

OUTDOOR RECREATION LEADERS PROGRAM

PARTICIPANT MANUAL



Name



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INTRODUCTION

What is the Outdoor Recreation Leaders Program?

The Outdoor Recreation Leaders Program is a series of workshops that will help you learn to lead groups in outdoor activities. They will teach you how to lead a group safely, sustainably, and successfully.

The Outdoor Recreation Leaders Program (ORLP) is a diverse set of workshops to help train both new and experienced people to lead outdoor recreation activities safely, sustainably, and more successfully. This program was developed in response to the increased use of public lands in Clark County and the need to conserve these incredible natural areas in our community for future generations to enjoy.

The History of the Outdoor Recreation Leaders Program

The development of the curriculum was funded by the Southern Nevada Public Land Management Act through the Engaging Communities project, a collaboration between the Southern Nevada Agencies Partnership (SNAP) and other partners to support community stewardship of public lands. As part of the project, Utah Tech University developed and ran the Outdoor Recreation Leaders Program (ORLP) from 2020-2024 in support of federal public lands sites around Clark County, Nevada.

Utah Tech University was approached to work on ORLP due to the success of the Outdoor Leadership Academy, a program

hosted by the university and the connections it established in Clark County. Founded in 2015, through a partnership between Utah Tech University and Grand Canyon-Parashant National Monument, the Outdoor Leadership Academy aims to lower the barriers for underrepresented young adults to experience public lands by creating impactful experiences in nature. Over the years, Lake Mead National Recreational Area became an important partner, strengthening the connection between Utah Tech and the Clark County area.

Between 2021-2024, ORLP staff conducted over 50 workshops using the curriculum from this workbook. During that time, ORLP hosted college interns who helped research best practices and run workshops, and it partnered with a variety of Utah Tech University undergraduate and master's level classes on the development, design, and copy editing of this workbook. Clark County nonprofits and Meetup groups invited ORLP to partner with them to offer workshops. Through these efforts, the program developed ongoing relationships with community groups such as Blacks in Nature, Outdoor Afro, The Phoenix, and VegasHikers. In addition, participants generously shared their feedback on every workshop. The results were reviewed by local outdoor experts and public land agency staff. Every person who contributed to this process helped improve the materials in this workshop.

Representatives of SNAP chose ORLP topics based on the greatest needs in Clark County public lands, and the workshops were organized into three tiers to accommodate participants with different experience levels and time availability. The final list of workshop topics evolved over the years based on feedback from SNAP and participant feedback. This feedback led us to split material for some topics into more than one tier in order to address different levels of

experience. However, you will find that introductory-level material is mostly found in Tier 1, and more advanced material is in Tier 2. Tier 3 was designed to provide outdoor recreation leaders with formal certifications. Although there are no workshops specifically for Tier 3 in this workbook, you may learn of opportunities for these advanced trainings in your Tier 1 and Tier 2 workshops.

Program Organization

Tier 1: Basic Outdoor and Leadership Information

You need little to no outdoor experience for these workshops. They will teach you the basics needed to lead groups in outdoor activities.

Tier 2: Intermediate Outdoor Experiences

These workshops move beyond the basics and require more time and previous experience. They involve full-day to overnight activities.

Tier 3: Advanced Outdoor Leadership Certification

These workshops are based on certifications and national learning programs. You will learn advanced skills and earn outdoor certifications. These workshops typically require extended trips, lasting a week or longer, and may not be offered as part of the program using this workbook and may not be offered by the organization running workshops from the other tiers. Examples include Wilderness First Aid and Leave No Trace Master Educator certifications. More information about these and other certificates can be found online although they may not be offered locally.

TIER 1 WORKSHOPS

- 1.1 Core Camping Skills: Tents, Stoves,& Campfires
- **1.2** Trip Best Practices
- 1.3 Ten Plus Essentials: Things to have with you just in case
- 1.4 Planning Day Trips
- 1.5 Planning Camping & Overnight Trips
- 1.6 Trip Safety
- 1.7 Basic Navigation Skills

1.1 CORE CAMPING SKILLS: Stoves, Tents, and Fires

Learning and practicing camping skills ahead of your trip will help you be prepared to quickly set up camp. Then you'll be able to focus on the fun of your trip.

Learning Objectives

After this module, and with some practice, you will be able to:

- 1. Set up a basic camping stove and use it to cook a simple meal.
- 2. Pitch a tent and understand some basic differences in tent designs.
- 3. Light a campfire and know basics around restrictions and wildfire prevention.

What makes an outdoor trip good?

 Examples:
 Friends
Fun activities
 Good scenery

Camping Stoves

Canister stoves are commonly used outdoors. They typically use propane or isobutane. These fuels are not usually interchangeable. Always use the right fuel type for your stove.

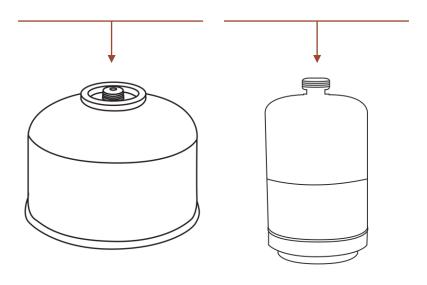
Activity: Canister Pros and Cons

	Canister Pros a	nd Cons
Туре	Propane	Isobutane
Use		
Pros		
Cons		

Fill in this chart while you discuss canisters with your instructor.

Activity: Label the Canisters

Write the correct name (either propane or isobutane) on the line by the canister.



Setup, Tips, and Safety Notes
,

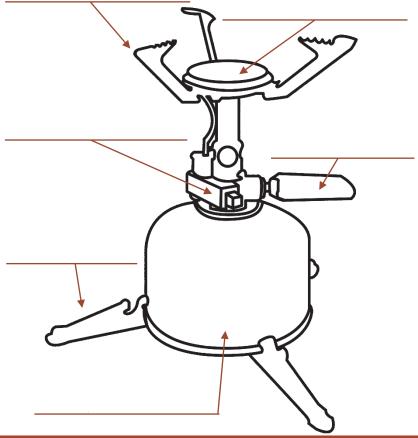
Activity: Label the Stove Diagrams

Using the word banks with each diagram, write the names of the parts the arrows are pointing to on their lines.

Canister Stove

Word Bank

Burner Isobutane Fuel Canister Pot Support Stand Fuel Regulator Piezo Igniter

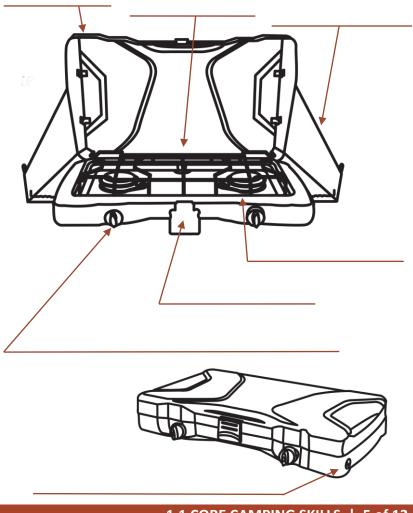


Coleman-style Stove

Word Bank

Temperature Control Knob Burner Lid Gas Regulator Latch Grate

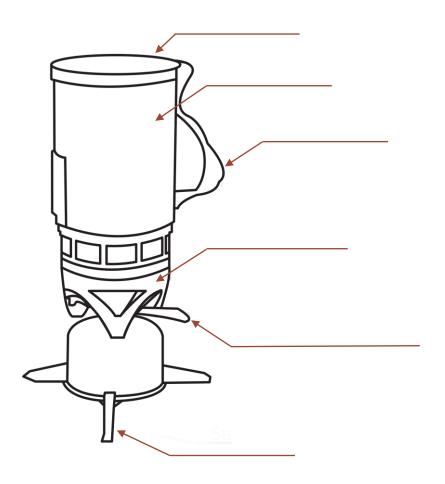
Wind Shield



Jetboil Stove

Word Bank

Handle Lid Shroud Fuel Regulator Pot Stand



Setting Up a Tent

Activity: Standing Tent Types

Label whether the tents are freestanding, semi-freestanding, or non-freestanding.



Tent Placement Tips

Consider the slope of the ground. Position your head uphill.

Don't put your tent too close to a fire or smoke.

Consider the wind direction.

Camp in existing campsites or on surfaces that resist trampling like rock, sand, or gravel.

Remember to reduce signs of camping when you leave!

Activity: Labeling Tents

Using the word banks with each diagram, write the names of the parts the arrows are pointing to on their lines.

Tent Diagram 1

Word Bank

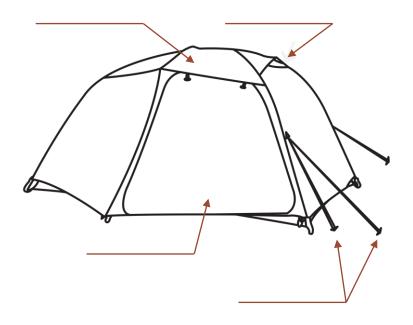
Bathtub Floor Fabric Poles Door (D-Door) Mesh Stakes



Tent Diagram 2

Word Bank

Guylines Rainfly Door Vent



Notes			

Building a Campfire

Fire Policies	
Fire Location	
Logs, Fuel, Kindling, & Tinder	
Fire Starters	

Fire Shapes

Label the fire shapes with names. Add the pros and cons.







Fire Extinguishing Checklist □ Drown the campfire with water. □ Mix the ashes and embers with soil and water. □ Scrape partially-burned sticks and logs to remove all hot embers. □ Repeat previous steps. □ Everything should be cool to the touch before you leave the fire area unattended.

1.2 TRIP BEST PRACTICES

Learning these outdoor principles will help your trip be safer and more fun. You will also learn how to keep the outdoors a great place for many people to enjoy.

Learning Objectives

After this module, and with some practice, you will be able to:

- Know and apply the principles of the Trip Best Practices.
- Understand how visitors can impact public lands in positive and negative ways (and be motivated to choose positive options!).

