# Hiking and Backpacking Unit

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- **Hike and Problem Solve/Find Bait and Fish**
- **Plan Final Hike**
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## Assessment Section
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<tr>
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<tr>
<td>Quiz 2 Including Answer Key</td>
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<tr>
<td>Quiz 3 Including Answer Key</td>
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<tr>
<td>Quiz 4 Including Answer Key</td>
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<tr>
<td>Quiz 5 Including Answer Key</td>
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<tr>
<td>Quiz 6 Including Answer Key</td>
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<td>Task Card Introduction</td>
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<td>Tying Knots Task Cards</td>
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<td>Skill Chart Introduction</td>
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<td>Equipment and Proper Dress Skill Chart</td>
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<td>CPR Skill Chart</td>
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<td>Starting a Fire Using a Bow-Drill Skill Chart</td>
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<td>Building a Lean-to Shelter Skill Chart</td>
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<td>Tying Knots Skill Chart</td>
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<td>Fly Fishing Skill Chart</td>
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<td><strong>Resource Section</strong></td>
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<tr>
<td>Resources and Materials</td>
<td>Resources.doc</td>
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</table>
Central Washington University
Hiking and Backpacking
PE 342

Instructors: James Waylon Tulip, Ryan Douglas-Reid
Office Hours: By Appointment or email and one of us will quickly respond!
Office: Physical Education Building, room 574
Text/Reading: Extra Credit/ Hatchet by Gary Paulsen

Purpose of Course: This course is designed to give the students a better understanding of the fundamental knowledge needed to enjoy hiking and backpacking safely. Students will experience a lifelong activity that promotes a healthy and active lifestyle.

Instructional Objectives:
Specific instructional objectives include the following:
1. To introduce students to the fun and exciting world of hiking and backpacking.
2. Give students the skills needed to safely hike and backpack in the wilderness.
3. Provide students with a basic knowledge of the various plants and animals in Washington State.
4. Present strategies for effectively fishing, hunting, and gathering food while in the wilderness.

Student Objectives:
Specific learning outcomes for students include the following:
1. Demonstrate hiking and backpacking skills (proper equipment, conditioning, proper clothing, how to hike).
2. Demonstrate proper hiking and backpacking safety.
3. Construct a manmade shelter from natural resources.
4. Be familiar with the essential skills needed for fishing, hunting and gathering.
5. Be able to name plants and animals native to Washington State.
**Assessment and Grading Procedures:**

Your grade will come from regular attendance and effort in classroom activities. You will earn points for attending and participating as well as lose points for every unexcused absence. An unexcused absence is when the teacher is not informed before the absence occurs or if the absence is not cleared through the office. This will be up to the teacher’s discretion to decide if the absence is excused or unexcused. In addition, Quizzes and a written journal will be required throughout the quarter and students will be informed of these due dates well before they occur. Grades will be shared throughout the quarter and if you have any questions don’t hesitate to come and ask us.

**Rules and Behavioral Expectations:**

A major focus of this unit will be using the proper safety precautions for backpacking. Behavioral expectations will be taken seriously because of the possible ramifications of misbehaving or not hearing instruction in the wilderness. Rules and behavioral expectations will be made the first day of class. The teacher and students will develop appropriate rules and expectations together.

**Equipment:**

This class requires a few essentials for safe hiking and backpacking.

- Backpack
- Tennis or hiking shoes
- Athletic clothes
- Water Bottle
- Coat
- Long pants and shirts
- Thick socks (wool or another material besides cotton)
- Compass
- Journal (empty 30 page template will be given to students)

<table>
<thead>
<tr>
<th>Evaluated Work</th>
<th>Final Grades:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Quizzes (100 pts)</td>
<td>270-300pts = A</td>
</tr>
<tr>
<td>2. Written assignments (50 pts)</td>
<td>260-269pts = A-</td>
</tr>
<tr>
<td>3. Attendance/Participation (150 pts)</td>
<td>250-259pts = B+</td>
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<tr>
<td>4. Bonus points including bringing work to class on due dates (Varied)</td>
<td>240-249pts = B</td>
</tr>
<tr>
<td></td>
<td>235-239pts = B-</td>
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<tr>
<td></td>
<td>225-234pts = C+</td>
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<tr>
<td></td>
<td>215-224pts = C</td>
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<td>210-214pts = C-</td>
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<td>200-209pts = D+</td>
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<td></td>
<td>195-199pts = D</td>
</tr>
<tr>
<td></td>
<td>190-194pts + D-</td>
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<tr>
<td></td>
<td>&lt;190 pts = F</td>
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</tbody>
</table>

Lose 5 points for each unexcused absence.
| Day 1  | Introduction to Course and Syllabus |
| Day 2  | Equipment And Proper Use |
| Day 3  | Safety Proper Dress |
| Day 4  | First Aid |
| Day 5  | CPR Turn in: Journal, Quiz 1 |
| Day 6  | Maps and Navigation |
| Day 7  | First Hike One Mile |
| Day 8  | Hike and Mapping |
| Day 9  | Hike 2 Uphill |
| Day 10 | Fire Safety How To Build A Fire Turn in: Journal, Quiz 2 |
| Day 11 | Mapping/Develop Hike |
| Day 12 | Hike 3 Do Your Hike And Note Changes |
| Day 13 | Hike and Problem Solve Build Fire |
| Day 14 | Hike 4 Near Water Water Safety Hypothermia |
| Day 15 | Introduction To Wildlife Plants Turn in: Journal, Quiz 3 |
| Day 16 | How To Build A Shelter |
| Day 17 | Hike 5 Identify Food |
| Day 18 | Hike Problem Solve Build Shelter |
| Day 19 | Hike 6 Identify Insects |
| Day 20 | Remedies For Insect Bites And Rashes Turn in: Journal, Quiz 4 |
| Day 21 | Introduction To Wildlife Animals And Tracks |
| Day 22 | Practice Knot Tying/Casting |
| Day 23 | Hike Problem Solve Prepare food |
| Day 24 | Hike 7 Practice Casting |
| Day 25 | Salmon ID Turn in: Journal, Quiz 5 |
| Day 26 | Introduction to Bait |
| Day 27 | Hike 8 Practice Fishing/Fly Fishing |
| Day 28 | Hike Problem Solve Find bait and fish |
| Day 29 | Plan Final Hike |
| Day 30 | Complete Final Hike Turn in: Journal, Quiz 6 |
1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will know the basic outline of the course.

2. Equipment: (for a class of 30 students)

3. Protocol
   - Remind class of the existing protocols.
   - Start and stop on the signals.
   - Safety
   - Make sure kids do journal entry

4. Class Rules:
   - Remind class of existing rules. These should be posted in a visible location in the gym.
   - Respect each other and the equipment.
   - Safety
**Instant Activity:** Journey/ Student will spread out in the gym using self space. Teacher will lead the children in a mock journey using various exercises during the journey. Have the kids begin the journey by marching. Let them know that a pond is ahead they will need to pretend swim across the lake. Continue on the journey making up scenarios.

**Set Induction:** How many of you love the outdoors? Learning how to hike and backpack lead you to aspects of the outdoors you never thought were possible to see. In this class we will cover the basics of hiking and backpacking.

<table>
<thead>
<tr>
<th>MAF/Instructional technique</th>
<th>Extensions</th>
<th>Refinements</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Encourage your students to bring their own backpacks and good shoes. Depending on the schools, equipment and community, you may require the students to bring their own equipment as well. Students should mark their name on their equipment.</td>
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<td>• In preparation for this class, check the equipment is organized into proper groups.</td>
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<td>• Mark with cones and posters where equipment area should be laid out.</td>
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<tr>
<td>• Have students carry all equipment to the proper areas at the beginning of each lesson.</td>
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<tr>
<td>• Try and work with students in groups of 2-4; safety is in numbers.</td>
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</table>

**Informing Task:** When I say go, walk over to the black line in front of the stage and sit down.

• Teacher goes over syllabus with students  
  Go over the syllabus with the students.

**Informing Task:** Now we are going to go on a walk to get the blood moving a little bit. When I say go begin walking 1 lap around the school.

• Teacher demonstrates rules and walks with the students.
Closure/Assessment: Hiking and backpacking is something many Americans never have the chance to do. Living here is unlike environment we are blessed with many hiking and backpacking opportunities. Over the next thirty days we are going to learn a lot and have a chance to become close as a class. I am looking forward to fun lesson with this class. See ya tomorrow!
1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will be able to identify all the backpacking and hiking equipment and the equipment’s uses.
   2. By the end of the class, all students will demonstrate the ability to pack their own backpack.

2. Equipment: (for a class of 30 students)
   1. Backpacks
   2. Canteens (or water bottle)
   3. Raingear (Jacket and Pants)
   4. Survival/First Aid Kits (Contents Explained Later)
   5. Tarps (8x10)
   6. Rope (25ft)

3. Protocol
   - Remind class of the existing protocols.
   - Start and stop on the signals.
   - Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   - Safety
   - Task Cards are an option
   - Make sure kids do journal entry

4. Class Rules:
   - Remind class of existing rules. These should be posted in a visible location in the gym.
   - Respect each other and the equipment.
   - Safety
**Instant Activity:** Scattered Gear: Start with the equipment scattered throughout the gymnasium and groups of two-three students standing with a hula hoop, also in different areas of the gym. At the signal the students retrieve one of each piece of equipment, per person in their group, and place the gear in their hula hoop. The goal is to assure that every student has the proper amount of gear. At the next signal the student will place the proper amount of gear in each backpack.

**Set Induction:** Many people love to go camping or will eventually go camping in the future. Different situations may arise where you might get lost or you might want to camp in the backwoods away from the mainstream campgrounds. This is why we are going to learn the essentials for what you should have in your pack for hiking.

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</table>

**Informing Task:** First we are going to practice the use of each piece of equipment, starting with the backpack. When I say go everyone jog and get your backpack and spread throughout the gym with your backpack in front of you. GO!

- Teacher demonstrates task then goes around helping.
- Check to assure backpack fits properly.

- I am now going to explain and demonstrate to everyone how to properly put on your backpack. If you have already adjusted

- Your backpack should fit snugly so that if there is equipment in the backpack. You will need to tighten the straps to adjust the fit.

- What vertebrae should the top of your backpack cross?
<p>| Teacher demonstrates task then goes around helping. | I am now going to explain and demonstrate to everyone how to properly put on your Hiking boots. If you have already laced your boots and checked for a proper fit, check your partner. | Your hiking boots should fit snug enough so you have plenty of ankle support. | How much room is in the end of your shoes? |
| Check to assure shoe fits properly. Laces should be snug and toes should have approximately ½ inch room from the end of the toes. | Explain and demonstrate how to fit your hiking boots and the importance of a proper fit. | Your hiking boots should have about ½ inch of room between the end of your toes and the toe of your shoe. |  |
|  | When you have all your backpack properly on please stand up and look at me. | You should be able to wiggle your toes slightly and they should not be cramped. |  |
| Informing Task: Next we will talk about the use of canteens. When I say go, take off your hiking boots, put them in your backpack, put your backpack on, and jog over to the canteens. GO! |  | The canteen should be as full as possible without over flowing it to prevent your other equipment in the pack from becoming water damaged. |  |
| Teacher explains the importance of water to survive. | Now, I will explain the importance of a canteen. | The canteen should be as full as possible without over flowing it to prevent your other equipment in the pack from becoming water damaged. |  |
| Teacher explains how a canteen can be an effective way to store, ration, and drink water. | Explain and demonstrate the level the canteen should be filled to. |  | How many days can you survive with no water? |</p>
<table>
<thead>
<tr>
<th><strong>Informing Task:</strong> Now we will talk about raingear. When I say go, put your canteen in your backpack, put your backpack on, and jog over to the raingear. Pick out your raingear and spread throughout the gym with your raingear in front of you.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Teacher explains the importance of saying warm and dry.</td>
</tr>
<tr>
<td>• Teacher demonstrates the proper fit of the raingear then goes around helping</td>
</tr>
<tr>
<td>• Next, I will explain and demonstrate to everyone how to properly fit the raingear. If you have already fit your raingear, check your partner.</td>
</tr>
<tr>
<td>• Explain and demonstrate the length of the pants and sleeves should be on the raingear.</td>
</tr>
<tr>
<td>• The pant legs should cover the ankles on the boots to prevent water from entering.</td>
</tr>
<tr>
<td>• The sleeves should go to your wrists</td>
</tr>
<tr>
<td>• Where should the pant legs and sleeves on your raingear reach to?</td>
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</tbody>
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<thead>
<tr>
<th><strong>Informing Task:</strong> Now we will talk about tarp. When I say go, put your raingear in your backpack, put your backpack on, and jog over to the raingear. Pick out your tarp and spread throughout the gym with your tarp in front of you. GO!</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Teacher repeats the importance of saying warm and dry.</td>
</tr>
<tr>
<td>• Next, I will explain and demonstrate to everyone how to fold your tarp. If you have already folded your tarp, check your partner.</td>
</tr>
<tr>
<td>• Explain and demonstrate how the tarp should fit compactly in your pack.</td>
</tr>
<tr>
<td>• The tarp should take up less than ½ of your backpack.</td>
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<tr>
<td>• What can staying dry and warm prevent?</td>
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<table>
<thead>
<tr>
<th><strong>Informing Task:</strong> Now we will talk about ropes. When I say go, put your tarp in your backpack, put your backpack on, and jog over to the ropes. Pick out your tarp and spread throughout the gym with your tarp in front of you. GO!</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Teacher explains some things ropes can be used for.</td>
</tr>
<tr>
<td>• Next, I will explain and demonstrate to everyone how to roll up your rope. If you have already rolled up your rope, check your partner.</td>
</tr>
<tr>
<td>• What is one thing your rope can be used for?</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th><strong>Informing Task:</strong> Last we will talk about Survival/First Aid Kit. When I say go, put your rope in your backpack, put your backpack on, and jog over to the Survival/First Aid Kit. GO!</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Explain the importance of a Survival/First Aid Kit and close lead to next day’s Survival/First Aid Kit lesson.</td>
</tr>
</tbody>
</table>
**Closure/Assessment:**

Today, in class we learned about the equipment that should be in your backpack. Let's see how much you remember. Raise your hand if you think you can answer my questions.

1. What is one thing your rope can be used for?
2. What can staying dry and warm prevent?
3. Where should the pant legs and sleeves on your raingear reach to?
4. How many days can you survive with no water?
5. How much room is in the end of your shoes?
6. What vertebrae should the top of your backpack cross?

Conclude class by noting the importance of safety and planning?
Backpacks

- Your backpack should fit snugly.
- You will need to tighten the straps to adjust the fit.
- If the top of the backpack hangs down past your 7th vertebrae, it is too loose and the straps need tightening.
- Have a friend locate the bony bump at the base of your neck, where the slope of your shoulder meets your neck. This is your 7th cervical (or C7) vertebra. Tilt your head forward to locate it more
Hiking Boots

- Put on your boots!
- Your hiking boots should fit snug enough so you have plenty of ankle support.
- Your hiking boots should have about ½ inch of room between the end of your toes and the toe of your shoe.
- You should be able to wiggle your toes slightly and they should not be
Canteens

• A canteen can be an effective way to store, ration, and drink water.
• The canteen should be as full as possible without over flowing it to prevent your other equipment in the pack from becoming water damaged.
• Go fill your canteen and put it in your backpack!
Raingear

- Put on your raingear.
- The pant legs should cover the ankles on the boots to prevent water from entering.
- The sleeves should go to your wrists.
- Check with your partner to see if it fits.
- Put your raingear in your backpack!
Tarps

- Get your tarp.
- Try folding your tarp 3 different ways.
- The tarp should fit compactly in your pack.
- The tarp should take up less than ½ of your backpack.
- Fold your tarp and put it in your backpack!
Ropes

- Go and get your rope.
- Ropes can be essential for survival.
- Measure your rope.
- Wind and un-wind your rope 3 times.
- Wind tour rope and put it in your backpack!
First Aid Kits

• Go get your first aid kit.
• First aid kits are essential for survival.
• Open your kit and write down everything that it contains.
• Put your first aid kit in your backpack!
Checklist

• Check with your partner.
• Do you have all of the required equipment?
• Fill out your checklist and give it to your teacher!
Adjustments

- Does your backpack still fit properly?
- Make the proper tightening or loosening adjustments to assure a proper fit while the backpack is full.
- Remember, the top of your backpack should sit on your 7th vertebrae.
- If you need help go back to the backpack task card or see the teacher.
Hike & Fun

• Hike around campus.
• Be back 5 minutes before the shower bell.
• Observe you’re fit in your backpack.
• Break in your shoes.
• Observe the support and comfort in your hiking boots.
• If you are experiencing any discomfort make sure to notify the teacher.
1. Objectives (Specific, Behavioral, Assessable)
   A. Students
      1. *By the end of the class, all students will be able to answer eight out of the ten questions on the Quiz.*
      2. Students will also be introduced to some of the dangers of hiking and backpacking.
         a. Avalanche
         b. Landslide

2. Equipment: (for a class of 30 students)
   1. First Aid Kit
   2. Binoculars
   3. Silverware
   4. Non Water Proof Boots
   5. Water Proof Boots and Shoes
   6. Canteen with water
   7. Compass
   8. Flash Light
   9. Map
   10. Cotton Shirt
   11. Wool Shirt
   12. Whistle
   13. Plastic Bag
   14. Piece of would 3 feet by 6 feet or so.
   15. Polyspots
   16. Tape
   17. Book
   18. Sand
   19. Rocks
   20. Marbles
   21. Avalanche and Landslide Assessment
   22. Pencil
   23. Paper
3. **Protocol:**
   - Remind class of the existing protocols.
   - Start and stop on the signals.
   - Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   - Safety
   - Make sure kids do journal entry

4. **Class Rules:**
   1. Remind class of existing rules. These should be posted in a visible location in the gym.
   2. Respect each other and the equipment.
   3. Safety
**Instant Activity:** Scattered Gear Challenge: Start with the equipment scattered throughout the gymnasium and groups of 4 students standing with a hula-hoop, in different areas of the gym. At the signal GO the students retrieve one piece of equipment each. The goal is to have the team of 4 gather what they believe is the most necessary items for safe hiking and backpacking. Have students explain why they didn’t choose the items they did. Explain, GORE-TEX material as being waterproof, windproof and totally breathable. This is important because trapped moister can be hazardous if temperatures get cold. (example wool shirt vs. cotton shirt)

**Set Induction:** Hiking and Backpacking can lead you too some of the most magnificent places known to man. That being said, hiking can be potentially dangerous. Understanding, landslides could be the difference between a good hike and a dangerous hike. The activity we are doing today will give you a better understanding of how landslides work and what sets them into action.

**Informing Task:** When I say go slowly walk to an activity station with your group and begin spreading the newspapers out.

<table>
<thead>
<tr>
<th>MAF/Instructional Techniques</th>
<th>Extensions (Task Progressions)</th>
<th>Refinements (Cues)</th>
<th>Applications (Challenges)</th>
</tr>
</thead>
</table>
| • Place the tape, book, newspaper, wood, meter stick, sand, rocks, marbles, paper, and pencils in groups.  
• Make sure there is plenty of space between each group.  
• Encourage students to work together. | • For this activity we will all be participating. First, I would like one member of the group to place your groups’ book on the piece of wood. | • Move the book to one end of the wood. | |

**Informing Task:** Now, when I say go tilt the piece of the wood up until the book slides off. GO
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<tr>
<td></td>
<td>• Measure height point at which the book slides of the wood.</td>
<td>• Use your entire group to make the task easier.</td>
<td>• See if you can find the exact point when the book begins to slide. Then write that measurement down.</td>
</tr>
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<td></td>
<td>• Place sand down on the piece of wood then put the book on the sand. Measure the point when the book begins to slide.</td>
<td>• Make sure the sand covers the entire piece of wood.</td>
<td>• Write down the exact point when the book begins to slide.</td>
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<td></td>
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<tr>
<td></td>
<td>• Set rocks on the wood and see how much this effects the height at which the book slides.</td>
<td></td>
<td>• See if you can find the exact point when the book begins to slide. Then write that measurement down.</td>
</tr>
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<tr>
<td></td>
<td>• The last experiment will be with marbles let’s see how this affects the book.</td>
<td></td>
<td>• Write down the exact point when the book begins to slide.</td>
</tr>
</tbody>
</table>

**Closure/Assessment:** Ask students what they think about hiking on surfaces that can be dangerous and how they could prevent being in a potentially dangerous position.
1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will be able to identify all the first aid and survival kit contents
   2. By the end of the class, all students will demonstrate the ability to wrap a sling

2. Equipment: (for a class of 30 students)
   1. Survival/First Aid Kits
   2. Bandages
   3. Antibiotic ointment
   4. Gauze pads
   5. Iodine or similar prep pads
   6. Alcohol prep pads
   7. Butterfly bandages
   8. Antibiotic ointment
   9. Medical adhesive tape
   10. Aspirin and/or non-aspirin pain relievers
   11. Ace Wraps
   12. Sun screen
   13. Basic first aid instructions
   14. Instant Ice Pack
   15. Instant Heat Pack

3. Protocol
   - Remind class of the existing protocols.
   - Start and stop on the signals.
   - Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   - Safety
   - Make sure kids do journal entry

4. Class Rules:
   - Remind class of existing rules. These should be posted in a visible location in the gym.
   - Respect each other and the equipment.
   - Safety
**Instant Activity:** Injury relay: Start with gauze and ace wraps at each end of the gymnasium and groups of three-four students standing at one end of the gym. Each student will have a different injury that needs to be treated. At the signal the one student will retrieve one piece of gauze and ace wrap to fix their own wound and one piece of gauze and ace wrap to fix a partners wound; the student will then run (nursing their injury to the other end of the gym (where their wounded partners are waiting) and will fix one of the partners wound. The healed partners will carry the remaining partners to the other side and repair their injury. The goal is to be creative and to work as a team. Feel free to use different scenarios with hopping from pod to pod /obstacles or using different injuries.

