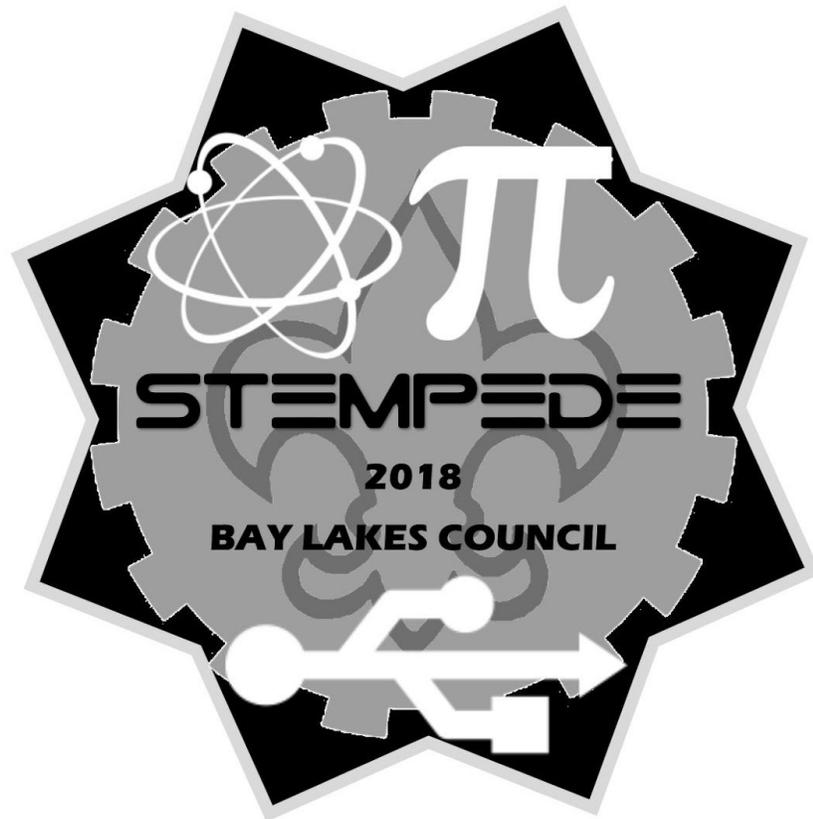


Bay Lakes Council October 5-7, 2018
Bear Paw Scout Camp



Dear Unit Leader:

Thank you for signing up for the Bay Lakes Council STEMpede! We are here to help you deliver a quality program to the scouts of your unit. (The terms Troop, Unit, Den, Crew and Group are used interchangeably.) The STEMpede staff are a highly-motivated group of leaders, adults and volunteers who all are excited to be at camp. We have been working hard to continually upgrade our program to better serve you and your scouts.

Your scout's safety and positive experience is our number one priority; working together with the staff, adult leaders and the council we are here to ensure an awesome experience. We are looking forward to a great weekend!

We have an action-packed weekend planned for your scouts and crew members. In order to complete the STEMpede program, we ask that each unit move quickly and efficiently between the stations according to their schedules. Please familiarize yourself with the event agenda and the items you will need to bring for a successful weekend!

If you have any questions about the weekend's camp program, please email BayLakesSTEM@gmail.com. Thank you for joining us for STEMpede weekend!

Sincerely,

The Bay Lakes STEM Committee

BayLakesSTEM@gmail.com

ADDITIONAL STEMPEDE DETAILS

WHO:

- All Boy Scout Troops and Venturing Crews who want to complete merit badges or Nova requirements for STEM (Science, Technology, Engineering, and Mathematics).
- Webelo Scouts who want to work on the Super NOVA requirements for STEM (Science, Technology, Engineering, and Mathematics).