Activity: Trip Best Practices

With your instructor's help, fill in the blanks with the Trip Best Practices. Take notes on the lines and in the boxes with each practice. (A completed list is in the Frequently Used Information section of the manual.)

1		

2	
DURABLE SURFACES	NON-DURABLE SURFACES
3	
4	
	Cathole
	/\\\\

5.	 		
6.	 		
	 		
7.			
7	 _	4	(
	```.	```	
8.	 		 

9	 	 
Notes		

### 1.3 TEN PLUS ESSENTIALS

Are you prepared for common accidents and emergencies on outdoor trips? You may have heard of the ten essentials—a list of items you should always carry just in case. In this module, you will review the basic ten essentials plus a few other important ones. You will understand why they can be important when in the wilderness.

# **Learning Objectives**

After this module, and with some practice, you will be able to

- 1. Know the Ten Plus Essentials*
- 2. Understand the purpose and need for them
- 3. Have a plan on inexpensive ways to get your own Ten Plus Essentials
- *A full reference list with notes of the Ten Plus Essentials is in the Frequently Used Information section.

	TEN PLUS ESSENTIALS
Notes	

Notes	
Notes	 
- <u>Ö</u> -	
Notes	

Notes	
1	
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Notes	

Notes	 _
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	ESSENTIAL PLUS+	
Notes		
Addition	nal Notes	
		_
		_

	lo you h	nave?		
What d	lo you r	need?		

### 1.4 DAY TRIPS

The secret to a successful outdoor recreation trip is to have a good plan. The weather can turn bad, equipment can break, and people can forget to bring things. Mishaps may happen, but a trip can still be fun with a good plan. Are you ready to make a good plan for a trip?

# **Learning Objectives**

After this module, and with some practice, you will be able to:

- 1. Determine intent, goals, and objectives for a day trip.
- 2. Pick the right location to meet those objectives.
- 3. Plan a trip considering key factors and logistics (safety, ability levels, group preferences, and so on).

# **Activity: Planning a Trip**

Using the Trip Form and the instructor's help, plan a trip for your group. Keep the following questions in mind:

### 1. What is the intent of your trip?

My trip:	<b>Examples:</b> Fun
	Social bonding
	Exercise
	Develop confidence
	Challenge

My Goals:
My Objectives:
3. What location fits your objectives?
Location Notes:

2. What are your goals and objectives?

# **Plan for Logistics**

Fill in the blanks while you discuss what you need to plan for.

1.	P	c	
Мс	- ,	perience with the participants	
2.	S	& I	
	-	are going and how long it will take	
3.	D	D	
Мс	aps and location a	levices	

4.	P
Do	I need a permit or reservation? Always check!
_	_
5.	T
Но	w will we get to the trailhead?
6.	c
Но	w will I communicate if an emergency happens?

7.	B			
How much will this trip cost?				
8.	G	& E		
Re	member the Ten Plus	Essentials		
9.	w	-		

10. R					
How can I learn about our trip and share what I know?					
11. T	B	P			
12. S	M				
If something <u>c</u>	goes wrong, what	is the plan?			

# **Introduction to Risk Management**

**Word bank** 

identify

### **Activity: Basic Risk Management Process**

Fill in the blanks using the word bank as you go over the **Basic Risk Management Process** with your instructor.

risk manager

implement		assess	adjustments
1.		the hazards.	
2.		the hazards.	
3.	Make a plan th	at	the hazards.
4.		the plan.	
5.	Continually ass	ess your plan and ma	ake any necessary
		·	
6.	Recognize you	are your own best	

addresses

EXAMPLE DAY TRIP FORM				
Trip Name				
Red Rock Canyon Nationa	l Conservation Area			
Trip Location				
1000 Scenic Loop Dr, Las V	egas, NV 89161			
Trip Purpose & Objectives				
Explore Red Rock and do a	híke			
Trip Leader 1 Name	Cell Phone #			
Jení Scout	1-702-333-3333			
Trip Leader 2 Name	Cell Phone #			
Tyler Hyke	1- <i>7</i> 02-555-555			
Trip Emergency Contact	Cell Phone #			
Friend Smith	1- <i>7</i> 02-444-5555			
Checklist				
<ul> <li>□ Permits Printed or Sa</li> <li>□ Weather Links sent t</li> <li>□ Driving Directions se</li> <li>□ Map or topo info ser</li> <li>□ Additional resource i</li> </ul>	o participants nt to participants			

DAY TRIP FORM (continued)			
List of Vehicles	Weather Report		
Tyler's Expedition	Weather Report (update morning of trip)		
Jení's mínívan	Sunny, lows of 48F and highs of 70F. Check day of at Redrockcanyonlv.com/weather		

#### Resources

www.redrockcanyonlv.org

#### **TRIP ITINERARY**

Date 4/20/25

Time	Activity	Location
9:00am	Departure	Jení's house
		XXXX 4 th St, Las Vegas
9:15-9:45am	Driving	Red Rock Canyon Entrance
10:00-12:00pm	Activity	Hiking Calico Tanks
12:00-1:00pm	Lunch	Picnic at the trailhead
1:00-1:30pm	Return	Return to Jení's house

# DAY TRIP FORM (continued)

	SAFETY MANAGEMENT PLAN				
Ad	dress & Phone # of hospital	s ar	nd health care facilities		
(al	ong the way and near the de	estin	ation)		
Su	ımmerlin Hospital Medical	Cen	ter - 702-233-7000		
65	7 Town Center Dr.				
La	s vegas, NV				
Na	me & Phone # of Search & I	Resc	cue:		
LA	s Vegas METRO Search an	d R	escue call 911		
Lis	t of Participants with First A	\id T	raining		
(ar	nd their level of training)				
Jen	í has CPR and fírst aíd				
Fm	nergency Response Steps	Ch	ecklist		
1.	STOP and assess		Communication Device		
	Provide care to the		or Plan (other than the		
۷.	injured based on your		leader's cell phone)		
	training		Liability/waiver form for		
3.	· ·		organization		
٥.	needed and make a plan		Organization		
4.	•				
•••	<ul> <li>Other participants</li> </ul>				
	Search & Rescue				
	Medical Assistance		-		
	Emergency Contacts				

Your organizations

DAY TRIP FORM (continued)				
	TRIP BUDGE	Т		
Expense	Amount	Notes		
Transportation	\$50	Gas		
Food	\$50	lunch		
Permit	\$30	Entrance fee		
Supplies/Gear	\$40	First aid kit		
Total	\$170			
# of Participants	10			
Cost per Participant	\$17			

#### **TEN PLUS ESSENTIALS PACKING LIST**

Navigation: Map, Compass, & GPS System



Everyone has Gaía downloaded with the area downloaded for using offline

# Sun Protection: Sunglasses, Sunscreen, & Sun Hat



Bottle of SPF 30

Sunglasses

Hat

# Insulation: Jacket, Hat, Gloves, Rain Shell, & Thermal **Underwear** Fleece Jacket Illumination: Flashlight, Lantern, & Headlamp Head lamp with extra batteries **First Aid Supplies** First aid kit Fire: Matches, Lighter, & Firestarter Lighter and matches Repair Kit and Tools: Duct Tape & Multi-tool Duct tape and Jeni has a multi-tool **Nutrition: Food Makes All the Difference** Snickers bar



Snickers bar Pedialyte

Hydration:	Water & Water Treatment Supplies
•	Camelback 32 oz
	Two extra bottles (24 oz each)
Shelter	
<b>A</b> .	Emergency blanket
Disposing	of Human Waste
	use outhouses at trailhead, Tyler has a WAG bag for emergency needs on the trail

#### 1.5 CAMPING AND OVERNIGHT TRIPS

Once a leader is comfortable with day trips, a good next step is to lead an overnight camping trip. To learn to do so, you will build upon your skills for planning a day trip and add what is needed for an overnight trip.

Creating a plan will help get the right people to the right place at the right time to have a meaningful experience. Like day trips, the weather can turn bad, equipment can break, and people can forget to bring things. As a leader, you can be prepared to turn any mishap into a good memory instead of a ruined trip.

### **Learning Objective**

After this module and with some practice, you will be able to:

- Prepare an effective plan for an overnight outdoor group adventure.
- 2. Plan for safe food storage and meals to accommodate different dietary needs.
- 3. Select appropriate camping gear for location and weather conditions (with an emphasis on tents, sleeping bags, and sleeping pads).

### **Activity: What Makes a Good Overnight Trip?**

1.	What are your favorite memories from overnight trips?				

successful?	
consider the Plan for Logistics	Examples: Fun activities
	Good food
	Somewhere to sleep
Fill out the Trip Form for	on & the Trip Form  ryour overnight trip. Be sure to gistics section of Module 4: Day Trips
Intentions of the	Ггір
	· · · · · · · · · · · · · · · · · · ·
- <del></del>	

2. What do you need to make your overnight trip

During your group discussion, add the details you find useful for the following logistics specific to overnight camping.

**Overnight Specific Logistics** 

Pre-trip:	 	
Camanaitan		
Campsites:	 	
Food/Water:		
Hygiene:		
Trygletie.		

Trash:	
On th	ne Trip
Settin	g up Camp Checklist
	If loaning gear to participants, you may decide to have people check it out before the trip or once you reach your destination.  O Numbering items and tracking who is borrowing each one provides accountability.
	If everyone is responsible for their own gear, do a quick gear check before heading out.  O This could happen at a pre-trip meeting or where you meet before heading out to your destination.
