the simplest early explorations can build to quite complex ideas.

There are countless other phenomena children can explore in their everyday lives. Here are just a few that have captured my toddler's interest recently: the pollinators that visit our garden every day, the life cycles of the plants in our yard (especially the edible ones!), adding water to just about

anything, tossing rocks down our hill and chasing them, the behaviors of squirrels and birds in our yard, transforming raw ingredients into a delicious meal. All of these everyday occurrences are opportunities to engage in scientific thinking together.

A few of my favorite prompts to use with children (and adults) of any age: "What do you notice?" "What do you wonder?" "What do you think is going on?" "Why do you think so?" When you child asks, "Why?" ask them, "What do you think?" and really listen to what they say! When you don't know the answers to their questions, tell them "I don't know! How could we find out?" Enjoy wondering about the world with your child, and exploring ways to answer your questions, and before you know it, you'll both be thinking like scientists.



*Leah Plack is the Oregon Science Teachers Association Communications coordinator, an elementary science consultant and kindergarten teacher.*

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# Extracurricular activities: benefits and drawbacks

Are you wondering if the benefits of extracurricular activities for kids are overblown? Or perhaps you're worried that they'll turn your family schedule into a logistical nightmare? Here's what you should keep in mind when deciding whether to sign up your children for activities.

## Benefits

Many studies show that recreational, athletic and cultural activities make a positive impact on children. *Here's why:*

- They allow kids to develop their talents and skills.
- They contribute to academic success by making it less likely children will lose interest in school or become depressed.
- They're a great way to socialize and make friends who share your child's interests, which promotes their academic and social integration.
- They boost self-esteem.

## Drawbacks

The benefits of extracurricular activities are contingent on them remaining fun. They shouldn't feel like an obligation or become a source of tension.

Make sure your children's schedules aren't overloaded. Too many activities can negatively impact a child's academic performance and even their ability to sleep.

Extracurricular activities should be enjoyable and allow children to develop new skills in a healthy environment. Pressuring them to perform will negate any benefits and may cause unwarranted stress.

# Back to school checklist for busy parents

Need a hand getting organized for the new school year? Follow this checklist to make sure you don't forget anything.

- Review all documents provided by the school.
- Buy everything on the school supply list.
- Buy comfortable shoes, rain boots, winter boots and a range of clothing for all weather conditions.
- Invest in a sturdy backpack and lunch box.
- Label your children's belongings.
- If your children walk to school, walk with them a few times so they know the way.
- If they take the bus, show them where the bus stop is.
- Display the school calendar prominently. On the refrigerator, for instance.
- Sign up for an after-school day care service if needed.
- Set up doctor's appointments before the school year begins.
- Inform the school about any allergies or medical conditions they should be aware of.
- Change bedtimes and wake-up times at least a week before school begins.
- Get in the habit of preparing lunches, backpacks and clothing the night before.
- Plan for a slower morning on the first day as rushing may prove to be stressful for you and your children.

Remember, the start of a new school year doesn't have to be hectic if you prepare yourself and your children ahead of time.

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# Debunking STEM Myths



*Christy Christopher  
leads the Columbia  
Gorge STEM Hub.*

STEM seems to be everywhere these days; the acronym is rapidly becoming a part of our everyday language. We have STEM toys, STEM apps, STEM schools, and more. While we may know that STEM stands for science, technology, engineering, and math, there are still many misconceptions surrounding the term. Here is a look at some common STEM myths, debunked.

*If the experience includes science, technology, engineering, or math, it's STEM.*

FALSE. STEM isn't simply about covering these four subjects. It's about authentic learning in a way that integrates those disciplines together, just like they are in the real world. And beyond "subjects" STEM engages our students in critical thinking, problem solving, and genuine exploration of their world.

*STEM is just about engineering and robotics.*

FALSE. In the Gorge we are fortunate to have strong robotics programs and many engineering jobs. But STEM is so much more than that. For example, people who work in advanced manufacturing, construction, forestry, fire suppression, medicine, crop production, natural resources,

are all in roles where STEM is an integral part of their job.