**Set Induction:** When people go camping, backpacking, or hiking it is a possibility that you may become injured or you may need instruments to assist you in your healing and/or survival.

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<td>• Encourage your students to bring their own supplies shoes. Depending on the schools, equipment and community, you may require the students to bring their own equipment as well. Students should mark their name on their equipment.</td>
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<td>• In preparation for this class, check the equipment is organized into proper groups.</td>
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<tr>
<td>• Mark with cones and posters where equipment area should be laid out.</td>
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<tr>
<td>• Have students carry all equipment to the proper areas at the beginning of each lesson.</td>
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<tr>
<td>• Try and work with students in groups of 2-4; safety is in numbers.</td>
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</table>

**Informing Task:** First we are going to practice the use of each piece of equipment in your first aid/ survival kit and their uses, starting with ace wraps. When I say go get your kit and come back to your groups' area and pull out your ace wraps placing them in front of you. GO

| • Teacher demonstrates task then goes around helping. | • I am now going to explain and demonstrate to everyone how to use ace bandages in different ways. | • Your arm should be elevated at a 90 degree angle against your. | • Name and attempt one use of a wrap? |
| • Teacher explains all the things a wrap can be used for. | • Explain and demonstrate                             | • The compression wrap should be tight enough to cut         |                                     |


Informing Task: Now we will go over the uses of bandages and other wraps. When I say go get your bandages and other wraps out of your kit and place them in front of you. GO

- Teacher demonstrates task then goes around helping.
- Teacher explains all the proper uses of bandages.
- Teacher explains the importance of stopping an open wound.
- I am now going to explain and demonstrate to everyone how to use bandages in different ways.
- Explain and demonstrate different scenarios when you or shouldn’t pull an object out of a wound.
- Students attempt to bandage imaginary wounds on their partners.
- When is it appropriate to remove an object from a wound?

Informing Task: Now were going to talk about a method called RICE. When I say go get your ice and other wraps out of your kit and place them in front of you. GO

- Teacher demonstrates task then goes around helping.
- Teacher explains RICE (REST ICE COMPRESSION ELEVATION)
- I am now going to explain and demonstrate to everyone how to use REST method.
- I am now going to explain and demonstrate to everyone how to use ICE method.
- I am now going to explain and demonstrate to everyone how to use COMPRESSION method.
- I am now going to explain and demonstrate to everyone how to use ELEVATION method.
- Students use different articles to use elevation methods.
- What does RICE stand for?

Informing Task: To wrap up we are going to practice the use of the remaining of equipment in your first aid/ survival kit and their uses. When I say go get your kit and come back to your groups’ area and pull out your ice packs, heat packs and other items and explore. GO

- Teacher demonstrates task then goes around helping.
- Teacher explains all the things in the kit can be used
- Allow students to explore through their kits and work with partners
- Answer any questions students may have about the kit.
- Name one thing you could use the kit for.
for.
- Demonstrate the instant ice and heat packs

**Closure/Assessment:**

Today, in class we learned the importance of first aid. Let’s see how much you remember. Raise your hand if you think you can answer my questions:

1. Name and attempt one use of a wrap?
2. When is it appropriate to remove an object from a wound?
3. What does RICE stand for?
Objectives (Specific, Behavioral, Assessable)

A. Students
   1. By the end of the class, all students will be able to answer eight out of the ten questions on the Quiz.
   2. Students will also be introduced to some of the dangers of hiking and backpacking.
      a. Avalanche
      b. Landslide

Equipment: (for a class of 30 students)

1. First Aid Kit
2. Binoculars
3. Silverware
4. Non Water Proof Boots
5. Water Proof Boots and Shoes
6. Canteen with water
7. Compass
8. Flash Light
9. Map
10. Cotton Shirt
11. Wool Shirt
12. Whistle
13. Plastic Bag
14. Piece of would 3 feet by 6 feet or so.
15. Poly spots
16. Tape
17. Book
18. Sand
19. Rocks
20. Marbles
21. Avalanche and Landslide Assessment
22. Pencil
23. Paper
Protocol
- Remind class of the existing protocols.
- Start and stop on the signals.
- Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
- Safety
- Make sure kids do journal entry

Class Rules:
- Remind class of existing rules. These should be posted in a visible location in the gym.
- Respect each other and the equipment.
- Safety
**Instant Activity:** Begin by tossing bouncy balls to each student. Have the students write down their names with a sharpie on the bouncy ball. Then have the class form a circle, students will start with hands behind their backs. Student should remember who tosses the ball to them as well as whom they toss the ball to. The teacher will start the activity by tossing the ball; students will receive the ball and toss their ball to another person. Students must thought to someone who hasn’t caught a ball yet (hands behind back). Go all the way through the activity until everyone has caught and tossed a ball. Try different variations (see how fast you can do the activity, lights off, backwards, etc.)

**Set Induction:** Today we are going to cover the basics of CPR this is very important to know if you are planning to go hiking or backpacking. CPR is a skill that is great to know no matter what you’re doing. If the situation every does arise were you’re put in a position to use CPR I would like you to have an understanding of how to react and what to do.

**Informing Task:** When I say go find four people have not been grouped with yet, find a manikin and open your CPR mask packages.

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<td>• Let kids know the manikins are very valuable and will be used for years to come.</td>
<td>• Introduce the CPR mask and the proper placement of the mask on the manikin.</td>
<td></td>
<td>• Have each student place the CPR mask on the manikin four times.</td>
</tr>
<tr>
<td>• Manikins spread out.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Make sure everyone is participating safely.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Make sure each student is participating.</td>
<td></td>
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</tbody>
</table>

**Informing Task:** To determine if someone needs CPR shout and shake the person. If there is no response then you will need to call 911. When I say go take turns shaking and shouting the victim to see if they respond. Say are you awake, are you awake?

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<td>• Wait 5 minutes before starting first extension.</td>
<td>• Next place your fingers on the victims chin and listen for breathing.</td>
<td></td>
<td>• Each member of the group needs to perform the whole sequence two times in a row. (Are you awake, are you awake?, Tilt head back, listen for breathing)</td>
</tr>
</tbody>
</table>
**Informing Task:** The next step to CPR is administering breaths. When I say go place the CPR mask on the victim, pinch nose, cover the mouth with yours and blow until you see the chest raise. Give 2 breaths. Each breath should take 1 second.

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<td>• Breaths should be steady and last for 1 second. • Have the partner count out the second. • Move around the classroom and demonstrate if needed.</td>
<td>• Listen for breathing, place mask around the mouth, pinch nose, cover mouth and blow twice.</td>
<td>• Is it quite enough for you to hear the breaths?</td>
<td></td>
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<td>• Students should be helping each other remember the steps. • It's okay if you use your group members to help you.</td>
<td>• Put together all the previous steps are you awake, are you awake?, Tilt head back, listen for breathing, place mask around the mouth, pinch nose, cover mouth and blow.</td>
<td>• See if you can talk one of your group members through the previous steps.</td>
<td></td>
</tr>
</tbody>
</table>

**Closure/Assessment:** Go job class lets see if each group member can fully administer CPR to a victim who is unconscious. In your groups decide which member will go first. When I say go, the first member should begin performing CPR. GO! Members not performing CPR will fill out the check list handed out by the instructor.

Do Quiz 1

You can have students turn in their notebooks to check their progress or you can have them keep the notebooks for studying.
CPR ASSESSMENT CHECK LIST

1. CALL ______
Check the victim for unresponsiveness. If there is no response, Call 911 and return to the victim. In most locations the emergency dispatcher can assist you with CPR instructions.

2. BLOW ______
Tilt the head back and listen for breathing. If not breathing normally, pinch nose and cover the mouth with yours and blow until you see the chest rise. Give 2 breaths. Each breath should take 1 second.

3. PUMP ______
If the victim is still not breathing normally, coughing or moving, begin chest compressions. Push down on the chest 11/2 to 2 inches 30 times right between the nipples. Pump at the rate of 100/minute, faster than once per second.
CPR

• Place your fingers on the victim's chin and listen for breathing.

• Pinch their nose and tilt their head back slightly by placing two fingers on their chin.
- Cover mouth and blow twice.
- Breaths should be steady and last for 1 second.
• If the victim is still not breathing normally, coughing or moving, begin chest compressions.
• Find the base of the sternum with two fingers.
• Place your palm over the top of your fingers.

• Place your other palm over the top of your hands, interlocking your fingers.
• Place your other palm over the top of your hands, interlocking your fingers.
• Push down on the chest 1½ to 2 inches 30 times right between the nipples.
• Pump at the rate of 100/minute (faster than once per second).
• Repeat process from the breathing to compressions until help arrives or the victim is revived.
Quiz # 1

Name__________________

1) How much room should be in the end of your shoes?

2) What vertebrae should the top of your backpack cross?

3) What does R.I.C.E. stand for?

4) What angle should your arm be at in a sling?

5) What is the name of the book you can read for extra credit?

6) How many points do you lose for an unexcused absence?

7) If a slope of a hillside has a greater angle would it be more or less likely to have an avalanche?

8) How does the surface of terrain effect landslide?

9) What is the first thing you should do in case of an emergency?

10) How many compressions to breaths are required when administering CPR?
Quiz # 1

Name__________________

1) How much room should be in the end of your shoes?
   \[ \frac{1}{2} \text{ inch} \]

2) What vertebrae should the top of your backpack cross?
   7th

3) What does R.I.C.E. stand for?
   Rest Ice Compression Elevation

4) What angle should your arm be at in a sling?
   90 degrees

5) What is the name of the book you can read for extra credit?
   Hatchet

6) How many points do you lose for an unexcused absence?
   5

7) If a slope of a hillside has a greater angle would it be more or less likely to have an avalanche?
   More likely

8) How does the surface of terrain effect landslide?
   The more firm the more stable or the looser the more unstable

9) What is the first thing you should do in case of an emergency?
   Call 911

10) How many compressions to breaths are required when administering CPR?
    30 compressions to 2 breaths
1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will demonstrate ability to read and navigate with a map.
   2. By the end of the class, all students will demonstrate ability to use a compass.
   3. By the end of the class, all students will know how to get unlost in the wilderness.

2. Equipment: (for a class of 30 students)
   1. Compasses
   2. Maps
   3. Pencils
   4. Construction paper

3. Protocol
   • Remind class of the existing protocols.
   • Start and stop on the signals.
   • Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   • Safety
   • Make sure kids do journal entry

4. Class Rules:
   • Remind class of existing rules. These should be posted in a visible location in the gym.
   • Respect each other and the equipment.
   • Safety
**Instant Activity:** Compass Introduction; the students should each get a compass when they walk into the class. Take the students on a tour of the school and the surrounding campus. Allow them a chance to face different directions in different areas of the school grounds and see what happens to the needle of the compass when you turn.

**Set Induction:** When you are out hiking and backpacking in the wilderness there can be a chance that you will be lost. Don’t panic! Today we will learn how to use tools to assist you in finding your way back out of the wilderness, into the safety of your own home.

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<td>• Encourage your students to bring their own backpacks and good shoes. Depending on the schools, equipment and community, you may require the students to bring their own equipment as well. Students should mark their name on their equipment.</td>
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<td>• In preparation for this class, check the equipment is organized into proper groups.</td>
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<td>• Mark with cones and posters where equipment area should be laid out and all of the boundaries.</td>
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<td>• Have students carry all equipment to the proper areas at the beginning of each lesson.</td>
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<tr>
<td>• Try and work with students in groups of 2-4; safety is in numbers.</td>
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<tr>
<td>• Have students bring materials to class but make sure to accommodate students who cannot afford materials.</td>
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</table>
- If there is not enough equipment you can work in groups.

**Informing Task:** First we are first going to learn how to use a compass. When I say **Go** I’d like you to spread out in the field, with your compasses and listen hear my next instructions. **“Go”**

| Teacher demonstrates each task then goes around helping. | I am now going to explain and demonstrate to everyone how to use a compass. |
| Teacher explains how the sun rises in the east and sets in the west. | Don’t panic. |
| You should do this activity on the playground, baseball field, or football field. | Be accurate in your measurement. |

- Hold the compass flat in front of your chest so that the compass needle floats freely and points to magnetic north.
- Rotate the entire compass housing until the needle sits within the orienting arrow stenciled onto the base of the compass housing. (Usually the orienting arrow is red.) The zero degree mark on the compass housing and the north end of the needle should be aligned pointing north.
- Keep the orienting arrow and the compass needle pointing north. Twist the base plate until the direction-of-travel line points at the distant landmark you wish to move toward. Double-check to make sure everything is still properly aligned.

- Don’t confuse the north end of the compass needle with the south end.
- Find north and walk 10 paces.
- Find east and walk 10 paces.
- Find south and walk 10 paces.
- Find west and walk 10 paces.
<table>
<thead>
<tr>
<th>The number of degrees marked on the compass dial where the direction-of-travel line intersects the compass dial is the direction to the distant landmark.</th>
</tr>
</thead>
</table>

**Informing Task:** Next we will learn how to orient a map with your compass. When I say **Go** grab one of these maps and spread out in our space and listen for directions. “**Go**”

- Teacher demonstrates each task then goes around helping.
- Make a map ahead of time for the area you will be practicing in.
- You should do this activity on the playground, baseball field, or football field.

- Find the declination diagram in the map’s margin. It looks like a little V and tells you the difference between magnetic north compass and map north.
- Note the number of degrees magnetic north is to the left or right of the map’s north.
- Twist the compass baseplate of the compass until the direction of travel line on the plate lines up with the zero mark on the compass dial.
- Line up one of the adjusted long sides of the compass with one of the map’s north-south margins. Make sure the direction of travel arrow on the compass points to north on the map.
- Rotate map and compass until the needle of the compass points to the number of degrees the

- Take your time.
- Be accurate in your measurement.
- Don’t confuse the north end of the compass needle with the south end.

- Find the north end of the map
**Informing Task:** Now we will learn how to use your map with your compass. When I say **Go** spread out in our space and listen for directions. “**Go**”

- Teacher demonstrates each task then goes around helping.
- Make a map ahead of time for the area you will be practicing in.
- You should do this activity on the playground, baseball field, or football field.

<table>
<thead>
<tr>
<th>Teacher demonstrates each task then goes around helping.</th>
<th>Orient your map using a compass.</th>
<th>Take your time.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make a map ahead of time for the area you will be practicing in.</td>
<td>Study wilderness features on the map and try to compare them to the wilderness around you.</td>
<td>Be accurate in your measurement.</td>
</tr>
<tr>
<td>You should do this activity on the playground, baseball field, or football field.</td>
<td>Limit the size of the map area where you are in by identifying a major feature of the landscape, such as a body of water or a mountain.</td>
<td>Don’t confuse the north end of the compass needle with the south end.</td>
</tr>
<tr>
<td></td>
<td>If you can identify two far-off terrain features pinpoint your location by noting the relative distances between yourself and two terrain features.</td>
<td>Ask yourself if you are to one side of a major restraining line such as a river or road.</td>
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<td></td>
<td>Set the necessary direction on your compass and start walking.</td>
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</table>

**Informing Task:** Now we will learn how to get unlost without your map with your compass. When I say **Go** grab one of these maps and spread out in our space and listen for directions. “**Go**”

- Teacher demonstrates each task then goes around helping.
- You should do this activity on the playground, baseball field, or football field.

<table>
<thead>
<tr>
<th>Teacher demonstrates each task then goes around helping.</th>
<th>Climb a nearby hill, ridge or tree to get a better view of the area.</th>
<th>Only move on if you have a clear picture of where you are and where you should go.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Look for signs of direction. The sun rises in the east and sets in the west.</td>
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<td></td>
<td></td>
<td>Name one thing to do if you’re lost.</td>
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<td></td>
<td></td>
<td>Always let someone know where you’re going (including the exact trail or route if you know it ahead of time) and when you expect to get back</td>
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</tbody>
</table>
- Try to remember what direction you were traveling in.
- Try to retrace your steps to the last point at which you knew your position or find your way back to camp or the school.
- Stay put and wait for rescuers if you have no idea in what direction you should go.
- Blow a whistle or yell if you're traveling with a group. Three short blasts on a whistle is a widely recognized distress signal.
- Light smoky fire or lay brightly colored clothing or tarps on a hill or clearing to draw attention to yourself.

**Closure/Assessment:**

Today, in class we learned what we need to do to navigate in the nature. Let’s see how much you remember. Raise your hand if you think you can answer my questions.

1. Can you name one thing to do if you're lost?
2. In which direction does the sun rise?
3. In which direction does the sun set?
Objectives (Specific, Behavioral, Assessable)

A. Students
   1. By the end of class, students will have a better understanding of the symptoms of dehydration.
   2. Students will know how to hike using the buddy system.

B. Teacher
   1. Being this is the first hike, concentrate on establish hiking safety rules.

Equipment: (for a class of 30 students)

1. Tennis shoes or hiking boots
2. Pants or shorts
3. Compass for kids who want to use compass.

Protocol
- Remind class of the existing protocols.
- Stay together
- Start and stop on the signals.
- Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
- Safety
- Follow all instructions
- Use knowledge from previous lessons
- Make sure kids do journal entry

Class Rules:
1. Remind class of existing rules. These should be posted in a visible location in the gym.
2. Respect each other and the equipment.
3. Safety
**Instant Activity:** Begin by pairing students up (number off students 1234, repeat going down the line and have like numbers pair up together). Groups line up on the base line in groups. The activity will be in relay format, teacher will inform groups the movements they will perform (skip to mid court and back; tag, bear crawl to free throw line and back; tag, wheel barrel to mid court and back; tag, sprint to end line and back; tag, high knee to end line and back; tag, lunge to mid court and back. Finish!

**Set Induction:** Great warm up, you all did an excellent job of working together and as a team. Today will be going through the rules necessary to safely hike at school.

**Informing Task:** Today we will be going on our first hike and going over some of the class rules. What are some rules you think as a class we should abide by? (take suggestions) As a class let’s walk to the trailhead, stop and wait for instruction.

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<tbody>
<tr>
<td>• Teacher leads the hike.</td>
<td>• First and foremost we all need to stick together. For this class we will always use the buddy system. We have a very special class and were all going to become good friends. Over this next month will be depending a lot on each other to perform various tasks. So our number one rule for this class will be, always stay together. Let’s start hiking.</td>
<td>• The person in front and behind you should be only a few yards away.</td>
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<tr>
<td>• Make sure to count the number off students in class so all students are accounted for.</td>
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<tr>
<td>• Students should have proper dress attire.</td>
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</table>

• Stop, great job class I’m really proud of everyone staying together. Is anyone experiencing problems with their shoes or any other comfort issues? Suggest different shoes, socks, clothes. Does anyone have shoes they think are holding up well on the hike? Why? Continue! | • | • |
<table>
<thead>
<tr>
<th></th>
<th>Stop, let stop to take a drink. Try to drink as we are hiking so we have enough fluids to keep us going. Good, keep it up!</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stop, for today this is as far as will be going. For the hike back will be heading down hill. Let's remember to stay together and walk at a safe pace since will have gravity working for us so try and keep a steady pace.</td>
</tr>
<tr>
<td></td>
<td>Keep a steady pace.</td>
</tr>
<tr>
<td></td>
<td>What are two cues we should remember?</td>
</tr>
</tbody>
</table>

**Closure/Assessment:** Stop, we did a great job today when I say go will finish by getting a drink either from the fountain or your water bottles. Does anyone have a dry mouth? You should be making a conscious effort to drink plenty of fluids on the days you have P.E. because some of you may be experiencing slight dehydration. Dehydration occurs when the body loses too much body fluid; the first signs of mild dehydration is increased thirst, dry mouth and sticky saliva. Let's end the day getting hydrated, go ahead and get a drink.
Physical Education Teacher Education Program
Central Washington University
Backpacking and Hiking
Hike and Mapping
Lesson #8

1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will demonstrate the ability to make their own map from their hike.