	If it is warm, coolers should be in the shade, if possible.
	Set up tents 15 ft upwind from any grills or fire pits.
	Make sure tents are being set up on established pads and are not encroaching on neighboring sites
	Set up tents first. Have more experienced people help
	the less experienced.
	If necessary, demonstrate how to inflate sleeping pads.
	Do you need someone to fill up a water container or is there a spigot at the site?
	If appropriate, have the group help set up the camp

#### **Assign Camp Task Roles**

Assign roles to the members of your group. In a large group or for a long trip, rotate the roles to share the burden of the needed work.

Write the name of the role next to the responsibilities.

ROLE	RESPONSIBILITIES
	Keep gear organized and protected. Load vehicles with heavy items first unless they need to be accessible. (1-2 people)
	Keep track of time and set the pace. Point out dangers and help others avoid them. (1 person)
	Assist everyone in keeping the camp clean. Inspect the camp for trash before leaving. Clean the kitchen area after cooking (though everyone cleans their own dishes after eating). (2 people)
	Cook all meals for the group daily. This may include meal prep, serving food, and putting the food away in storage containers after each meal. (2 people)
	Keep track of the mood and add safe fun and humor to activities. Help those with heavier loads enjoy their responsibility. (1 person)
	Track the group's health and awareness of their surroundings. Encourage water drinking and ensure everyone is urinating. Immediately report safety concerns to the group leader. (1 person)

## **Trip Security Discussion** Group your trip participants in pairs to assign them to keep track of each other. These pairs should ideally be people who don't know each other well, since couples often go off together. Lead a discussion about group norms on the trip. Some example things to consider include: **Quiet hours** Respecting neighboring groups 0 Any assigned jobs like meal prep or cleaning Communication expectations: If people leave the site: names, destinations, and expected time of return Which leader is responsible for handling emergencies in the middle of the night and how to find their tent. ☐ State clear fire safety rules. Make sure trip participants know what they need for each activity and when to be ready. **Packing Up**

Check in all borrowed gear as you pack up.
Have the group help clean up and pack shared gear.
Clean all trash and microtrash. Be prepared to take
trash home with you, if needed.
Do a final site inspection. Leave each area in better
shape than when you arrived.

#### When You Get Back

Get feedback from your participants so you can
improve and plan for your next trip.
Unpack and clean your gear. Take care of it so it is
ready for the next trip.
Replace any items used or used up (first aid kits,
standard kitchen items like towels or soap).
Debrief with your leaders to improve your next trip.

# **Car Camping Checklist**

The advantage of car camping is being able to take more supplies with you. Below is an extensive list of items to consider bringing when car camping. Check off items as you pack them.

# **Clothing (*cold weather items)**

Head and Upper Body	Lower Body and Feet
Head and Upper Body  Beanie (fleece or wool hat) Brimmed hat Fleece or wool jacket Long-sleeve shirt (wool, thermal or a sunshirt) Poncho (if your jacket is not waterproof) Scarf or face mask* Snow jacket*	Lower Body and Feet  ☐ Hiking boots ☐ Pants (nylon, spandex, breathable fabric) ☐ Shorts (nylon, spandex, breathable fabric) ☐ Snow pants* ☐ Socks (wool, cotton, liner) ☐ Tennis or running
<ul><li>□ T-shirts</li><li>□ Warm gloves*</li><li>□ Rain/wind jacket</li></ul>	shoes  Thermals*  Underwear

# **Cooking Supplies**

Equipment and Cleaning	Dishes and Silverware
☐ Biodegradable dish soap	☐ Dish bins (3)
☐ Measuring cups	☐ Frying pan
☐ Pot handles	☐ Mug or unbreakable cup
☐ Small container of bleach	for each person
$\square$ Stove (with fuel bottle)	☐ Pots (with lids)
☐ Waterproof matches or	☐ Serving spoon
lighter	☐ Spatula
☐ Ziploc bags	☐ Spoons, forks, knives for
	each person
	☐ Tupperware containers
	for food storage
	☐ Unbreakable bowls and
	plates for each person

# Sleeping, Shelter, and Hygiene

Sleeping and Shelter	Hygiene	
☐ Nylon ropes	☐ Brush and comb	
<ul><li>☐ Sleeping pad</li><li>☐ Smaller tarp</li></ul>	<ul><li>Bug spray</li><li>Dromedary bag (washing)</li></ul>	
☐ Tent/tarp	☐ Lip balm	
☐ Winter*/Summer	☐ Pads or tampons if needed	
sleeping bag	☐ Sunscreen	
	☐ Toilet paper/paper towels	
	☐ Toothbrush and toothpaste	

# **Useful and Optional Items**

Useful Items	Optional Items
<ul> <li>□ Bandanas</li> <li>□ Duffle bag or storage tubs</li> <li>□ Extra batteries</li> <li>□ First aid/repair kit</li> <li>□ Headlamp/camp lamp</li> <li>□ Medications (as necessary)</li> <li>□ Plastic bags (heavy-duty)</li> <li>□ Pocket knife</li> <li>□ Sunglasses</li> </ul>	<ul> <li>□ Books</li> <li>□ Camera</li> <li>□ Field guides</li> <li>□ Notebook and drawing supplies</li> </ul>
☐ Water bottles	

#### **Add Your Own List Items**

_			

# **Tents** - Optional

**Word bank** 

### **Activity: Tent Terms**

Fill in the blanks using the word bank as you go over the terms used for describing tent types.

Freestanding	Non-freestanding	3-season	
Semi-freestanding	Pop-up	All season	

1.	Poles fully support the shape of the
	tent without stakes.
2.	Tent will stand without stakes but will
	not have its full shape. Often a few stakes make it fully
	supported. Sometimes manufacturers call these
	freestanding.
3.	Tent requires stakes to have a shape.
	Likely useless without stakes.
4.	May have built in poles or wires to
	unfold and support it as you open it up. Easy to set up, but
	less durable. The poles can break, and the tent doesn't
	withstand wind well.
5.	Not suitable for cold or extreme
	weather. Lighter and fine for most uses. More mesh and
	better airflow.
6.	Built to withstand extreme weather
	like snow and heavy rain. Less mesh. Better at trapping
	body heat.

## **Activity: Standing Tent Types**

Label whether the tents are freestanding, semi-freestanding, or non-freestanding.



# **Tent Placement Tips**

- Consider the slope of the ground. Position your head uphill.
- Don't put your tent too close to a fire or smoke.
- Consider the wind direction.
- Camp in existing campsites or on surfaces that resist trampling like rock, sand, or gravel.

Remember to reduce signs of camping when you leave!

Other Tent Notes	

# Sleeping Bags and Pads -Optional

## **Sleeping Bag Terms**

Fill in the blanks with the proper terms.

#### Insulation

S

• The filling of the sleeping bag is synthetic, regardless of the cloth the cover is made of.

	PROS		CONS
•	Less expensive than	•	Heavy
	down	•	Take up a lot of
•	Warm when wet		space/don't pack down
•	Easy to wash		much

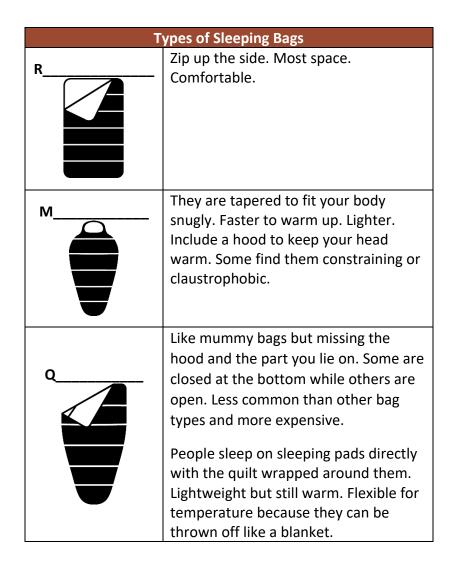
D	)							

- The filling is either goose or duck down.
- Hydrophobic down: down that has been treated to resist water.
- Duck down: less expensive and less warm than goose.
- Goose down: more expensive and warmer than duck.

PROS	CONS
<ul> <li>Lightweight</li> </ul>	More expensive than
<ul> <li>Usually warmer than</li> </ul>	synthetic
synthetic	<ul> <li>Requires special care</li> </ul>
<ul> <li>Packs down small</li> </ul>	when cleaning

F	:	P	)				

- How lofty or fluffy the filling is. Higher fill power is loftier, warmer, and lighter.
  - Lowest quality: about 500 fill (500 cubic inches)
  - Highest quality: about 900 fill (900 cubic inches)



Sizing		
Warmth R	ating	
SUMMER	SPRING AND FALL	WINTER
30° bag	15°-30° bag	0°-15° bag
Other Slee	ping Bag Notes	

# **Sleeping Pad Terms**

MATERIAL	DESCRIPTION
	The foam equivalent of an egg carton with the foam protected by an outer coating that may add some insulation.
	Has a valve that will allow air to enter the pad automatically when it is open.
	Requires you or a pump to get air into it.
INSULATION TERM	DESCRIPTION
	The higher this value, the better the insulation. Values below 2 are only suitable for warm weather. Values from 3-4 appear to be most popular, but values can go up to 7.

Sleeping Pad Notes				

EXAMPLE CAR CAN	EXAMPLE CAR CAMPING TRIP FORM				
Trip Name					
Red Rock Canyon National (	Conservation Area				
Trip Location					
Group Campground, 3293 Mi 89161	oenkopi Rd, Las Vegas, NV				
Trip Purpose & Objectives					
Explore Red Rock and camp					
Trip Leader 1 Name	Cell Phone #				
Jení Scout 1-702-333-3333					
Trip Leader 2 Name	Cell Phone #				
Tyler Hyke	1- <del>7</del> 02-555-555				
Trip Emergency Contact	Cell Phone #				
Friend Smith	1- <del>7</del> 02-444-5555				