*STEM is nice to have, but only if we have time.*

FALSE. STEM is more important now than ever. STEM careers are nearly all high-wage and high growth, and more than one in five job openings in Oregon are in STEM fields. Preparing kids in STEM is important for their future opportunities and crucial for our country to be able to continue being a world leader in science and innovation.

*STEM is only for boys and wealthy kids.*

FALSE. But this misconception is rooted in a real problem. The demographics of people in STEM careers, and even in STEM courses, is still far from matching the demographics of our country. With so much opportunity in STEM fields, this is a significant equity issue. Everyone can do STEM; it's up to parents, educators, and current STEM professionals to help all children understand that.

*All STEM careers require a college degree.*

FALSE. According to the Oregon Employment Department, about 53 percent of current STEM jobs require a bachelor's degree or higher. But that

still leaves nearly half of STEM jobs that do not require four plus years of college. Other pathways to STEM careers include: career and technical programs (CTE) in high school; on-the-job training and apprenticeships; and associate degree programs, such as Columbia Gorge Community College's EM-Tech and nursing programs.

*STEM learning starts in middle or high school.*

FALSE. It's crucial that STEM starts early, just like literacy and social-emotional skills. Most children have unconsciously decided by middle school whether STEM is for them. If we want to change the status quo of who can and will pursue STEM careers, we must encourage "STEM identities" when children are young. Plus, young children are natural scientists and engineers: they do experiments ("what happens when I drop my cup?") and love creating. Let's encourage this passion for learning!

**The data mentioned above comes from the State of Oregon Employment Department's "10-Year Occupational Projections for STEM Jobs" by Anna Johnson, published on September 18, 2018. <https://www.qualityinfo.org/-/10-year-occupational-projections-for-stem-jobs?inheritRedirect=true>**

# For safety, for all



**Wear a helmet in case you fall!**  
**Protect your head, protect your future**

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- Archivist
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- Designer
- Drafter
- Drone pilot
- Economist
- Electrical engineer
- Environmental engineer
- Excavator
- Fiber optic technician
- Financial analyst
- Futurist
- Geologist
- Geotechnical specialist
- Graphic designer
- Hydrologist
- Illustrator
- Information technology specialist
- Landscape architect
- Mechanic
- Mechanical engineer
- Pilot
- Security specialist
- Software developer
- Soil scientist
- Surveyor
- Technical writer
- Traffic engineer
- Underwater imaging specialist
- Urban planner
- Web developer
- Welder
- Wildlife conservationist

... and so many more!

**PORTOFHOODRIVER.COM**

## Directory

# STEM Spaces & RESOURCES FOR FAMILIES

(NOTE: If an organization serves only certain counties, those are listed. Primary counties served are in bold.)

### **Bonneville Dam & Hatchery (Cascadè Locks)**

Rangers and volunteer staff at the visitor centers offer tours and answer questions about hydroelectric power, dam construction, life-cycles of salmon, and more. Park ranger maintained educational geocaches.

web: [www.nwp.usace.army.mil/bonneville/](http://www.nwp.usace.army.mil/bonneville/)  
phone: 541-374-8820

### **Columbia Gorge Discovery Center (The Dalles)**

Interpretive museum featuring cultural and natural history exhibits, native plant nature walks, and a live raptor program.

[w.gorgediscovery.org](http://w.gorgediscovery.org)  
phone: 541-296-8600

### **Columbia Riverkeeper Nichols Natural Area: Photo Post Project (Hood River)**

#### **Hood River County Library**

Makerspace with regular programming & STEM Family Kits available for checkout. Counties: H K Sh Sk

web: [www.hoodriverlibrary.org](http://www.hoodriverlibrary.org)  
phone: 541-386-2535

#### **Goldendale Observatory**

Free presentations include outdoor telescope viewing and indoor classroom sessions at Maryhill Stonehenge Visitor Center.

web: [www.goldendaleobservatory.com](http://www.goldendaleobservatory.com)  
voicemail: 509-773-3141

#### **Gorge Makerspace (White Salmon)**

Open studio time on Tuesdays and Thursdays and several topic-specific summer camps.