2. Equipment: (for a class of 30 students)
   1. Compasses
   2. Maps
   3. Pencils
   4. Construction paper
   5. Hiking boots
   6. Backpacks w/equipment in the pack
   7. Poly spots
   8. Hula hoops
   9. Jump ropes
   10. Mats
   11. Anything to use for obstacle courses

3. Protocol
   • Remind class of the existing protocols.
   • Start and stop on the signals.
   • Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   • Safety
   • Stay together

4. Class Rules:
   • Remind class of existing rules. These should be posted in a visible location in the gym.
   • Respect each other and the equipment.
   • Safety
   • Stay together
**Instant Activity:** Gear up; At the beginning of class the students come in and gather all of their equipment and backpacks. They must go through their checklist with their partner. After they gear up they will go through an obstacle course until the rest of the class is ready to hike.

**Set Induction:** When you are out hiking and backpacking in the wilderness there can be challenges that face you. Today is our first hike challenge and we will go on a hike together and test some of our skills on the hike.

<table>
<thead>
<tr>
<th>MAF/Instructional technique</th>
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<th>Refinements</th>
<th>Applications</th>
</tr>
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<tbody>
<tr>
<td>Encourage your students to bring their own backpacks and good shoes. Depending on the schools, equipment and community, you may require the students to bring their own equipment as well. Students should mark their name on their equipment.</td>
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<tr>
<td>In preparation for this class, check the equipment is organized into proper groups.</td>
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<tr>
<td>Mark with cones and posters where equipment area should be laid out and all of the boundaries.</td>
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<tr>
<td>Have students carry all equipment to the proper areas at the beginning of each lesson.</td>
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<tr>
<td>Try and work with students in groups of 2-4; safety is in numbers.</td>
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<tr>
<td>Have students bring materials to class but make sure to accommodate students who cannot afford materials.</td>
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</tbody>
</table>
- If there is not enough equipment you can work in groups.
- Hand out materials during the instant activity.

**Informing Task:** When I say **Go** I’d like you to group to our exit and wait for me to guide you on the hike. As we go you will develop your own map. **“Go”**

- Teacher leads the students on the hike.
- Students draw their maps as they hike during periodic stops.
- Teacher should point out important landmarks.

- Make sure to develop your map as we go.
- Add directions on the map as you go.
- Look for important landmarks
- Mark your paces.
- Draw at least 5 major landmarks

**Closure/Assessment:**

1. Review any skills from previous lessons learned with remaining time. Check all of the students’ maps by having them turn them in at the end of class. Today, in class we learned how to draw maps of our hike. Let’s see how much you remember. Raise your hand if you think you can name some important landmarks.
Objectives (Specific, Behavioral, Assessable)
A. Students
   1. By the end of class, students will have a better understanding of the natural environment around them.

Equipment: (for a class of 30 students)
   1. Pencil and paper

Protocol
   1. Remind class of the existing protocols.
   2. Stay together
   3. Start and stop on the signals.
   4. Safety
   5. Follow all instructions
   6. Work in groups
   7. Use knowledge from previous lessons
   8. Make sure kids do journal entry

Class Rules:
   1. Remind class of existing rules. These should be posted in a visible location in the gym.
   2. Respect each other and the equipment.
   3. Safety
**Instant Activity:** Begin by leading your class to the head of the designated trail for the day.

**Set Induction:** Today I would like everyone to really concentrate on your surrounding environment. Everyday, we walk by or miss things in our environment because we aren’t paying attention. On this hike I would like everyone to examine or see something they have never noticed before. Keep your eyes peeled and your mind open!

**Informing Task:** Let’s begin hiking, and remember try to be very observant today. Help your classmates if they are having trouble exploring on their own and feel free to explore a little bit but remember me must hike as a class and keep on the trail. Let’s begin!

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<th>Applications (Challenges)</th>
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<tr>
<td>• Make sure you have hiked this trail before. Teacher leads the hike. Make sure to count the number of students in class so all students are accounted for. Students should have proper dress attire.</td>
<td>• Make children stop, you will play “I Spy”. Teacher picks an animal, plant or mineral. Students then ask; yes or no questions to figure out what it is. Whoever guess correctly is the next to say “I Spy”</td>
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</table>

**Informing Task:** Stop, when I say go follow me to the downed tree. We’re not going to touch the tree just yet. Sit back, examine and discuss with your classmates what if any life lives in this fallen down tree. GO!

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<tr>
<td>• Pick out a dead tree you can examine with living organisms in the bark. (Do this on your own hike) Teacher leads the hike. Make sure to count the number of students in class so all students are accounted for. Students should have proper dress attire.</td>
<td>• Have all students tap the log, does it feel solid or hallow?</td>
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<td>•</td>
<td>• Smell, does it smell wet or dry?</td>
<td>•</td>
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</table>
• Turn over the log or lift up the piece of bark. Remember do this carefully because this is home to many living creatures.

• Write down what you see. Draw one of the organisms and write down its name.

**Informing Task:** Well I hope everyone took the time today to see something they hadn’t. When I say go, place the logs back to their original form, gather all your material and start walking as a class back to the gym. GO!

**Closure/Assessment:** Good job today, my hope is that we learned or saw something new today. For your homework, I would like you to look up what you drew today in the encyclopedia or another resource and write down what this organism eats, where it lives, and one interesting fact. You earned it, go ahead and get a drink and then please line up.
1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will demonstrate the knowledge to avoid a fire while outdoors.
   2. By the end of the class, the students will know the steps necessary to start a fire.
   3. By the end of the class, all students will attempt to start a fire.

2. Equipment: (for a class of 30 students)
   1. Water Buckets
   2. Stones
   3. Cotton Balls
   4. Petroleum Jelly
   5. Box of Waterproof Matches
   6. Plastic Film Canisters (or Ziplock Baggies)
   7. Dry Kindling
   8. Sturdy Sapling (about 2 ½ feet long)
   9. Nylon Cords
   10. Cedar Hand Holds
   11. Cedar Spindle Branches (about ¾ inch wide and about 6 inches long)
   12. Cedar Fireboards (about ½ inch thick and flat)

3. Protocol
   • Remind class of the existing protocols.
   • Start and stop on the signals.
   • Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   • Safety
   • Use fire safety
   • Follow all instructions
   • Make sure kids do journal entry

4. Class Rules:
   • Remind class of existing rules. These should be posted in a visible location in the gym.
   • Respect each other and the equipment.
   • Safety
**Instant Activity:** Stop, Drop, and Roll: Students travel around in open space; when they are tagged by the fire starters (any number of students you choose) they must stop, drop and roll. They must roll around to put out the fire until the fire fighters (any number of students) come and put them out by tagging them.

**Set Induction:** Fire can be used for so many things; If you are stuck in the woods for an extended period of time you can use fire for warmth; If you need clean water and food fire can assist you with eating and drinking; fire is powerful and it must be controlled and respected. Today we will learn do these things as well as creating fire.

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<td>• Mark with cones and posters where equipment area should be laid out and all of the boundaries.</td>
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<td>• Have students carry all equipment to the proper areas at the beginning of each lesson.</td>
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<tr>
<td>• Try and work with students in groups of 2-4; safety is in numbers.</td>
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<tr>
<td>• If possible, have students bring as many materials as possible to class but make sure to accommodate students who cannot afford materials.</td>
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<tr>
<td>• If there is not enough equipment you can work in groups.</td>
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<td></td>
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<tr>
<td>• Make sure to work in an area where you can have proper</td>
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<tr>
<td>fire safety, a large, open, dirt area is ideal.</td>
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<tr>
<td>• See if the local fire department will assist in any way.</td>
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<tr>
<td>• Check with administrators before carrying out lesson.</td>
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**Informing Task:** We are first going learn how to use safety before we light fires so if something happens we can handle the situation. When I say **Go** I’d like you to spread out into open space, lay out your equipment in front of you, sit behind it and look up ready to hear my next instructions. **Go**

- Emphasize that it is important for us to go slow to ensure safety. We don’t want anyone to hurt themselves learning these new skills.
- Teacher demonstrates each task then goes around helping.
- Check to make sure students are progressing properly and understanding the information.
- Walk around and have those who can complete task help others.
- Prepare a check list ahead of time.

<table>
<thead>
<tr>
<th>I am now going to explain and demonstrate to everyone how to properly use fire safety and to avoid an out of control fire. If you have questions we will cover them at the end.</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>• Explain and demonstrate the different methods to each task.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• When you have all of your safety measures properly in place go through your check list and allow your partners to practice too.</td>
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</tbody>
</table>

- Keep a source of water on hand when grilling or having a campfire.
- Carry a cellular phone in case you need to make an emergency phone call.
- Make sure you remain at a safe distance from campfires and grills especially when lighting.
- Light your fire or grill in a safe, open place, away from anything flammable and keep anything flammable away from fire and heat.
- Keep at least a 3-foot distance between a campfire or grill and anything else.
- Dig a 1-foot deep hole with a stick or tool.
- Build a barrier around your fire pit with large stones.

<p>| What do you do if your clothes catch fire? |  |  |
| What is the safety distance? |  |  |
| Any questions? |  |  |</p>
<table>
<thead>
<tr>
<th>Informing Task: Now we will learn Use a cotton ball covered in petroleum jelly to make a great fire starter to add to your back packing kit. When I say “GO” I would like get a jar of petroleum jelly for your group and three cotton balls per person, and spread out in your fire area facing me. GO</th>
</tr>
</thead>
</table>
| - In case your clothing catches fire: stop, drop and roll.  
- Put out all fires before leaving the campsite or grill area.  
- If the fire is spreading too quickly, get everyone away and call 911. |
| - Have materials pre-calculated for disbursement.  
- Teacher demonstrates each task then goes around helping.  
- Check to make sure students are progressing properly and understanding the information.  
- Explain that you can store the fire starters for future use.  
- Check with administrators for approval on fire.  
- Only pass out enough matches for demonstration.  
- I suggest only allowing one fire at a time for supervision sake.  
- Have a fire extinguisher on hand.  
- Roll each cotton ball in the jelly until it is completely covered.  
- Store fire starter in a plastic film canister (or Ziplock baggie).  
- Place your dry kindling on top of two or three cotton balls  
- Light the cotton ball.  
- Any Questions? |
**Informing Task:** You are now going to learn how to make a bow-drill for starting a fire. When I say “GO” I would like you get a bundle of your materials to make the bow drill, spread out to your space where you can see me, and wait for my instructions. **GO**

| Teacher demonstrates each task then goes around helping. | I am now going to explain and demonstrate to everyone how to make a bow-drill. | Make your bow from a light sturdy sapling about 2 ½ feet long. |
| Check to make sure students are progressing properly and understanding the information. | Rub your hands together back and forth and see how heat comes through friction. | Tie a piece of nylon cord from one end of the bow to the other. |
| Walk around and have those who can complete task partner with a learner. | Explain that a bow-drill consists of four parts: the bow, the hand-hold, the spindle or drill and the fireboard. | If you don't have a nylon cord, you can use string or a shoelace. |
| Have supplies pre arranged to make the bow-drill. | Explain and demonstrate the different methods and the purpose each task. | Use a dry, soft wood such as cedar to make the other parts of the drill. |
| If there is lack of equipment work in groups. | When you have had a chance to make a bow-drill, let your partners try. | The hold piece should fit into your hand firmly. |

- **What kinds of wood should you use to make your bow drill?**

- **Make your bow from a light sturdy sapling about 2 ½ feet long.**

- **Tie a piece of nylon cord from one end of the bow to the other.**

- **If you don't have a nylon cord, you can use string or a shoelace.**

- **Use a dry, soft wood such as cedar to make the other parts of the drill.**

- **The hold piece should fit into your hand firmly.**

- **Create a small depression in one side of the hand-hold for the spindle to ride in.**

- **Create your spindle from a branch about ¾ inch wide, about 6 inches long, and strait.**

- **Both ends of the spindle should be at a dull point**

- **You want your fireboard about a 1/2-inch thick and flat on both sides.**

- **Create a depression in it similar to the hand-hold for the other side of the spindle**
<table>
<thead>
<tr>
<th><strong>Informing Task:</strong> You are now ready to learn how to use a bow-drill for starting a fire. When I say “GO” I would like you to get in your fire area, with your bow-drill and listen for my directions. <strong>GO</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher demonstrates each task then goes around helping.</strong></td>
</tr>
<tr>
<td><strong>Check to make sure students are progressing properly and understanding the information.</strong></td>
</tr>
<tr>
<td><strong>Walk around and have those who can start a fire help their partners.</strong></td>
</tr>
<tr>
<td><strong>Check with administrators for approval on fire.</strong></td>
</tr>
<tr>
<td><strong>I suggest only allowing smoke at this time for safety sake.</strong></td>
</tr>
<tr>
<td><strong>Have a fire extinguisher on hand.</strong></td>
</tr>
<tr>
<td><strong>Use extreme caution.</strong></td>
</tr>
<tr>
<td><strong>The teacher should try to complete the whole demonstration to gain fire.</strong></td>
</tr>
<tr>
<td><strong>Practice before showing the class for success.</strong></td>
</tr>
<tr>
<td><strong>I am now going to explain and demonstrate to everyone how to use a bow-drill.</strong></td>
</tr>
<tr>
<td><strong>Explain and demonstrate the different methods and the purpose each task.</strong></td>
</tr>
<tr>
<td><strong>When you have had a chance to use a bow-drill, let your partners try.</strong></td>
</tr>
<tr>
<td><strong>You’re aiming for the students to gain smoke in this activity, not fire.</strong></td>
</tr>
<tr>
<td><strong>Explain how they will use the dry vegetation wadded together to ignite with coal created from the bow-drill in the fire board.</strong></td>
</tr>
<tr>
<td><strong>Place your fire board on the ground</strong></td>
</tr>
<tr>
<td><strong>Place your left foot across it to hold it stable while your right knee is on the ground.</strong></td>
</tr>
<tr>
<td><strong>Wrap the cord on your bow around the spindle one time</strong></td>
</tr>
<tr>
<td><strong>Put the bottom end of the spindle in the notch on thr fire board.</strong></td>
</tr>
<tr>
<td><strong>Put the top end of the spindle into the handhold notch and press down on the handhold.</strong></td>
</tr>
<tr>
<td><strong>Hold one end of the bow in your right hand with the cord facing inward</strong></td>
</tr>
<tr>
<td><strong>Press down on the handhold with your left hand.</strong></td>
</tr>
<tr>
<td><strong>Move your right arm back and forth in a sawing motion, spinning the spindle.</strong></td>
</tr>
<tr>
<td><strong>Increase the speed of the motion and the intensity of your pressure until the fire board begins to smoke.</strong></td>
</tr>
<tr>
<td><strong>Any questions?</strong></td>
</tr>
<tr>
<td><strong>What are some vegetation materials you can use?</strong></td>
</tr>
</tbody>
</table>
Closure/Assessment:

The skills presented in this sample lesson will realistically take more than one class to teach at any level. The following are some of the questions you might use to check knowledge. I suggest a classroom assessment chart be used to record skills. Here are sample questions you could ask to check for understanding:

Today, in class we learned a lot about fire. Let’s see how much you remember. Raise your hand if you think you can answer my questions:

1) What do you do if your clothes catch fire?
2) What is the safety distance?
3) What kinds of wood should you use to make your bow drill?
4) What are some vegetation materials you can use?
5) Do Quiz 2

You can have students turn in their notebooks to check their progress or you can have them keep the notebooks for studying.
Starting a Fire Using a Bow-Drill

- Make your bow from a light sturdy sapling about 2 ½ feet long.
- Tie a piece of nylon cord from one end of the bow to the other.
- If you don't have a nylon cord, you can use string or a shoelace.
- Use a dry, soft wood such as cedar to make the other parts of the drill.
- The hold piece should fit into your hand firmly.
- Create a small depression in one side of the hand-hold for the spindle to ride in.
- Create your spindle from a branch about ¾ inch wide, about 6 inches long, and strait.
- Both ends of the spindle should be at a dull point.
- You want your fireboard about a 1/2-inch thick and flat on both sides.
- Create a depression in it similar to the hand-hold for the other side of the spindle.
• Gather materials in a bundle that will easily light to a fire

• Place your fire board on the ground

• place your left foot across it to hold it stable while your right knee is on the ground.

• Wrap the cord on your bow around the spindle one time
• Put the bottom end of the spindle in the notch on the fire board.
• Put the top end of the spindle into the handhold notch and press down on the handhold.
• Hold one end of the bow in your right hand with the cord facing inward.
• Press down on the handhold with your left hand.
• Move your right arm back and forth in a sawing motion, spinning the spindle.
• Increase the speed of the motion and the intensity of your pressure until the fire board begins to smoke.

• When smoke turns to an amber carefully remove it with a tool.
• Place it in your fire-starting materials and blow gently.

• Fire!
Quiz # 2

Name_________________

1) In which direction does the sun rise?

2) In which direction does the sun set?

3) When you have a dry mouth, what is that a sign of?

4) What are landmarks helpful for?

5) When lighting a fire how deep should you dig your hole?

6) What is the safety distance for your fire and surrounding objects?

7) How long should your stick be when making a bow?

8) What is the best thing to use for a barrier when creating a fire pit?

9) What do you do if your clothes catch fire?

10) What type of wood is best to start fire with a spark?
Quiz # 2

Name___________________

1) In which direction does the sun rise?
   **East**

2) In which direction does the sun set?
   **West**

3) When you have a dry mouth, what is that a sign of?
   **Dehydration**

4) What are landmarks helpful for?
   **Getting unlost**

5) When lighting a fire how deep should you dig your hole?
   **1 foot**

6) What is the safety distance for your fire and surrounding objects?
   **3 feet**

7) How long should your stick be when making a bow?
   **2 ½ feet**

8) What is the best thing to use for a barrier when creating a fire pit?
   **Large stones**

9) What do you do if your clothes catch fire?
   **Stop Drop and Roll**

10) What type of wood is best to start fire with a spark?
    **Dry kindling**
Objectives (Specific, Behavioral, Assessable)
   A. Students
      1. Students will be able to develop a hike by plotting out checkpoint on a map.

Equipment: (for a class of 30 students)
   1. Pencil
   2. Notebook

Protocol
   • Remind class of the existing protocols.
   • Start and stop on the signals.
   • Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   • Safety
   • Use fire safety
   • Follow all instructions
   • Make sure kids do journal entry

Class Rules:
   • Remind class of existing rules. These should be posted in a visible location in the gym.
   • Respect each other and the equipment.
   • Safety
   • Make sure kids do journal entry
**Instant Activity:** Climber Challenge- For this instant activity teams of 4 or 5 are made. Set 5 cones out in front of each group evenly (about 15 feet apart). This activity is a relay, have the students imagine as if they were really climbing a mountain. First person in relay imagines as if they were running the flats at the base of the mountain. Students weave in and out of cones. Tag the second person in line. Second person walks at a quick pace, third person does high knees up the mountain, fourth and fifth in line both bear crawl to finish the challenge.

**Set Induction:** As you all know hiking and backpacking can be very fun. But making sure your hike is going to be a safe one is the biggest challenge of all. So today we are going to develop our own hikes, making sure they are safe and an appropriate distance.

**Informing Task:** When I say go, get a pencil and a notebook and let’s meet out on the field.

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| • All students need to have a pencil and notebook.  
• Make sure all students are accounted for. | • First, hikes need to be developed so they can be hiked safely. Think of your first 3 hikes and write down 5 aspects you liked. Example (slope, terrain, water,) | | |

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</table>
| • All students need to have a pencil and notebook.  
• Students should be spread out on the field so they can work individually. But close enough all students can here the instruction. | • Next using your 5 favorite aspect and draw a hike here at school you would like to go on. Include stopping points, elevation and what you would bring for a 32 degree, day hike. | | • Have your partner check and see if you brought the proper equipment. |

**Informing Task:** Next for fun, find a partner and make a hike for them.

**Closure/Assessment:** Well your all have do great job this quarter. I thought today would be a fun day to relax and enjoy the weather. Be prepared to get a work out.
1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will demonstrate the ability to make conscientious changes by making corrections to their maps.
   2. Students will complete their individual hike and make changes/corrections.
   3. Students will demonstrate ability to constructively use previous knowledge from prior lessons.
   4. Students will also gain confidence by following the maps that they have already made through:
      a. Achievement
      b. Discovery

2. Equipment: (for a class of 30 students)
   1. Backpacks (Contents covered in previous lessons)
   2. Maps (Made by students in previous lesson plan)
   3. Proper Clothing (Covered in previous lessons)
   4. Walkie-Talkies (If appropriate for the school)
   5. Cell Phones (one per group)

3. Protocol
   - Remind class of the existing protocols.
   - Stay together
   - Start and stop on the signals.
   - Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   - Safety
   - Follow all instructions
   - Work in groups
   - Use knowledge from previous lessons
   - Make sure kids do journal entry

4. Class Rules:
   - Remind class of existing rules. These should be posted in a visible location in the gym.
   - Respect each other and the equipment.
   - Safety
**Instant Activity:** Begin by leading your class to the head of the designated hiking areas.