Checklist					
<ul> <li>□ Permits Printed or Saved</li> <li>□ Weather Links sent to participants</li> <li>□ Driving Directions sent to participants</li> <li>□ Map or topo info sent to participants</li> <li>□ Additional resource info sent to participants</li> <li>□ Pack ítems from car campíng checklíst</li> <li>□ Prepare and pack food plan</li> </ul>					

List of Vehicles	Weather Report
Tyler's Expedition	(update morning of trip) Low: 52F Hígh: 73F,
Jení's mínívan	sunny Check morning of trip at Redrockcanyonlv.com/weather

#### Resources

www.redrockcanyonlv.org

#### TRIP ITINERARY

Date 5/9/25

Time	Activity	Location and Notes			
DAY 1					
9:00am	Departure	Jení's house			
		XXXX 4 th St, Las Vegas			
9:15-9:45	Driving	Red Rock Canyon			
		Entrance			
10:00-11:30	Set up campsite	Red Rock Campground			
	and get oriented				
11:30-12:00	Lunch	Pícnic at campsite			
12:00-4:00	Hike	Kraft Mountain (3.5			
		mí)			
4:00-6:00	Downtime	Cooks prep for dinner			
		starting at 5 p.m.			
6:00-7:00	Dinner	Family-style dinner			
		and clean up			
7:00-8:00	Group Game	Assassín ís a fun group			
		game			
8:00-10:00	Campfire with	Tell stories			
	group day debrief				

DAY 2						
8:00-9:00	Breakfast,	Cooks need to prep at				
	Put camp away	7:30 and put our lunch				
	for the day to	for individuals to pack				
	protect gear from	for the day				
	wind and animals					
9:00-12:00	Climbing	Meet guide				
12:00-12:30	Lunch break at	Sweep area after eating				
	climbing area					
12:30-3:00	Climbing					
3:00-5:30	Downtime at	Journal, group games,				
	campsite	personal time to bathe				
5:30-6:30	Dinner	Cooks need to prep at				
		4:30				
6:30-7:30	Group Game	Capture the Flag				
7:30-9:30	Campfire with	Facilitate discussion on				
	group day debrief	the value of wildlands				
	DAY 3					
8:00-9:00	Breakfast	Cooks prep at 7:30 and				
		put out lunch for group				
		to pack				
9:00-10:00	Pack up camp	Sweep camp, have				
		loaders organíze gear				
		and load into vehicles				
10:00-11:00	Drive home					
11:00-11:30	Trip debrief					
12:00	Pick up time and					
	lunch with					
	parents					

SAFETY MANAGEMENT PLAN				
Address & Phone # of hospital	s and health care facilities			
(along the way and near the de	estination)			
Summerlin Hospital Medical	Center - 702-233-7000			
657 Town Center Dr.				
Las Vegas, NV				
Name & Phone # of Search & Rescue (County Sheriff)				
Call 911 if it's an emergency for Metro police and search				
and rescue				
List of Participants with First A	Aid Training			
(and their level of training)				
Jení has CPR and fírst aíd				
	,			
<b>Emergency Response Steps</b>	Checklist			
<ol> <li>STOP and assess</li> </ol>	☐ Communication Device			
2. Provide care to the	or Plan (other than the			
injured based on your	leader's cell phone)			
training	☐ Liability/waiver form for			
3. Decide if an evacuation is	organization			
needed and make a plan				
4. Communicate with:				
<ul> <li>Other participants</li> </ul>				

Search & Rescue Medical Assistance Emergency Contacts Your organizations

TRIP BUDGET					
Expense	Amount	Notes			
Transportation	\$50	Gas			
Food	\$360	Food for three days \$10 per person per day			
Campground	\$168	C-Road Runner			
Supplies/Gear	\$40	First aid kit			
Total	\$618				
# of Participants	10				
Cost per Participant	\$61.80				

TRIP ROSTER					
Name (role)	Contact #	Emergency Contact	Emergency Contact #	Health Considerations & Signs of Issues	
1.					
2.					
3.					
4.					
5.					
6.					

#### TEN PLUS ESSENTIALS PACKING LIST

#### Navigation: Map, Compass, & GPS System



Everyone has Gaía downloaded with the area downloaded and Friend has a compass and topo map of the area

#### Sun Protection: Sunglasses, Sunscreen, & Sun Hat



Bottle of SPF 30

Hats and sunglasses

The campsite has some shade over the tables

# Insulation: Jacket, Hat, Gloves, Rain Shell, & Thermal Underwear



Fleece Jackets and emergency rain ponchos

#### Illumination: Flashlight, Lantern, & Headlamp



Head lamp with extra batteries and 4 group lanterns with extra batteries

#### **First Aid Supplies**



First aid kit for group

#### Fire: Matches, Lighter, & Firestarter



Lighter and matches 3 bundles of local firewood Box of fire starters

#### Repair Kit and Tools: Duct Tape & Multi-tool



Duct tape, multi-tool, and some repair kits that came with some of the sleeping pads and tents

#### **Nutrition: Food Makes All the Difference**



See meal plan for details Individuals will bring their favorite snacks and drinks

Pairs will be assigned to bring and cook each meal

#### **Hydration: Water & Water Treatment Supplies**

Camelback 32 oz



Two extra bottles (24 oz each) Campsite has running water

### Emergency blanket for hikes, but everyone has tents for shelter Disposing of Human Waste Campsite has latrines

### Sample Food Plan Form

Day Br. (gr	Breakfast (groceries)	Lunch	Dinner (graceries)	Morning	Afternoon	Dessert	Prep
1 On	roceries)		(groceries)				
1 On		(groceries)	(gioceiles)	Snack	Snack		
	On own	Turkey wraps	Dutch oven	Apple	Chips and	Baked	Pack as is in
		(wrap	lasagna (box of	and bars	salsa	goodie	cooler and
		tortillas,	noodles, bottle				food box
		turkey,	of marinara, bag				
		mustard,	of mozzarella,				
		mayo,	container of				
		coleslaw)	ricotta, bag of				
			spinach, garlic				
			bread)				
2 Ba	Bagels,	Sandwiches	Calabacitas	Oranges	Caprese	Cookies	Make and
Cre	cream	(turkey, ham,	(squash, corn,	and bars	(tomatoes,		freeze
Ś	cheese,	sliced cheese,	black beans,		mozzarella		calabacitas,
ар	apples,	mustard,	onion, sweet		slices,		put
pa	bananas,	mayo,	potato, tortillas,		balsamic		remainder
OĽ	oranges	spinach, red	green chili,		vinegar)		in cooler
		pepper),	shredded				and food
		Pringles	cheese, garlic,				pox
			oregano)				

## **Options for Additional Meals**

7 2		Failcii		0		
<b>€</b>	(groceries)	(groceries)	(groceries)	Snack	Snack	
<	Vanilla	Pitas, hummus,	Rice, sausage,	Apples and	Oreos	Jell-0
<u>~</u>	yogurt,	tabouli,	veggies (minute	bars		pudding
<u>~</u>	granola,	tomatoes,	rice, turkey			
3	muffins	cucumbers,	sausage, red			
		summer sausage	pepper, cherry			
			tomatoes,			
			onion, pesto)			
В	Breakfast	PB & J (bread,	Pesto, pasta,	Dried fruit	Goldfish	Oreo pie
	burritos	almond butter,	zucchini, red	and bars		
<u>(</u> е	(eggs, hash	peanut butter,	pepper, and			
<u></u>	browns,	strawberry jam,	sun-dried			
Sć	salsa,	grape jam)	tomatoes			
	tortillas)					

### 1.6 TRIP SAFETY

Accidents and illness are an everyday reality, and doubly so when on an outdoor adventure. When you lead a group, you need to be able to handle medical issues. Having supplies, information, and a plan to handle emergencies can help keep you and your group safe.

### **Learning Objectives**

After this module and with some practice you will be able to:

- 1. Know a variety of items in different first aid kits.
- 2. Pack a first aid kit appropriate for different activities and group sizes.
- 3. Develop a plan in case of a medical emergency that addresses the needs of an entire group.
- 4. Know about opportunities for expanded training like Wilderness First Aid and Wilderness First Responder.

### **First Aid Kits**

First aid kits can vary depending on the nature of the expedition, the group's requirements, and individual preferences. Review the commercially-available kits and the home-built kits while making notes of the contents and design.

What did you like about the kits?					

What did	you dislike	e about 1	the kits?		
Mark do	vou think	is assent	ial in a fi	ot aid liti	
	you think i			St ala kit:	
Additiona	al Notes				

### **Emergency Planning**

### **Assigning Roles**

You must assign roles when an emergency arises during an outdoor trip. Use the table below to identify and define each roles' responsibilities.

ROLE	RESPONSIBILITIES
Person(s) focused	
on the injured	
Person(s) focused	
on the group's	
safety	
Person(s) going for	
help if necessary	
	HELP PLAN
Where will they go	
for help?	
How will they	
communicate?	

Have clear plans to communicate before the trip because communication on a trip can be limited, especially if there is an emergency.

Make sure everyone knows how to use the communication equipment and practices using it in advance.

### **Medical Facilities**

Know the medical facilities in your area, including a trauma center if possible since they specialize in life threatening injuries. Having this information allows for quick and efficient access to medical care in the event of an emergency.

Use the table on the next pages to record important information about the medical facilities near your planned outdoor location. Record information for multiple medical facilities of each area to ensure you have viable back up options in case of emergencies.

