DISCOVER

4-H MOUNTAIN BIKE CLUB

EXTENSION
UtahStateUniversity

DISCOVER

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Description

The Discover 4-H Clubs series guides new 4-H volunteer leaders through the process of starting a 4-H club or provides a guideline for seasoned volunteer leaders to try a new project area. Each guide outlines everything needed to organize a club and hold the first six club meetings related to a specific project area.

Purpose

The purpose is to create an environment for families to come together and participate in learning activities while spending time together as a multi-family club. Members will experiment with new 4-H project areas.

What is 4-H?

4-H is one of the largest youth development organizations in the United States. 4-H is found in almost every county across the nation and enjoys a partnership between the U. S. Department of Agriculture (USDA), the state land-grant universities (e.g., Utah State University), and local county governments.

4-H is about youth and adults working together as partners in designing and implementing club and individual plans for activities and events. Positive youth development is the primary goal of 4-H. The project area serves as the vehicle for members to learn and master project-specific skills while developing basic life skills. All projects support the ultimate goal for the 4-H member to develop positive personal assets needed to live successfully in a diverse and changing world.

Participation in 4-H has shown many positive outcomes for youth. Specifically, 4-H participants have higher participation in civic contribution, higher grades, increased healthy habits, and higher participation in science than other youth (Lerner et al., 2005).

Updated September 2017

Utah 4-H

4-H is the youth development program of Utah State University Extension and has more than 90,000 youth participants and 8,600 adult volunteers. Each county (Daggett is covered by Uintah County) has a Utah State University Extension office that administers the 4-H program.

The 4-H Motto

"To Make the Best Better!"

The 4-H Pledge

I pledge: My HEAD to clearer thinking, my HEART to greater loyalty, my HANDS to larger service and my HEALTH to better living, for my club, my community, my country, and my world.

4-H Clubs

What is a 4-H Club? The club is the basic unit and foundation of 4-H. An organized club meets regularly (once a month, twice a month, weekly, etc.) under the guidance of one or more volunteer leaders, elects its own officers, plans its own program, and participates in a variety of activities. Clubs may choose to meet during the school year, only for the summer, or both.

Club Enrollment

Enroll your club with your local Extension office. Each member will need to complete a Club Member Enrollment form, Medical History form, and a Code of Conduct/Photo Release form (print these from the www.utah4h.org website or get them from the county Extension office).

Elect Club Officers

Elect club officers during one of your first club meetings. Depending on how many youth are in your club, you can decide how many officers you would like. This will typically include a president, vice president, pledge leader, and secretary. Other possible officers or committees are: song leader, activity facilitator, clean-up supervisor, recreation chair, scrapbook coordinator, contact committee (email, phone, etc.), field trip committee, club photographer, etc. Pairing older members with younger members as Sr. and Jr. officers may be an effective strategy to involve a greater number of youth in leadership roles and reinforce the leadership experience for both ages. Your club may decide the duration of officers 6 months, 1 year, etc.

A Typical Club Meeting

Follow this outline for each club meeting:

- ☐ Call to order–president
- ☐ Pledge of Allegiance and 4-H Pledge–pledge leader (arranges for club members to give pledges)
- ☐ Song–song leader (leads or arranges for club member to lead)
- ☐ Roll call–secretary (may use an icebreaker or get acquainted type of roll call to get the meeting started)
- ☐ Minutes of the last meeting–secretary
- ☐ Business/Announcements–vice president
- ☐ Club Activity–arranged by activity facilitator and includes project, lesson, service, etc. These are outlined by project area in the following pages.
- ☐ Refreshments–arranged by refreshment coordinator
- ☐ Clean Up–led by clean-up supervisor

Essential Elements of 4-H Youth Development

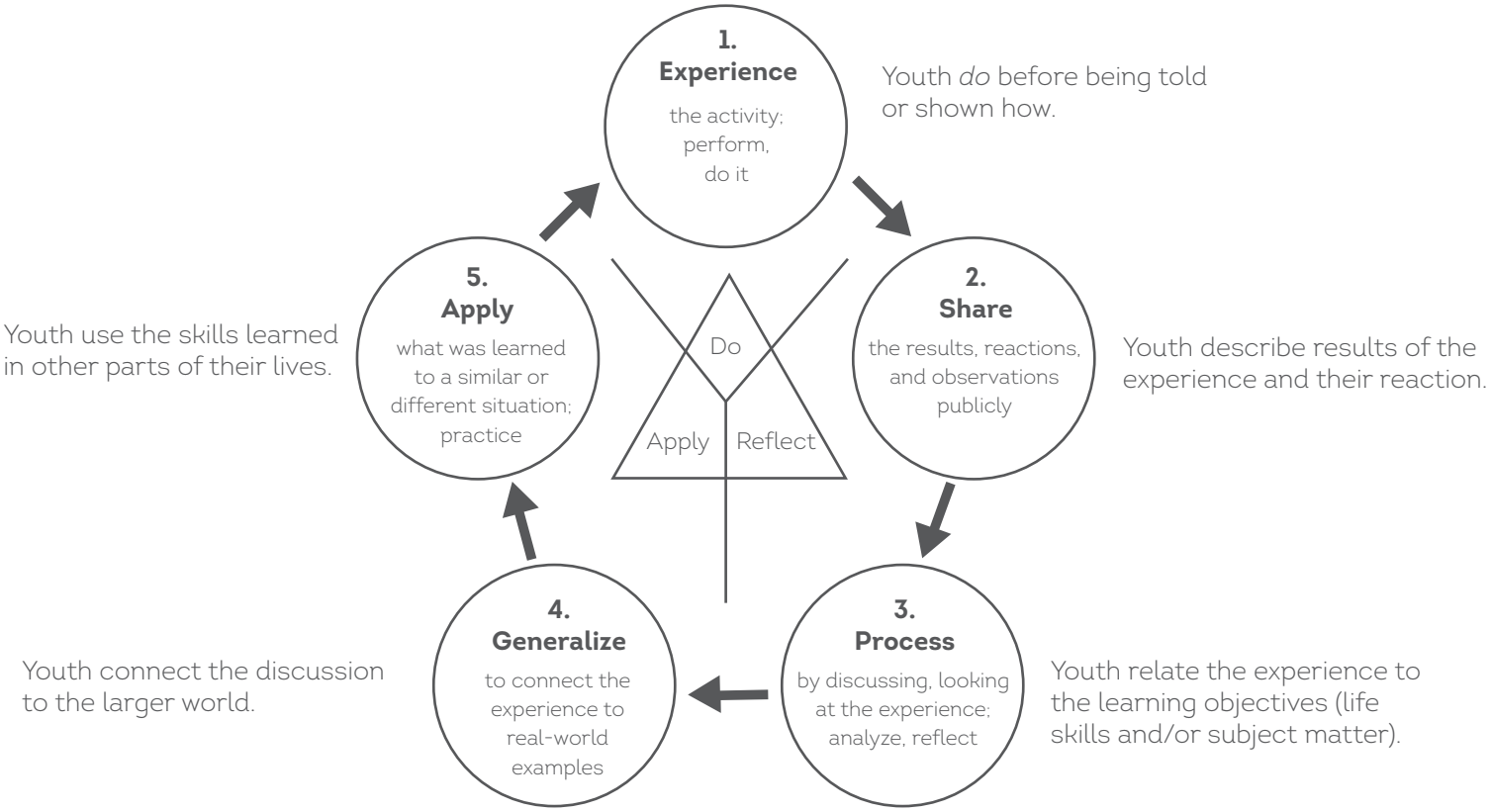
The essential elements are about healthy environments. Regardless of the project area, youth need to be in environments where the following elements are present in order to foster youth development.