**Set Induction:** This is a chance for you students to utilize something you have made yourselves. We have learned how to make maps, how to use them and we made our own maps. Now we will follow the maps you have made for your hikes and make any changes or additions to your map that you notice.

<table>
<thead>
<tr>
<th>MAF/Instructional technique</th>
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<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage your students to bring their own backpacks and good shoes. Depending on the schools, equipment and community, you may require the students to bring their own equipment as well. Students should mark their name on their equipment.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>In preparation for this class, check the equipment is organized into proper groups.</td>
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<tr>
<td>Have students carry all equipment to the proper areas at the beginning of each lesson.</td>
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<tr>
<td>Try and work with students in groups of 2-4; safety is in numbers.</td>
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</tr>
<tr>
<td>Check students maps before class to make sure each student has one. Also make sure their maps are sufficient enough to guide them on their hike; if not the teacher should guide the students.</td>
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</tr>
</tbody>
</table>

**Informing Task:** When I say “GO” we will split up in your groups and follow my instructions. **GO**

- If any student does not have a map or their map is
- I would like you to come and check with me to see if
- Keep a steady pace.
- Try and note at least three changes.
<table>
<thead>
<tr>
<th>insufficient group them with students who meet these criteria.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Group students together that will work responsibly.</td>
</tr>
<tr>
<td>• The teacher can guide a group if there are other exceptions as well.</td>
</tr>
<tr>
<td>• Double check the maps that the students will use before they leave.</td>
</tr>
<tr>
<td>• Give the students a reasonable time in which they should complete each individual hike.</td>
</tr>
<tr>
<td>• Give the students a time to be back by.</td>
</tr>
<tr>
<td>• Allow the students to hike for the majority of the class period with a little time left for the closure.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>your maps are appropriate.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Leave with your groups and try to see if you can complete everyone's hike within your group.</td>
</tr>
<tr>
<td>• Remember safety and all of the things you have learned so far to keep you safe.</td>
</tr>
<tr>
<td>• Try to correct any changes or make any adjustments to your map.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>• Make sure to note changes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Stay together.</td>
</tr>
<tr>
<td>• Count paces between landmarks.</td>
</tr>
<tr>
<td>• Try and make all the corrections to the map to make it accurate.</td>
</tr>
</tbody>
</table>

**Closure/Assessment:**

Check to make sure that all of the students have made it back. I suggest using an attendance check list as they arrive. Close with the students sharing what their hike was like. Here are sample questions you could ask:

Today, in class we completed our own individual hikes. These hikes you can go on throughout the year and even as you get older.

1. What are some interesting changes to the environment that you noticed?
2. How many of you made significant changes to your map and what were they?
3. Did everyone have a chance to do their hike with their group?
4. Any other questions/comments?
Objectives (Specific, Behavioral, Assessable)
   A. Students
      1. Students will show their ability to build a fire in a team setting.
      2. Students will demonstrate ability to constructively use previous knowledge from prior lessons.

Equipment: (for a class of 30 students)
   1. Backpacks (Contents covered in previous lessons)
   2. Maps (Made by students in previous lesson plan)
   3. Proper Clothing (Covered in previous lessons)
   4. Walkie-Talkies (If appropriate for the school)
   5. Cell Phones (one per group)
   6. Water Buckets
   7. Stones
   8. Cotton Balls
   9. Petroleum Jelly
   10. Box of Waterproof Matches
   11. Plastic Film Canisters (or Ziplock Baggies)
   12. Dry Kindling
   13. Sturdy Sapling (about 2 ½ feet long)
   14. Nylon Cords
   15. Cedar Hand Holds
   16. Cedar Spindle Branches (about ¾ inch wide and about 6 inches long)
   17. Cedar Fireboards (about ½ inch thick and flat)

3. Protocol
   1. Remind class of the existing protocols.
   2. Stay together
   3. Start and stop on the signals.
   4. Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   5. Safety
   6. Follow all instructions
   7. Work in groups
   8. Use knowledge from previous lessons
9. Make sure kids do journal entry

4. Class Rules:
   1. Remind class of existing rules. These should be posted in a visible location in the gym.
   2. Respect each other and the equipment.
   3. Safety
**Instant Activity:** Begin by leading the class to the head of the trail.

**Set Induction:** Today is the first of several problem solving days. Last week we learned how to build a fire and today will be putting that skill to use.

**Informing Task:** When I say go let's say together and begin hiking.

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<td>In preparation for this class, check the equipment is organized into proper groups.</td>
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<tr>
<td>Prepare the equipment necessary for starting a fire.</td>
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<tr>
<td>Place the equipment at the end of the hike. This will need to be done before class by the teacher (not a T.A.).</td>
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<tr>
<td>Refer to lesson 10 MAF/Instructional Techniques.</td>
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**Informing Task:** When I say go, with your group begin to start making fire.

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<td>Check with administrators for approval on fire.</td>
<td>If you're not able to start the fire, switch roles.</td>
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<td>I suggest only allowing smoke for safety sake.</td>
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<tr>
<td>Always have a fire extinguisher on hand.</td>
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<td>Use extreme caution.</td>
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<tr>
<td>The teacher should try to complete the whole demonstration to gain fire.</td>
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<td>Once children see smoke instruct them to let you</td>
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**Informing Task:** When I say go, pick up what you can and begin walking back to school.

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</table>
| • Teacher will need to go back and clean the fire site.  
• Students need to be responsible when walking with equipment. | • | • | • |

**Closure/Assessment:** Fire needs to be something students should almost be scared of. Each year hundreds of wild land fires are started by campers and if you don’t take the proper precautions the same could happen to you. Also, for this class either myself or the T.A. will make sure the fire site is clean; but when your making fire in the wilderness. You must be the one to clean the site remember littering is against the law and you will incur a hefty fine.
1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will demonstrate the knowledge of water safety.
   2. Students will also gain confidence by answering questions and demonstrate knowledge for:
      a. Purifying water
      b. How to save a drowning person
      c. How to treat hypothermia

2. Equipment: (for a class of 30 students)
   1. Backpacks (Contents covered in previous lessons)
   2. Proper Clothing (Covered in previous lessons)
   3. Walkie-Talkies (If appropriate for the school)
   4. Cell Phones (one per group)

3. Protocol
   - Remind class of the existing protocols.
   - Stay together
   - Start and stop on the signals.
   - Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   - Safety
   - Follow all instructions
   - Work in groups
   - Use knowledge from previous lessons
   - Make sure kids do journal entry

4. Class Rules:
   - Remind class of existing rules. These should be posted in a visible location in the gym.
   - Respect each other and the equipment.
   - Safety
**Instant Activity:** Begin by leading your class to the head of the designated hiking area.

**Set Induction:** If you are out hiking, it is probable that you will encounter water at some point. Today we will learn some of the risks that water brings, we will learn how to prevent certain dangers of water, and we will learn how to handle the situations that arise.

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<td>• In preparation for this class, check the equipment is organized into proper groups.</td>
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<tr>
<td>• Have students carry all equipment to the proper areas at the beginning of each lesson.</td>
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<tr>
<td>• Try and work with students in groups of 2-4; safety is in numbers.</td>
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<tr>
<td>• Have your hike for the day pre-chosen; know where you will carry out all of your instruction.</td>
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<tr>
<td>• Make sure to clear this lesson with administrators.</td>
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**Informing Task:** When I say “GO” we will go as a group on a hike down by some water and we will learn about water safety. **GO**

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<tr>
<td>• Teacher leads students on a pre-determined hike.</td>
<td>• Make sure to all stick together</td>
<td>• Stay close to eachother</td>
<td>• Name one way you can use water to help you.</td>
</tr>
</tbody>
</table>
- Make sure to avoid going too close to the water
- Only go as closely as needed by the water.
- Carry out all necessary safety precautions
- When you get to your pre disposed water site carry out the rest of your lesson.
- If unable to teach by water, go on a hike and find another spot to carry out this lesson

- Water covers most of the world; there is a good chance you will encounter it on your hikes.
- Water is one of the worlds strongest elements; you can use it to help you and it can hurt you

Informing Task: To start with we will learn how to retrieve water in the nature. When I say “Go” I would like you to spread out in a space facing me. “Go.”

- Emphasize that it is important to respect water and to always use safety.
- Use prior information from the fire lesson to explain that you can use fire to purify water.

- We are first going to learn one way to use water to help you.
- Explain and demonstrate how to can purify water
- Explain so students understand that boiling kills all organisms that prey on human bodies, but this method requires fire or heat.
- Be sure you understand how to use the device and have practiced with it before you head into the wilderness.

- Bring the water to a full, roiling boil.
- Name one way water can hurt you.
Informing Task: You are now ready to learn how to help someone who is drowning.

- Teacher explains and demonstrates each task then goes around helping.
- Check to make sure students are progressing properly and understanding the information.

Table:

<table>
<thead>
<tr>
<th>Teacher explains that the student should determine which method to use, depending on circumstances.</th>
</tr>
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<tbody>
<tr>
<td>Get a long stick or pole and reach it toward the drowning person. Tell them to grab it and pull him to safety.</td>
</tr>
<tr>
<td>Throw the drowning person an object attached to a rope and pull him to safety.</td>
</tr>
<tr>
<td>Row out to the drowning person and use one of the above two methods.</td>
</tr>
<tr>
<td>Get in the water yourself and swim to the drowning person only as a last resort and only if you're trained as a lifeguard. Realize that you're risking your life in doing this.</td>
</tr>
<tr>
<td>Talk to the person as you approach and tell him you'll be taking him back to shore. Even if he's panicking, your voice might help to calm him down.</td>
</tr>
<tr>
<td>Try to approach the person from behind and hook your arm over his chest as you sidestroke back to shore. If possible, tell the person to relax and float on his back.</td>
</tr>
<tr>
<td>Treat the drowning victim once he's safely in a boat or on shore</td>
</tr>
</tbody>
</table>

Informing Task: If a person becomes cold or wet in the wilderness there is a big chance that they can suffer from mild or severe hypothermia. Now that we know how to save a person in the water we will learn how to treat mild hypothermia.
- Teacher demonstrates and explains all of the steps for students
- Explain that you should Do everything in your power to prevent hypothermia before it occurs

<table>
<thead>
<tr>
<th>Steps for Treating Hypothermia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove the affected person from the cold, wet and/or windy environment.</td>
</tr>
<tr>
<td>Dry the person off, replacing wet clothing with dry clothing.</td>
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<tr>
<td>Shelter the person however possible: in a cave, under an overhang, in an improvised shelter such as a tent or under a rain fly.</td>
</tr>
<tr>
<td>Make sure he or she is wearing a dry hat: A large percentage of body-heat loss occurs through the head.</td>
</tr>
<tr>
<td>Cover the neck with something dry: A lot of heat is also lost through the neck.</td>
</tr>
<tr>
<td>Prepare a warm (not hot) beverage with and have the hypothermic person drink it.</td>
</tr>
<tr>
<td>Encourage the person to eat carbohydrate-rich foods.</td>
</tr>
<tr>
<td>Encourage the person to move around, generating heat and helping with rewarming.</td>
</tr>
<tr>
<td>Make the warm beverage a sweet one, to provide sugar (extra energy) for rewarming.</td>
</tr>
<tr>
<td>Fluids are more important than solids, even if cold: If the choice is between cold fluids and no fluids, choose cold fluids.</td>
</tr>
<tr>
<td>If hypothermia is severe, insulate the person from the ground and the surrounding cold by having him or her lie in a sleeping bag on a sleeping pad.</td>
</tr>
</tbody>
</table>

Informing Task: Now I want to head back and review what we have learned

- What are some things you can do to treat mild hypothermia
- Teacher guides students back to the school and reviews information

**Closure/Assessment:**

Check to make sure that all of the students have made it back. I suggest using an attendance check list as they arrive. Close with the students sharing what their hike was like. Here are sample questions you could ask:

Today, in class we learned about water safety

1. What are some things you can do to treat mild hypothermia?
2. What is one way to save a drowning person?
3. Name one way water can hurt you.
4. Name one way you can use water to help you.
Objectives (Specific, Behavioral, Assessable)

A. Students
   1. Student will identify plants around the school.
   2. Students will be able to research plants in the computer lab.
   3. Students will identify five plants found in the northwest which are either poisonous or can cause a rash.

Equipment: (for a class of 30 students)
   1. Paper
   2. Pencil

Protocol
   1. Remind class of the existing protocols.
   2. Start and stop on the signals.
   3. Make sure kids do journal entry

Class Rules:
   1. Remind class of existing rules. These should be posted in a visible location in the gym.
   2. Respect each other and the equipment.
   3. Safety
**Instant Activity:** Climber Challenge- For this instant activity teams of 4 or 5 are made. Set 5 cones out in front of each group evenly (about 15 feet apart). This activity is a relay, have the students imagine as if they were really climbing a mountain. First person in relay imagines as if they were running the flats at the base of the mountain. Students weave in and out of cones. Tag the second person in line. Second person walks at a quick pace, third person does high knees up the mountain, fourth and fifth in line both bear crawl to finish the challenge.

**Set Induction:** Native plants have many benefits to the northwest. Native plants control erosion by holding the soil with their roots. They also reduce flooding by slowing runoff, which we here in the northwest could use plenty of.

**Informing Task:** When I say go, grab your paper and pencil. GO!

<table>
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</table>
| • Student should not touch any of the plants.  
• Make sure all students are accounted for.  
• Students may try to pick plants they already know, encourage them to pick a rare plant.  
• Split the class into group of two this will help create relationships as well as make things easier in the computer lab.  
• Lead students to an area with an abundance of plant life. | • Split class into groups of two.  
• Groups write down three different plants they are unfamiliar with.  
• Identify the color, size, shape, and environment of the plant. | • Once all groups have agreed on three different plants they are unfamiliar with. They will need to identify the plants they picked. | |

**Informing Task:** When I say go, follow me to the computer lab.

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</table>
| • Students need to follow the computer lab rules.  
• Make sure all students are accounted for. | • Use a search engine to identify your three plants. | • Are any of your plants eatable? | |

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</table>
| • Students need to follow the computer lab rules.  
• Write down three interesting facts about each plant. | | • | |
Closure/Assessment: Turn in your paper with the name of your three plants and the three interesting facts about each plant. For your homework find five plants found in the northwest which are either poisonous or can cause a rash.

Do Quiz 3

You can have students turn in their notebooks to check their progress or you can have them keep the notebooks for studying.
Quiz# 3

Name____________________

1) Name the most interesting plant you found and explain why you thought this.

2) Explain why plants are so important to the environment?

3) Name three interesting facts about each plant.

4) What’s one poisonous plant?

5) What is the name of three plants native to Washington?

6) What is the first step to purifying water?

7) What effects does boiling water have on organisms?

8) A large majority of your body heat is lost through you_______!

9) Should you give a hypothermic victim warm or hot water?

10) Should you keep moving or remain still after you have warmed up?
Quiz# 3

Name_________________

1) Name the most interesting plant you found and explain why you thought this.
   Student derived

2) Explain why plants are so important to the environment?
   Air, medicine, food, shelter

3) Name three interesting facts about each plant.
   Student derived

4) What’s one poisonous plant?
   Poisonous Oak

5) What is the name of three plants native to Washington?
   Student derived

6) What is the first step to purifying water?
   Build a fire

7) What effects does boiling water have on organisms?
   Kills potentially harmful organisms

8) A large majority of your body heat is lost through you heat!

9) Should you give a hypothermic victim warm or hot water?
   Warm

10) Should you keep moving or remain still after you have warmed up?
    Keep moving
1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will demonstrate the different kinds of shelters you can build in the wild.
   2. Students will also be introduced to the techniques involved in building two different types of shelters:
      a. Debris Hut Shelter
      b. Build a Lean-to Shelter
   3. Students will also learn the steps on how to choose a wilderness camp site

2. Equipment: (for a class of 30 students)
   1. Backpacks (Contents covered in previous lessons)
   2. Proper Clothing (Covered in previous lessons)
   3. Walkie-Talkies (If appropriate for the school)
   4. Cell Phones (one per group)
   5. Materials to build a debris shelter (brush, debris, rubbish, sticks)
   6. Materials to build a lean-to

3. Protocol
   - Remind class of the existing protocols.
   - Stay together
   - Start and stop on the signals.
   - Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   - Safety
   - Follow all instructions
   - Work in groups
   - Use knowledge from previous lessons
   - Make sure kids do journal entry

4. Class Rules:
   - Remind class of existing rules. These should be posted in a visible location in the gym.
   - Respect each other and the equipment.
   - Safety
**Instant Activity:** Pyramid Build: Split the class into groups of six to eight students and spread all of the groups out along a line. On the signal the students run in a group to another line approx. 10 yards away. When they get to the line, the students will build a pyramid on their hands and knees; they start with three students side by side on the bottom, then two students kneel on their backs, and the final student kneels on top, building a pyramid. Then the students break down and run to the next line repeating the process. You can repeat this process three to four times total. The goal is to work as a team in order to make it across the finish line as a team first.

**Set Induction:** Shelters have been used for survival since our ancestors were hunter-gatherers. The information we will learn today will help you stay warm and safe even without a fire or proper clothing if you were ever to get lost in the wild and needed to sleep outdoors.

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</table>
- Work in an area where all of the appropriate instruction can be carried out.

**Informing Task:** We are first going to learn how to choose a wilderness campsite. When I say Go I’d like you to follow me on a hike where we will find some good areas to set up camp. **GO**

- Teacher guides students on the hike and directs them through the lesson.
- Check to make sure students are progressing properly and understanding the information.
- Prepare a check list ahead of time.
- Show the students examples of things to look for while on your hike.

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>I am now going to explain and demonstrate to everyone how to properly choose a wilderness campsite.</td>
<td>Find an area that drains well to avoid flooding if it rains.</td>
</tr>
<tr>
<td></td>
<td>Taking a few minutes to assess the terrain can increase your potential for comfort while minimizing your impact on the environment.</td>
<td>Camp at least 200 feet from lakes or streams to protect them and yourself.</td>
</tr>
<tr>
<td></td>
<td>Choose an established campsite in high-use areas rather than tramping down a new spot.</td>
<td>Avoid camping beneath large dead trees and branches that can come crashing down in the night.</td>
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<td></td>
<td></td>
<td>Camp above the high-water mark in desert canyons to stay beyond the reach of flash floods.</td>
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<td></td>
<td>Consider the benefits of receiving the morning sun and being shaded from the hot afternoon sun when picking your location. Also think about potential windbreaks.</td>
</tr>
<tr>
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<td></td>
<td>Your location should be on a fringe area, not too open where it will be exposed to wind and sun, and not too dense where animals make their homes and feed. Your location should also be at least 50 yards from water, as bodies of water dampen the</td>
</tr>
</tbody>
</table>

What is one thing you should look for when choosing a camp site and why?
Informing Task: Now we will learn to make one of the most basic shelters, a debris shelter. This shelter is constructed very much in the same way a forest animal constructs its home or nest. When I say **GO** spread out and find a comfortable spot where you can see me. **GO**

<table>
<thead>
<tr>
<th>Teacher guides students on the hike and directs them through the lesson.</th>
<th>I am now going to explain and demonstrate to everyone how to properly build a shelter</th>
<th>Face your door away from the wind.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check to make sure students are progressing properly and understanding the information.</td>
<td>Building a debris shelter allows you to stay warm and safe even without a fire or proper clothing.</td>
<td>More debris equals more warmth, so pile it high.</td>
</tr>
<tr>
<td>Prepare a check list ahead of time.</td>
<td>Choose a good location for your shelter</td>
<td>Make sure to cover your debris hut entirely, except for the doorway.</td>
</tr>
<tr>
<td>Make sure to find a spot to demonstrate this lesson ahead of time.</td>
<td>Picture your shelter before you begin to build it. You'll need a large rock, tree stump or similar object to build your shelter against.</td>
<td>Enter your debris hut feet first, and slide on down inside.</td>
</tr>
<tr>
<td>Make sure to gather materials ahead of time and have them at the site where you will give this demonstration.</td>
<td>The ridgepole should be a few feet taller than you. It will serve a purpose similar to that of the top horizontal pole in a tent.</td>
<td>Use debris on the floor of your hut to create a sleeping pad.</td>
</tr>
<tr>
<td>If you would like you can gather your materials while on your hike.</td>
<td>Find a straight and sturdy branch to act as your ridgepole</td>
<td>Mark your debris hut so you can find it from the outside easily. The nature of the debris hut is that it blends in perfectly with the surroundings. If someone is trying to find you they will have a hard time seeing your hut.</td>
</tr>
<tr>
<td>Allow students to assist in the demonstration and to try themselves</td>
<td>Brace your ridgepole firmly against your rock or tree stump and use other</td>
<td>Never build a fire inside your debris hut. Make sure your fire is well away from your hut.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See if you can find all of the materials necessary to build a debris shelter in 5 minutes.</td>
</tr>
</tbody>
</table>
branches or rocks to stabilize it. This is the spine of your hut, so make sure it's braced firmly.