Consider navigating to the nearest hospital just before your trip so that it is in the list of recent locations.

### **Personal Beacons**

Personal Locator Beacons (PLBs) and satellite messengers are the two best options for sending distress signals in remote areas. They work with satellites instead of cell phone towers. Emergency responders can receive distress calls more reliably.

Notes			

Location of Trip	Facility Name & Address	Phone Number	Hours of Operation

### **Emergency Supplies**

You should have supplies for spending the night unexpectedly in case of emergencies. These supplies are in addition to a first aid kit and the Ten Essentials (see Module 3). The number of each supply item should be relative to the number of people in your group.

Use the Emergency Supplies table on the next page to identify and define why the item is necessary in an emergency and how to use it.

### **Emergency Supplies**

ITEM	NECESSARY FOR/HOW TO USE
Emergency bivvy	
Extra meal or two	
Extra water	
Instrument for cooking meals	
Layers for cold	

### **More Opportunities for Safety Training**

There are opportunities for expanded training and certifications that provide specialized training for emergencies in outdoor environments. These may include Wilderness First Aid (WFA), Wilderness First Responder (WFR), and Cardiopulmonary Resuscitation (CPR).

Below is a table containing reputable sources* for expanded training, certifications, and more.

Resource	Website	Contact
NOLS	www.nols.edu/en/	info@nols.edu 800-710-6657
Wilderness Medicine Training Center	www.wildernessmedici ne.com	carl@Wilderness Medicine.com 303-688-5176
Red Cross	www.redcross.org/	support@redcross training.org 1-800-RED-CROSS 1-866-381-0022

^{*}This information is up to date as of December 2024.

### 1.7 NAVIGATION

"When walking alone in a jungle of true darkness, there are three things that can show you the way: instinct to survive, the knowledge of navigation, creative imagination. Without them, you are lost." – Toba Beta

### **ABOUT**

### **Brief Description**

Do you rely on a map app to get where you need to be? Wilderness locations are often poorly mapped. Directions can be unavailable or incorrect with standard map apps, even when trying to locate a trailhead.

Relying on your phone and a hiking app can work in many situations, but problems can happen. Relying on your phone requires understanding the app you are using and having a reliable backup system you know how to use. It also requires having a working phone, and phones can die or break.

This workshop will help you better use your favorite app and teach you the basic skills of using a map and compass.

### **Learning Objectives**

After this module and with some practice you will be able to:

- Describe the pros and cons of different navigation tools.
- Find reliable information regarding the locations of trailheads, trails, campsites, and other destinations.
- 3. Discuss some available hiking apps and situations each is suited for.
- 4. Demonstrate basic skills with a compass and a map.

### **Navigation Tools**

### **Hiking Apps**

Write down some of the apps discussed.

### **Hiking Apps (cont.)**

App Name	 		
Notes	 		
App Name	 		
Notes		· · · · · · · · · · · · · · · · · · ·	
App Name	 		
Notes			
App Name			
Notes			

### **Hiking App Pros and Cons**

What are some of the pros and cons of using hiking apps?

PROS		
CONS		

### **GPS Units -Optional GPS Brands and Models** Notes on traditional GPS units Notes on GPS units with communication capabilities Notes on GPS watches

### **Compasses and Maps**

### **Compass and Map Experience**

using a map and compass.				

### **Topographic Maps**

This section is adapted from Penn State / 4-H publication Trees + Me = Forestry

The most obvious way in which topographic maps differ from other maps is that they contain many thin, curved lines that appear to wrap around certain areas. These lines are called **contour lines**. They connect points of equal **elevation**. This means that if you were to walk along the ground represented by a contour line, you wouldn't go uphill or downhill.

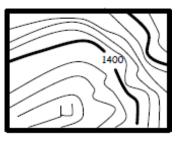
A **topographic map** will tell you whether an area is steep or level. Places where the lines are close together are very steep. Where the lines are far apart, the land is relatively flat. The actual elevation is written on every fifth line. In the United States we measure elevation beginning with 0 feet at sea level.

### Exercise 1

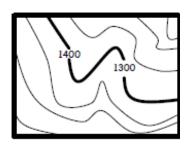
Contour lines have four important characteristics:

- 1. All points along the same contour line are at the same elevation.
- 2. All contour lines eventually connect with themselves.
- 3. Contour lines never cross each other.
- 4. Contour lines never split or branch.

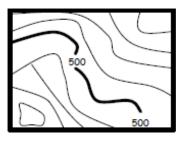
Each drawing below violates a rule of contour lines. Match each rule with the drawing that violates the rule.



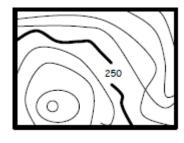
A. _____



B.



C. _____



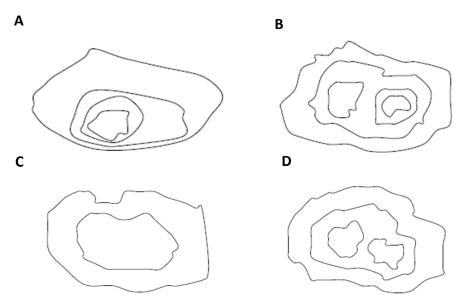
D. _____

### Exercise 2:

Adapted from The Language of Maps – 1983 by Pitman Learning Inc.

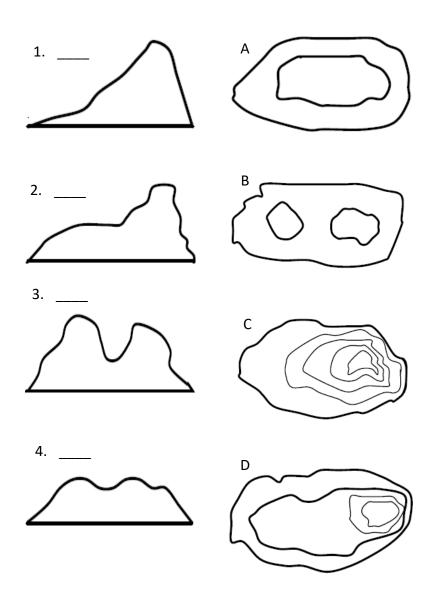
**Part 1:** Match each image below with the appropriate description

- 1. Gentle slope on all sides.
- 2. Round hill with two peaks.
- 3. _____ Steep south side.
- 4. _____ Two peaks with east side higher



Adapted from The Language of Maps – 1983 by Pitman Learning Inc.

Part 2: Match each side view image with the correct contour lines.



### **Orientation to Maps**

Fill in the blank with the correct term.

	: Degrees measured from the equator (0°) to the
poles (90°).	Lines north of the equator may be indicated as
north or wit	h a positive number. Lines south of the equator
may be indi	cated as south or with a negative number.
	: Degrees measured east and west of the Prime
Meridian in	Greenwich, England. The Prime Meridian is 0°,
with numbe	rs going up to 180° east and west where they
meet on the	e other side of the planet.

Degrees are divided into minutes (1/60 of a degree) and seconds (1/60 of a minute or 1/3600 of a degree).

Coordinates can be in degrees or decimals. For example, the Hoover dam is located at  $36^{\circ}$  0′ 56'' N,  $114^{\circ}$  44′ 16'' W or 36.016045, -114.737839.



### **Label the Compass**

### **Word Bank**

Direction of Travel Arrow

Magnetic Needle or "Red Fred"

**Meridian Lines** 

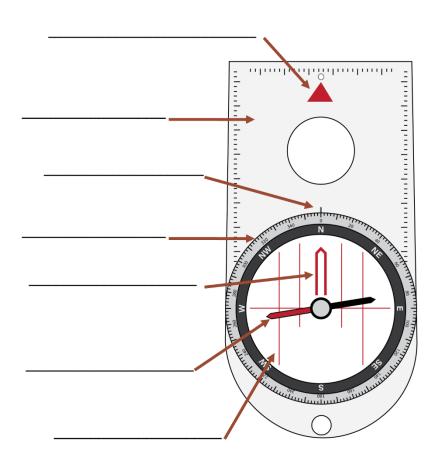
Orienting Arrow or "The Shed"

Baseplate

Bezel

Index Line

Label the parts of a compass with the words in the word bank.



### **TIER 2 WORKSHOPS**

These workshops are designed to take 1-3 days and build on the information covered in the Tier 1 workshops. If you are not experienced with the basic skills covered in Tier 1, we suggest you reach out to the Tier 2 workshop instructors to make sure they are teaching the material in a way that will work for you or sign up for a Tier 1 workshop to build those skills before attempting a Tier 2 workshop.

- 2.1 Intermediate Camping
- 2.2 Backpacking

### 2.1 INTERMEDIATE CAMPING

This module teaches skills for camping overnight at established campgrounds or near existing infrastructure where campers take their gear to a site in a vehicle.

Spending a night in the great outdoors can be an incredible bonding experience for groups and families, but there is a lot more involved compared to a day hike or barbeque. There is more gear, coordination, and rules and regulations.

In this module, you will plan a camping trip and practice key camping skills. You will also learn different types of gear and what you should bring when planning a trip. While gear comes in a range of prices, few people need the most expensive stuff. Sometimes the cheapest gear is great. You will learn how to care for your gear so even cheap gear will last for years.

### **Learning Objective**

After this module and with some practice, you will be able to

### **Pre-Trip Planning Meeting**

- 1. Complete a trip plan for camping using the Trip Form.
- 2. Pack appropriate items for activities, locations, and weather conditions.
- Plan for the health and safety of their group members including food, water, overall wellbeing, and special needs.
- 4. Consider different backgrounds and ability levels while planning.
- 5. Apply best practices for camping throughout the trip.
- 6. Pack and use the Ten Plus Essentials.
- 7. Assess and mitigate risks for their trip conditions.

### **Camping Trip**

- 1. Set up and maintain a campsite in an established campground.
- 2. Apply best practices for camping at the campsite and throughout the trip.
- 3. Set up a tent and use Guylines.
- 4. Set up a group camp kitchen including sanitation and waste management.