web: [www.gorgemakerspace.com](http://www.gorgemakerspace.com)  
phone: 509-808-1781

### **National Forests: Mt. Hood National Forest (Hood River County) and Gifford Pinchot National Forest (Klickitat, Skamania)**

Go camping, hiking, or visit a ranger station to learn more about nature and science.

web: [www.fs.usda.gov/mthood](http://www.fs.usda.gov/mthood)  
web: [www.fs.usda.gov/giffordpinchot/](http://www.fs.usda.gov/giffordpinchot/)  
phone: 509-395-3400 (Mt Adams Ranger District in Trout Lake, WA)

#### **The Dalles Dam**

Visitor center features a variety of interactive displays, a short film on the benefits and impacts of the dam.

web: [www.nwp.usace.army.mil/The-Dalles/](http://www.nwp.usace.army.mil/The-Dalles/)  
phone: 541-296-9778

#### **The Dalles-Wasco County Library**

Makerspace with digital fabrication tools including: laser printer, laser etcher, and more. Hands on activities for young children and STEM programs for many ages. Numerous STEM Family Kits and technology resources for educators. Counties: H K Sh Sk W

web: [www.wascocountylibrary.com/](http://www.wascocountylibrary.com/)  
phone: 541-296-2815

#### **WAAAM (Hood River)**

Museum featuring one of the largest collections of still-flying antique aeroplanes and still-driving antique automobiles.

web: [www.waaamuseum.org](http://www.waaamuseum.org)  
phone: 541-308-1600

#### **Wonderworks Children's Museum (The Dalles)**

Exhibits and creative play spaces geared towards kids ages 0-8, but open to all ages.

web: [www.wonderworkschildrensmuseum.org](http://www.wonderworkschildrensmuseum.org)  
phone: 541-980-5922

## Annual STEM Community Events

- Fall – Robotics season begins (FIRST & VEX, K-12)
- December – Regional FIRST and VEX Robotics Tournaments (Hood River & The Dalles)
- January - ROV Submersible robotics (The Dalles, White Salmon)
- February – Introduce a Girl to Engineering (Hood River, The Dalles, White Salmon)
- February – Lunch with a STEM Pro (Hood River)
- March - Gorge Wind Challenge (The Dalles, grades 6-12)
- March – March for Science (White Salmon)
- April – STEM Career Day (The Dalles, grade 7)
- June – Gorge STEM Fair (Hood River)
- June – Nichols Natural Area Work Party - Columbia Riverkeeper (Hood River)
- August – STEM Educator Symposium & Superquest training (The Dalles)
- Throughout – STEM Nights at local elementary schools, Maker clubs

Did we miss something?

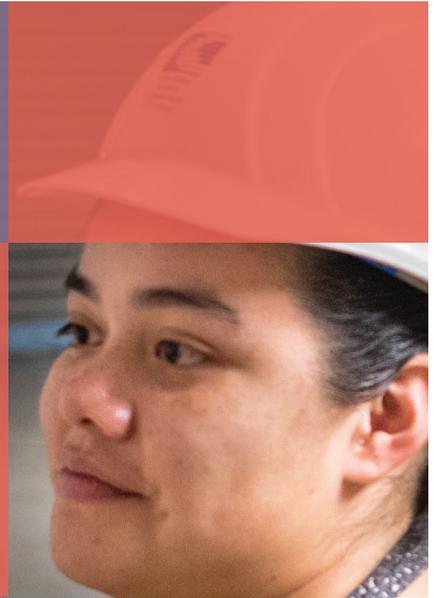
Please contact the Columbia Gorge STEM Hub to let us know:  
[gorgestem@cgesd.k12.or.us](mailto:gorgestem@cgesd.k12.or.us)

# Youth Success Program

Are you 16-24 and need help launching into a career or training? The CGCC Youth Success Program can help you every step of the way!