- The braced end of the pole should not be much higher than your crotch. The other end of your ridgepole goes on the ground, held in place by a couple of heavy rocks.

- Use stout sticks leaned against your ridgepole every few inches as ribs. Line them all the way down, leaving only a small opening on the high end to act as a doorway. Go inside beneath your stout sticks to make sure there is enough room for you inside. It should be comfortable, but not too roomy. Smaller stays warmer.

- Pile all manner of fine brush and twigs over the ribs of your structure.

- Gather as much debris as you can from the ground and pile it over the twigs on your structure. Use whatever the surrounding area offers: leaves, pine needles, dried ferns, grasses, mosses or anything you can gather.
<table>
<thead>
<tr>
<th>Teacher guides students on the hike and directs them through the lesson.</th>
<th>I am now going to explain and demonstrate to everyone how to properly build a lean-to.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check to make sure students are progressing properly and understanding the information.</td>
<td>Select a good spot to build your lean-to. Build in a fringe area, neither in the center of a field nor a dense thicket, but somewhere between these areas. Choose an area at least 50 yards from a body of water, as evaporating water tends to add extra chill to the air.</td>
</tr>
<tr>
<td>Prepare a check list ahead of time.</td>
<td>Find a fallen tree or a large, long rock to build your lean-to against. You can also tie a branch horizontally between two trees a few feet off the ground. There are hundreds of variables to making a lean-to; the important thing is that you have a sturdy brace to lean your structure against.</td>
</tr>
<tr>
<td>Make sure to find a spot to demonstrate this lesson ahead of time.</td>
<td>Lean stout sticks along the horizontal brace of your lean-to. Crawl beneath them to make sure there is enough</td>
</tr>
<tr>
<td>Make sure to gather materials ahead of time and have them at the site where you will give this demonstration.</td>
<td>The more brush and debris you pile on your lean-to, the more insulated it will be inside.</td>
</tr>
<tr>
<td>If you would like you can gather your materials while on your hike.</td>
<td>Obviously you want to be very careful with fire around your lean-to. Dry brush is very flammable.</td>
</tr>
<tr>
<td>Allow students to assist in the demonstration and to try themselves</td>
<td>Make your lean-to recognizable from the outside, so someone looking for you will not pass it by. Lean-tos tend to blend in with surroundings.</td>
</tr>
<tr>
<td>Informing Task: Now we will learn to make a more sturdy shelter, a lean to. This shelter is going to be easier or harder to make depending on your environment in which you are lost. When I say GO spread out and find a comfortable spot where you can see me. GO</td>
<td></td>
</tr>
<tr>
<td>The more brush and debris you pile on your lean-to, the more insulated it will be inside.</td>
<td>See if you can find an object to build your lean-to on</td>
</tr>
</tbody>
</table>

**Dry materials insulate better, but use what you have available.**

- Lean more stout sticks over your debris to hold it in place against the wind.
room to sleep under. There shouldn't be too much extra room, but it should be long enough to cover you completely.

- Pile smaller branches and twigs on top of your stout branches, leaving only an opening at either end exposed.
- Pile all manner of debris - moss, leaves, pine needles, dried fern or whatever nature makes available - on top of your structure.

**Informing Task:** Now I want to head back and review what we have learned

- Teacher guides students back to the school and reviews information

**Closure/Assessment:**

Check to make sure that all of the students have made it back. I suggest using an attendance check list as they arrive. Close with the students hearing what their hike was like. Here are sample questions you could ask:

Today, in class we learned about shelters. These skills can help you if you ever get lost.

1. What is one thing you should look for when choosing a camp site and why?
2. Name some items you can use for a shelter.
Bilding a Lean-To Shelter

• Select a good spot to build your lean-to. Build in a fringe area, neither in the center of a field nor a dense thicket, but somewhere between these areas. Choose an area at least 50 yards from a body of water, as evaporating water tends to add extra chill to the air.

• Find a fallen tree or a large, long rock to build your lean-to against. You can also tie a branch horizontally between two trees a few feet off the ground. There are hundreds of variables to making a lean-to; the important thing is that you have a sturdy brace to lean your structure against.

• Lean stout sticks along the horizontal brace of your lean-to. Crawl beneath them to make sure there is enough room to sleep under. There shouldn't be too much extra room, but it should be long enough to cover you completely.
• Pile smaller branches and twigs on top of your stout branches, leaving only an opening at either end exposed.

• Pile all manner of debris - moss, leaves, pine needles, dried fern or whatever nature makes available - on top of your structure.
1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will learn ways to survive off of the food in the wild.
   2. By the end of the class, all students add information to their journal

2. Equipment: (for a class of 30 students)
   1. Backpacks (Contents covered in previous lessons)
   2. Proper Clothing (Covered in previous lessons)
   3. Walkie-Talkies (If appropriate for the school)
   4. Cell Phones (one per group)
   5. Pencils (1 per student)
   6. Journal/Notepad (1 per student)

3. Protocol
   • Remind class of the existing protocols.
   • Stay together
   • Start and stop on the signals.
   • Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   • Safety
   • Follow all instructions
   • Work in groups
   • Use knowledge from previous lessons
   • Make sure kids do journal entry

4. Class Rules:
   • Remind class of existing rules. These should be posted in a visible location in the gym.
   • Respect each other and the equipment.
   • Safety
**Instant Activity:** Gear up; At the beginning of class the students come in and gather all of their equipment and backpacks. They must go through their checklist with their partner. Continue by leading your class to the head of the designated hiking areas.

**Set Induction:** While in the wild you know there is a chance that you might get lost. If you have to stay overnight and you don’t have food, you may need to survive off of the animals, plants, and insects.

<table>
<thead>
<tr>
<th>MAF/Instructional technique</th>
<th>Extensions</th>
<th>Refinements</th>
<th>Applications</th>
</tr>
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<tbody>
<tr>
<td>• Encourage your students to bring their own backpacks and good shoes. Depending on the schools, equipment and community, you may require the students to bring their own equipment as well. Students should mark their name on their equipment.</td>
<td>• Follow me on a hike and we will go over some food in the wild.</td>
<td>• Water can carry hepatitis A, solminela, and giardia; all will make you really sick if you don’t clean the water.</td>
<td>• Can you name one way you would survive if lost and you needed to eat?</td>
</tr>
<tr>
<td>• In preparation for this class, check the equipment is organized into proper groups.</td>
<td>• Make sure to add this information to your notebooks as the groups are presenting.</td>
<td>• Worms and insects consist of 80% protien.</td>
<td></td>
</tr>
<tr>
<td>• Make sure to clear this lesson with administrators.</td>
<td></td>
<td>• Don’t eat centipedes; they</td>
<td></td>
</tr>
<tr>
<td>• Work in an area where all of the appropriate instruction can be carried out.</td>
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<tr>
<td>• Stake out this hike ahead of time.</td>
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</table>

**Informing Task:** When I say “GO” we will split up in your groups and follow my instructions. GO

• Check to make sure students understanding information as you go
• Prepare a check list ahead of time.
• Give the students a reasonable time in which they
should complete each individual hike.

- Give the students a time to be back by.
- Allow the students to hike for the majority of the class period with a little time left for the closure.
- It may be ideal for the teacher to guide the whole lesson
- Lesson time will depend on resources and abundance of insects; teachers should account for these issues concerning class time.
- Refer to information in other lessons.

Many foods can be cooked with water but water must be purified if taken from a stream.
- Worms and insects make for great sources of energy.
- Snakes can be eaten as well
- Make sure to discard of all food remains.
- Some fruits are poisonous.

bite
- If eating a snake make sure to cut off the head; it may contain poison.
- Skin snake and cook thoroughly over a fire.
- You can burn food or keep remains over 100 yards from camp; it may attract animals.
- Do not eat yellow berries; you can get really sick.

**Closure/Assessment:**

Today, in class we learned about some foods in the wild. Let’s see how much you remember. Can you name one way you would survive if lost and you needed to eat?

You can have students turn in their notebooks to check their progress or you can have them keep the notebooks for studying.
1. **Objectives (Specific, Behavioral, Assessable)**
   1. By the end of the class, all students will assist in building one of the different kinds of shelters you can build in the wild.
   2. Students will utilize the techniques involved in building two different types of shelters:
      a. Debris Hut Shelter
      b. Build a Lean-to Shelter
   3. Students will demonstrate the steps on how to choose a wilderness camp site

2. **Equipment: (for a class of 30 students)**
   1. Backpacks (Contents covered in previous lessons)
   2. Proper Clothing (Covered in previous lessons)
   3. Walkie-Talkies (If appropriate for the school)
   4. Cell Phones (one per group)
   5. Materials to build a debris shelter (brush, debris, rubbish, sticks)
   6. Materials to build a lean-to

3. **Protocol**
   - Remind class of the existing protocols.
   - Stay together
   - Start and stop on the signals.
   - Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   - Safety
   - Follow all instructions
   - Work in groups
   - Use knowledge from previous lessons
   - Make sure kids do journal entry

4. **Class Rules:**
   - Remind class of existing rules. These should be posted in a visible location in the gym.
   - Respect each other and the equipment.
   - Safety
**Instant Activity:** Gear up; At the beginning of class the students come in and gather all of their equipment and backpacks. They must go through their checklist with their partner. Continue by leading your class to the head of the designated hiking areas.

**Set Induction:** This is a chance for you students to utilize past skills. We have learned how to build multiple shelters, and good spots to make them. Now we will have a chance to go on a hike and build a shelter with a group of students.

<table>
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<tbody>
<tr>
<td>• Encourage your students to bring their own backpacks and good shoes. Depending on the schools, equipment and community, you may require the students to bring their own equipment as well. Students should mark their name on their equipment.</td>
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<tr>
<td>• In preparation for this class, check the equipment is organized into proper groups.</td>
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<tr>
<td>• Have students carry all equipment to the proper areas at the beginning of each lesson.</td>
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<tr>
<td>• Try and work with students in groups of 2-4; safety is in numbers.</td>
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<tr>
<td>• Make sure to clear this lesson with administrators.</td>
<td></td>
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</tr>
<tr>
<td>• Work in an area where all of the appropriate instruction can be carried out.</td>
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</table>

**Informing Task:** When I say “**GO**” we will split up in your groups and follow my instructions. **GO**

| | | | |
| Check to make sure students understand information to build a shelter. | I would like you to come and check with me to see if you groups are appropriate. | Keep a steady pace. | Try and complete at least one shelter by the end on the period |
- Prepare a check list ahead of time.
- Group students together that will work responsibly.
- The teacher can guide a group if there are other exceptions as well.
- Give the students a reasonable time in which they should complete each individual hike.
- Give the students a time to be back by.
- Allow the students to hike for the majority of the class period with a little time left for the closure.
- Leave with your groups and try to see if you can complete a shelter with your group.
- Remember safety and all of the things you have learned so far to keep you safe.
- Try to work together as a team.
- Remember the information from the shelter lesson.
- Stay together.
- Leave with your groups and try to see if you can complete a shelter with your group.

**Closure/Assessment:**
Check to make sure that all of the students have made it back. I suggest using an attendance check list as they arrive. Close with the students having what their hike was like. Here are sample questions you could ask:

Today, in class we learned about shelters. These skills can help you if you ever get lost.

1. What is one thing you should look for when choosing a camp site and why?
2. Name some items you can use for a shelter.
1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will have an introduction to the basic information on insects.
   2. Students will also explore their curiosity and surroundings by searching for insects.
   3. By the end of class student will have started to produce a journal entry on the insects encountered on the hike

2. Equipment: (for a class of 30 students)
   1. Backpacks (Contents covered in previous lessons)
   2. Proper Clothing (Covered in previous lessons)
   3. Walkie-Talkies (If appropriate for the school)
   4. Cell Phones (one per group)
   5. Digital Cameras
   6. Printing materials for the camera
   7. Pencils (1 per student)
   8. Journal/Notepad (1 per student)

3. Protocol
   • Remind class of the existing protocols.
   • Stay together
   • Start and stop on the signals.
   • Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   • Safety
   • Follow all instructions
   • Work in groups
   • Use knowledge from previous lessons
   • Make sure kids do journal entry

4. Class Rules:
   • Remind class of existing rules. These should be posted in a visible location in the gym.
   • Respect each other and the equipment.
   • Safety
**Instant Activity:** Gear up; At the beginning of class the students come in and gather all of their equipment and backpacks. They must go through their checklist with their partner. Continue by leading your class to the head of the designated hiking areas.

**Set Induction:** Today we are going to go over insects you may encounter in the wild. As learned before you may need to eat insects in order to survive. As we go on our hike we will stop and discuss multiple insects as we encounter them.

<table>
<thead>
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<tr>
<td>• Encourage your students to bring their own backpacks and good shoes. Depending on the schools, equipment and community, you may require the students to bring their own equipment as well. Students should mark their name on their equipment.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• In preparation for this class, check the equipment is organized into proper groups.</td>
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<tr>
<td>• Make sure to clear this lesson with administrators.</td>
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</tr>
<tr>
<td>• Work in an area where all of the appropriate instruction can be carried out.</td>
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<tr>
<td>• Obtain one more digital cameras for the hike.</td>
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<tr>
<td>• Have printing materials set up ahead of time</td>
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<tr>
<td>• Keep in mind how many students will need a picture and how many you will have to print off; this should tell you how much time you will need for closure for the end of</td>
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</tbody>
</table>
### Informing Task: When I say “GO” we will split up in your groups and follow my instructions. GO

- Check to make sure students understanding information to build a shelter.
- Prepare a check list ahead of time.
- Group students together that will work responsibly. Group work may be appropriate if there are multiple cameras available.
- The teacher can guide a group if there are other exceptions as well.
- Give the students a reasonable time in which they should complete each individual hike.
- Give the students a time to be back by.
- Allow the students to hike for the majority of the class period with a little time left for the closure.
- It may be ideal for the teacher to guide the whole lesson.
- Lesson time will depend on resources and abundance of insects; teachers should account for these issues.

- I would like you to come with me staying in your appropriate groups as I guide you through the hike.
- Teacher should guide the students through their hike while taking pictures of insects on the way.
- Make sure to stop along the way so each student has a chance to see insects as you discover them.
- Remember safety and all of the things you have learned so far to keep you safe.
- Try to work together as a team.
- Remember the information from the food lessons.

- Keep a steady pace.
- Stay together.
- You can look under rocks and fallen wood to find many insects.
- Make sure to note where particular insects are found.

- Try and find three different insects on your own.
Concerning class time.

**Closure/Assessment:**

Check to make sure that all of the students have made it back. I suggest using an attendance check list as they arrive. Close with the students having what their hike was like. Here are sample questions you could ask:

Today, in class we learned about insects; you may need them for your survival if you were to get lost while hiking.

1. What is one place where you can find insects?
2. Can anyone name some of the insects that were found?

When you get back to class you should print off all of the insect pictures; make sure each student has one picture. It is okay to have more than one student with the same insect. It would be a good idea to have the students take their picture home with their journal for the day and do a small summary for homework; it should include:

1. Type of insect
2. Where it lives
3. Is it poisonous
4. What if it is eaten? Will you be okay? Will it help or hurt you?
5. Any other additional info
1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will develop their own final hike by applying all of the information throughout the quarter
   2. Students will also develop their own sets of goals and objective for which they choose to accomplish on the hike

2. Equipment: (for a class of 30 students)
   1. Digital Photos of insects
   2. Pencils (1 per student)
   3. Journal/Notepad (1 per student)
   4. Previous Homework assignment

3. Protocol
   - Remind class of the existing protocols.
   - Start and stop on the signals.
   - Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   - No talking while another person is talking
   - Make sure kids do journal entry

4. Class Rules:
   - Remind class of existing rules. These should be posted in a visible location in the gym.
   - Follow all instructions
   - Work in groups
   - Use knowledge from previous lessons
**Instant Activity:** Group up: When students come into class they will be expected to group together with the other students who share the same insect from the previous day. With their group they will produce an outline about their individual insect and to present to the class.

**Set Induction:** Insects can be very interesting creatures.

<table>
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<td>• Encourage your students to bring their materials to class.</td>
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</tr>
<tr>
<td>• Work in an area where all of the appropriate instruction can be carried out.</td>
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<tr>
<td>• Make sure students are in their proper groups during the instant activity.</td>
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<tr>
<td>• Have materials prepared for presenting the rest of the information to the class</td>
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</table>

**Informing Task:** We are first going learn about the information that everyone learned during their homework. When I say Go I would like the first group to come in front and begin presenting. “Go.”

| • Allow students a couple of minutes per group to present. | • You should cover the basic information that was assigned last night.  
1. Type of insect  
2. Where it lives  
3. Is it poisonous  
4. What if it is eaten? Will you be okay? Will it help or hurt you?  
5. Any other additional info | • Make sure to add this information to your notebooks as the groups are presenting. | • What insects can be eaten in order to survive? |
| • Check to make sure students are progressing properly and understanding the information. |            |             |              |
| • Add any key notes to the insects that students may have missed. |            |             |              |

**Informing Task:** Now that we have learned about a few insects we well learn how to protect you from bites. When I say Go I would like you to sit in an area where all of you can easily see me and get ready for some notes. “Go.”

| • Check to make sure students are progressing properly and understanding the | • For the most part, bites are just a nuisance - they can, however, deliver viruses,  
• be respectful of bug's homes.  
• Dress in dark clothing thick |            | • What are 3 steps to avoid bites? |
| • For the most part, bites are just a nuisance - they can, however, deliver viruses,  
• be respectful of bug's homes.  
• Dress in dark clothing thick |            |             |              |
<table>
<thead>
<tr>
<th>Information.</th>
<th>Cause discomfort, or be poisonness.</th>
<th>Enough that insects can't bite through it.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Teacher should present information and students should follow along.</td>
<td>• The trick is to avoid bites altogether, a task made easy by following certain steps and tips.</td>
<td>• Wear long pants and a long-sleeved shirt. Tuck the pant legs into your socks and tuck all shirts in completely.</td>
</tr>
<tr>
<td>• Allow students to participate and ask questions often.</td>
<td></td>
<td>• Cover up with a hat, preferably with ear flaps.</td>
</tr>
<tr>
<td></td>
<td>• Consider treating your clothing with a product containing Permethrin, especially if you will be in a mosquito-infested area for a long period of time. The chemical will last on treated clothes for up to five washings. Do not spray Permethrin on your skin.</td>
<td>• Generously spray the area around your ankles, and other exposed skin, with a repellent containing 30 percent DEET (diethyltoluamide). Lotions and gels are also available.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• shake out shoes and clothing before putting them on, especially if they have been sitting outdoors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• freeze when you are being investigated by stinging insects so that you don't frighten the insect into stinging.</td>
</tr>
<tr>
<td><strong>Informing Task:</strong> Now that we have learned how to protect you from bites, we will specifically learn about fire ants. Please turn to a new section in your notes.</td>
<td></td>
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<tr>
<td><strong>Check to make sure students are progressing properly and understanding the information.</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Teacher should present information and students should follow along.</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Allow students to participate and ask questions often.</strong></td>
<td></td>
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<tr>
<td>• Fire ant stings itch like mad and are prone to infection. In some cases, these stings can produce severe allergic reactions.</td>
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<tr>
<td>• The following tips will help you.</td>
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</tr>
<tr>
<td>• Remove all ants from the body to prevent further stinging.</td>
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<td></td>
</tr>
<tr>
<td>• Elevate the extremity where the person was bit.</td>
<td></td>
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</tr>
<tr>
<td>• Apply a topical steroid cream, such as hydrocortisone.</td>
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<td></td>
</tr>
<tr>
<td>• Administer oral antihistamines.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Monitor carefully for severe allergic reactions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Monitor carefully for infection.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• If symptoms persist or if you have specific medical conditions or concerns, we recommend you contact a physician.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• What is one risk of being bitten by fire ants?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Informing Task:</strong> Now that we have learned how to protect you from fire ants, we will specifically learn recluse spiders. Please turn to a new section in your notes.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Check to make sure students are progressing properly and understanding the information.</strong></td>
</tr>
<tr>
<td><strong>Recluse spider bites are rarely fatal, but can cause</strong></td>
</tr>
<tr>
<td><strong>Exercise caution when stepping or reaching into</strong></td>
</tr>
<tr>
<td><strong>What are some features of the recluse spider?</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>What is one risk of being bitten by fire ants?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>If symptoms persist or if you have specific medical conditions or concerns, we recommend you contact a physician.</strong></td>
</tr>
<tr>
<td><strong>This information is not intended as a substitute for professional medical advice or treatment.</strong></td>
</tr>
<tr>
<td>Understanding the information.</td>
</tr>
<tr>
<td>Teacher should present information and students should follow along.</td>
</tr>
<tr>
<td>Allow students to participate and ask questions often.</td>
</tr>
<tr>
<td>Great discomfort and crater-like scars at the site of the bite.</td>
</tr>
<tr>
<td>If you are bitten while in the wilderness, evacuation is recommended for proper treatment.</td>
</tr>
<tr>
<td>Learn to recognize fiddleback spiders, which get their name from a violin-shaped mark on the back of their heads.</td>
</tr>
<tr>
<td>Their bodies are a little more than 1cm in length, and their legs reach to about 5cm</td>
</tr>
<tr>
<td>Places where fiddleback spiders are likely to be: in hot, dry, unoccupied environments like dried logs, wood piles, or abandoned buildings.</td>
</tr>
<tr>
<td>Look for the signs and symptoms of a fiddleback spider bite: pain at the site of the bite within a few hours, a blister at the site of the bite which will often grow in size and rupture and occasional nausea, vomiting, fever or chills.</td>
</tr>
<tr>
<td>Clean the bite with an antiseptic cleanser.</td>
</tr>
<tr>
<td>Apply an ice pack to the site of the bite.</td>
</tr>
<tr>
<td>Monitor the bite area, if a blister forms and then pops, carefully clean and dress the wound to prevent infection.</td>
</tr>
<tr>
<td>Administer pain killers to provide some relief of the symptoms.</td>
</tr>
<tr>
<td>Evacuate immediately so the injured person may be treated in a hospital to minimize tissue damage.</td>
</tr>
<tr>
<td>Do not attempt to lance the bite or extract the venom.</td>
</tr>
</tbody>
</table>
| This information is not
Informing Task: Now that we have learned how to protect you from insects; we have seen that many bites can cause allergic reactions. Next we will learn about what to do if you need to treat an allergic reaction. Please turn to a new section in your notes.