- 5. Understand and apply Trip Best Practices.

### **Pre-Trip Planning Meeting**

### **Activity: Fill Out the Trip Form**

Notes for Planning

Fill out the Trip Form for your overnight trip. Be sure to consider the Plan for Logistics section of **Module 1.4: Day Trips** and **Module 1.5: Camping & Overnight Trips** when making decisions. Other **Tier 1 Modules** may help as well.

,	<b>g</b>		

### **On The Camping Trip**

### **Setting Up Your Campsite**

see <b>Module 1.2: Trip best Practices</b> for campsite tips.
Notes
Tonts
Tents
See <b>Module 1.1: Core Camping Skills</b> for diagrams and activities.
Notes

### **Food Storage and Trash**

### Coolers

Cooler Types		
Styrofoam		
Pros	Cons	
Soft-sided	1	
Pros	Cons	
Hard plastic		
Pros	Cons	
F103	COTIS	
Roto-molded		
Pros	Cons	

Notes on food storage
Disposing of Human Waste
See Module 1.2: Trip Best Practices & Module 1.3: Ten Plus Essentials for notes and information.
Notes:
Making Fires
See <b>Module 1.1: Core Camping Skills</b> for diagrams and activities.
Notes:

### **Using Stoves**

See **Module 1.1: Core Camping Skills** for diagrams and activities.

Notes	
Gear Geeking	
Notes	

### **Evening Debrief**

What was your highlight so far?
What was your biggest challenge?
What was the best thing you learned today?

### Morning After Gear Review What gear worked well for you and the other participants?

What gear didn't work well	?
What do you want to chang	ge for next time?

# **Caring for Gear** Notes

### **Car Camping Checklist**

The advantage of car camping is taking more supplies with you. This list offers suggestions for a car camping trip. Check off what fits your trip or items as you pack them.

Items marked with a * are for winter trips.

### **Clothes**

Head and Upper Body	Lo	wer Body and Feet
Beanie (fleece or wool hat)		Hiking boots
Brimmed hat		Pants (nylon, spandex,
Fleece or wool jacket		breathable fabric)
Long sleeve shirt (wool,		Shorts (nylon, spandex,
thermal)		breathable fabric)
Poncho (if your jacket is		Snow pants*
not waterproof)		Socks (wool, cotton,
Scarf or face mask*		liner)
Snow jacket*		Tennis or running
T-shirts		shoes
Warm gloves*		Thermals*
Waterproof rain/wind		Underwear
jacket		

### **Cooking Supplies**

Equipment and Cleaning	Dishes and Silverware
☐ Biodegradable dish soap	☐ Dish bins (3)
☐ Measuring cups	☐ Frying pan
☐ Pot handles	☐ Mug or unbreakable cup
☐ Small container of bleach	for each person
$\square$ Stove (with fuel bottle)	☐ Pots (with lids)
☐ Waterproof matches or	☐ Serving spoon
lighter	□ Spatula
☐ Ziploc bags	☐ Spoons, forks, knives for
	each person
	☐ Tupperware containers
	for food storage
	☐ Unbreakable bowls and
	plates for each person

### Sleeping, Shelter, and Hygiene

Sle	eping and Shelter	Ну	giene
	Nylon ropes		Brush and comb
	Sleeping pad		Bug spray
	Smaller tarp		Dromedary bag (washing)
	Tent/tarp		Lip balm
	Winter*/Summer		Pads or tampons if needed
	sleeping bag		Sunscreen
			Toilet paper/paper towels
			Toothbrush and toothpaste

### **Useful and Optional Items**

Us	eful Items	Optional Items	
	Bandanas Duffle bag or storage tubs Extra batteries First aid/repair kit Headlamp/camp lamp Medications (as	<ul> <li>□ Books</li> <li>□ Camera</li> <li>□ Field guides</li> <li>□ Notebook and drawing supplies</li> </ul>	
	necessary) Plastic bags (heavy-duty) Pocket knife Sunglasses Water bottles		

### **Add Your Own List Items**

_	 	

### **EXAMPLE CAR CAMPING TRIP FORM**

### **Trip Name**

Red Rock Canyon National Conservation Area

### **Trip Location**

Group Campground, 3293 Moenkopí Rd, Las Vegas, NV 89161

### **Trip Purpose and Objectives**

Explore Red Rock and camp

Trip Leader 1 Name	Cell Phone #
Jení Scout	1- <i>7</i> 02-333-3333
Trip Leader 2 Name	Cell Phone #
Tyler Hyke	1- <i>7</i> 02-555-555
Trip Emergency Contact	Cell Phone #
Friend Smith	1- <del>7</del> 02-444-5555

### Checklist

- ✓ Permits Printed or Saved
- ✓ Weather Links sent to participants
- ✓ Driving Directions sent to participants
- ✓ Map or topo info sent to participants
- ✓ Additional resource info sent to participants
- ✓ Pack items from car camping checklist
- ✓ Prepare and pack food plan

 $\checkmark$ 

List of Vehicles	Weather Report
Tulanta Eva adition	(update morning of trip) Low 51, High 78, no rain
Tyler's Expedition	Low 51, High 78, no rain
Jeni's minivan	Check morning of trip at
	Redrockcanyonlv.com/weather

### Resources

www.redrockcanyonlv.org

### TRIP ITINERARY

Date 5/9/25

Time	Activity	Location and Notes
	DAY 1	
9:00am	Departure	Jení's house
		XXXX 4 th St, Las Vegas
9:15-9:45	Driving	Red Rock Canyon
		Entrance
10:00-11:30	Set up campsite	Red Rock Canyon
	and get oriented	Group Campground
11:30-12:00	Lunch	Picnic at campsite
12:00-4:00	Hike	Kraft Mountain (3.5
		mí)
4:00-6:00	Downtime	Cooks need to prep for
		dinner at 5
6:00-7:00	Dinner	Family style dinner
		and clean up
7:00-8:00	Group Game	Assassín ís a fun group
		game
8:00-10:00	Campfire with	Group can help anyone
	group day debrief	having gear issues

	DAY 2	
8:00-9:00	Breakfast,	Cooks need to prep at
	Put camp away	7:30 and put our lunch
	for the day to	for individuals to pack
	protect gear from	for the day
	wind and animals	-
9:00-12:00	Climbing	Meet guide
12:00-12:30	Lunch break at	Sweep area after eating
	climbing area	
12:30-3:00	Climbing	
3:00-5:30	Downtime at	Journal, group games,
	campsite	personal time to bathe
5:30-6:30	Dinner	Cooks need to prep at
		4:30
6:30-7:30	Group Game	Capture the Flag
7:30-9:30	Campfire with	Chat or play games by
	group day debrief	lantern light
	DAY 3	
8:00-9:00	Breakfast	Cooks prep at 7:30 and
		put out lunch for group
		to pack
9:00-10:00	Pack up camp	Sweep camp, have
		loaders organíze gear
		and load into vehicles
10:00-11:00	Drive home	
11:00-11:30	Trip debrief	
12:00	Pick up time and	
	lunch with	
	parents	

	SAFETY MANA	GEN	IENT PLAN
Ad	dress and Phone # of hospi	tals	and health care facilities
(al	ong the way and near the de	estin	ation)
Cı.	ımmerlin Hospital Medical	Cela	ter - 702-222-7000
	7 Town Center Dr.	CCN	CCI - 702-233-7000
	s Vegas, NV		
Си	s vegus, inv		
Na	me and Phone # of Search 8	& Re	escue (County Sheriff)
Ca	ll 911 if it's an emergency	for	Las Vegas Metro políce
an	d Search and Rescue		
Lis	t of Participants with First A	Aid T	raining
(ar	nd their level of training)		
Jen	í has CPR and fírst aíd		
Em	nergency Response Steps	Ch	ecklist
1.	STOP and assess		Communication Device
2.	Provide care to the		or Plan (other than the
	injured based on your		leader's cell phone)
	training		Liability/waiver form for
3.	Decide if an evacuation is		organization
	needed and make a plan		Driving directions sent
4.	Communicate with:		to participants
	<ul> <li>Other participants</li> </ul>		
	<ul> <li>Search &amp; Rescue</li> </ul>		
	<ul> <li>Medical Assistance</li> </ul>	П	

Emergency Contacts
Your organizations

	TRIP BUDGE	Т
Expense	Amount	Notes
Transportation	\$50	Gas
Food	\$360	Food for three days \$10 per person per day
Campground	\$168	C-Roach Runner
Supplies/Gear	\$40	First aid kit
Total	\$618	
# of Participants	10	
Cost per Participant	\$61.80	

		TRIP ROS	TER	
Name (role)	Contact #	Emergency Contact	Emergency Contact #	Health Considerations & Signs of Issues
1.				
2.				
3.				
4.				
5.				
6.				

### TEN PLUS ESSENTIALS PACKING LIST

### Navigation: Map, Compass, & GPS System



Everyone has Gaía downloaded with the area downloaded and Friend has a compass and a topo map of the area

### Sun Protection: Sunglasses, Sunscreen, & Sun Hat



Bottle of SPF 30

Hat

Sunglasses

Campground has shade

### Insulation: Jacket, Hat, Gloves, Rain Shell, & Thermal Underwear



Fleece Jacket

Rain ponchos and emergency blankets for hiking and unexpected weather

### Illumination: Flashlight, Lantern, & Headlamp



Head lamp with extra batteries and four lanterns for the group with extra batteries

### **First Aid Supplies**



First aid kit for the group

### Fire: Matches, Lighter, & Firestarter



Lighter and matches
3 bundles of local firewood
A box of fire starters

### Repair Kit and Tools: Duct Tape, & Multi-tool



Duct tape and Tyler has a multitool. A few people are bringing the repair kits that came with their sleeping pads and tents.

### **Nutrition: Food Makes All the Difference**



See the meal plan for details
Each participant is bringing their favorite
snacks and beverages
Pairs have been assigned shopping for and
cooking each meal

### **Hydration: Water & Water Treatment Supplies**



camelback 32 oz

Two extra bottles (24 oz each)

The campsite has running water

### **Shelter**



Tents and everyone has an emergency blanket in case of an emergency when we hike

### **Disposing of Human Waste**



use outhouses at campsite

Tyler has a WAG bag as backup for hikes