WHEN:

- October 5-7, 2018
- Check-in begins at 4 pm on Friday, October 5th for Boy Scouts, Venturers, and Webelos

WHERE:

- Bear Paw Scout Camp
- 14000 Bear Paw Camp Lane, Mountain, WI 54149

HOW MUCH:

- \$25.00 per Adult/Leader
- \$50.00 per Boy Scout, Venture Scout, or Webelo

REGISTRATION:

Must register online at: <http://www.baylakesbsa.org/event/stempede/2405978>

- **Registration deadline: September 21st, 2018**
- **There will be NO on-site registration.**

October 5-7, 2018 Bear Paw Scout Camp

Friday, October 5th

4:00 – 6:30 pm Check In; Trading Post will be open from 4 pm-9 pm

5:00 pm Evening flags (for those present)

6:00 pm Dining hall open for indoor games

7:00 pm Leaders Meeting Cracker Barrel at Commissioner Bowl

7:30 – 8:00 pm Opening Ceremony at the Parade Grounds

8:00 – 10:00 pm Movie Time (STEM themed movie) & Indoor STEM Room Open

9:30 pm Star Hike (optional, may be required for some scouts for their Saturday activities)

10:00 pm Quiet time

Saturday, October 6th

7:00 am Wake Up

7:15-8:00 am Open Breakfast (served anytime in dining hall)

8:00 am Flag Ceremony (Class A Field Uniform)

9:00 – 2:30 pm Boy Scout, Webelo & Venturers Block Rotation

12:00 pm lunch served at site of morning program activity (for adults not in program-lunch will be picked up at dining hall)

2:30 – 5:00 pm Open Programming & Block Rotation (Trading Post Open)

5:00-5:15 pm Flags

5:15-6:45 Dinner in dining hall

7:00 – 7:30 pm Chapel Service

7:30 pm STEMPede Campfire Program

9:30 pm Star Hike (optional, may be required for some scouts for their Saturday activities)

10:00 pm Quiet time

Sunday, October 7th

7:00 am Wake Up

7:15-8 am Breakfast in Dining hall

8:00 am Flags and special presentation

8:30-10 am Campsite checkouts and registration checkouts

*****ACTUAL TIMES MAY CHANGE - SCHEDULES WILL BE GIVEN ONSITE*****

UPON ARRIVAL TO CAMP:

Units (Boy Scouts, Webelos & Crews) should arrive between 4:00 pm – 6:30 pm on Friday, October 5th for registration. Please arrive to camp via Bear Paw Camp Lane, Mountain WI. The first person arriving from your unit should check in the entire unit at the check-in station to receive your day packet of information and a review of your health form.

A Unit Leader will have the opportunity to drive one (1) vehicle to the campsite to unload the gear. Vehicles should be moved to the designated parking lot immediately after unloading, however a unit trailer is permitted to stay on site (contingent on weather-if it is raining, it is the decision of the ranger if trailers are allowed). We highly encourage the use of carpooling. With the number of scouts, leaders, and volunteers, use of parking lots could be a difficult task.

SCHEDULES & LOGISTICS:

Each participant will have individualized schedules to coordinate with their registration to specific Merit Badges, activities or adventures. The schedules will be distributed to the unit or individuals when they check in at Bear Paw Camp for the weekend. Maps of camp, locations of events, and other needed materials for the weekend will also be distributed at that time as well.

Blue cards **MUST** be started, signed and prerequisites **MUST** be indicated as completed prior to starting a Merit Badge. Following the completion of all required aspects for the Merit Badge, it will be signed and given back to the scout. Webelos will be given a certificate of sorts to take back to their unit leaders to ensure the mark off and completion of the SuperNova requirements they completed at STEMpede.

CAMPSITES:

Units and participants will be assigned a specific campsite or area. These areas are assigned to ensure that all campers have adequate space for a successful overnight experience. These assignments will be given to the leader checking in or the individual when they arrive to camp at the registration area.

BLUE CARDS:

Blue Cards are the nationally recognized merit badge records. Scouts must bring their own Blue Cards to STEMpede. They should be signed by their unit leader prior to coming to camp and handed to the merit badge counselor for completion. The Merit Badge Counselor, once the scout has met all requirements for the merit badge, will sign the areas on the Blue Card needed to be returned to the scout prior to departing camp.

DAY PACKS:

Scouts are required to carry their own day pack. At a minimum, each scout should have a durable water bottle and a personal first aid kit. (Please limit bottle flipping to personal time.) The Scout Motto is to “Be Prepared,” therefore it is recommended that the “Basic Scout Essentials” are included in this day pack. The list of these “Essentials” can be found in the Hiking section of the Scout Handbook. Scouts will need this day pack to transport items from the weekend's activities.

CLASS A FIELD UNIFORM:

Class A Field Uniform is required for Saturday & Sunday Opening and Closing Flag Ceremonies only. Scouts should consider putting their uniform in their day bag during sessions if they choose.