1. **Belonging**: a positive relationship with a caring adult; an inclusive and safe environment.
2. **Mastery:** engagement in learning, opportunity for mastery.
3. **Independence:** opportunity to see oneself as an active participant in the future, opportunity to make choices.
4. **Generosity:** opportunity to value and practice service to others.

(Information retrieved from: http://www.4-h.org/resource-library/professional-development-learning/4-h-youth-development/youth-development/essential-elements/)

4-H "Learning by Doing" Learning Approach

The Do, Reflect, Apply learning approach allows youth to experience the learning process with minimal guidance from adults. This allows for discovery by youth that may not take place with exact instructions.



4-H Mission Mandates

The mission of 4-H is to provide meaningful opportunities for youth and adults to work together to create sustainable community change. This is accomplished within three primary content areas, or mission mandates - citizenship, healthy living, and science. These mandates reiterate the founding purposes of Extension (e.g., community leadership, quality of life, and technology transfer) in the context of 21st century challenges and opportunities. (Information retrieved from: http://www.csrees.usda.gov/nea/family/res/pdfs/Mission_Mandates.pdf)

1. **Citizenship:** connecting youth to their community, community leaders, and their role in civic affairs. This may include: civic engagement, service, civic education, and leadership.
2. **Healthy Living:** promoting healthy living to youth and their families. This includes: nutrition, fitness, social-emotional health, injury prevention, and prevention of tobacco, alcohol, and other drug use.
3. **Science:** preparing youth for science, engineering, and technology education. The core areas include: animal science and agriculture, applied mathematics, consumer science, engineering, environmental science and natural resources, life science, and technology.

Getting Started

1. Recruit one to three other families to form a club with you.
    a. Send 4-H registration form and medical/photo release form to each family (available at utah4h.org).
    b. Distribute the Discover 4-H Clubs curriculum to each family.
    c. Decide on a club name.
    d. Choose how often your club will meet (e.g., monthly, bi-monthly, etc.).
2. Enroll as a 4-H volunteer at the local county Extension office (invite other parents to do the same).
3. Enroll your club at the local county Extension office.
    a. Sign up to receive the county 4-H newsletter from your county Extension office to stay informed about 4-H related opportunities.
4. Identify which family/adult leader will be in charge of the first club meeting.
    a. Set a date for your first club meeting and invite the other participants.
5. Hold the first club meeting (if this is a newly formed club).
    a. See *A Typical Club Meeting* section above for a general outline.
        i. Your activity for this first club meeting will be to elect club officers and to schedule the six project area club meetings outlined in the remainder of this guide. You may also complete a-d under #1 above.
    b. At the end of the first club meeting, make a calendar outlining the adult leader in charge (in partnership with the club president) of each club meeting along with the dates, locations, and times of the remaining club meetings.
6. Hold the six project-specific club meetings outlined in this guide.
7. Continue with the same project area with the 4-H curriculum of your choice (can be obtained from the county Extension office) OR try another Discover 4-H Club project area.

Other Resources

Utah 4-H website: www.Utah4-h.org
National 4-H website: www.4-h.org
4-H volunteer training:
To set up login:
http://utah4h.org/volunteers/training/
To start modules: (password = volunteer)

References

Information was taken from the Utah 4-H website (utah4h.org), the National 4-H website (4h.org), the Utah Volunteer Handbook, or as otherwise noted.

Lerner, R., M. et al., (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth grade adolescents: Findings from the first wave of the 4-H Study of Positive Youth Development. Journal of Early Adolescence, 25(1), 17-71.

We would love feedback or suggestions on this guide; please go to the following link to take a short survey:
Go to https://goo.gl/WH8Rqk or Click here to give your feedback

4-H MOUNTAIN BIKE CLUB *Meetings*

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DISCOVER
4-H Mountain Bike Club

4-H Club Meeting 1
Bike Basics and Trail Eiquette

Supplies

- Bike
- Proper clothing
- Helmet
- Gloves
- Eye protection
- Knee pads
- Cones

INTRODUCTION

Mountain biking is the sport or hobby of riding bicycles off-road, often over rough terrain, using specially designed mountain bikes. Mountain biking can generally be broken down into two categories, cross country and downhill.

Mountain bikers can ride almost anywhere from the vacant lot in a neighborhood to more remote forested mountains, deserts, or rolling hills. One of the most well-known pioneers of mountain biking is Joe Breeze. He modified bikes to meet the demand of riding off road around Mt. Tamalpais in California. In 1977, Joe built a bike out of light tubing and flat tires, which is the framework for many modern mountain bikes today. During the 1970's, other mountain bike enthusiasts who went on to become leaders in the mountain bike industry were Gary Fisher, Charlie Kelly, and Tom Ritchey.

Mountain biking requires physical fitness, endurance, core strength, balance, bike handling skills, and self-reliance. Mountain biking is a great 4-H project because it fits nicely with the 4-H Mission Mandates of Healthy Living, Science, and Citizenship.

CLUB MEETINGS WILL FOLLOW THE FORMAT BELOW

- Bike maintenance mini lesson
- Parking lot mini lesson
- Mission mandate mini lesson related to mountain biking (Healthy Living, Science, and Citizenship)
- A club ride

PRIOR TO THE MEETING

- Service your bike - make sure your bike is in working order.
- Ride your bike.
- Have the proper clothing, helmet, and gloves.

HOW TO FIT YOUR BIKE

Having the right bike size and fit is important for safety, as well as performance. Getting the right bike fit is based on personal preference and comes down to what feels right to the rider, though there are some guidelines to follow. Generally speaking, your stance should be relaxed with your elbows and knees slightly bent.

Step 1: Bike Height

To make sure the bike is the right height, swing one leg over the bike and stand with both feet firmly on the ground. There should be 1-3 inches between the rider and the bike.

Step 2: Seat/Saddle Height

Position the saddle of the bike so it is level to the ground. Hop on the bike, putting the balls of your feet on the pedals. Use a friend or a wall to help balance. Sit on the center of your saddle with your hands on the handle bars.

Pedal backward until one foot is all the way down. Adjust the seat height so that the leg is fully extended with a slight bend to the knee. The sole of the foot should be parallel to the ground. You should not be reaching at the bottom of the pedal stroke. If your hips are rocking from side to side while pedaling, or if your knee is fully extended during your stroke, your seat is too high.

Step 3: Reach

While still sitting centered on the saddle, reach forward and grab the handlebars with both hands. There should be a slight bend to the elbow, but not too much bend. Now you're ready to ride!

Basics, Balance & Turning

First things first! Let's work on a few of the basics. Instructors, demonstrate each of these elements and then complete the activities.

How to Stand and Lay a Bike on the Ground

When not using the bike or taking a break, it is best to try to leave it upright by leaning it carefully against something sturdy. However, if it needs to be put on the ground, be sure to lay it with the gears and dérailleurs up (or on the bike's left side).

How to Get on a Bike

To mount the bike, stand on either side and balance it by placing both hands on the handle bars. Then, swing one leg over, so that both legs are planted firmly on the ground with the bike in between them. Leaving one foot on the ground, use the other foot to adjust the pedal and place it so it is at the top of your pedal stroke.

How to Start

Once securely mounted on the bike, look straight ahead. Use the foot that is still on the ground to push forward and gain momentum, then place that foot on the pedal and start pedaling. Try to continue in a straight line until you find your balance before doing any turning.