- Check to make sure students are progressing properly and understanding the information.
- Teacher should present information and students should follow along.
- Allow students to participate and ask questions often.
- Remember this information is not intended as a substitute for professional medical advice or treatment.

| • Anaphylaxis is a rare but severe allergic reaction usually triggered by bee stings, insect bites, certain drugs and foods. The reaction may be fatal within minutes, so prompt treatment is imperative. |
|---|---|---|---|
| • Most people who know if they are susceptible to anaphylactic shock will carry an Anakit or Epipen. Find out what they are allergic to, where they keep their kit and how their injections are administered, so that you can assist them in an emergency situation. |
| • Guides and leaders bringing others into remote areas might think about carrying an Anakit or Epipen in their first aid kit. Consult a doctor. |
| • Know in advance what your companions are allergic to and where they keep their inhalers, epinephrine kits and allergy medications. Consider wearing a medic alert bracelet if you know you are susceptible to anaphylactic shock. |
| • Learn to identify the signs and symptoms of anaphylaxis: difficulty breathing, wheezing, rash, itching, hives, swelling of the feet, hands, eyes or face, flushed skin, nausea, vomiting, abdominal pain, rapid pulse. |
| • Remove the person from contact with the allergen, if the allergen is suspected to be something in the air or on the skin. |
| • Administer injectable epinephrine (adrenaline) immediately if the person is having difficulty talking or breathing. Epinephrine is usually prescribed in an Anakit or Epipen with a |
| • Why should you always be aware of allergens? |

intended as a substitute for professional medical advice or treatment.
- Preload syringe, and injected intramuscularly in the thigh for rapid absorption.
- Monitor airway, breathing and circulation.
- Treat for shock.
- Inject a second dose of epinephrine within 12 to 15 minutes after the first dose was administered, to prevent a relapse. Most kits contain at least two doses.
- Administer an oral antihistamine once the epinephrine has taken effect and the person is able to take the medication by himself or herself.
- Hydrate well.
- Evacuate immediately, administering oral antihistamines at regular intervals until the person has reached professional medical care.

**Closure/Assessment:**
Today, in class we learned a lot about safety. Let’s see how much you remember. Raise your hand if you think you can answer my questions.

1. What insects can be eaten in order to survive?
2. What are 3 steps to avoid bites?
3. What is one risk of being bitten by fire ants?
4. What are some features of the recluse spider?
5. Why should you always be aware of allergens?
6. Any other comments or questions?

Do Quiz 4

You can have students turn in their notebooks to check their progress or you can have them keep the notebooks for studying.
Quiz # 4

Name__________________

1) What is the name of one of the shelters we learned about?

2) How far should you camp from lakes or streams?

3) What can you become sick with, if you drink dirty water?

4) What color berries can make you very sick?

5) How much percent of worms is protein?

6) What are 3 steps to avoid bites?

7) Bug repellent should contain what percent of DEET?

8) If you are being investigated by stinging or biting insects, should you run or freeze?

9) What plant form makes for great insulation in a shelter?

10) When bitten by a spider, should you try and extract the venom?
Quiz # 4

Name__________________

1) What is the name of one of the shelters we learned about?  
   Lean-to or Debris shelter

2) How far should you camp from lakes or streams?  
   200 feet

3) What can you become sick with, if you drink dirty water?  
   Hepatitis A, Giardia, or Salmonella

4) What color berries can make you very sick?  
   Yellow

5) How much percent of worms is protein?  
   80%

6) What are 3 steps to avoid bites?  
   Wear dark clothes, Cover up, and Wear bug repellant

7) Bug repellent should contain what percent of DEET?  
   30

8) If you are being investigated by stinging or biting insects, should you run or freeze?  
   Freeze

9) What plant form makes for great insulation in a shelter?  
   Moss

10) When bitten by a spider, should you try and extract the venom?  
   No
Objectives (Specific, Behavioral, Assessable)

A. Students
   1. Students will be able to identify several different animal prints.

Equipment: (for a class of 30 students)
   1. Cards with five different local animal prints on them.
   2. Cone
   3. Actual animal print molds.
   4. Parachute
   5. Paper
   6. Pencil

Protocol
   1. Remind class of the existing protocols.
   2. Start and stop on the signals.
   3. Follow all instructions
   4. Make sure kids do journal entry

Class Rules:
   1. Remind class of existing rules. These should be posted in a visible location in the gym.
   2. Respect each other and the equipment.
   3. Safety
**Instant Activity:** Soccer Relay - For this instant activity teams of 5 are made. Set 5 cones out in front of each group evenly (about 15 feet apart). This activity is a relay first person in relay dribbles along the outside of the cones with their right foot and back. Second student weaves in and out of cones. Third person dribbles with only the outside of their foot. Fourth person dribbles with the inside of their foot and the fifth and final student weaves the cones using only the sole of their foot.

**Set Induction:** When you feature into the wild you must be very responsible and safe. Many people act as if a wild animal is similar to a zoo or caged animal. This is not the case, in many cases wild animals can be of no hard to humans. Sometimes even being more scared of us then we are of them. However, this does not mean wild animals are safe. They can be very unpredictable and present a great danger. Today, we are going to play a game which will help us identify animal prints. Being aware of our surrounding is very important to hiking and backpacking.

**Informing Task:** When I say go, line up single file behind a cone.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Set five cones in a line 15 feet apart and put a different animal card under each of the five cones.</td>
<td>Begin, see if you can find a total of six like cards.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set five cards out in front of each cone evenly, 15 yards apart.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Students will run to any card on the field. If they pick up a card which has their animal print on it they bring that card back.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If it’s not their animal print they set the card down and tag the next person in line.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Only one card can be flipped a turn.</td>
<td></td>
<td></td>
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<tr>
<td>Students sit down when they have a total of six cards.</td>
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MAF/Instructional Techniques | Extensions (Task Progressions) | Refinements (Cues) | Applications (Challenges) |
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<tr>
<td>Set five cones in a line 15 feet apart and put a</td>
<td>Good job, this time you’ll be collecting the other</td>
<td>Make sure to look at each card critically.</td>
<td>How many of you can name all five of the prints</td>
</tr>
</tbody>
</table>

- Good job, this time you’ll be collecting the other
different animal card under each of the five cones.
- Set five cards out in front of each cone evenly, 15 yards apart.
- Students will run to any card on the field. If they pick up a card which doesn’ animal print on it they bring that card back.
- If it’s not their animal print then they set the card down and tag the next person in line.
- Only one card can flipped a turn.
- Students sit down when they have a total of six cards.

four prints besides your own.

without looking at the cards.

Informing Task: Nice job, now when I say go can you gather all the cones and cards and place them by me. Go!
Informing Task: When I say go, grab a footprint mold from the box and bring the footprint back to your group.

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<tr>
<td>Careful footprint molds are very delicate. Plus kids love to rough them up.</td>
<td>Pass the mold to each member of your group.</td>
<td>Write down what you think your print is from.</td>
<td></td>
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<tr>
<td>Careful footprint molds are very delicate. Plus kids love to rough them up.</td>
<td>Pass the mold to another group. Continue until you have seen every print.</td>
<td>Careful mold are very fragile.</td>
<td>Write down what you think each groups print is.</td>
</tr>
</tbody>
</table>

Closure/Assessment: For assessment, hold up each animal print and call on students until these guess right. Let them know how much you appreciate their participation.
Objectives (Specific, Behavioral, Assessable)
A. Students
   1. By the end of class, students will be able to tie a fishing lure onto fishing line.
   2. Students will also be able to cast a lure at least 15ft.

Equipment: (for a class of 30 students)
1. Fishing rod and reel
2. 30 Hook less lure.
3. 30 Pieces of yarn.
4. Frisbee

Protocol
1. Remind class of the existing protocols.
2. Stay together
3. Start and stop on the signals.
4. Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
5. Safety
6. Follow all instructions
7. Work in groups
8. Use knowledge from previous lessons
9. Make sure kids do journal entry

Class Rules:
1. Remind class of existing rules. These should be posted in a visible location in the gym.
2. Respect each other and the equipment.
3. Safety

Instant Activity: Ultimate Frisbee- Split class into two teams players can toss Frisbee to teammates but you cannot run with the frisbee. If the frisbee is dropped the other team takes get the ball. Try to score at opposite ends of the field.

Set Induction: Many of us eat fish on a regular basis from the store or even a restaurant and this is a convenient way to get our fish fix. However, with a little time and effort you to can put fish on the table and have some fun.
**Informing Task:** Today, we are going to learn several basic fishing fundamentals. When I say go, could you please grab a piece of yarn and a hook less lure and sit quietly.

<table>
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</table>
| • 30 hookless lures and thirty pieces of yarn.  
• Scissors  
• Use hookless lures when practicing anything.  
• Yarn and large lures work best because they are easier to see and handle.  
• Students who know how to tie on lures should show those who do not.  
• Use a long table so students can work and talk together. | • Students read their individual directions and try to emulate the clinch knot. | | • If student successfully tie the knot in front of the teacher. Then they should begin helping their classmates who are having trouble. |

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| • 30 hookless lures and thirty pieces of yarn.  
• Scissors  
• Use hook less lures when practicing anything.  
• Yarn and large lures work best because they are easier to see and handle.  
• Students who know how to tie on lures should show those who do not.  
• Use a long table so students can work and talk together. | • Students partner up. Each student ties a clinch knot. | | • Check your partners knot by pulling the fishing line firmly. |

**Informing Task:** When I say go, cut the lure from the yarn and stand next to a fishing rod.
- 30 fishing rods with line.
- 30 hookless lures.
- Make sure students are spread out and facing the same direction.
- Lay fishing rods out with line strung through the eyes of the rod.
- Use a field.

### MAF/Instructional Techniques

**Extensions (Task Progressions)**

- Start by tying your lure to the fishing line.

**Refinements (Cues)**

- Using your dominant hand flip the bail of the rod.

**Applications (Challenges)**

- Next using your dominant hand pinch the line against the rod using your pointer finger.
- Demonstrate flipping the bail of the rod and casting the lure.

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| • 30 fishing rods with line. | • Bring the rod back and then forward, when you bring the rod forward release the line from your finger. | • Toss the lure like a ball. | • Can you cast the lure 10 yards?  
• Repeat this step until you can cast ten yards.  
• See how far you can cast. |
| • 30 hookless lures.       |                               |                   |                          |
| • Make sure students are spread out and facing the same direction. |                               |                   |                          |
| • Use a field.             |                               |                   |                          |
| • Demonstrate flipping the bail of the rod and casting the lure. |                               |                   |                          |

**Closure/Assessment:** Great job today, casting can be just as easy as throwing a ball it just takes a little practice. If you have a fishing rod at home please practice this will not only help you but you may be able to help others in the class. Thanks for the great day!
Task Card 1

Rules

You must put about 3 inches of line through the hook eyehole and then take the line out. Repeat this step 5 times.
Task Card 2

Rules

Put 3 inches of line through the hook eyehole and then wrap the line around itself 5 times.

Repeat this step 5 times.
Task Card 3

Cues:
- Go slow
- Count aloud

Rules

Put 3 inches of line through the hook eyehole and then wrap the line around itself. Take the short end of the line and put it through the first hole by the hook eyehole (not the hook eyehole). Pull the line tight. Snip your line and repeat this task 10 times.
Task Card 4

Cues:
- Go slow
- Count aloud
- Pull out enough line for 2 knots.

Rules

Repeat task 3 except use 6 inches of line for your knot instead of three. This time tie one knot on top of the other. You should have two knots on top of each other. Do this once successfully and move to task 5.
Task Card 5

Rules

Pick up a reel and thread the line around the reel arbor. Next tie an overhand knot around the line itself. Cut the line and repeat this 5 times successfully.

Cues:
- Go slow
- Pay attention to detail
Task Card 6

Cues:
- Go slow
- Pay attention to detail
- Pull with a firm grip.

Rules

Pick up a reel and thread the line around the reel arbor. Next tie an overhand knot around the line itself. Then tie a second knot of the tag end of the line. Grab the tag end and pull the knot down.
Task Card 7

Rules

Grab a reel and repeat task 5, see if you can do task 5 in 10 seconds.

Cues:
- Think about your next step.
- Pay attention to detail
Task Card 8

Rules

For task 7 you must tie an arbor knot then a clinch knot using the same piece of line.

Cues:
- Go slow
- Pay attention to detail
Task Card 9

Rules

The Double Surgeon's Knot requires the leader and tippet to be placed side-by-side so they overlap (for about 6") with ends facing in opposite directions. Pinch the standing leader and tippet tag end with the left thumb and forefinger and use the right hand to tie an overhand knot with the leader tag end and the tippet. With the standing leader and tippet tag end still pinched tie an overhand knot with your right hand.
Task Card 10

Rules

The double surgeons knot is a great knot for tying lines together, see if you can tie four double surgeons knots in a row.

Cues:
- Go slow
- Pay attention to detail
Task Card 11

Rules

Grab two pieces of line. See if you can tie an arbor knot followed by a clinch knot. Then take the extra piece of line and add a double surgeons knot to your line.
1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will assist in building a fire, by working as a group and using prior knowledge.
   2. By the end of the class, the students will demonstrate the steps necessary to start a fire.
   3. By the end of the class, all students will cook food over a fire

2. Equipment: (for a class of 30 students)
   1. Backpacks (Contents covered in previous lessons)
   2. Proper Clothing (Covered in previous lessons)
   3. Walkie-Talkies (If appropriate for the school)
   4. Cell Phones (one per group)
   5. Materials to build a fire (covered in lesson 10)
   6. Coffee cans (1 per group)
   7. Study sticks (1 per coffee can)
   8. Hot dogs (at least 1 per student)
   9. Buns (1 per hot dog)
   10. Condiments (if available and appropriate)

3. Protocol
   - Remind class of the existing protocols.
   - Stay together
   - Start and stop on the signals.
   - Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   - Safety
   - Follow all instructions
   - Work in groups
   - Use knowledge from previous lessons
   - Make sure kids do journal entry

4. Class Rules:
   - Remind class of existing rules. These should be posted in a visible location in the gym.
   - Respect each other and the equipment.
   - Safety
**Instant Activity:** Gear up; At the beginning of class the students come in and gather all of their equipment and backpacks. They must go through their checklist with their partner. Continue by leading your class to the head of the designated hiking areas.

**Set Induction:** Today we are going to have a little relaxed time and enjoy some good food. This is a chance for you students to utilize past skills; We have learned how to build fires, and we have also learned how to survive on the food in the wild. Now we will have a chance to go on a hike and build a fire with a group of students and prepare a good outdoors meal.

<table>
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<tbody>
<tr>
<td>• Encourage your students to bring their own backpacks and good shoes. Depending on the schools, equipment and community, you may require the students to bring their own equipment as well. Students should mark their name on their equipment.</td>
<td></td>
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</tr>
<tr>
<td>• In preparation for this class, check the equipment is organized into proper groups.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• Have students carry all equipment to the proper areas at the beginning of each lesson.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• Try and work with students in groups of 2-4; safety is in numbers.</td>
<td></td>
<td></td>
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<tr>
<td>• Make sure to clear this lesson with administrators.</td>
<td></td>
<td></td>
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<tr>
<td>• Work in an area where all of the appropriate instruction can be carried out.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• Buy all of the food ahead of time and check for allergies;</td>
<td></td>
<td></td>
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</tbody>
</table>
you may want to make accommodations for students that are allergic to the food that is being prepared.

**Informing Task:** When I say “GO” we will split up in your groups and follow my instructions. **GO**

- Check to make sure students understanding information to build a fire.
- Prepare a check list ahead of time.
- Group students together that will work responsibly.
- The teacher can guide a group if there are other exceptions as well.
- Give the students a reasonable time in which they should be able to carry out the activities.
- Give the students a time to be back by.
- Allow the students to hike for the majority of the class period with a little time left for the closure.
- Teachers should make packages for each student ahead of time including, hot dogs, condiments, and water bottles
- Teacher should punch holes

- I would like you to come and check with me to see if you groups are appropriate.
- Leave with your groups and try to see if you can complete build a fire with your group.
- Once you have built a fire cook some hot dogs over the fire.
- Remember safety and all of the things you have learned so far to keep you safe.
- Try to work together as a team.
- Remember the information from the fire lesson.
- Remember the importance of using clean water.
- Keep a steady pace.
- Stay together.
- Use prior knowledge and safety precautions.
- When cooking the hot dogs use a coffee can.
- Slide a stick through the holes in the coffee can, fill it with water, place the hot dogs inside, and cook over the fire.
- Try and build a fire together and prepare for food by the end of class.
in the top of then coffee cans ahead of time to slide the sticks through; the sticks could also be picked ahead of time.

**Closure/Assessment:**

Check to make sure that all of the students have made it back. I suggest using an attendance check list as they arrive. Close with the students having what their hike was like. Here are sample questions you could ask:

Today, in class we used fires to prepare food. These skills can help you if prepared ahead of time.

1. What is one reason you should prepare for your hike?
2. Name some reasons why you should always use clean water.
Objectives (Specific, Behavioral, Assessable)

A. Students
   1. Students will learn how to walk with a fishing rod
   2. Students will improve their casting ability

Equipment: (for a class of 30 students)
   1. Fishing rod and reel
   2. Hook less lure
   3. Proper dress

Protocol
   1. Remind class of the existing protocols.
   2. Stay together
   3. Start and stop on the signals.
   4. Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   5. Safety
   6. Follow all instructions
   7. Work in groups
   8. Use knowledge from previous lessons
   9. Make sure kids do journal entry

Class Rules:
   1. Remind class of existing rules. These should be posted in a visible location in the gym.
   2. Respect each other and the equipment.
   3. Safety
**Instant Activity:** Begin by leading your class to the head of the designated hiking areas.

**Set Induction:** Well it sound like yesterday was fun. Lots of food and a great hike. Today we are going to move one step closer to catching our own food. Let's see if we can't pack our fishing rod and a lure with us on our hike today and once we get to the top will make a few casts.