STEMPEDE STAFF:

Our STEMpede staff are a motivated and well trained group of volunteers who are devoting their personal time to make this a memorable experience for your scouts. Please help us further the Aims of Scouting with all scouts at camp, including staff. If you have any questions throughout the weekend, please seek out a committee staff member for assistance.

MEAL PROCEDURES:

All meals will be prepared by our Camp Cook and his staff. Please refer to the schedule for exact times and locations. If there are dietary needs for a member of your unit, please contact baylakesstem@gmail.com at least one week prior to the event.

ELECTRONICS POLICY:

With the ever-changing advancement of technology, Merit Badge books are now available in electronic form and STEMpede staff supports the BSA in this advancement. Therefore, E-Readers will be allowed at camp. Gaming, internet, phone calls, and text messaging should be reserved for when you get back home. Youth Protection policies must be adhered to at all times and are especially important in relation to photography use. Failure to comply with Youth Protection policies may result in scouts or adults being asked to leave the camp without refund. Your agreement to this is recognized by registration to this event.

SATURDAY EVENING CAMPFIRE:

The STEMpede staff will be holding a Saturday evening campfire program (weather permitting.) Each unit and participant is encouraged to come up with a scout approved / appropriate skit or song to be performed during the campfire. Units and individuals will need to obtain approval of

their skit prior to the campfire.

DUTY TO GOD SERVICES:

A Scout is reverent! Scouts of all faiths observe the twelfth part of the Scout Law by worshipping in the manner of their choice. An interfaith opportunity to fulfill your Duty to God will be held on Saturday evening.

LEADERSHIP:

Each unit must have at least two registered adult leaders in camp (on site) at all times.

HEALTH & SAFETY:

Every scout and adult attending camp must have with them a current BSA Health Form with Parts A and B completed. Please find the link to the health form, if needed:

http://www.scouting.org/filestore/HealthSafety/pdf/680-001_ABC.pdf Unit leaders should collect and review all medical forms prior to camp and keep in their possession for review.

Each unit should bring their own unit first aid kit. Each unit leader should conduct all minor treatment to youth and adults. All medications are to be kept in their original container, locked up and dispensed by the unit leader. Unit leaders should keep track of when, how much, the type, and by whom the medication was dispensed.

The camp will have a "health officer" on staff for the duration of camp for more serious situations. However, if a medical emergency occurs, dial 911 immediately. An adult unit leader must accompany a scout to the camp infirmary located at the Health Lodge / Scout Office with their health form. The camp infirmary will provide necessary first aid treatment or referral. Non-emergency transportation of a scout or leader to a hospital is the responsibility of the unit. In case of an emergency, transportation will be provided by local authorities.

SAFETY PRECAUTIONS:

Many accidents that happen at camp can be avoided. Always wear closed-toe shoes, drink plenty of water - no matter the temperature outside, and use good-scout common sense.

DISCIPLINE:

The Unit Leader and their assistants are responsible for the discipline and order of their unit. The Camp Staff will not assume responsibility for, or interfere with, unit discipline unless it directly involves the health and safety of scouts or unit leaders are not present at the time of the issue. The STEMpede Chairs will be notified of any problem by the staff member. No arrangements can be made to send a scout home before informing the STEMpede Chairs of the

situation.

DRESS CODE:

Please dress appropriately for the weather. Most of the grounds are wide open or wooded and you could be subject to temperature extremes, intense sun and wind. A suggested packing list is attached.

YOUTH / ADULT LEADER MEETINGS:

Senior Patrol Leaders or other designated youth and adult leaders will meet Friday evening for a quick overview of the weekend's program and activities. This will be at the Commissioners Bowl by the waterfront at 7:00 pm.

YOUTH PROTECTION TRAINING:

The Boy Scouts of America places the greatest importance on creating the most secure environment possible for our youth members. To maintain such an environment, the BSA developed numerous procedural and leadership selection policies and provides parents and leader the resources for the Cub Scout, Boy Scout, and Venturing programs. Youth Protection Training is required for all BSA registered volunteers and must be taken every two years. We kindly request that all of our volunteer leaders and parents take Youth Protection Training prior to attend the STEMpede weekend of events.

LEAVING CAMP (DURING SESSIONS):

Scouts are expected to stay on-site from the opening to the conclusion of camp. Adults needing to leave need to formally check out with the STEMpede Chairs or Medical Director. This is a safety policy, so all people are accounted for at camp.