To start up a hill, try to find a stable patch of terrain that has traction. If possible, back the rear tire into a rock, tree root, or something hard and sturdy. Make sure the bike is in a low enough gear that it is easy to pedal on an incline. Sit on the nose of the seat with one foot on the pedal. Pedal backward until your foot is at about a 45 degree angle. Look straight ahead. Then, push off with the foot on the ground and get it on the pedal quickly. Begin pedaling in swift strokes until the bike has its momentum.

How to Stop

To practice braking properly, first make sure your body is in the correct position. Check this by getting into the attack position (out of the saddle, weight forward, chest low). Wrists should be directly in line with forearms, braking fingers and levers. Wrists should not have bend, but rather be in a natural, straight line.

Then, establish which brake is connected to which wheel. Generally on U.S. bikes, the brake on the left hand side is used to control the front brake and the right for the rear. Always use one or two fingers to brake; that way the rest of the hand can maintain control and steering of the bike.

Seventy percent of the bike's stopping power comes from the front brake, and thirty percent comes from the rear. This means that while the front brake offers the ability to stop faster, the power can also pitch the rider right over the handlebars. To avoid that, go in slow and steady with the brake while keeping your body weight centered. It is important to look up while braking and feel what is happening with the bike momentum.

When approaching the stop, plan which foot you will take off the pedal and use it to balance once you have stopped. Lean to that side while slowly pulling on the brake. Once the bike has stopped or almost stopped, slide forward off the saddle and place the foot on the ground to complete the stop. Make sure the brakes are doing the stopping, not your feet.

Practice Activity

Set up two cones in a straight line, about 20 feet apart. One by one, have each youth start at the first cone, ride to the second cone, and then stop. Let them practice as much as they want, until they feel comfortable starting and stopping.

Gear Shifting

The goal of shifting is to help the rider stay in a comfortable spin. The terrain will change throughout the ride, which means you will need to change the difficulty of your pedal stroke accordingly.

There are two shifters levers on every mountain bike; the shifter on the right controls the gears in the back, while the shifter on the left controls the gears in the front. You primarily use your right-hand gears. One shifter shifts up into a harder gear (one that is used to go faster by adding more tension to your stroke), while the other is used to shift into an easier gear.

Practice Activity

Using the cones from the previous activity, have each youth start at the first cone and ride to the second, practicing shifting through the different gears. Let them practice as much as they want, until they feel comfortable with shifting.

Balance/Getting Comfortable

Before hitting the trails, the kids will want to practice different kinds of weight shifting extremes and exaggerations. Instruct a student to ride around while they demonstrate the following:

1. Lean far forward.
2. Lean far backward.
3. Move backward, until way off of the saddle (downhill.)
4. Scoot up on saddle and lean down to handlebars (climbing.)
5. Move way off saddle to left and right, i.e., lean bike left & right, without turning, and point out where this might be useful (when off-camber, to dodge a tree, etc.)
6. Bounce on the fork, compressing the front shock.

Now, let all of the students ride around and try these different extremes until they are more comfortable with their balance on the bikes.

In order to turn, keep your weight in the center of the bike. The bike may lean around the turn, but you will stay center. Think about your inside pedal being up, rather than leaning down toward the ground. Also, think about opening up your inside knee.

Practice Activity

Set up a line of six to eight cones, each about 7 feet apart. Have the kids practice weaving in and out of them. As they get more comfortable with the motion, have them do a complete circle around the end cones. You can also close the distance between the cones, adding a higher level of difficulty.

TRAIL ETIQUETTE

Because the trails are for everyone, learning to have the proper trail etiquette is essential for every mountain biker. Youth should learn the guidelines for sharing the trail before they go out for a ride. Instructors, carefully go over all of these etiquette tips and rules of the trail using role-play activities.

- General Yield Guidelines: Do your utmost to let your fellow trail users know you're coming. Anticipate other trail users as you ride around corners. Bicyclists should yield to other non-motorized trail users, unless the trail is clearly signed for bike-only travel. Bicyclists traveling downhill should yield to those headed uphill, unless the trail is clearly signed for one-way or downhill-only traffic. In terrain where there is not a clear up or down travel, the biker who is traveling slowest should yield to those traveling faster. In general, strive to make each pass a safe and courteous one.
- Be Informed: It's YOUR responsibility to be "in the know." Familiarize yourself with local trails, conditions, closures, rules and regulations.
- Respect: It's a simple concept: if you offer respect, you are more likely to receive it.
- Communicate: Let folks know you're there – before you're there.

National Off Road Bicycle Association Code of Conduct

1. I will yield right of way to other non-motorized recreationists. I realize that people judge cyclists by my actions.
2. I will slow down and use caution when approaching or overtaking another and will make my presence known well in advance.
3. I will maintain control of my speed at all times and will approach turns in anticipation of someone around the bend. (Alert others with a bell or friendly shout.)
4. I will stay on designated trails to avoid trampling native vegetation and minimize potential erosion of trails by not using muddy trails or cutting switchbacks.
5. I will not disturb wildlife or livestock.
6. I will not litter, I will pack out what I pack in, and I will pack out more than my share whenever possible.
7. I will respect public and private property, including trail use signs and no trespassing signs, and will leave gates as I have found them.
8. I will always be self-sufficient, and my destination and travel speed will be determined by my ability, my equipment, the terrain, and the present weather conditions.
9. I will not travel solo when biking in remote areas. I will leave word of my destination and when I plan to return.
10. I will observe the practice of minimum impact bicycling by "taking only pictures and leaving only waffle prints."
11. I will always wear a helmet whenever I ride.

Rules of the Trail

- Ride on open trails.
- Leave no trace.
- Control your bicycle!
- Always follow yield guidelines.
- Never scare animals.
- Plan ahead and be prepared.

Passing Hikers

- Hikers have the right-of-way.
- Greet hikers early.
- Slow down and stop, allowing the hikers to pass you.
- If the hikers decide to move off the trail to let you pass, pass slowly and prepare to stop if necessary.
- Expect the unexpected. Humans and animals can be unpredictable or easily spooked by cyclists.

Passing Cyclists

- From Behind: Announce your intention to pass with a friendly "Let me know when it's safe to pass."
- Head on: Use the single-track yield on narrow trails (stop to the side, put one foot down, and lean away from the trail).
- Uphill riders have the right-of-way.

Passing Horses

- Stop at least 30 feet from the horse.
- Greet the equestrian and the horse to demonstrate that you are a human, not a predator.
- Ask for instructions on how to pass safely. Offer to get off your bike.
- Pass slowly and steadily, but only after the equestrian gives you the go-ahead. Sudden movements can spook a horse and put all of you in a dangerous situation.

Practice Activity

Use the cards at the end of this lesson to review mountain bike etiquette rules. Have youth create a short skit for each rule. Have them role play a bad example and a correct example of each rule.

Reflect

- What rule stands out to you?
- Why do we obey these rules?

Apply

- What happens when people disobey these rules?
- What should you do when you see others disobey these rules?

Now, the club is ready to go for a ride. After the ride is over, conclude the meeting by encouraging the club members to ride between now and the next meeting.

4-H MISSION MANDATES

Identify from citizenship, healthy living and/or science and explain why.

Citizenship

Youth are taught the rules of being a good citizen on the trail. They learn how to effectively communicate with other members of the community who also enjoy the trails so everyone can have a safe and enjoyable experience.

Healthy Living

Mountain biking is a great activity that builds fitness, contributes to a healthy lifestyle, and engages youth in a fun way to exercise.

Science

The mechanics of how a bike works is broken down, offering lessons in physics and engineering.

ESSENTIAL ELEMENTS

Identify tips to include during the lesson and how it applies.

Belonging

Together, youth are learning a new skill that is facilitated by a caring adult.