# Sample Food Plan Form

Day	Breakfast (groceries)	Lunch (groceries)	Dinner (groceries)	Morning	Morning Afternoon Snack Snack	Dessert	Prep
н	On own	Turkey wraps (wrap tortillas, turkey, mustard, mayo, coleslaw)	Dutch oven lasagna (box of noodles, bottle of marinara, bag of mozzarella, container of ricotta, bag of spinach, garlic bread)	Apple and bars	Chips and salsa	Baked goodie	Pack as is in cooler and food box
2	Bagels, cream cheese, apples, bananas, oranges	Sandwiches (turkey, ham, sliced cheese, mustard, mayo, spinach, red pepper), Pringles	Calabacitas (squash, corn, black beans, onion, sweet potato, tortillas, green chili, shredded cheese, garlic, oregano)	Oranges and bars	Caprese (tomatoes, mozzarella slices, balsamic vinegar)	Cookies	Make and freeze calabacitas, put remainder in cooler and food box

## **Options for Additional Meals**

4	ω	Day
Breakfast burritos (eggs, hash browns, salsa, tortillas)	Vanilla yogurt, granola, muffins	Breakfast (groceries)
PB & J (bread, almond butter, peanut butter, strawberry jam, grape jam)	Pitas, hummus, tabouli, tomatoes, cucumbers, summer sausage	Lunch (groceries)
Pesto, pasta, zucchini, red pepper, and sun-dried tomatoes	Rice, sausage, veggies (minute rice, turkey sausage, red pepper, cherry tomatoes, onion, pesto)	Dinner (groceries)
Dried fruit and bars	Apples and bars	Morning Snack
Goldfish	Oreos	Afternoon Snack
Oreo pie	Jell-O pudding	Dessert
Make and freeze eggs and potatoes, box and cooler for the rest	Pack as is in cooler and food box	Prep

### 2.2 BACKPACKING

In this workshop, you will learn backpacking skills and how to lead a group in a backpacking adventure. You will learn planning and logistics, gear options, how to pack a backpack, and how to stay safe.

### **Learning Objective**

After this workshop and with some practice, you will be able to:

### **Pre-Trip Planning Meeting**

- Select appropriate clothing and equipment for a backpacking trip
- 2. Pack a backpack for up to a three-day backpacking trip, including the Ten Plus Essentials
- 3. Assess the weather (and throughout the backpacking trip)
- 4. Plan rations for healthy meals
- 5. Plan water for the trip: where to collect it, what equipment is needed to make it safe, and how much to carry
- 6. Create a trip plan from a scenario
- 7. Review a trip plan and assess the itinerary, mileage, elevation gain and loss, participants' experience and fitness levels, and anticipated hazards

### **Backpacking Trip**

- 1. Navigate to a backcountry destination using a map and compass
- 2. Select a campsite
- 3. Set up a tent and tarp
- 4. Properly dispose of human waste in the backcountry

- 5. Properly gather and treat water in a backcountry setting
- 6. Use proper hygiene in the backcountry on multi-day trips
- 7. Properly store food and supplies in a backcountry setting
- 8. Use a backpacking stove to cook healthy meals in the backcountry
- 9. Assess basic risks along the way and increase situation awareness to keep participants and their group safe

### **Pre-Trip Planning Meeting**

What do you want to keep in mind for your

backpacking trip?	•	

### **Activity: Gear Review**

	•	ge?
ther Gear Notes		

<b>Activity: Food Planning</b>		
What is the plan for food for the trip?		
What do you need to pack for food on your trip?		
<b>Gear Principles Discussion</b>		
Backpacks		
<b>Fill in the blank</b> : Hikers should not carry more than% of their body weight in their backpacks.		
My Backpack Measurements		
<ul><li>Torso length:</li><li>Backpack hip belt:</li></ul>		
Backpack Capacity		
With your instructor's help, fill in the trip length and gear		

capacity for the Backpack Capacity Table.

**Backpack Capacity** 

Cachean Capacity	,	
Trip Length	Gear Capacity Notes	Notes
		If you are camping alone and must carry everything yourself, you
		will probably need the full 50 liters unless you are camping without
		a tent. When backpacking with a group, you can divide shared gear
		and get away with a smaller bag. Smaller bags can work if you strap
		some of your gear to the outside of your bag.
		Most people recommend a 55–65-liter bag for most situations.
		Exceptions are for increased colder weather gear or if you are
		leading a group and need to carry more gear as backup gear and
		first aid gear need more space. Smaller bags can work if you strap
		some of your gear to the outside of your bag.
		Experienced long-distance (aka thru) hikers often use smaller bags,
		but only ultralight backpackers use much smaller bags. On
		extended trips, the extra room isn't for more gear as your base
		weight (or weight of non-consumable gear) will be similar to what
		you carry for shorter trips. The extra room is for more food and
		possibly water if you are traveling through drier areas.

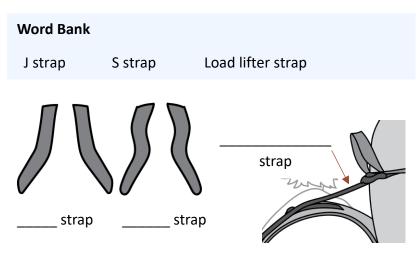
### **Backpack Terms**

Write the correct term for each definition.

Word	Bank	
•	ration sleeve cover	Capacity Base weight
1.	consumables in yo	: weight of all non- our pack plus the pack itself
2.	liters)	_: volume of space in the pack (in
3.	that isolates a hyo	: a pocket in some packs dration bladder from the rest of the
4.	from rain.	: cover that protects backpack

### **Backpack Diagrams**

Write the correct terms in the blanks.



### **Backpack Diagrams (cont.)**

Write the correct terms in the blanks.

### **Word Bank**

External frame pack
Internal frame pack
Hip belt
Sternum straps

Frameless pack
Lid (or brain)
Daisy chains
Haul loop

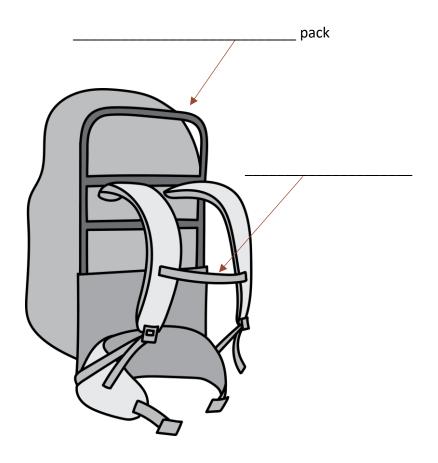


### **Backpack Diagrams (cont.)**

Write the correct terms in the blanks.

### **Word Bank**

External frame pack Frameless pack
Internal frame pack Lid (or brain)
Hip belt Daisy chains
Sternum straps Haul loop

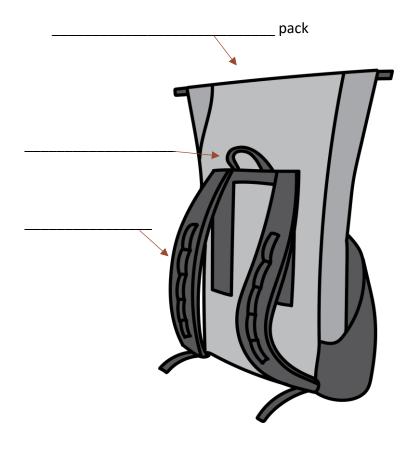


### **Backpack Diagrams (cont.)**

Write the correct terms in the blanks.

### **Word Bank**

External frame pack Frameless pack
Internal frame pack Lid (or brain)
Hip belt Daisy chains
Sternum straps Haul loop



Tent notes
See <b>Module 1.1: Core Camping Skills</b> for more information.
Sleeping Bags and Sleeping Pads
See <b>Module 1.5: Camping and Overnight Trips</b> for more information
What kinds of sleeping equipment do you need for your trip and weather?
Weather-Appropriate Clothing
What layers might you need during the day?

What do you need for sleeping?		
What do you need for unexpected weather conditions?		
Other Clothing Notes		
Water		
Bring liter per person for every two miles of moderate		
hiking in moderate temperatures (based on hiker's personal		
ability level).		

How much water will you need on your trip?		
First Aid Kit Notes		
See Module 1.6: Trip Safety for more information.		
Stove and Cookware Notes		
Food Storage Notes		

Disposing of Human Waste Notes		
Other Pre-Trip Meeting Notes		

### **Packing a Backpack**

Color and label the section of the backpack that shows where the items should be packed.

Compartment	Items
	Midweight items you won't need until camp like sleeping gear.
of main compartment	Some packs have a divider and a separate zipper to access this section to allow for easier access without unpacking the entire pack. The divider and zipper add weight.
	Place your sleeping bag at the bottom of your pack. It can be kept in a stuff sack or compression sack or kept loose as other items will compress it. If you will be in wet conditions, you can cover your sleeping bag with a plastic bag.
of main compartment from back	Lightest gear is stored here to avoid making you prone to losing your balance.
	Lighter clothing like a puffy jacket and camp towels can help fill in space left by objects closer to your back.
	Lightweight toiletries can be kept here.

Compartment
of
main
compartment
to
your back

### **Items**

Heaviest gear should be kept close to the body.

Hydration bladders go here if used. Food you don't need until camp is the heaviest item after water.

Keep your cooking and eating gear here. Make sure fuel containers are tightly sealed and positioned upright to minimize the risk of spills. Canisters and smaller stoves may fit inside cookware to save space. Keep fuel below food to prevent

contamination in case there is a leak.

Some suggest packing your tent in this area. If the tent is compressed, it is heavy for the space it will occupy. If the tent is loose, you can wrap the tent body and rainfly around heavier items.

_____ of main compartment and _____



Things you might need when hiking:

- 1. First aid kit
- 2. Water filter
- 3. Compass and map
- 4. Sunscreen
- 5. Rain jacket (if rain is possible)
- 6. Snacks
- 7. Extra layers for warmth

Toilet kit (WAG bags, trowel, toilet paper, hand sanitizer, and any other items)

Compartment	Items
	Suggestions (but see what works best for you):
on	1. Sunscreen
	2. Compass and map
the	3. GPS unit
and elsewhere	4. Bug spray
	5. Lip balm