CHECKING OUT (END OF CAMP):

Units can check out Sunday morning with the help of a staff member. Each unit is to practice Leave No Trace principles and keep the grounds in better shape than when we found them. We are guests at the Bear Paw Scout Camp and would appreciate the ability to come back again. STEMpede patches will be handed out following approved site inspection.

MERIT BADGE DESCRIPTIONS & PREREQUISITES

ANIMATION

An introduction to the art of animation. Scouts will learn how to create animations, the ways in which animation is used not only in cartoons/movies but in everyday life.

Prerequisites

Must have documentation of current Cyber Chip

Watch the following two videos:

- <http://www.pixar.com/careers>
- <http://www.animationcareerreview.com/careers-animation/types-jobs>

ASTRONOMY

In learning about astronomy, Scouts study how activities in space affect our own planet and bear witness to the wonders of the night sky: the nebulae, or giant clouds of gas and dust where new stars are born; old stars dying and exploding; meteor showers and shooting stars; the moon, planets, and a dazzling array of stars.

WORKBOOK LINK: <http://www.usscouts.org/mb/worksheets/Astronomy.pdf>

PREREQUISITES:

PLEASE RESEARCH AND HAVE A BRIEF WRITE UP AND BRING IT WITH YOU TO STEMPEDE.

5. Do the following:

- List the names of the five most visible planets. Explain which ones can appear in phases similar to lunar phases and which ones cannot, and explain why.
- Using the Internet (with your parent's permission), books, and other resources, find out when each of the five most visible planets that you identified in requirement 5a will be observable in the evening sky during the next 12 months, then compile this information in the form of a chart or table.
- Describe the motion of the planets across the sky.

6. Do the following:

- Sketch the face of the Moon and indicate at least five seas and five craters. Label these landmarks.

- B. Sketch the phase and the daily position of the Moon, at the same hour and place, for four nights within a one week period. Include landmarks on the horizon such as hills, trees, and buildings. Explain the changes you observe.
- C. List the factors that keep the Moon in orbit around Earth.

AVIATION

For most of history, people have dreamed of flying, imagining how it would feel to soar through the sky like an eagle or hover in mid air like a hummingbird, to float on unseen currents, free of Earth's constant tug, able to travel great distances and to rise above any obstacle. Today, through aviation, we can not only join the birds but also fly farther, faster, and higher than they ever could.

WORKBOOK LINK: <http://www.usscouts.org/mb/worksheets/Aviation.pdf>

PREREQUISITES:

PLEASE RESEARCH AND HAVE A BRIEF WRITE UP AND BRING IT WITH YOU TO STEMPEDE.

1. Do the following:

- A. Define "aircraft." Describe some kinds and uses of aircraft today. Explain the operation of piston, turboprop, and jet engines.
- B. Point out on a model airplane the forces that act on an airplane in flight.
- C. Explain how an airfoil generates lift, how the primary control surfaces (ailerons, elevators, and rudder) affect the airplane's attitude, and how a propeller produces thrust.
- D. Demonstrate how the control surfaces of an airplane are used for takeoff, straight climb, level turn, climbing turn, descending turn, straight descent, and landing.
- E. Explain the following: the sport pilot, the recreational pilot and the private pilot certificates; the instrument rating.

2. Please complete one of the following options, take notes, and bring them with you to discuss with your counselor:

- A. Visit an airport. After the visit, report on how the facilities are used, how runways are numbered, and how runways are determined to be "active."
- B. Visit a Federal Aviation Administration facility control tower, terminal radar control facility, air route traffic control center, or Flight Standards District Office. (Phone directory listings are under U.S. Government Offices, Transportation Department, Federal Aviation Administration. Call in advance.) Report on the operation and your impressions of the facility.
- C. Visit an aviation museum or attend an air show. Report on your impressions of the museum or show.

ELECTRICITY

Electricity is a set of physical phenomena associated with the presence of electric charge. Various common phenomena are related to electricity, including lightning, static electricity, electric heating, electric discharges and many more. The presence of an electric charge, which can be either positive or negative, produces an electric field. On the other hand, the movement of electric charges, which is known as electric current, produces a magnetic field.