Independence

Riders in this lesson are learning a skill that will eventually give them the independence to bike and travel on their own. This which involves choosing gear and equipment, choosing trails to ride, etc.

Generosity

This lessons teaches the rules and guidelines of putting other members of the community who are on the trail before themselves by practicing good trail etiquette.

Mastery

This lesson breaks down the very beginning steps toward mastering mountain biking.

References:

MTB Tips on How to Choose the Right Mountain Bike for You. Retrieved from www.mtbtips.com

National Off-Road Bicycle Association (2004). NORBA Officials Guidebook, 8. Retrieved from https://s3.amazonaws.com/USACWeb/forms/rules/04_norba_guidebook.pdf

Ride on Open Trails	Plan Ahead and Be Prepared
Leave No Trace	Passing Cyclists
Control Your Bicycle	Passing Hikers
Always Follow Yield Guidelines	Passing Horses
Never Scare Animals	

4-H Club Meeting 2
Building on the Basics

Supplies

- Bike
- Proper clothing
- Helmet
- Gloves
- Eye protection
- Knee pads
- Cones

PRIOR TO THE MEETING

- Make sure your bike is in working order and service as necessary.
- Ride your bike.
- Review this section.

INTRODUCTION

To begin this lesson, ask the youth if they were able to ride between now and the last meeting. Did they have any experiences with practicing etiquette?

Activity #1
Bike Maintenance Mini Lesson

THE "M" CHECK

The "M" check is the perfect way to begin every ride. It takes you through the key parts of your bike, showing which parts to check to make sure everything is working properly before you take off up the trail.

- Front Tire: be sure it is on securely and doesn't wobble. Also, make sure your tire pressure is firm and look for any signs of wear and tear. Check the spokes by squeezing them between your fingers. They should not move very much.

- Headset: grab your front brake with one hand and place the other one at the base of your handlebars. Push bike back and forth. You shouldn't feel any movement or knocking against the hand that is on the headset.

- Crankset: grab the crank arm and give it a little wobble. It should be tight with very little movement. Grab your pedals and make that they are tight as well.

- Seat: check the saddle to make sure it is tight and doesn't shift around. Try twisting it from side to side, and pull on it a little from underneath. Also, push straight down on your seat to check the rear suspension. Make sure there is give, but not resistance.

- Rear Tire: as with the front tire, check the back tire for wobbling, firm tire pressure, wear, and tight spokes. Additionally, check your chain to make sure it is on properly.

PICKING A LINE

Have one of the youth demonstrate picking a line. Place two cones or other obstacles close together, leaving a space just wide enough for the bike to get through.

Let the youth practice riding through the space while highlighting these tips:

- DO NOT look at what you want to miss! You will have a tendency to turn toward it and hit it
- Look up and at where you want to go, not at your front wheel.
- Pick a line that is smooth and avoids a difficult section.
- On the trail, look about 10-15 feet in front of the bike. The faster you go, the farther ahead you should look.
- If you get off the line, just pick a new one.

Now, let all of the students practice picking a line. Have them go one at a time, each riding through the narrow obstacle. Continue having them practice until they are successfully able to pick a line.

MOUNTAIN BIKING GEAR

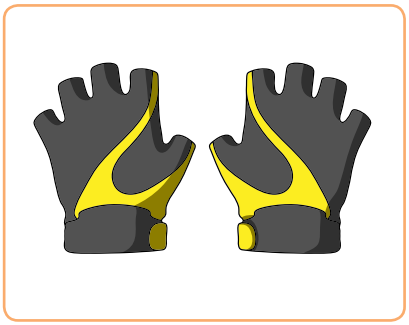
Wearing Mountain Bike gear is not just about looking cool. Each piece of equipment has a design and function that scientifically helps improve your performance on the trail. The choice to go baggy or tight or which fabric to use will affect your ride. Here are some tips to help you choose the gear that will best work for you.

Helmet - this is by far your most important piece of equipment. In mountain biking, it is not a matter of IF you will crash, but WHEN you will crash. Having a helmet could literally save your life. Helmets are an absolute must for every bike ride.

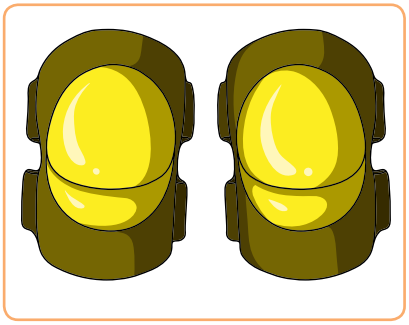
Shirt/Jersey - There are a few options in selecting a shirt or jersey. If you are more performance driven, you will want to consider a tight fitting jersey made from lycra, nylon or polyester. The closer the fabric is to your skin, the better it will wick away moisture. It will also make you more aerodynamic, and prevent your clothing from getting snagged when on the trail. Of course, you don't have to wear anything cycling specific. The key is to still use a fabric that is moisture wicking (i.e., no cotton!) Shorts - as with your biking shirt or jersey, you can choose to go baggy or tight. Again, the most important thing is that you choose a fabric that will wick away moisture.

Shoes - Part of your shoe choice will depend on your bike's pedals. There is an option to have clipped pedals, which means you will need to have shoes that can clip in. Otherwise, any sort of casual mountain bike shoe or tennis shoe with grips will do.

Glasses - Eye protection is another important addition to your mountain bike gear. You will want to have glasses to keep your eyes safe from branches, debris, dust, and the sun. Some riders prefer goggles, while others choose regular sport glasses.



Gloves - these are used to protect your hands while on the trail, as well as to keep you from getting callouses. Try to pick a lightweight fabric that will still allow easy movement in your hands.



Knee pads - again, crashing on your mountain bike is inevitable. Many of the pros ride in knee pads to protect themselves when that happens.

For cold weather rides, consider adding some items such as jackets, ear protection, gloves, and pants or tights in addition to your regular gear.

Practice Activity

Go for a ride!

Reflect

- Why do riders pick a line?
- Why is it important to complete an "M" check before you begin a ride?
- How can gear protect you on the trail?

Apply

- How can we know that an "M" check was safe and you can begin your ride?
- What should you do if you see others not wearing a helmet?

4-H MISSION MANDATES

Healthy Living
Youth learn mountain biking techniques and how to apply them in physical activities.

Science
Youth learn to apply the science of gears to mountain bike operation and maintenance.

ESSENTIAL ELEMENTS

Independence
Learning to properly gear up and fit gear best for the individual increases the individual's confidence.

Generosity
Being held accountable for an individual's own safety builds responsibility and accountability to one's self.

References:

How to Check Your Bike - British Cycling's M Check. Retrieved from: https://www.britishcycling.org.uk

How to Dress Mountain Biking in Winter, Summer, Spring or Autumn: What to Wear in All Conditions. Retrieved from: https://mpora.com/mountainbiking

4-H Club Meeting 3
Overcoming Obstacles

Supplies

- Bike
- Proper clothing
- Helmet
- Gloves
- Eye protection
- Knee pads
- Cones
- Objects for youth to practice riding over (large, flat rocks, logs, or wooden planks.)

PRIOR TO THE MEETING

- Service your bike - make sure your bike is in working order
- Ride your bike
- Review this section

INTRODUCTION

To begin this lesson, ask the youth if they remember the "M" check. Have one demonstrate, then everyone practice doing it on their bikes.

Activity #1
Bike Maintenance Mini Lesson

BRAKES

The brakes are one of the most important elements to the mountain bike, which is why it is important to check them before every ride. To do so, pull on the lever. It should feel solid and consistent – no matter how many times you pull it, it feels the same. When fully engaged, there should be about an inch between the lever and the handlebar.