If you qualify, you may be eligible for the following services:

- Job placement assistance
- Resume writing and interview skills development
- Financial incentives
- Paid internships
- Occupational training
- Career planning
- Personal career advisors
- Mentoring and leadership development
- College transition support



## Contact:

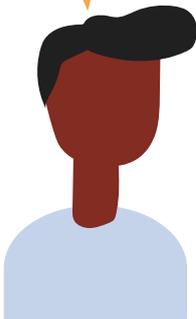
Matt Fitzpatrick  
Pre-College Pathways  
and Transition Advisor  
(541) 506-6042  
mfitzpatrick@cgcc.edu



For eligibility information,  
please see  
[www.cgcc.edu/ysp](http://www.cgcc.edu/ysp)

Columbia Gorge Community College is an equal opportunity educator and employer. Support for the Youth Success Program is funded through the Workforce Innovation and Opportunity Act, the U.S. Department of Labor and Oregon's Higher Education Coordinating Commission and East Cascades Works.

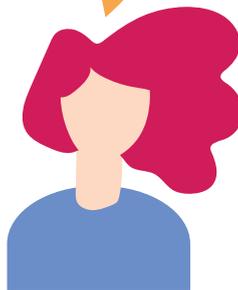
*HOW DO I  
GET RID OF OLD  
MEDICINES?*



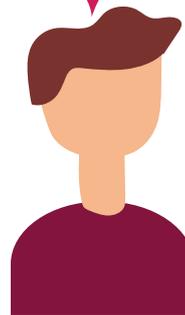
*HOW CAN I  
REDUCE WASTE  
AT HOME?*



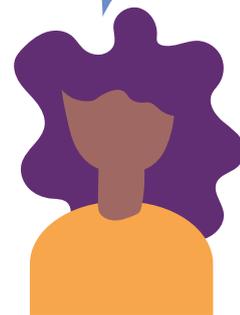
*ARE MY  
CLEANING  
CHEMICALS  
SAFE?*



*WHAT  
CAN I  
RECYCLE?*



*WHERE  
CAN I GET A  
COMPOST BIN?*



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# Fostering **creativity** in kids



**Creativity is an essential life skill as it allows for the ability to adapt to new situations and solve complex problems. Here are some ways you can help foster it.**

## **Designate time and space for creating**

Provide kids with free time and a space at home where they can influence their environment. The key is to let them control the materials around them without parental interference. This can be as simple as setting up a corner with assorted art materials, a set of building blocks or a box of old clothes for dressing up.

## **Include them in problem solving**

Creative thinking involves the capacity to recognize that most problems have multiple solutions. From an early age, children should be encouraged to come up with ways to resolve the complications experienced in their lives.

For example, allow them to brainstorm ways they can keep their room clean or deal with a sibling who doesn't want to share. They may still need your help to uncover the best answer to the problem, but their capacity to innovate may surprise you.

## **Encourage them to explore their interests**

Another key aspect of creativity

involves following up on what stimulates delight or piques curiosity. Even the smallest spark of interest can ignite into a lifelong passion under the right circumstances.

When you notice your children demonstrating fascination with something, encourage them to delve deeper by giving them more information or providing additional resources.

Above all, parents who want to foster creativity in their kids should strive to step back and let their kids experience the world around them on their own terms. Unstructured play is key. Experimenting is essential and letting them try and fail will provide invaluable lessons.

---

## **Is your child over-scheduled?**

Sports teams, dance classes, music lessons, coding clubs and more. There are countless enriching activities available to children that can add value to their lives. However, having too many obligations on top of school work can take a toll.

If your kid no longer sleeps well at night, complains of headaches or stomach aches or seems to struggle to keep up in school, they may have too many activities competing for their time and energy. Other signs they're overwhelmed include spending less time with friends and not having the opportunity to just play or relax.

So how do you strike the right balance between providing enriching activities and not overscheduling your children? Here are some options.

- Check in with them. Regularly ask if they're still enjoying their activities. Don't pressure your children into pursuing things that they don't want to do.

- Incorporate free time into their routine. Make family dinners, game night and playtime a priority. Every weekend, make sure they get some unstructured time to play, read or go outside.

- Be selective about new activities. If they express interest in starting something new, talk to them about strategies for including it in their existing schedule. It may be necessary to drop something else before committing to a new activity.