WORKBOOK LINK: <http://www.usscouts.org/mb/worksheets/Electricity.pdf>

PREREQUISITES:

PLEASE RESEARCH AND HAVE A BRIEF WRITE UP AND BRING IT WITH YOU TO STEMPEDE.

Read merit badge book prior to attending:

2. Complete an electrical home safety inspection of your home, using the checklist found in this pamphlet or one approved by your scoutmaster. Discuss what you find with your counselor.
7. Explain what overloading an electric circuit means. Tell what you have done to make sure your home circuits are not overloaded.
8. Make a floor plan wiring diagram of the lights, switches, and outlets for a room in your home. Show which fuse or circuit breaker protects each one.
- 9a. Read an electric meter and, using your family's electric bill, determine the energy cost from the meter reading.
- 9b. Discuss with your counselor five ways in which your family can conserve energy.
10. Explain the following electrical terms: volt, ampere, watt, ohm, resistance, potential difference, rectifier, rheostat, conductor, ground, circuit, and short circuit.

ELECTRONICS

Electronics is the science of controlling electrical energy electrically, in which the electrons have a fundamental role. Electronics deals with electrical circuits that involve active electrical components such as vacuum tubes, transistors, diodes, integrated circuits, optoelectronics, sensors etc. The science of electronics is also considered to be a branch of physics and electrical engineering.

WORKBOOK LINK: <https://meritbadge.org/wiki/images/e/ee/Electronics.pdf>

PREREQUISITES:

PLEASE RESEARCH AND HAVE A BRIEF WRITE UP AND BRING IT WITH YOU TO STEMPEDE.

1. Discuss the safety precautions you must exercise when using, building, altering, or repairing electronic devices.
- 4c. Choose one of the following three projects. For your project, find or create a schematic

diagram. To the best of your ability, explain to your counselor how the circuit you built operates.

I. A control device

li. A digital circuit

lii. An audio circuit

Show how to read the schematic diagram of the project you choose and to the best of your ability, explain to your counselor how the circuit you built operates.

6. Find out about three career opportunities in electronics that interest you. Discuss with and explain to your counselor what training and education are needed for each position.

FIRST AID

Prerequisites

Requirement 1. Satisfy your counselor that you have current knowledge of all first-aid requirements for Tenderfoot, Second class, and First class ranks. You may satisfy this requirement by showing your counselor your Scout Handbook with the various requirements signed off by your Scoutmaster.

Requirement 5 Prepare a first aid kit for your home. Display and discuss its contents with your counselor.

Please review the merit badge book and complete the merit badge workbook as much as possible and mail it by 9/15/18 to Jason Marquardt, 121 Selma Street, Plymouth, WI 53073

GEOCACHING

The word geocache is a combination of "geo" which means "earth," and "cache," which means "a hiding place." Geocaching describes a hiding place on the planet Earth – a hiding place you can find using a GPS unit. A GPS (Global Positioning System) unit is an electronic tool that shows you where to go based on information it gets from satellites in space.

WORKBOOK LINK: <http://usscouts.org/mb/worksheets/Geocaching.pdf>

Prerequisites:

Requirement 7: with your parents permission go to www.geocaching.com .

Type in your zip code to locate public geocaches in your area.

Share the posed information about three of those geocaches with your counselor.

Then pick one of the three and find the cache (to fulfill this requirement, you will need to set up a free user account with www.geocaching.com)

MOTORBOATING

Prerequisites:

Verification that they have completed the BSA swimmer test and passed as a swimmer (current buddy tag or letter from scoutmaster).

Written permission by a parent or legal guardian will be needed for scouts to operate a motorboat.

Please note that this merit badge has more challenging concepts to understand and it is recommended for older scouts. It is encouraged that those scouts interested in this merit badge complete the online DNR Boating safety class prior to coming to STEMpede to assist them in demonstrating practical application of motorboating.

ORIENTEERING

Orienteering, the use of map and compass to find locations and plan a journey, has been a vital skill for humans for thousands of years. Orienteering is also a recognized sport at Olympic Games, and thousands of people participate in the sport each year in local clubs and competitions.

WORKBOOK LINK: <http://www.usscouts.org/mb/worksheets/Orienteering.pdf>

PREREQUISITES:

PLEASE RESEARCH AND HAVE A BRIEF WRITE UP AND BRING IT WITH YOU TO STEMPEDE.