Tip

Even the slightest bit of oil can ruin the brake pads, so avoid touching them with your hands. If you do end up touching them, they can be cleaned with disc brake pad cleaner or rubbing alcohol. Then rough the pads slightly with sandpaper before re-attaching them.

If the brake does not feel solid or consistent, check the brake pads by taking the wheel off and looking into the space where the rotor spins. If the brake pads look worn or glazed, take them from the calipers.

If they are less than 3 mm thick (including the holder), they need to be replaced. Do not ride the brake pads to their absolute minimum – be sure to replace them before they become a safety hazard.

Also, visually check the brake assemblies to be sure they haven't been jarred or installed improperly. Make sure the rotors are centered between the brake pads. Each pad should make full contact with the rotor when the brake is engaged.

Activity #2
Parking Lot Mini Lesson

FIGURE 8 AND RIDING OVER OBSTACLES

Practice Activity 1: Figure 8 with a Twist

Start with a wider distance between the two cones/objects and then gradually move the cones/objects closer as you become more proficient. Practice going slow and controlled. Remember to keep your inside foot up.
Figure 8's, e.g. on a sidewalk, using half-pedaling on the inside foot (push bike through turn with half pedal strokes.)
Watch a demonstration of the activity here:
https://www.youtube.com/watch?v=JQKLXPbJwJA (1:12 to 1:46)

Practice Activity 2: Going Over Obstacles

Either bring or find a few obstacles the kids can practice riding over in the parking lot before they encounter them on the trail, objects like large, flat rocks, logs or large sticks, or wooden planks work well. Demonstrate riding over each of the obstacles, following the tips below about the correct position.

- Joints are slightly bent and flexible
- Crank arms are horizontal
- When approaching a larger obstacle, such as a log, shift slightly back and lift the handlebars over the obstacle
- Thrust forward with arms/torso to exit a log or small rise

Now, let all the students practice going over the obstacles. Let them start on the smaller ones and work their way up. Continue practicing until they are all comfortable taking their bikes over obstacles.

ENVIRONMENTAL IMPACT

Any outdoor activity will have some sort of impact on the environment. It is important to know what those impacts are, and how you can make a positive difference to these environments.

VEGETATION

Part of mountain biking is enjoying the beautiful mountain scenery. Trampling vegetation off trail causes severe damage that is easily visible. Once trampling occurs, recovery is a very slow process. Trail widening and trampling causes compositional changes in vegetation, as well as inviting "invasive" plant species that may not have been previously present.

Studies show that as long as bikers and hikers remain on trails, the vegetation impacts are only on the centerline of the lane. Trail maintenance is important to discourage users from widening trails or trampling vegetation.

- It is important to remain in the center of the trail as much as possible.
- Do your part in trail maintenance – if you come to a recently fallen tree, do your best to clear it from the trail so other visitors will not widen the trail to go around it.
- Help prevent spread of unwanted plants by washing off all equipment before and after biking. Throw seeds in the trash and not on the sides of the trail to prevent unwanted spread.
- Always ask for permission from the property owner before forming a new trail.

SOILS

Trail degradation is one of the biggest issues facing soil. Obvious issues such as excessive muddiness, eroded ruts, and tree roots can degrade visitor experience and cause safety concerns.

There are four common forms of soil degradation.

- **Compaction:** Caused by the weight of users and their equipment and is unavoidable. It causes an increase in water runoff and provides more support to resist erosion and displacement.
- **Muddiness:** Usually occurs when trails are in areas of poor drainage. It can be avoidable or unavoidable. Excessive muddiness causes a widened trail or even sometimes a braided trail to avoid mud holes.
- **Displacement**: Trial users can also push soil laterally, causing displacement and development of ruts, berms, or cupped treads. This can compound drainage problems.
- **Erosion:** Usually caused by water from concentrated run-off that picks up loose soil and carries it to an area where the water will slow and the sediments will drop. A well-designed trail will have little to no soil loss.

Studies have shown that among the trail uses of horseback riding, hiking, mountain biking, and ATV's, trails predominately used to mountain bike had the least erosion and lowest soil loss.

Tips to Avoid Adding to Soil Degradation

- Always stay on the trail when possible.
- Ride on dry trails.
- If trails are mostly dry, but a few small puddles exist, go through them – not around.
- Travel over any obstacles in the trail – not around.

WATER

Soil from trails rarely enters water bodies unless trails cross streams or run close to a stream or lake. Trails can intercept and divert water from seeps or springs, which serve important ecological functions.

Tips to Avoid Interfering with Water Flow

- Try to avoid riding in a flat area along banks of water bodies or streams.
- If a bridge is offered, use it – don't ride through a stream if it is possible to avoid it.
- Always dispose of human waste properly.

WILDLIFE

Wildlife responds differently to the presence of trail users. Some wildlife may become used to human visitors and will not shy away from being seen, which can become a positive experience while on the trail. Use these tips to learn how to respect the wildlife you might encounter:

Tips to Respect Wildlife

- Be cautious and respectful entering trails during sensitive times/seasons to protect wildlife from undue stress.
- Store food safely and leave no crumbs or trash behind.
- It's OK for wildlife to notice you, but you are too close if the wildlife stops what it is doing or moves away from you.
- All wildlife can be dangerous – be aware of the possible presence of animals, and keep your distance.

THINGS TO REMEMBER

When you hit the trails, it's important to do your part to preserve the environment. Here are some important things to remember.

- Pack OUT at least what you pack IN.
- Clean up all waste thoroughly.
- Don't take artifacts, plants, rocks, etc., home.
- Be cautious and respectful of wildlife.
- Always ride on hard surfaces - not mud.
- Learn all existing trails prior to departure.

Practice Activity

Go for a ride!

Reflect

- What is the benefit of riding through small puddles?
- Why does brake pad thickness matter?
- How can half pedaling help you turn in a figure 8?

Apply

- Why should we care about protecting trailside vegetation?
- How can we encourage others to keep trail sizes small?

4-H MISSION MANDATES

Citizenship

It is important to respect natural areas that are available to everyone. By taking care of trails and surroundings, youth learn to actively protect natural resources.

Healthy Living

Youth obtain soil science knowledge and learn how to apply it to mountain biking experiences.

Science

Obstacles in mountain bike trails offer opportunities to problem solve and build mental and physical strength.

ESSENTIAL ELEMENTS

Belonging

Taking care of surroundings and allowing others to enjoy the same experiences in nature can inspire a sense of belonging for youth.

Mastery

Encouraging practice of overcoming obstacles can contribute to the youth's success in mastering mountain biking.

References:

How to Set Up and Adjust Your Brakes. Retrieved from: https://www.youtube.com/user/globalmtb

Supplies

- Bike
- Proper clothing
- Helmet
- Gloves
- Eye protection
- Knee pads
- Cones
- Tire gauge
- Tire pump
- Tube patch Kit

PRIOR TO THE MEETING

- Service your bike - make sure your bike is in working order.
- Ride your bike.
- Review this section.

INTRODUCTION

To begin this lesson, ask the youth if they were able to go on a ride since the last meeting. Ask if they saw any wildlife during their ride.

Activity #1
Bike Maintenance Mini Lesson

TIRES AND WHEELS

TIRE PRESSURE

Tire pressure is important to every ride, because it affects a rider's sense of control of the bike and how the bike maneuvers terrain. The bike tires will give a recommended pressure range, usually somewhere between 30 and 50 PSI. Anywhere within the range is good, but a comfortable pressure may vary due to weight. A lighter person may feel more control with a high tire pressure.