**Informing Task:** When I say go find a new partner and pick up a rod.

<table>
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<tr>
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</tr>
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<tbody>
<tr>
<td>• Students will be hard to control the first time caring a rod. • Set a precedent, rods can be dangerous and are also very expensive. If they want this privilege they must respect the equipment. • Stay together • Follow previous hiking protocol.</td>
<td>• The rods are fully assembled in order to pack a rod safely you must get the rod into two parts. • Pull the two pieces apart.</td>
<td>• Nice and easy.</td>
<td>•</td>
</tr>
<tr>
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</tr>
<tr>
<td>• Check to see all students carrying a rod have the butt of the rod facing forward. • All groups should have a rod/reel and lure.</td>
<td>• Once the two pieces are apart hold the rod pieces with the butt of the rod facing forward.</td>
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</tbody>
</table>

**Informing Task:** When I say go, begin hiking. Go!

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<tr>
<td>Informing Task: Stop, when I say go tie your lure to the fishing line and begin casting with your partner. Go!</td>
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<tr>
<td></td>
<td>• Students should be in their own space.</td>
<td>• Alternate casts with your partner.</td>
<td>• Sharing is caring.</td>
</tr>
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<td>Applications (Challenges)</td>
</tr>
<tr>
<td></td>
<td>• Students should be in their own space.</td>
<td></td>
<td>• Determine a spot to aim for and see who can hit it or come close.</td>
</tr>
<tr>
<td>Informing Task: I’m seeing some improvement. When I say go, pull the rod apart and begin walking back as you did walking up.</td>
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</tr>
<tr>
<td>Closure/Assessment: This is really great I’m starting to see some pretty good casters. I’m looking forward to see you catch some fish.</td>
<td></td>
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</tr>
</tbody>
</table>
Objectives (Specific, Behavioral, Assessable)

A. Students
   1. Students will be able to identify five species of salmon.
   2. Students will know the difference between a rainbow and cutthroat trout.

Equipment: (for a class of 30 students)
   1. Video
   2. Cards with five different salmon species on them.
   3. Cone
   4. Actual animal print molds.

Protocol
   1. Remind class of the existing protocols.
   2. Start and stop on the signals.
   3. Follow all instructions
   4. Make sure kids do journal entry

Class Rules:
   1. Remind class of existing rules. These should be posted in a visible location in the gym.
   2. Respect each other and the equipment.
   3. Safety
**Instant Activity:** Watch trout video (be prepared for a quiz)

**Set Induction:** Trout and salmon have been around for many years and at one time there was actually no limit on how many fish you could catch. This however, has changed with a depleted resource the rules and regulation have stiffened. That is why fish identification is so important these days. You way think you’ve caught a rainbow trout but it could be its cousin the endangered species bull trout. Today we are going to play the same game we did with wildlife footprint identification. Except will be using all five species of salmon and the group that wins today will have their choice of fly-fishing or spin fishing on our next hike.

**Informing Task:** When I say go, form a single file line. First I will number you off, find your like number and line up, Go!

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</table>
| • Set five cones in a line 15 feet apart and put a different salmon species under each of the five cones.  
• Set five cards out in front of each cone evenly, 15 yards apart.  
• Students will run to any card on the field. If they pick up a card which has their salmon species they bring that card back  
• If it’s not their salmon species they set the card down and tag the next person in line.  
• Only one card can be flipped a turn.  
• Students sit down when they have a total of six cards. | • Begin, see if you can find a total of six like cards. | |  

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<tbody>
<tr>
<td>• Set five cones in a line 15 feet apart and put a different salmon species under each of the five cones.</td>
<td>• Good job, this time you’ll be collecting the other four prints besides your own.</td>
<td></td>
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</table>

• Pick one person to name all five species of salmon and they also will have the option to fly-fisher or spin fish.
- Set five cards out in front of each cone evenly, 15 yards apart.
- Students will run to any card on the field. If they pick up a card which has their salmon species they bring that card back.
- If it's not their salmon species they set the card down and tag the next person in line.
- Only one card can be flipped a turn.
- Students sit down when they have a total of six cards.

**Informing Task:** Nice job to all of the groups. When I say go let's walk back to the gym and get a pencil. When I say go, get your pencil and meet me in the mild of the basketball court.

**Closure/Assessment:**
1. Name four of the five species of salmon.
2. What is the main difference between cutthroat and rainbow trout?
3. What is the scientific name of the rainbow trout?
4. Are trout populations on the incline or decline?

Do Quiz 5

You can have students turn in their notebooks to check their progress or you can have them keep the notebooks for studying.
Quiz# 5

Name_________________

1) Name one animal print and one characteristic of that print.

2) Explain two differences between the animal prints used?

3) You should flip the _____ before casting.

4) The ___________ knot is important to keeping your lure on the line?

5) What should a fisherman do after the bail is flipped?

6) How many species of salmon are there?

7) Name two species of salmon?

8) Name an endangered fish species.

9) What is the difference between cutthroat and rainbow trout?

10) Can eating wild rainbow trout help you survive?
1) Name one animal print and one characteristic of that print.
   **Teacher derived**

2) Explain two differences between the animal prints used?
   **Student derived**

3) You should flip the _____ before casting.
   **Bail**

4) The ___________ knot is important to keeping your lure on the line?
   **Fisherman’s**

5) What should a fisherman do after the bail is flipped?
   **Pinch the line to the rod.**

6) How many species of salmon are there?
   **Five**

7) Name two species of salmon?
   **Chinook, Sockeye, Pink, Chum, King there are other accepted names.**

8) Name an endangered fish species.
   **Bull Trout**

9) What is the difference between cutthroat and rainbow trout?
   **Red line on throat**

10) Can eating wild rainbow trout help you survive?
    **Yes**
Objectives (Specific, Behavioral, Assessable)

A. Students
   1. Student will find several different types of natural food fish eat.

Equipment: (for a class of 30 students)
   1. Paper and pencil for assessment.
   2. Proper hiking clothes.
   3. A few small shovels (gardening tool).

Protocol
   1. Remind class of the existing protocols.
   2. Start and stop on the signals.
   3. Follow all instructions
   4. Make sure kids do journal entry

Class Rules:
   1. Remind class of existing rules. These should be posted in a visible location in the gym.
   2. Respect each other and the equipment.
   3. Safety
**Instant Activity:** Begin by leading your class to the head of the designated hiking areas.

**Set Induction:** So far we have learned how to cast and several different types of eatable fish. Know we’re going to explore what fish eat and in are next lesson will put this knowledge to use and try catching a few trout.

**Informing Task:** When I say go, as a class let’s start walking toward the (lake, river any body of water) river. Can I have five volunteers to help me carry these shovels? Go!

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<tr>
<td>• Stay together and follow previous hiking protocol.</td>
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</table>

**Informing Task:** That’s good we’re here, today we’re going to explore the edge of the river and see if we can’t find some possible food fish might feed on. When I say go, let’s walk the river edge and look for possible trout food.

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</table>
| • This exercise works best on small streams.  
• As explain in previous lessons be aware of the habitat you’re walking in. This is the home of many living things.  
• Look for worms near the river.  
• Explain to student, worms are swept away by the current. Left helpless the worm makes easy prey for a fast fish. | • Find a person with a shovel and a area with moist dirt. Next dig a small hole near the river. | • Think like a fish, what could you eat? | • |

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<tbody>
<tr>
<td>• As explain in previous lessons be aware of the habitat you’re walking in. This is the home of many living things.</td>
<td>• Lets look for possible insects that could fall prey to a hungry fish.</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>
### Informing Task:
Let's take a look at some of the insects you have found today. When I say go bring, the insect you found to me and we will determine as a class if fish would eat the insect.

#### MAF/Instructional Techniques
- Teacher should research what insects are around during this time of day and year.
- Explain that streams are full of insect life and the time of year and day determines which insects you will see.

#### Extensions (Task Progressions)

#### Refinements (Cues)

#### Applications (Challenges)

### Informing Task:
Research what fish eat and when, a good resource would be your local fly fishing shop.

#### MAF/Instructional Techniques
- Stay together and follow previous hiking protocol.

#### Extensions (Task Progressions)

#### Refinements (Cues)

#### Applications (Challenges)

### Informing Task:
Well were running out of time, make sure we have all four shovels and let's start walking back to school. Go!

#### MAF/Instructional Techniques
- Do you remember the names of the insects we found?

#### Extensions (Task Progressions)

#### Refinements (Cues)

#### Applications (Challenges)

### Closure/Assessment:
Good job today, two classes from now will put some of this knowledge to work and see if we can't hook a fish. For your homework look up the difference between west slope and east slope cutthroat trout.
Objectives (Specific, Behavioral, Assessable)

A. Students
1. Students will improve fishing skills.
2. A number of students will be introduced to fly-fishing.

Equipment: (for a class of 30 students)
1. Fishing rod and reel
2. Fly-fishing rod
3. Yarn
4. Lure
5. Proper dress

Protocol
a. Remind class of the existing protocols.
b. Stay together
c. Start and stop on the signals.
d. Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
e. Safety
f. Follow all instructions
g. Work in groups
h. Use knowledge from previous lessons
i. Make sure kids do journal entry

Class Rules:
1. Remind class of existing rules. These should be posted in a visible location in the gym.
2. Respect each other and the equipment.
3. Safety
**Instant Activity:** Begin by leading your class to the head of the designated hiking areas.

**Set Induction:** Today, we will finally get to test the waters. For many of us this will be the first time ever fishing so remember native fish are a valuable resource and have been so for many years. Let’s remember to be patient and respectful today.

**Informing Task:** When I say go, partner up with someone you have never been with and choose a rod and lure. Go!

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</table>
| • Destination of hike should be a lake.  
• Set out fishing rod/reel and fly-fishing rod/reel.  
• Have fly-fishing rods already strung up with yarn attached fly line.  
• Award students from fish ID lesson and give the winners the option of fly-fishing.  
• Stay together  
• Follow previous hiking protocol.  
• Check to see all students who are carrying a rod have the butt of the rod facing forward.  
• All groups should have a rod/reel and lure. | • | | • |

**Informing Task:** When I say go, break down your rod so you can properly carry it and then start hiking, Go!

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| • Stay together  
• Follow previous hiking protocol.  
• Check to see all students who are carrying a rod have the butt facing forward.  
• All groups should have a | • | • |
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<tr>
<td>rob/reel and lure or fly-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fishing rod/reel and yarn.</td>
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</table>

**Informing Task:** Stop, when I say go find your own space with your partner and carefully tie your lure to the fishing line.

**MAF/Instructional Techniques**
- Group fly fishing students together.
- Students using lures should use extreme caution.

**Extensions (Task Progressions)**
- Students with spin fishing rods begin casting and reeling your lure (taking turns).

**Refinements (Cues)**
- Aim for a spot in the water.

**Applications (Challenges)**

---

**MAF/Instructional Techniques**
- Demonstrate fly-fishing cast to students.

**Extensions (Task Progressions)**
- Have students move the rod from ten o’clock to two o’clock.

**Refinements (Cues)**

---

**MAF/Instructional Techniques**
- (Fly fishing students) demonstrate pulling out line and then moving the rod from ten to two.

**Extensions (Task Progressions)**
- Pull out some fly line and then move the rod from ten o’clock to two o’clock.

**Refinements (Cues)**
- Ten o’clock-two o’clock!

---

**MAF/Instructional Techniques**
- Demonstrate pull out line and then moving the rod from ten to two.

**Extensions (Task Progressions)**
- Continue casting using the ten o’clock-two o’clock approach but pull a little more line out.

**Refinements (Cues)**
- Ten o’clock-two o’clock!
- Don’t take more line than you can handle.

**Applications (Challenges)**
- Can you cast without hitting letting the yarn touch behind or in front of you fly-fishers.

**Informing Task:** When I say go, break down all rod and reel and begin walking back to school carrying the rod properly.

**MAF/Instructional Techniques**
- Stay together and follow previous hiking and backpacking protocol.
- Check to see all students who are carrying a rod have the butt facing

**Extensions (Task Progressions)**
- Be aware of your what is around you.
- Careful with your equipment.

---
- All groups should have either a spin rod and reel or a fly-fishing rod and reel.
- Place equipment back where you found it as well as how you found it.

**Closure/Assessment:** Fly-fishing students did you like the experience? What is one cue you remember from today?
Fly Fishing

Step 1
- Pull ten feet of line from the reel
- Line should be in a straight line coming out of the rod.
- Pinch line with pointer finger on the rod handle.
- Pick line up with the rod.

Rod moves from ten o'clock to two o'clock
Step 2
  • Bring the rod behind your head; rod should stop at two o'clock.

Step 3
  • Stop rod at ten o'clock and then move rod back to two o'clock.
  • Repeat
Objectives (Specific, Behavioral, Assessable)

A. Students
   1. Student will identify a spot where bait would likely be.
   2. Students will use the bait they found to fish.

Equipment: (for a class of 30 students)
   1. Fishing rod and reel
   2. Single bait hooks
   3. Proper dress
   4. Bait (worms)
   5. Small gardening shovels (4 or 5)

Protocol
   1. Remind class of the existing protocols.
   2. Stay together
   3. Start and stop on the signals.
   4. Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   5. Safety
   6. Follow all instructions
   7. Work in groups
   8. Use knowledge from previous lessons
   9. Make sure kids do journal entry

Class Rules:
   1. Remind class of existing rules. These should be posted in a visible location in the gym.
   2. Respect each other and the equipment.
   3. Safety
**Instant Activity:** Begin by leading your class to the head of the designated hiking areas.

**Set Induction:** Beings that today is another problem solving day we are going to able what we learned in our last lesson and see if we can’t find some real bait out in the wild.

**Informing Task:** When I say go, partner up with someone you have never been with and choose a rod and lure. I also need several people to grab shovels, Go!

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| • Destination of hike should be a lake.  
• Set out fishing rod/reel .  
• Stay together  
• Follow previous hiking protocol.  
• Check to see all students who are carrying a rod have the butt of the rod facing forward.  
• All groups should have a rod/reel and lure. | • | • | • |

**Informing Task:** When I say go, break down your rod so you can properly carry it and then start hiking, Go!

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</table>
| • Stay together  
• Follow previous hiking protocol.  
• Check to see all students who are carrying a rod have the butt facing forward.  
• All groups should have a rod/reel. | • | • Rod but faces same direction you do. | • Lets see if the whole class can walk the entire hike without touching our rods against any branch. |

**Informing Task:** Stop, when I say go; with your partner look for bait you could put on a hook. Example, the worm we found the other day.

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<tr>
<td>• Keep a close eye on students.</td>
<td>• If you find bait, place it on your hook and begin</td>
<td>• Cast softly the bait doesn’t fall off.</td>
<td>•</td>
</tr>
</tbody>
</table>
- Make sure no one wanders to far. cast.

**Informing Task:** When I say go, if you're having trouble finding bait, come see me for a worm.

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<td>- Be prepared with a box full of bait (worms).</td>
<td>- Slowly reel the bait in.</td>
<td>- Tease the fish; give your rod a few jerks.</td>
<td></td>
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</tbody>
</table>

**Informing Task:** When I say go, break down all rods and reels and begin walking back to school carrying the rod properly.

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<tbody>
<tr>
<td>- Stay together and follow previous hiking and backpacking protocol.</td>
<td>-</td>
<td>- Be aware of your what is around you.</td>
<td></td>
</tr>
<tr>
<td>- Check to see all students who are carrying a rod have the butt facing forward.</td>
<td>-</td>
<td>- Careful with your equipment.</td>
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</tr>
<tr>
<td>- All groups should have either a spin rod and reel or a fly-fishing rod and reel.</td>
<td>-</td>
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<tr>
<td>- Place equipment back where you found it as well as how you found it.</td>
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**Closure/Assessment:** Today was a great day; I was impressed with your willingness to search for bait. Fishing can be fun and if you catch one like some of us did today it's pretty exciting.
1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will develop their own final hike by applying all of the information throughout the quarter
   2. Students will also develop their own sets of goals and objective for which they choose to accomplish on the hike

2. Equipment: (for a class of 30 students)
   1. Pencils (1 per student)
   2. Journal/Notepad

3. Protocol
   • Remind class of the existing protocols.
   • Start and stop on the signals.
   • Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   • No talking while another person is talking
   • Make sure kids do journal entry

4. Class Rules:
   • Remind class of existing rules. These should be posted in a visible location in the gym.
   • Follow all instructions
   • Work in groups
   • Use knowledge from previous lessons
**Instant Activity:** Group up: When students come into class they will be expected to group together with the other students who share the ideas for what they want to do on their hike and begin discussing ideas.

**Set Induction:** This is the chance for you students to piece together all of your information from throughout the term.

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<tr>
<td>• Encourage your students to bring their materials to class.</td>
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<tr>
<td>• Work in an area where all of the appropriate instruction can be carried out.</td>
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<tr>
<td>• Make sure students are in their proper groups during the instant activity.</td>
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<tr>
<td>• Have materials prepared for presenting the rest of the information to the class</td>
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<tr>
<td>• Have signs around the class signaling where each group should meet according to their activity they want to do most</td>
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<tr>
<td>• Groups should be 4-6 students; multiple groups can do the same activity.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Check with administrators on this lesson; see if you can have extra time for the final lesson.</td>
<td></td>
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</tr>
</tbody>
</table>

**Informing Task:** Today you are going to develop your own lesson for your final hike. When I say **Go** I would everyone to change groups if you want to or you can stay in your current group. **“Go.”**

<table>
<thead>
<tr>
<th>• Check to make sure students are progressing properly and</th>
<th>• Right now you are grouped together according to the final activity you want to do</th>
<th>• Their hike plan should include 1) Activities; the first and second</th>
</tr>
</thead>
</table>
understanding the information throughout the class period.

- Make sure groups will work well together
- Give students a template for a lesson; prepared ahead of time.
- Make sure to tell students how much time they have for their lessons.

<table>
<thead>
<tr>
<th>Understanding the information throughout the class period.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make sure groups will work well together.</td>
</tr>
<tr>
<td>Give students a template for a lesson; prepared ahead of time.</td>
</tr>
<tr>
<td>Make sure to tell students how much time they have for their lessons.</td>
</tr>
</tbody>
</table>

most.

- Together you will develop a plan for your final hike that you will participate on tomorrow.

activity they will do on their hike

2) Objectives; what they want to accomplish during their activities

3) Duties; each student in each group should have an equal amount of responsibility for their activity to be completed

4) Materials; what are you going to use on your hike

5) Timeline; what is their overall agenda, in order, and how much time will you need for each step.

**Closure/Assessment:**
Today, in class we planned our hikes for tomorrow. When you come to class we will meet briefly and get to it does anyone have any questions please give me you hike plans and I will make adjustments and corrections to perfect them for tomorrow, if needed.
Physical Education Teacher Education Program
Central Washington University
Backpacking and Hiking
Complete Final Hike
Lesson #30

1. Objectives (Specific, Behavioral, Assessable)
   1. By the end of the class, all students will complete their own final hike.

2. Equipment: (for a class of 30 students)
   1. Pencils (1 per student)
   2. Journal/Notepad
   3. Backpacks (Contents covered in previous lessons)
   4. Proper Clothing (Covered in previous lessons)
   5. Walkie-Talkies (If appropriate for the school)
   6. Cell Phones (one per group)
   7. Lesson Outlines (one per group)

3. Protocol
   • Remind class of the existing protocols.
   • Stay together
   • Start and stop on the signals.
   • Avoid handling equipment when teacher is instructing unless the equipment is necessary for the instruction.
   • Safety
   • Follow all instructions
   • Work in groups
   • Use knowledge from previous lessons
   • Make sure kids do journal entry

4. Class Rules:
   • Remind class of existing rules. These should be posted in a visible location in the gym.
   • Respect each other and the equipment.
   • Safety
**Instant Activity:** Group up: When students come into class they will be expected to group together with the other students who are in their final hike group; Gear up; students gather all of their equipment and backpacks. They must go through their checklist with their partner. Continue by leading your class to the head of the designated hiking areas.

**Set Induction:** This is the chance for you students to piece together all of your information from throughout the term. Also this is a chance for you students to utilize past skills. You finally get to put all of your knowledge to the test accomplish something of your own.

<table>
<thead>
<tr>
<th>MAF/Instructional technique</th>
<th>Extensions</th>
<th>Refinements</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Work in an area where all of the appropriate instruction can be carried out.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Make sue students are in their proper groups during the instant activity.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Have materials prepared for presenting the rest of the information to the class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Have signs around the class signaling where each group should meet according to their activity they want to do most</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Groups should be 4-6 students; multiple groups can do the same activity.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Check with administrators on this lesson; see if you can have extra time for the final lesson.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• Encourage your students to bring their own backpacks and good shoes. Depending on the schools, equipment</td>
<td></td>
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</tbody>
</table>
and community, you may require the students to bring their own equipment as well. Students should mark their name on their equipment.