1. Show that you know first aid for the types of injuries that could occur while orienteering, including cuts, scratches, blisters, snakebite, insect stings, tick bites, heat and cold reactions (sunburn, heat stroke, heat exhaustion, hypothermia), and dehydration. Explain to your counselor why you should be able to identify poisonous plants and poisonous animals that are found in your area.
2. Explain what orienteering is.
3. Teach orienteering techniques to your patrol, troop, or crew.

PHOTOGRAPHY

Beyond capturing family memories, photography offers a chance to be creative. Many photographers use photography to express their creativity, using lighting, composition, depth, color, and content to make their photographs into more than snapshots. Good photographs tell

us about a person, a news event, a product, a place, a scientific breakthrough, an endangered animal, or a time in history.

WORKBOOK LINK: <http://usscouts.org/mb/worksheets/Photography.pdf>

PREREQUISITES:

PLEASE RESEARCH AND HAVE A BRIEF WRITE UP AND BRING IT WITH YOU TO STEMPEDE.

1. Complete your Cyber Chip for your current grade and bring a printed copy.
8. Identify three career opportunities in photography. Pick one and be prepared to explain to your counselor how to prepare for such a career. Be prepared to discuss what education and training are required and why this profession might interest you.

Scouts should bring a digital camera if they have one, with charged batteries

RADIO

PREREQUISITES:

Complete 9 modules online and fill out custom made merit badge workbook: link https://www.youtube.com/watch?v=y4wbWlmyVy4&list=PLe-188aTNiWfiVMpwSACGK6y7cTA_r53n

You will receive a custom merit badge book from the instructor to work on prior to the merit badge.

SIGNS, SIGNALS, & CODES

American Sign Language (ASL) is the third most used language in the United States. The Signs, Signals, and Codes merit badge will cover Morse Code, ASL, Braille, signaling, trail markings, and other nonverbal communications. Did you know that some of these have even saved people's lives?

WORKBOOK LINK: https://meritbadge.org/wiki/images/f/fe/Signs,_Signals,_and_Codes.pdf

PREREQUISITES:

None

SUSTAINABILITY

Sustainability merit badge is an option for the National Outdoor Badge for Conservation.

WORKBOOK LINK: <https://meritbadge.org/wiki/images/f/fe/Sustainability.pdf>

PREREQUISITES:

PLEASE RESEARCH AND HAVE A BRIEF WRITE UP AND BRING IT WITH YOU TO STEMPEDE.

1. Before starting work on any other requirements for this merit badge, write in your own words the meaning of sustainability. Explain how you think conservation and stewardship of our natural resources relate to sustainability. Have a family meeting, and ask family members to write down what they think sustainability means. Be sure to take notes. You will need this information again for requirement 5.

6. Do the following:

Water A. Develop and implement a plan that attempts to reduce your family's water usage. As a family, discuss water usage. To aid in your discussion, if past water bills are available, you may choose to examine a few. As a family, choose three ways to help reduce water consumption. Implement those ideas for one month. share what you learn with your counselor, and tell how you think your plan affected your family's water usage

Food A. Develop and implement a plan that attempts to reduce your household food waste. Establish a baseline and then track and record your results for two weeks. Report your results to your family and counselor.

Stuff A. Keep a log of the "stuff" your family purchases (excluding food items) for two weeks. In your log, categorize each purchase as an essential need (such a soap) or a desirable want (such as a DVD, dinner out, etc.). Share what you learn with your counselor.

3. Learn about career opportunities in the sustainability field. Pick on and find out the education, training, and experience required. Discuss what you have learned with your counselor and explain why this career might interest you.

WEATHER

Prerequisites

1. Define meteorology, explain what weather is and what climate is. Discuss how weather affects farmers, sailors, aviators, and the outdoor construction industry and tell why the weather forecasts are important to each of these groups.
2. Name five dangerous weather related conditions. Give the safety rules for each when outdoors. Draw cross sections of a cold front and a warm front showing the location and movements of the cold and warm air, the frontal slope, teh location and types of clouds associated with each type of front, and the location of precipitation.

6. Draw a diagram of the water cycle and label its major processes. Explain the water cycle to your counselor.

9. Make one of the following instruments, wind vane, anemometer, rain gauge, or hygrometer. Keep a weather log for one week using information from this instrument as well as from other sources such as local radio and television stations. Be sure to make a note of any morning dew or frost. In the log, also list the weather forecasts from radio or television at the same time each day and show how the weather really turned out.