Your chosen tire pressure may vary according to activity, too. For example, when riding on roads, higher tire pressure would be better because there are less obstacles to maneuver. But on a trail, where there may be obstacles to ride over or through, a more moderate pressure would be ideal.

Practice Activity

Using the tire pressure gauge, check everyone's tire pressure.

QUICK RELEASES AND HUBS

Quick release wheels are widely used because they are easy to operate – but they are also easy to install wrong. An improperly attached quick release can result in the loss of a front wheel, which inevitably means a wreck. That's why it's important to learn how to safely and correctly use a quick release wheel.

To remove the wheel using the quick release, move the quick release lever to the open position. Hang on to the lever while loosening the adjusting nut on the other side of the wheel, but don't take the nut all the way off. Once it's loose, push the side with the lever toward the wheel until it is centered, then remove the wheel from the fork.

To put the wheel back on, place the wheel between the fork legs. Align the brake disc and guide the wheel into the dropouts, and then turn the adjusting nut to change the tension of the quick release. Continue turning the adjusting nut until the lever has some resistance when moving it. If the lever moves too easily, the nut is not tight enough. When the lever has enough tension, move it into the closed position and make sure it doesn't touch the fork or the brake. To test it, lift the front of the bike and give the front wheel a good thump. The wheel should not come off, be loose, or move from side to side.

To check that the hub of your wheels are working properly, lift the bike so the wheel is off the ground and give it a light push. The wheel should turn smoothly without clicks or catches. Then, grab the rim and move it sideways. There should be no movement at the hub.

For a quick tutorial, check out the video below:
https://www.youtube.com/watch?v=YTLgcEViRo0

HOW TO FIX A FLAT

Flat tires are not uncommon for mountain bikers. It is important to always carry a spare tube, patch kit, tire pump, and tire levers.

HOW TO FIX A FLAT TIRE

1. First, try to find a place where you can safely get off the trail and have room to work. Remove the tire that is flat (as instructed on previous page, and gently prop your bike up or lay it down with the drive side up. Then, make sure all the air is completely out of the tire. Use the tire lever to slip underneath the beading of the tire on one side and gently pull the tire off the rim. You don't have to pull the tire completely off the rim, but at least pull it all the way out on one side.

2. Next, remove the inner tube by reaching underneath the tire and pulling it all the way out until the only part still inside is connected to the valve. To remove it completely, lift the tire over until the valve can be pulled all the way out.

3. To find the hole, pump the tube up a little, so it begins to hold its shape. Look carefully for the puncture. Sometimes, it can be so small that you may have to hold your face close to the tire to feel where the air is coming from. You can also spit on the tire – where it starts to bubble is your hole. At this point, you can decide if you are going to patch the hole or replace the tube entirely.

4. To patch the puncture, rub the area down with sandpaper to clean away dust and dirt, giving the patch a better surface to stick to. Apply glue to your patch and press it down hard for at least 30 seconds, or for the recommended time specified by the patch kit.

5. Before putting the new or patched tube back in, be sure to thoroughly check the inside of the tire for the cause of the puncture. Check carefully! The offending item could be very sharp. Remove anything that is still stuck and do not leave it in an area where it can harm someone else's tire.

6. To put the new or patched tube back in, add air to the tube so it has a little shape to it. You can either undo the valve and blow it up yourself, or use the pump to do so. Remember, it doesn't need to be fully pumped. Start with the valve area by finding the place where the valve goes and dropping it in the hole. Then, put the bead of the tire over the area where the valve goes. Tuck the inner tube in all the way around. Once the tube is all the way back in, finish putting the tire back into place. Before pumping it back up, double check all the way around the tire to be sure you can't see any of the inner tube. If you do, be sure to tuck it back up under the tire.

7. Once everything is in place, pump the tire back up, re-attach the wheel, and you're on your way again.

To see a demonstration on how this is done, check out this video:
https://www.youtube.com/watch?v=-ZbeR0mJBkk

HOW TO CHECK FOR TRUE

When a wheel is out of true, it means that it is not moving in a straight, true path. To do a truing test on your bike, place it so it is upside down. Stand directly behind the back tire (or in front of the front tire), and pedal the bike. Look for any wobbling that would indicate the bike wheels are not true.

To check the tension in your spokes, start at the valve of the wheel and gently squeeze the spokes. A little motion is okay, but you don't want them to move more than 2-3 millimeters. Go all the way around the wheel, checking for loose spokes.

ASCENDING AND DESCENDING

Climbing and going down steep hills is usually a challenge for beginning mountain bikers. Part of the challenge arises from being in a low gear to climb the hill. The mechanical advantage that low gearing translates into massive torque, which can cause the rear wheel to spin, particularly since you may also be standing up in order to generate the force you need to keep the cranks turning over.

In preparing to practice going up and down those big hills, demonstrate riding and shifting through all gears from low to high and back down, either in order (skipping redundant gear combinations), or by repeating the redundant combinations. Also, demonstrate the following techniques:

ASCENDING

- Sit and spin
- Sit and bob
- Stand and dance (high cadence)
- Stand and thrash side to side (low cadence)
- Finding the right gear
- Anticipation
- Body positioning
- Look ahead and pick a line

DESCENDING

- Pick a line
- Start balanced and slow
- Slide back
- Squeeze brakes

Now, let youth practice these different techniques. Try to find a hill that will allow a challenging, but do-able, practice to go up and down. Continue practicing with them until they are comfortable with ascending and descending.

FOOD, TRAINING AND HYDRATING

PRE-RIDE

FOOD. Carbohydrates give your body the fuel it needs - you wouldn't drive a car without gas! Avoid eating a large meal within 2 hours before heavy exercise. Instead, eat high protein foods, like meats, 3-4 hours before a ride; Eat whole grains, pasta, or bagels 2 hours before a ride.

WARM UP. It is not necessarily a good idea to do heavy stretches before riding. It is better to do low-intensity stretches. Do a flat, easy trail ride before riding steep inclines or harder trails.

PLAN. Decide how long and where you want to ride. Prepare all necessary food and water to pack with you. Set realistic physical goals and expectations for yourself.

DURING YOUR RIDE

FOOD. Don't eat during the ride if your ride is an hour or less. For longer rides, eat 50-100 calories of easily digestible carbohydrates every half hour. Some good examples are half a banana, raisins or a pre-packaged snack (just be sure to check ingredients on the packaging for unhealthy chemicals).

ROADSIDE STRETCHING. Long bike rides occasionally cause tightness in muscle groups not felt in other workouts. Try the following stretches while on long rides to ease discomfort.

- Crouching Pigeon
- Twisting Lunge
- Standing Cobra

POST-RIDE

FOOD. Amino acids are the building blocks for protein used to build and repair muscles and bones. Carbohydrates refuel the body's source for energy. Chocolate milk contains the correct combination of protein and carbohydrates to aid in muscle recovery and repair, making it a great post-ride drink.

WARM UP. Stretching creates tension that aligns disorganized muscle tissue, which increases recovery time.

PLAN. Human growth hormone (HGH) is at its highest an hour after sleep onset. HGH aids muscle recovery and stimulates the nervous system. It is recommended that teens receive 9.25 hours of sleep each night.

HYDRATION. Every cell, tissue and organ in your body needs water to function correctly. To remain hydrated on a daily basis, always drink 8 ounces of water six to eight times a day. While biking it is recommended you drink 16 ounces of water per hour in cool weather. During times of heavy workouts and heat, increase your water consumption.