As a parent, it's your job to guard your child's well-being. This includes their mental health. If they're showing signs of being overscheduled, make some changes to their routine and give them time to simply relax and be a kid.



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# STEM Programs AT LOCAL SCHOOLS

*All local schools have multiple STEM opportunities for students. These include classes, clubs, and after-school programs. The following list gives a snapshot of STEM-related opportunities in each district. For more information, contact your local principal.*

## **Hood River County School District**

**Elementary schools:** Maker Clubs; ExCEL after school program; First Robotics clubs; STEM Nights.

**Middle schools:** FUSE Digital Design & Making classes in Engineering; FIRST FLL Robotics Teams, Chief Science Officers.

**High School:** Robotics courses; Career & Technical Education (CTE) courses; AP & dual credit science & math classes; numerous science & STEM-related clubs.

## **North Wasco County School District**

**Elementary schools:** Maker Clubs, school gardens/greenhouse, robotics.

**Middle school:** Science & engineering events, STEAM class elective, robotics.

**High School:** 4H, Gardening Club & school garden, Robotics, AP science & math classes.

## **Sherman County School District**

**Elementary school:** robotics; school garden/greenhouse; 4H

**Middle school & high school:** robotics; 4H & FFA; gaming club; maker/prototyping equipment

## **South Wasco County School District**

**Elementary:** STEM-related field trips

**High School:** robotics; school garden/greenhouse; science & engineering events

Did we miss something? Please contact the Columbia Gorge STEM Hub to let us know:

**[gorgestem@cgesd.k12.or.us](mailto:gorgestem@cgesd.k12.or.us)**



Hood River Valley School District has two middle schools, each with unique STEM opportunities. Wy'east Middle School has additional after school STEM programs available due to a grant. Hood River Middle School has an additional STEM program focused on Environmental Science, called Food and Conservation Science. The program spends time on the Engineering Design process but focuses on the life sciences. Whereas, the school's engineering programs focus on applied physical sciences.

# GET READY GORGE



## Fall is on the Way | Stay Safe

SEPTEMBER IS NATIONAL PREPAREDNESS MONTH • GET READY!

### Make a family emergency plan – What's on your evacuation list?

#### EMERGENCY SUPPLIES

- Build a Go-Kit of emergency supplies. Start with your camping or travel box
- Stock up – 3 days to 3 weeks
- Use the Go-Kit checklist here: <https://www.ready.gov/build-a-kit>
- Have a Go-Kit in your car year 'round
- Expect power outages and find alternatives

#### COMMUNICATIONS

- Cellular networks can be a problem in a disaster. Text may be more reliable than calls
- Business point of sale systems are also reliant on cellular - i.e. Square
- Have a backup communication plan that doesn't rely on cell or internet
- Listen to car or battery powered radio

#### FAMILY EMERGENCY PLANS

- Opt-in to Hood River County Citizen Alerts: [www.HoodRiverSheriff.com/events/emergency-alerts](http://www.HoodRiverSheriff.com/events/emergency-alerts)
- Think about your family plans – an out of state contact you all call to check in; safe meeting places; how you would reconnect if separated.
- Practice it – talk through as a family

#### EVACUATION RESPONSE

- Don't hesitate- evacuate. Then you'll have more time to help your neighbors.
- During a emergency, there are three levels of evacuation:  
Level 1 – READY: Pack & prepare for evacuation.  
Level 2 – SET: Ready to leave at a moment's notice  
Level 3 – GO: Evacuate immediately
- Know the risks and respect fire restrictions, such as campfire bans and safe lawn mowing

#### EVACUATION

- Think about where you'd go, and how you'd get there if roads are full or closed.
- A trailer or motorhome is a great evacuation home base.
- Animals and livestock smell fire long before you do. Act early to get them into a smaller place, where you can more easily load them into trailers or crates later for evacuation.
- Make an evacuation list of the top 5 things you'd take if you had to leave in 5 minutes.



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Facebook: [www.facebook.com/hrcso](http://www.facebook.com/hrcso)



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