10. Give a talk of at least 5 minutes to a group explaining the outdoor safety rules in the event of lightning, flash floods, and tornadoes.

11. Find out about a weather related career opportunity that interests you. Discuss with your counselor what training and education are required for such a position, and the responsibilities required of such a position.

WOODWORKING

Prerequisites

Scouts will need to be 14 years of age to use limited power tools, must have totin' chip (documentation required), read merit badge book and be prepared to discuss. Must bring eye protection.

PROJECT BLIMP

Your team designs, builds, and tests a payload carrying a suite of sensors to collect atmospheric data and imagery. During STEMpede, your team's payload will be lifted high into the atmosphere and brought back to Earth beneath a large balloon. Your team will be scored on the design, execution, and operation of its payload. Extra points will be awarded for following the scientific method and for the presentation of the data during the STEMpede Sunday breakfast.

<https://sites.google.com/view/blc-blimp>

VENTURING ACTIVITIES & PREREQUISITES

ACTIVITY DESCRIPTION & OBJECTIVE

Mountain Climbing

Natural rock faces adorn with two rock faces out of the camp in the Nicolet National Forest at Bear Paw Scout Camp. Get ready for a 35-foot rock face that is used for most climbing and rappelling, but if you want a more bigger challenge; try out the 70-foot rock face as well! Climbing and rappelling opportunities are available for Venturers of all experience levels!

Mountain Biking

Camp offers a variety of single and double track trails through woods, hills, and the National Forest.

WEBELOS SUPERNOVA ACTIVITIES

We are calling all WEBELOS who want to greatly increase in brightness and go SuperNova at STEMpede. Each Scout will get to build and launch a model rocket, conduct a messy experiment, make water walk, partake in some geocaching, and many other things.

Please note that Webelos will complete the majority of the activities for the SuperNOVA award at STEMpede, however, there will be some follow-up required after the event with their Cubmaster and SuperNova mentor. Webelos will need to have completed First Responder pin and either Engineer or Adventures in Science prior to receiving the full SuperNOVA award. Additionally, they will then need to complete an application for the Webelos Scout SuperNOVA award. This can be found at:

<https://filestore.scouting.org/filestore/STEM/pdf/SupernovaApplication.pdf>

ADULT PROGRAMMING:

Please join us for the STEMpede adult program and have a scout experience yourself. The activities will include fire making and a fire competition (ala Survivor), a one hour hike, and visiting merit badge/open programming. The morning session will run from 9 to noon. Just before the lunch break, one of the highlights of the adult program will be the opportunity to serve as judge for the Scout Dutch Oven Chopped Competition. After the lunch break, the adults will have the opportunity to relax and play a round (or two) of disc golf.

CHOPPED -

Do you dream of being a *Chopped Champion!*?!?! Do you watch the food network and dream of the day you could appear in the spotlight?!?! Now is your chance!! This year, during STEMpede 2018 you can participate in *DUTCH OVEN CHOPPED!* The event will take place during the day on Saturday of STEMpede weekend, judging will be done shortly after lunch and awards will be presented during the evening campfire on Saturday night! Here is how it will work!

- 1- "Mystery Basket" ingredients will be provided for each participant and a list of those ingredients will be emailed to each participant 1 week prior to the contest.
- 2- Contestants will also be provided with Charcoal and Hog Pans
- 3- Contestants must provide their own Dutch Oven and their own additional ingredients to prepare their dish.
- 4- Specific Rules will be emailed to all participants 2 weeks prior to the event.
- 5- Contestants will have 2 hours to prepare and cook their submission.
- 6- Entry can be made to either or both the Dessert and/or entrée category but, if both are entered, then both entries must be prepared and cooked during the same 2 hour period.
- 7- Contest is open to all Adult Leaders and Scout or Venturers age 15 and older.

Sign up and specific details will be sent to you!

STEM ACTIVITIES DESCRIPTIONS

CATAPULTS

A catapult is a device used to launch a projectile a great distance without the aid of explosive devices – particularly various types of ancient and medieval siege engines. Catapult projects can inspire students to study different subject including physics, engineering, science, math and history.

ROBOTS

A robot is a machine – especially one programmable by a computer – capable of carrying out a complex series of actions automatically. Robots can be guided by an external control device or the control may be embedded within. Robots may be constructed to take on a human form but most are machines designed to perform a task with no regard to how they look.