Know the signs of dehydration, and drink BEFORE you are thirsty:

- Dry mouth
- Sleepiness or fatigue
- Extreme thirst
- Headache
- Confusion
- Little or no urine
- Feeling dizzy or lightheaded
- No tears when crying

AEROBIC FITNESS

PRE-RIDE

Tidal Volume: The amount of air you breathe in and out at rest.
Vital Capacity: The amount of air you can breathe in forcefully.

It is impossible to increase the actual size of your lungs, but you can train them to take in oxygen more efficiently by working out in higher elevations or challenging yourself during exercise.

According to the 2008 Physical Activity Guidelines for Americans, youth ages 6-17 need 60 minutes or more of aerobic physical activity daily. Three times a week should be vigorous-intensity aerobic exercise, such as mountain biking. Adults ages 18-65 need at least 75 minutes of high intensity aerobic exercise per week.

Practice Activity

Go for a ride!

Reflect

- Why do you check for true?
- How can you use low gears to help you go up a hill?
- Why do you try to estimate where and how long you will be mountain biking?
- How can changing tire pressure benefit you in different places?

Apply

- What other activities do you participate in that require nutritional food during the activity?
- In what other activities can you practice controlling your breath?

4-H MISSION MANDATES

Healthy Living

Learning to listen to the body and recognizing when to supply nutrients and water increases youth's ability to make healthy choices.

Science

Youth learn the importance of nutrition and how to supply sufficient nutrient needs.

ESSENTIAL ELEMENTS

Independence

Understanding how to change a tire and maintain the correct tire pressure allows youth to be independent and learn to problem solve.

Mastery

By learning how to change a tire, youth learn to fully master bike maintenance.

References:

Marion, J., & Wimpey, J. (2007). Environmental Impacts of Mountain Biking: Science Review and Best Practices. International Mountain Bicycling Association.

Supplies

- Bike
- Proper clothing
- Helmet
- Gloves
- Eye protection
- Knee pads
- Rope
- Broom handles or long sticks (at least two)

PRIOR TO THE MEETING

- Service your bike - make sure your bike is in working order.
- Ride your bike.
- Review this section.

INTRODUCTION

To begin this lesson, ask the youth what they ate in order to prepare for this ride.

Activity #1
Bike Maintenance Mini Lesson

DRIVE SYSTEMS AND CARE

The crankset is the part of the bike that connects to the pedals and makes it go. Always check over the crankset, making sure it's not wobbling or rubbing.

CHAIN AND CASSETTE

Typically, the chain and cassette are the parts of the bike that collect the most dirt, which means they should be cleaned on a regular basis. Before each ride, check over the chain and cassette to see if it is time for a good cleaning. Stand next to the bike and lift the rear wheel off the ground. Slowly rotate the pedal, and look at each individual link for dirt buildup or rust.

If there are any links that are dirty, brush them out with a firm brush or an old toothbrush. Then, lubricate the links with a chain lubricant by applying a small drop of lube to the link and rubbing off the excess with a clean, dry rag or towel. It's very important to make sure all the excess is removed, or it will just collect more dirt.

Every month or so, an off-bike cleaning may be needed for mountain bike chains. To do so, remove the chain entirely from the bike and soak it in chain solvent.

BROOM TREE

Set up - Tie a rope between two trees. Place broom handles or other objects that can hang from the rope to create a gap. The height of the bottom of the broom sticks should be just below the handle bars.

Instruct the youth to focus on the center of the gap. Focus on where you want to go, not the broom handles or trees.

Practice Activities

- Practice going through the gap, focusing on the center of the gap.
- Practice going through the gap both fast and slow.
- Increase the difficulty by moving the broom handles closer together.
- Add additional broom sticks to create multiple obstacles (like the figure 8).
- Add obstacles to the ground to ride over in addition to the broomstick gaps.

Check out this Youtube video to see how it's done:
https://www.youtube.com/watch?v=JQKLXPbJwJA

SAFETY AND FIRST AID

The time to be prepared for an injury on the mountain bike-trail is before it happens. Here are some ideas on how to prevent injury while riding.

- Ensure proper bike fit and wear proper clothing, including helmet and gloves.
- Let someone who is not riding with you know where and when you are riding.
- Know the area and the types of terrain you will be riding in.
- Don't ride faster than your skill or the terrain allows.

Even after good preparation and prevention strategies, injuries are going to happen. Here are some of the most common injuries on the trail and some basic first aid to treat them.

- Scrapes, cuts, or lacerations: if the wound is deep or bleeding, apply pressure to stop the bleeding. Then clean it with water and cover it with a bandage or clean cloth. Apply antibiotic cream if you have it.
- Rashes, insect bites or stings: if a rider gets into poison ivy or gets stung by a bee, make sure the person is not allergic, then see if he or she needs a benadryl, allergy cream, or other medication.
- Concussion: anytime a rider hits his or her head in a tumble or crash, evaluate the severity of the impact. Assess the helmet to check for any cracks. Ask about headache, dizziness, paleness, or bruising.

DEHYDRATION, HEAT-RELATED ILLNESS, SUNSCREEN

Hydration is important to monitor before, during, and after riding.

Dehydration and heat stroke are the most common heat-related illnesses. This is most likely to happen during mountain biking when you don't continually drink water. We lose body water when we sweat, and if we aren't replacing it with water and healthy food, we could get sick.
Some symptoms of dehydration include:

- Thirst
- Dry skin
- Fatigue
- Dizziness
- Confusion

Sunburns are very common after a day of biking. It's important to remember that you can still get sunburned even if you can't feel it. Sunscreen should be applied 10 minutes before your activity starts and reapplied every 2 hours.

http://www.hopkinsmedicine.org/healthlibrary/conditions/non-traumatic_emergencies/dehydration_and_heat_stroke_85,P00828/

FIRST AID KIT

"A first aid kit is a collection of supplies and equipment that is used to give medical treatment, and can be put together for the purpose by an individual or organization or purchased complete." It's smart to take a small kit with you whenever you hit the trail.

Basic kits should include:

- Bandaids
- Ibuprofen
- Antibiotic cream
- Disposable exam gloves
- Safety pins
- Benadryl or allergy medicine
- Duct tape

These are all great things to have in your kit. Can you think of anything else to include?

Adapted from:
https://en.wikipedia.org/wiki/First_aid_kit

Practice Activity

Go for a ride! Then have healthy living snacks.

Reflect

- Why is eye gaze always something to pay attention to when passing through a small space?
- How do you identify in yourself when you are starting to suffer from too much exposure to heat?
- What has been the favorite skill you have learned so far from the club activities?
- If you have learned a new skill on your own, will you share it with the group?

Apply

- In what other situations can you see yourself using the things you've learned about first aid?
- Why are healthy snack choices essential to success in mountain biking?

4-H MISSION MANDATES

Citizenship

A person knowledgeable of first aid is able to assist in many kinds of accidents and be a productive citizen.

Healthy Living

Youth learn to identify life-harming situations and how to avoid them.

ESSENTIAL ELEMENTS

Belonging

By working in group activities and trading tips with club members, mountain biking can create a sense of belonging between peers.

Mastery

Maintaining bike chains encourages youth to learn more about the mechanics of a mountain bike and helps youth to see the overall importance of regular maintenance.