- In preparation for this class, check the equipment is organized into proper groups.
- Give students their lessons back

**Informing Task:** Today you are going to follow your own lesson for your final hike. When I say **Go** spread out in your groups and check off with me then begin your hike. “**Go.**”

<table>
<thead>
<tr>
<th>Prepare a check list ahead of time.</th>
<th>Right now you are grouped together according to the final activity you want to do most.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group students together that will work responsibly.</td>
<td>Together you will complete your final hike and come back for closure.</td>
</tr>
<tr>
<td>The teacher can guide a group if there are other exceptions as well.</td>
<td>You should keep a journal.</td>
</tr>
<tr>
<td>Give the students a reasonable time in which they should complete each individual hike.</td>
<td>You should follow your plans.</td>
</tr>
<tr>
<td>Give the students a time to be back by.</td>
<td>Their hike plan should include</td>
</tr>
<tr>
<td>Allow the students to hike for the majority of the class period with a little time left for the closure.</td>
<td>1) Activities; the first and second activity they will do on their hike</td>
</tr>
<tr>
<td></td>
<td>2) Objectives; what they want to accomplish during their activities</td>
</tr>
<tr>
<td></td>
<td>3) Duties; each student in each group should have a equal amount of responsibility for their activity to be completed</td>
</tr>
<tr>
<td></td>
<td>4) Materials; what are you going to use on your hike</td>
</tr>
<tr>
<td></td>
<td>5) Timeline; what is their overall agenda, in order, and how much time will you need for each step.</td>
</tr>
</tbody>
</table>
**Closure/Assessment:**

Congratulations on your success. Did everyone complete your entire lesson? What did you enjoy most? What did you learn the most about? How will you use this info in the future?

Do Final Quiz 6
Quiz# 6

Name________________

1) What is the difference between Westslope and Eastslope cutthroat?

2) Name two places you can find trout food.

3) Name one insect a trout feeds on.

4) Name two types of fishing?

5) What time of year do rivers have insects?

6) Should you hold the butt of the rod facing forward or behind you?

7) Always be aware of your surrounding when fishing T/F?

8) Name one protocol for hiking.

9) What explain one safety precaution for hiking?

10) Always try to hike with ___________?
Quiz # 6

Name__________________

1) What is the difference between Westslope and Eastslope cutthroat?  
   Westslope cutthroat originated in the Rockies.

2) Name two places you can find trout food.  
   Student derived

3) Name one insect a trout feeds on.  
   Student derived

4) Name two types of fishing?  
   Fly fishing, and spin fishing

5) What time of year does a river have insects?  
   Year round

6) Should you hold the butt of the rod facing forward or behind you?  
   Forward

7) Always be aware of your surrounding when fishing T/F?  
   T

8) Name one protocol for hiking.  
   Student derived

9) Explain one safety precaution for hiking?  
   Student derived, Ex. Buddy system

10) Always try to hike with someone else?
Hiking an Backpacking

Assessment
Assessment Introduction

In our assessments we wanted to assure that the students understood the concepts and materials that were outlined in this unit; our hiking and backpacking unit covered a wide array of details that molded topics such as, outdoor skills, safety, navigation, and survival. In order to do so we included various informal assessments each day; checking for understanding by asking questions was typically carried out throughout the lessons and at the close of the lessons. For formal assessments we wished to accomplish the same goals; students have to fill out a journal each day by following along with the journal questions (attached is a template for the journal pages); each page is worth two points and journals are given to the teacher each Friday for review. Also, a ten point / ten question quiz will be given to the students at the closure of each Friday.
Hiking & Backpacking Journal

Day #____  Topic________________  Name________________

1) What is one thing you learned today that you didn’t already know?

2) How could you use this information to benefit your future?

3) In what type of situation would this information be useful?

4) Explain something that you would like to learn more about in relation to today’s topic?

5) Write something you learned about today that either surprised you or changed your view.
Quiz # 1

Name__________________

1) How much room should be in the end of your shoes?

2) What vertebrae should the top of your backpack cross?

3) What does R.I.C.E. stand for?

4) What angle should your arm be at in a sling?

5) What is the name of the book you can read for extra credit?

6) How many points do you lose for an unexcused absence?

7) If a slope of a hillside has a greater angle would it be more or less likely to have an avalanche?

8) How does the surface of terrain effect landslide?

9) What is the first thing you should do in case of an emergency?

10) How many compressions to breaths are required when administering CPR?
Quiz # 1

Name__________________

1) How much room should be in the end of your shoes?  
   *½ inch*

2) What vertebrae should the top of your backpack cross?  
   *7th*

3) What does R.I.C.E. stand for?  
   *Rest Ice Compression Elevation*

4) What angle should your arm be at in a sling?  
   *90 degrees*

5) What is the name of the book you can read for extra credit?  
   *Hatchet*

6) How many points do you lose for an unexcused absence?  
   *5*

7) If a slope of a hillside has a greater angle would it be more or less likely to have an avalanche?  
   *More likely*

8) How does the surface of terrain effect landslide?  
   *The more firm the more stable or the looser the more unstable*

9) What is the first thing you should do in case of an emergency?  
   *Call 911*

10) How many compressions to breaths are required when administering CPR?  
    *30 compressions to 2 breaths*
Quiz # 2

Name__________________

1) In which direction does the sun rise?

2) In which direction does the sun set?

3) When you have a dry mouth, what is that a sign of?

4) What are landmarks helpful for?

5) When lighting a fire how deep should you dig your hole?

6) What is the safety distance for your fire and surrounding objects?

7) How long should your stick be when making a bow?

8) What is the best thing to use for a barrier when creating a fire pit?

9) What do you do if your clothes catch fire?

10) What type of wood is best to start fire with a spark?
Quiz # 2

Name________________

1) In which direction does the sun rise?
   East

2) In which direction does the sun set?
   West

3) When you have a dry mouth, what is that a sign of?
   Dehydration

4) What are landmarks helpful for?
   Getting unlost

5) When lighting a fire how deep should you dig your hole?
   1 foot

6) What is the safety distance for your fire and surrounding objects?
   3 feet

7) How long should your stick be when making a bow?
   2 ½ feet

8) What is the best thing to use for a barrier when creating a fire pit?
   Large stones

9) What do you do if your clothes catch fire?
   Stop Drop and Roll

10) What type of wood is best to start fire with a spark?
    Dry kindling
Quiz# 3

Name________________

1) Name the most interesting plant you found and explain why you thought this.

2) Explain why plants are so important to the environment?

3) Name three interesting facts about each plant.

4) What’s one poisonous plant?

5) What is the name of three plants native to Washington?

6) What is the first step to purifying water?

7) What effects does boiling water have on organisms?

8) A large majority of your body heat is lost through you_______!

9) Should you give a hypothermic victim warm or hot water?

10) Should you keep moving or remain still after you have warmed up?
Quiz # 3

Name __________________

1) Name the most interesting plant you found and explain why you thought this.
   Student derived

2) Explain why plants are so important to the environment?
   Air, medicine, food, shelter

3) Name three interesting facts about each plant.
   Student derived

4) What’s one poisonous plant?
   Poisonous Oak

5) What is the name of three plants native to Washington?
   Student derived

6) What is the first step to purifying water?
   Build a fire

7) What effects does boiling water have on organisms?
   Kills potentially harmful organisms

8) A large majority of your body heat is lost through you heat!

9) Should you give a hypothermic victim warm or hot water?
   Warm

10) Should you keep moving or remain still after you have warmed up?
    Keep moving
Quiz # 4

Name_________________

1) What is the name of one of the shelters we learned about?

2) How far should you camp from lakes or streams?

3) What can you become sick with, if you drink dirty water?

4) What color berries can make you very sick?

5) How much percent of worms is protein?

6) What are 3 steps to avoid bites?

7) Bug repellent should contain what percent of DEET?

8) If you are being investigated by stinging or biting insects, should you run or freeze?

9) What plant form makes for great insulation in a shelter?

10) When bitten by a spider, should you try and extract the venom?
Quiz # 4

Name________________

1) What is the name of one of the shelters we learned about?
   Lean-to or Debris shelter

2) How far should you camp from lakes or streams?
   200 feet

3) What can you become sick with, if you drink dirty water?
   Hepatitis A, Giardia, or Salmonella

4) What color berries can make you very sick?
   Yellow

5) How much percent of worms is protein?
   80%

6) What are 3 steps to avoid bites?
   Wear dark clothes, Cover up, and Wear bug repellant

7) Bug repellent should contain what percent of DEET?
   30

8) If you are being investigated by stinging or biting insects, should you run or freeze?
   Freeze

9) What plant form makes for great insulation in a shelter?
   Moss

10) When bitten by a spider, should you try and extract the venom?
    No
Quiz# 5

Name________________

1) Name one animal print and one characteristic of that print.

2) Explain two differences between the animal prints used?

3) You should flip the _____ before casting.

4) The ___________ knot is important to keeping your lure on the line?

5) What should a fisherman do after the bail is flipped?

6) How many species of salmon are there?

7) Name two species of salmon?

8) Name an endangered fish species.

9) What is the difference between cutthroat and rainbow trout?

10) Can eating wild rainbow trout help you survive?
Quiz# 5

Name________________

1) Name one animal print and one characteristic of that print.
   Teacher derived

2) Explain two differences between the animal prints used?
   Student derived

3) You should flip the _____ before casting.
   Bail

4) The _______ knot is important to keeping your lure on the line?
   Fisherman’s

5) What should a fisherman do after the bail is flipped?
   Pinch the line to the rod.

6) How many species of salmon are there?
   Five

7) Name two species of salmon?
   Chinook, Sockeye, Pink, Chum, King there are other accepted names.

8) Name an endangered fish species.
   Bull Trout

9) What is the difference between cutthroat and rainbow trout?
   Red line on throat

10) Can eating wild rainbow trout help you survive?
    Yes
Quiz# 6

Name________________

1) What is the difference between Westslope and Eastslope cutthroat?

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3) Name one insect a trout feeds on.

4) Name two types of fishing?

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6) Should you hold the butt of the rod facing forward or behind you?

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10) Always try to hike with ____________?
Quiz# 6

Name__________________

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   Fly fishing, and spin fishing

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   Year round

6) Should you hold the butt of the rod facing forward or behind you?
   Forward

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   T

8) Name one protocol for hiking.
   Student derived

9) Explain one safety precaution for hiking?
   Student derived, Ex. Buddy system

10) Always try to hike with someone else?
Task Cards
Hiking and Backpacking
Task Cards

These task cards can be used in place of lesson twenty-two or in addition to lesson twenty-two. The task cards cover basic knot tying skills. There are ten task cards each containing an activity. To complete all ten-task cards it should take students a full class period.
Task Card 1

**Rules**

You must put about 3 inches of line through the hook eyehole and then take the line out. Repeat this step 5 times.
Task Card 2

Cues:
- Go slow
- Count aloud

Rules

Put 3 inches of line through the hook eyehole and then wrap the line around itself 5 times. Repeat this step 5 times.
Task Card 3

Rules

Put 3 inches of line through the hook eyehole and then wrap the line around itself. Take the short end of the line and put it through the first hole by the hook eyehole (not the hook eyehole). Pull the line tight. Snip your line and repeat this task 10 times.
Task Card 4

Rules

Repeat task 3 except use 6 inches of line for your knot instead of three. This time tie one knot on top of the other. You should have two knots on top of each other. Do this once successfully and move to task 5.
Task Card 5

**Rules**

Pick up a reel and thread the line around the reel arbor. Next tie an overhand knot around the line itself. Cut the line and repeat this 5 times successfully.

Cues:
- Go slow
- Pay attention to detail
Task Card 6

Rules

Pick up a reel and thread the line around the reel arbor. Next tie an overhand knot around the line itself. Then tie a second knot of the tag end of the line. Grab the tag end and pull the knot down.
Task Card 7

Rules

Grab a reel and repeat task 5, see if you can do task 5 in 10 seconds.

Cues:
- Think about your next step.
- Pay attention to detail
Task Card 8

Rules

For task 7 you must tie an arbor knot then a clinch knot using the same piece of line.

Cues:
- Go slow
- Pay attention to detail
Task Card 9

Rules

The Double Surgeon's Knot requires the leader and tippet to be placed side-by-side so they overlap (for about 6") with ends facing in opposite directions. Pinch the standing leader and tippet tag end with the left thumb and forefinger and use the right hand to tie an overhand knot with the leader tag end and the tippet. With the standing leader and tippet tag end still pinched tie an overhand knot with your right hand.
Task Card 10

Rules

The double surgeons knot is a great knot for tying lines together, see if you can tie four double surgeons knots in a row.

Cues:
- Go slow
- Pay attention to detail
Task Card 11

Rules

Grab two pieces of line. See if you can tie an arbor knot followed by a clinch knot. Then take the extra piece of line and add a double surgeons knot to your line.
**Skill Chart Introduction**

The skill charts are designed to give the students a visual example of a skill within the lesson. Skill charts are great for introducing skills and giving students who were absent something to look over if they are unfamiliar with the skill. The skills that are covered in this unit are CPR; building a shelter, building a fire, fly fishing and knot tying. All of these skills charts give great examples of the skill but should be taught in conjunction with their lessons not by themselves.
Bilding a Lean-To Shelter

- Select a good spot to build your lean-to. Build in a fringe area, neither in the center of a field nor a dense thicket, but somewhere between these areas. Choose an area at least 50 yards from a body of water, as evaporating water tends to add extra chill to the air.
- Find a fallen tree or a large, long rock to build your lean-to against. You can also tie a branch horizontally between two trees a few feet off the ground. There are hundreds of variables to making a lean-to; the important thing is that you have a sturdy brace to lean your structure against.
- Lean stout sticks along the horizontal brace of your lean-to. Crawl beneath them to make sure there is enough room to sleep under. There shouldn't be too much extra room, but it should be long enough to cover you completely.
• Pile smaller branches and twigs on top of your stout branches, leaving only an opening at either end exposed.
• Pile all manner of debris - moss, leaves, pine needles, dried fern or whatever nature makes available - on top of your structure.
- Place your fingers on the victim's chin and listen for breathing.

- Pinch their nose and tilt their head back slightly by placing two fingers on their chin.
• Cover mouth and blow twice.
• Breaths should be steady and last for 1 second.

• If the victim is still not breathing normally, coughing or moving, begin chest compressions.
• Find the base of the sternum with two fingers.
• Place your palm over the top of your fingers.
• Place your other palm over the top of your hands, interlocking your fingers.

• Push down on the chest 1½ to 2 inches 30 times right between the nipples.

• Pump at the rate of 100/minute (faster than once per second).

• Repeat process from the breathing to compressions until help arrives or the victim is revived.
Backpacks

- Your backpack should fit snugly.
- You will need to tighten the straps to adjust the fit.
- If the top of the backpack hangs down past your 7th vertebrae, it is too loose and the straps need tightening.
- Have a friend locate the bony bump at the base of your neck, where the slope of your shoulder meets your neck. This is your 7th cervical (or C7) vertebra. Tilt your head forward to locate it more
Hiking Boots

- Put on your boots!
- Your hiking boots should fit snug enough so you have plenty of ankle support.
- Your hiking boots should have about ½ inch of room between the end of your toes and the toe of your shoe.
- You should be able to wiggle your toes slightly and they should not be
Canteens

- A canteen can be an effective way to store, ration, and drink water.
- The canteen should be as full as possible without over flowing it to prevent your other equipment in the pack from becoming water damaged.
- Go fill your canteen and put it in your backpack!
Raingear

- Put on your raingear.
- The pant legs should cover the ankles on the boots to prevent water from entering.
- The sleeves should go to your wrists.
- Check with your partner to see if it fits.
- Put your raingear in your backpack!
Tarps

• Get your tarp.
• Try folding your tarp 3 different ways.
• The tarp should fit compactly in your pack.
• The tarp should take up less than ½ of your backpack.
• Fold your tarp and put it in your backpack!
Ropes

• Go and get your rope.
• Ropes can be essential for survival.
• Measure your rope.
• Wind and un-wind your rope 3 times.
• Wind tour rope and put it in your backpack!
First Aid Kits

• Go get your first aid kit.
• First aid kits are essential for survival.
• Open your kit and write down everything that it contains.
• Put your first aid kit in your backpack!
Checklist

• Check with your partner.
• Do you have all of the required equipment?
• Fill out your checklist and give it to your teacher!
Adjustments

- Does your backpack still fit properly?
- Make the proper tightening or loosening adjustments to assure a proper fit while the backpack is full.
- Remember, the top of your backpack should sit on your 7th vertebrae.
- If you need help go back to the backpack task card or see the teacher.
Hike & Fun

- Hike around campus.
- Be back 5 minutes before the shower bell.
- Observe you’re fit in your backpack.
- Break in your shoes.
- Observe the support and comfort in your hiking boots.
- If you are experiencing any discomfort make sure to notify the teacher.
Fly Fishing

Step 1
- Pull ten feet of line from the reel
- Line should be in a straight line coming out of the rod.
- Pinch line with pointer finger on the rod handle.
- Pick line up with the rod.

Rod moves from ten o’clock to two o’clock

Step 2
- Bring the rod behind your head; rod should stop at two o’clock.
Step 3

- Stop rod at ten o’clock and then move rod back to two o’clock.
- Repeat
Starting a Fire Using a Bow-Drill

- Make your bow from a light sturdy sapling about 2 ½ feet long.
- Tie a piece of nylon cord from one end of the bow to the other.
- If you don't have a nylon cord, you can use string or a shoelace.
- Use a dry, soft wood such as cedar to make the other parts of the drill.
- The hold piece should fit into your hand firmly.
- Create a small depression in one side of the hand-hold for the spindle to ride in.
- Create your spindle from a branch about ¾ inch wide, about 6 inches long, and strait.
- Both ends of the spindle should be at a dull point
- You want your fireboard about a 1/2-inch thick and flat on both sides.
- Create a depression in it similar to the hand-hold for the other side of the spindle
• Gather materials in a bundle that will easily light to a fire

• Place your fire board on the ground
• Place your left foot across it to hold it stable while your right knee is on the ground.
• Wrap the cord on your bow around the spindle one time
• Put the bottom end of the spindle in the notch on the fire board.
• Put the top end of the spindle into the handhold notch and press down on the handhold.
• Hold one end of the bow in your right hand with the cord facing inward
• Press down on the handhold with your left hand.
• Move your right arm back and forth in a sawing motion, spinning the spindle.
• Increase the speed of the motion and the intensity of your pressure until the fire board begins to smoke.
- When smoke turns to an amber carefully remove it with a tool.

- Place it in your fire-starting materials and blow gently.

- Fire!
Resources

(The following sources provided multiple amounts of information for our entire unit.)


Bow drill pictures taken from
http://www.arthurhaines.com

lean to pictures taken from
http://www.ehow.com

cpr pictures taken from
http://www.ehow.com

Materials

1. Backpacks
2. Canteens (or water bottle)
3. Raingear (Jacket and Pants)
4. Survival/First Aid Kits (Contents Explained Below)
5. Bandages
6. Antibiotic ointment
7. Gauze pads
8. Iodine or similar prep pads
9. Alcohol prep pads
10. Butterfly bandages
11. Antibiotic ointment
12. Medical adhesive tape
13. Aspirin and/or non-aspirin pain relievers
14. Ace Wraps
15. Sun screen
16. Basic first aid instructions
17. Instant Ice Pack
18. Instant Heat Pack
19. Tarps (8x10)
20. Rope (25ft)
21. Binoculars
22. Silverware
23. Compass
24. Flash Light
25. Map
26. Cotton Shirt
27. Wool Shirt
28. Whistle
29. Plastic Bag
30. Piece of wood 3 feet by 6 feet or so.
31. Poly-spots
32. Tape
33. Book
34. Sand
35. Rocks
36. Marbles
37. Avalanche and Landslide Assessment
38. Pencils
39. Paper
40. Maps
41. Construction paper
42. Hiking boots
43. Hula hoops
44. Jump ropes
45. Mats
46. Water Buckets
47. Stones
48. Cotton Balls
49. Petroleum Jelly
50. Box of Waterproof Matches
51. Plastic Film Canisters (or Zip-lock Baggies)
52. Dry Kindling
53. Sturdy Sapling (about 2 1/2 feet long)
54. Nylon Cords
55. Cedar Hand Holds
56. Cedar Spindle Branches (about 3/4 inch wide and about 6 inches long)
57. Cedar Fireboards (about 1/2 inch thick and flat)
58. Walkie-Talkies (If appropriate for the school)
59. Cell Phones (one per group)
60. Materials to build a debris shelter (brush, debris, rubbish, sticks)
61. Materials to build a lean-to
62. Journal/Notepad (1 per student)
63. Digital Cameras
64. Printing materials for the camera
65. Cards with five different local animal prints on them.
66. Cone
67. Actual animal print molds.
68. Parachute
69. Fishing rod and reel
70. 30 Hook less lure.
71. 30 Pieces of yarn.
72. Frisbee
73. coffee cans (1 per group)
74. study sticks (1 per coffee can)
75. Hot dogs (at least 1 per student)
76. Buns (1 per hot dog)
77. condiments (if available and appropriate)
78. Video
79. Cards with five different salmon species on them.
80. A few small shovels (gardening tool).
81. Fishing rod and reel
82. Fly-fishing rod
83. Yarn
84. Lure
85. Single bait hooks
86. bait
87. Water such as a pond or stream would be helpful