TREBUCHETS

A trebuchet, sometimes called a trebuchet is a medieval siege engine to batter masonry or to throw projectiles over walls. The trebuchet is energized by lowering the main the long arm and raising the weighted short arm, usually with a winch, and is locked into the charged state by a trigger mechanism.

OPEN TIME DESCRIPTIONS & PREREQUISITES

AM RADIOS

AM broadcasting is a radio broadcasting technology, which employs amplitude modulation (AM) transmissions. It was the first method developed for making audio radio transmissions, and is still used worldwide, primarily for medium wave (also known as "AM band") transmissions, but also on the longwave and shortwave radio bands.

BIKE PUMP ROCKETS

Bike pump rockets are bottles that are partially filled with water and pressurized with compressed air delivered by a hand bicycle pump or small compressor. When the desired pressure is reached, the rocket is launched by releasing hold-down clamps..

CATAPULTS

A catapult is a device used to launch a projectile a great distance without the aid of explosive devices – particularly various types of ancient and medieval siege engines. Catapult projects can inspire students to study different subject including physics, engineering, science, math and history.

LAKESHORE TECHNICAL COLLEGE TRAILER

Our partners at Lakeshore Technical College will have a Mobile Training Lab at STEMpede. The mobile labs are packed with technology offering scouts to complete hands-on training on the Programmable Logic Controller (PLC) with 10 PLC machines. The portable lab equipment is used to teach basic robot programming.

LEGO PINWOOD DERBY

Using an axle and wheel kit, you can build a LEGO pinewood derby car from your bricks, and race it on a Pinewood Derby track.

POPSICLE STICK TOWER

Popsicle stick towers are a common engineering project and may have various criteria for height, weight, and number of popsicles.

ROBOTS

A robot is a machine – especially one programmable by a computer – capable of carrying out a complex series of actions automatically. Robots can be guided by an external control device or the control may be embedded within. Robots may be constructed to take on a human form but most are machines designed to perform a task with no regard to how they look.

SNAP CIRCUITS

Snap circuits are a line of electronic kits manufactured in a variety of sizes, offering a range of building experience for the user, and may include motors, lamps, and speakers.

TREBUCHETS

A trebuchet, sometimes called a trebucket is a medieval siege engine to batter masonry or to throw projectiles over walls. The trebuchet is energized by lowering the main the long arm and raising the weighted short arm, usually with a winch, and is locked into the charged state by a trigger mechanism.

VORTEX CANNONS

An air vortex cannon is a device that releases doughnut-shaped air vortices similar to smoke rings but larger, stronger and invisible. The vortices can ruffle hair, disturb papers or blow out candles after travelling several meters.

WALK THE SOLAR SYSTEM

Enjoy the outdoors while exercising your mind. The journey through our solar system begins with a visit to our closest star, the Sun, and continues to each planet – from Mercury to all the way to Neptune – plus Pluto. Along the way, it reveals some of the secrets of space.

PLUS MANY MORE ACTIVITIES INCLUDING GIANT FOOSBALL, GAGA BALL, OOBLECK, BOARD GAMES, GEODESIC DOME AND ALUMINUM ANT HILL CASTING

EQUIPMENT LIST:

Health Form Parts A and B for ALL youth & adults attending

<http://www.scouting.org/scoutsorce/HealthandSafety/ahmr.aspx>

Tent or tarp, poles, and stakes

Waterproof ground cloth or plastic sheet

Sleeping bag and pillow

Cot or ground-pad

Mess-Kit including cup, bowl, plate, knife, fork, spoon

Class A Field Scout uniform

Class B Activity Scout uniform

Poncho or raincoat, rain gear

Warm jacket or coat

Pajamas or sweatshirt, sweatpants

Underwear

Durable shoes (no open-toed shoes!)

Hat or cap

Extra socks, shoes, other extra clothing

Camp chair

Toothpaste, toothbrush, comb

Washcloth, towel

Soap in container

Extra plastic bag or container

Personal First Aid Kit

Durable Water bottle - limit flipping to personal time

- Flashlight, bulb, extra batteries
- Sunscreen
- Insect repellent
- Day Bag
- Camera
- Sunglasses
- Notebook and pencil
- Cooking equipment as outlined by
your Unit
- Cooler or ice chest