References:

McGinnis, Marianne (2014). How and When to Hydrate. Retrieved from http://www.bicycling.com/training-nutrition/how-and-when-hydrate

National Sleep Foundation. Teens and Sleep. Retrieved from http://sleepfoundation.org/sleep-topics/teens-and-sleep

Centers for Disease Control and Prevention. How Much Physical Activity Do You Need (2014, August 25). Retrieved from http://www.cdc.gov/physicalactivity/everyone/guidelines/index.html

4-H Club Meeting 6

Bike Care and Advanced Obstacles

Supplies

- Bike
- Proper clothing
- Helmet
- Gloves
- Eye protection
- Knee pads
- Shock pump
- Obstacles to ride over (logs, rocks, wood boxes, sandbags, or whatever you have around)
- Stakes to secure obstacles to the ground

PRIOR TO THE MEETING

- Service your bike - make sure your bike is in working order.
- Ride your bike.
- Have the proper clothing, helmet, and gloves .

INTRODUCTION

To begin this lesson, ask the youth to help you review the safety and first aid key points from the previous meeting.

Activity #1

Bike Maintenance Mini Lesson

SUSPENSION

The suspension in your bike is used to help absorb the shock from rough terrain and give the rider a little insulation. In order to get the right amount of suspension, you will need to set up your sag. First, have your shock and fork set in the open position and lower your set. Hop on the bike, and use a wall, tree or buddy to help you balance on it. Slightly bounce up and down. Then, put the O-ring indicator back into the dust wiper. Dismount the bike carefully and measure the placement of the O-ring to make sure you are on or close to the 25% range. Check with your bicycle's manufacturer to see their exact recommendations for your bike.

If you need to adjust to your sag, use your shock pump to adjust your PSI. Add more air if the O-Ring has traveled too far, and use the bleed valve to let air out if the O-Ring did not move far enough.

For a demonstration on sag adjustment, check out the video below:
https://www.youtube.com/watch?v=dh2Q7Fu2pfA

Proper care and maintenance of the bike's suspension will help it ride better and last much longer. After each ride, simply take a wet, clean rag and wipe down the fork stanchions and shock shaft. At the seal areas, slide the cloth around the fork and wedge it between the wheel to get that hard-to-reach place.

ROCK GARDEN

GOING OVER ADVANCED OBSTACLES

Set up - obtain a number of obstacles that can be placed in succession to create a series of obstacles similar to what you would find in a rock field. Obstacles could be logs, rocks, wood boxes, sandbags, tool boxes or whatever you can round up. Make sure the obstacles are sturdy or you have something to help stake them to the ground.

Skills

- Front tire lift - compress or weight the front end and then pop with arms and power pedal.
- Back tire lift - un-weight and move body forward.
- Bunny hop
- Feet placement
- Timing and practice

Practice Activity

Place two obstacles together and practice going over them. As the kids get comfortable, add additional obstacles of different heights. Finally, when the youth are ready, string together as many obstacles as possible with the time you have.

RESOURCES

One of the best mountain biking resources that you could have would be to establish a long-term 4-H Mountain Bike club. This will give you a group of people to ride with, learn from, teach and have a great time on the trails with.

To find the best mountain bike trails in your area, check your local government websites. Be sure to research the trails thoroughly before you go. You could also check in with your local bike shops and see what rides they recommend.

Practice Activity

Go for a ride!

Reflect

- What does adjusting your sag do to you and your bike?
- What obstacles can you see yourself using the front tire lift to get over or around?
- How do O-rings effect suspension?

Apply

- How can regular equipment cleanings be beneficial to our bikes?
- What is a trail that you would want to bike on as a group?

4-H MISSION MANDATES

Identify from citizenship, healthy living and/or science and explain why.

Citizenship

By forming a long-term club, youth can encourage each other to take care of trails and spread the love for mountain biking.

Healthy Living

Long-term mountain biking involvement encourages youth to continue to make healthy choices and to care for their bodies.

ESSENTIAL ELEMENTS

Identify tips to include during the lesson and how it applies.

Belonging

By initiating a long-term mountain biking club, youth can be included in growing experiences as individuals and gain a sense of belonging and purpose in a group.

Independence

Youth are able to tackle a challenge at any point in a ride and handle tough situations independently and successfully.

Mastery

By starting young, youth have a quality length of time to improve skills and pursue mountain biking for as long as they like.

References:

National Off-Road Bicycle Association (2004). NORBA Officials Guidebook, 8. Retrieved from https://s3.amazonaws.com/USACWeb/forms/rules/04_norba_guidebook.pdf

Trail Etiquette and Safety for Equestrians, Hikers, and Mountain Bikers (2014, January 1). Retrieved from https://www.imba.com/resources/risk-management/shared-trails

Contact for Utah High School Mountain Biking: Dave and Lori Harward - 801 661-7988

Continue Discovering

More to Discover

Congratulations on completing your Discover 4-H club meetings! Continue with additional curriculum in your current project area, or discover other 4-H project areas. Check out the following links for additional 4-H curriculum.

1. www.discover4h.org
2. http://www.4-h.org/resource-library/curriculum/
3. http://utah4h.org/curriculum/

Become a 4-H Member or Volunteer

To **register** your Utah club or individuals in your club visit and contact your County Extension Office

http://utah4h.org/about/

http://utah4h.org/join/index

For help registering in 4-H online visit:

http://utah4h.org/staffresources/4honlinehelp

Non-Utah residents, please contact your local 4-H office:

http://www.4-h.org/get-involved/find-4-h-clubs-camps-programs/

Stay Connected

Visit Your County Extension Office

Stay connected with 4-H activities and news through your county Extension office. Ask about volunteer opportunities, and don't forget to register for your county newsletter. Find contact information for counties in Utah here:

https://extension.usu.edu/locations

Enjoy the Fair!

Enter your project or create a new project for the county fair. Learn about your county fair and fair judging here:

http://utah4h.org/events/index

Participate in Local or State 4-H Activities, Programs, Contests, or Camps

For Utah state events and programs visit:

http://utah4h.org/events/index

http://utah4h.org/projects/

For local Utah 4-H events and programs, visit your county Extension office.

https://extension.usu.edu/locations

Non-Utah residents, please contact your local 4-H office.

http://www.4-h.org/get-involved/find-4-h-clubs-camps-programs/

Discover *Service*

Become a 4-H Volunteer!

http://www.youtube.com/watch?v=UBemO5VSyK0

http://www.youtube.com/watch?v=U8n4o9gHvAA

To become a 4-H volunteer in Utah, visit us at:

http://utah4h.org/join/becomevolunteer

Serve Together as a 4-H Club or as an Individual 4-H Member

Use your skills, passions, and 4-H to better your community and world. You are needed! Look for opportunities to help in your area or participate in service programs that reach places throughout the world (religious groups, Red Cross, etc.).

Hold a Club Service Project

USU Collegiate 4-H Club hosted "The Gift of Giving" as a club activity. Club members assembled Christmas stockings filled with needed items for CAPSA (Community Abuse Prevention Services Agency).

http://tinyurl.com/lu5n2nc

Donate 4-H Projects

Look for hospitals, nursing homes, or other nonprofit organizations that will benefit from 4-H projects. Such projects include making quilts for CAPSA or Primary Children's Hospital, or making beanies for newborns. During Utah 4-H State Contests, 40 "smile bags" were sewn and donated to Operation Smile.

Partner with Local Businesses

92,000 pounds of processed lamb, beef, and pork were donated to the Utah Food Bank in 2013 by multiple companies.

http://tinyurl.com/pu7lxyw

Donate Money

Clubs or individuals can donate money gained from a 4-H project to a worthy cause. A nine-year-old 4-H member from Davis County donated her project money to help a three-year-old battle cancer.

http://tinyurl.com/mqtfwxo

Give Us Your *Feedback*

Help us improve Discover 4-H curriculum. We would love feedback or suggestions on this guide.
Please go to the following link to take a short survey: Click here to give your feedback
Or go to: https://goo.gl/iTfiJV