	6. Snacks
KUAI	7. Headlamp
	8. Water bottles
	9. Rain cover (if you carry one)
	10. Car keys, cash, and ID (many
	bags have a clip inside an
	accessory pocket)

_____ and _____

Use loops to attach things to the outside of your pack. You can clip clothing that needs to dry (bring safety pins to help support it). Some loops can store trekking poles.

You can strap a large sleeping pad or tent to the bottom of most packs with a sewn-on strap. You can loosen the straps that attach the lid to the pack and slide a larger item in that space.

Secure items attached outside the pack, so they do not bounce. Bouncing items can jostle you while walking and add to your energy expenditure. A swinging item outside a pack acts like an item ten times its weight. Tight and neat backpacks carry better and allow you to be more efficient in your movements.

### On the Backpacking Trip

Notes During the Hike				
	ing the	ing the Hike	ing the Hike	ing the Hike

Demonstration	ns at C	amp	

### **Evening Debrief** What was the highlight of your day? What was the low point of your day? What was the best thing you learned? Goal for the next day:

## **Final Debrief** What did you enjoy most? What was your biggest challenge? What gear did you like most? Why? What will you do differently on your next trip?

### **Backpacking Checklist**

This is an extensive list of items you should bring on a backpacking trip. This can be adjusted based on experience, gear weight, preference, and physical capabilities.

Ва	ckpack Gear
	Backpack (typically 50-80 liters) Sleeping bag or backpacking quilt
	Sleeping pad
	Pillow
	Rain protection for inside the backpack (trash bag or waterproof stuff sac)
Kit	chen
	Lightweight stove & fuel
	Cookpot & lid
	Lighter & backup fire starter
	Eating utensils
	Cup or mug
	Biodegradable soap
	Cloth for cleaning
	Bear canister, food bag, or hang bag & 50 ft nylon
	cord
Fo	od & Water
	Water bottles (plastic ones are lighter than
	traditional water bottles)
	Water filtration or purification (primary & secondary
	options)
	Meals (aim for 2500-3000 calories per person)
	Energy food and drinks (trail mix, salt replacement,
	or bars)
	Collapsible water container

### **Backpacking Checklist (Cont.)**

He	alth & Personal Items
	Toilet paper & Ziploc to carry out used tissue
	Digging trowel
	Hand sanitizer
	Prescriptions
	Contact lenses
	Menstrual products
	Toothbrush, toothpaste, & floss
	Chap stick
	Earplugs
	Sunscreen
Clo	thing (Weather & Area Dependent)
	Hiking pants or shorts
	Wicking shirt, tank top, long-sleeve shirt for sun and
	bugs
	Quick-dry underwear (at least 2)
	Down jacket or fleece jacket
	Rain wear (jacket and pants)
	Base layers
	Shoes suited for terrain
	Socks (hiking & sleeping) (synthetic or wool)
	Hats or beanies (warmth or sun protection)
	Sunglasses
	Gloves
	Bandana (for washcloth, emergency use, or sun protection)
	Head net for mosquitos (note: pre-treat clothing with permethrin bug repellent)
1	- · ·
	Gaiters (rainy, snowy, muddy conditions)

Na	vigation
	Мар
	Compass
	GPS
	Satellite messenger, personal locator beacon or both
Em	nergency Kit
	Whistle
	Black marker
	Duct tape or other repair tape
	Sleeping pad patch kit
	Super glue
	Needle & thread
	First aid supplies (include moleskin, antihistamines,
	anti-diarrheal medicine, gauze pads, medical tape,
	antibiotic ointment, & athletic tape)
	Itinerary left with a friend & in your car
To	ols
	Light pocketknife or multitool
	Headlamp & extra batteries
	Power bank & charging cords, wall plug if needed
	Assorted Ziploc bags
	Cash, ID, credit card, insurance card, & permits
Ot	her
	Bear spray (in grizzly country)
	Camera
	Cards and camp games
	Trekking poles
	Phone
	Day pack
	Waterproof pencil

EXAMPLE BACKPACKING TRIP FORM			
Trip Name			
Charleston Peak Sou	uth Traíl		
Trip Location			
1208 Cathedral Pícr	uíc Area Rd, Mt Charleston, NV 89124		
Trip Purpose and Ob	jectives		
Enjoy cooler temperatures in the summer and camp			
Trip Leader 1	Cell Phone #		
<b>Name</b> Jení Scout	1-702-333-3333		
Trip Leader 2 Cell Phone #			
Name 1-702-555-5555			
Trip Emergency	Cell Phone #		
Contact Friend Smith			
Checklist			
☐ Permits Printed or Saved			
☐ Weather Links sent to participants			
☐ Driving Direct	tions sent to participants		
☐ Map or topo	info sent to participants		
	source info sent to participants		
•	$\ \square$ Prepare and pack food		
□ Pack items from backpacking checklist			

EXAMPLE BACKPACKING TRIP FORM (CONT.)			
List of Vehicles	Weather Report		
- I and a fire addition	(update morning of trip)		
Tyler's Expedition	Low 53, High 81, cloudy, 5% rain		
Jeni's minivan	Check morning of trip at		
	https://mtcharlestonweather.com/go-		
	<u>mt-charleston</u>		

### Resources

https://www.alltrails.com/trail/us/nevada/charleston-peaksouth-trail

https://www.gomtcharleston.com/mount-charleston-national-recreation-trailsouth-loop/

### TRIP ITINERARY

Date 7/19/25

Time	Activity	Location and Notes
DAY 1		
9:00am	Departure	Jení's house
		XXXX 4 th St, Las Vegas
9:15-9:45	Driving	Charleston Peak South
		Trailhead
10:00-10:30	Organize	Trailhead
	gear.	
10:30-12:00	Hike	Goal of 2-3 miles
12:00-12:30	Lunch	Traíl
12:30-4:00	Hike	Goal of 3-5 miles depending on
		group
4:00-6:00	Set up	Cooks need to prep for dinner at
	camp and	5pm
	downtime	

BACKPACKING EXAMPLE TRIP FORM (CONT.)				
	DAY 1 (CONT.)			
6:00-7:00	Dinner	Family style dinner and clean		
		ир		
7:00-8:00	Group	Play cards or games like		
	Game	Assassin that don't require		
		anything		
8:00-10:00	Campfire	Tell stories		
	with group			
	day			
	debrief			
		DAY 2		
8:00-9:00	Breakfast,	Cooks need to prep at 7:30am		
am	put away	and put out lunch supplies for		
	camp gear	individuals to pack for the day		
	to protect			
	gear from			
	wind and			
	animals			
9:00-12:00	Finish hike	Last couple of miles is hard;		
pm	to peak	make time to enjoy the view at		
		the top		
12:00-12:30	Lunch			
pm	break at			
	peak			
12:30-5:30	Hiking	Plan to be back at cars no later		
pm	down	than 6 pm		
5:30-6:00	Pack gear	If finished at 6pm, group goes		
pm	into cars	into town for pizza		

	SAFETY MANAG	GEN	IENT PLAN
Ad	dress and Phone # of hospit	tals	and health care facilities
(ald	ong the way and near the de	estin	ation)
	ntennial Hills Hospital (70	2) 8	35-9700
69	00 N Durango Dr.		
La.	s Vegas, NC 89149		
Na	me and Phone # of Search 8	& Re	escue (County Sheriff)
La.	s Vegas Metro políce and Se	earc	h and Rescue: Call 911 if
	an emergency.		
	t of Participants with First A	id T	raining
(an	d their level of training)		
Jen	í has CPR and fírst aíd		
Em	ergency Response Steps	Ch	ecklist
5.	STOP and assess		Communication Device
6.	Provide care to the		or Plan (other than the
	injured based on your		leader's cell phone)
	training		Liability/waiver form for
7.	Decide if an evacuation is		organization
	needed and make a plan		
8.	Communicate with:		
	<ul> <li>Other participants</li> </ul>		
	<ul> <li>Search &amp; Rescue</li> </ul>		

Medical Assistance Emergency Contacts Your organizations

TRIP BUDGET				
Expense	Amount	Notes		
Transportation	\$50	Gas		
Food	\$200	Food for two days \$10 per person per day		
Permit	NA			
Supplies/Gear	\$90	First aid kit and WAG bags		
Total	\$340			
# of Participants	10			
Cost per Participant	\$34			

### TRIP ROSTER Health Contact Emergency Emergency Considerations Name (role) & Signs of # Contact Contact # Issues 1. 2. 3. 4. 5. 6.

### TEN PLUS ESSENTIALS PACKING LIST

### Navigation: Map, Compass, & GPS System



Everyone has Gaía downloaded with the area downloaded

Jení and Fríend both have compasses and paper topo maps for the area

### Sun Protection: Sunglasses, Sunscreen, & Sun Hat



Bottle of SPF 30

Hat

Sunglasses

Sunshirts

### Insulation: Jacket, Hat, Gloves, Rain Shell, & Thermal Underwear



Fleece Jacket and rain jackets in case chance of rain increases

### Illumination: Flashlight, Lantern, & Headlamp



Head lamps with extra batteries

### **First Aid Supplies**



First aid kit for group and small personal ones for blisters

### Fire: Matches, Lighter, & Firestarter



Lighter and matches plus 3 backpacking stoves and isobutane fuel canisters

### Repair Kit and Tools: Duct Tape, & Multi-tool



Duct tape and Tyler has a multitool

### **Nutrition: Food Makes All the Difference**



See meal plan Participants are bringing their own snacks and electrolytes for two days

**Hydration: Water & Water Treatment Supplies** 



Camelback 32 oz Two extra bottles (24 oz each) Each participant also has a small filter for emergency use

### Shelter



Tents and Emergency blanket for hike to peak

### Disposing of Human Waste



use outhouses at trailhead and then WAG bags on the trail

# Sample Food Plan Form

Day		Lunch	Dinner	Morning	noc	Dessert	Prep
	(groceries)	(groceries)	(groceries)	Snack	Snack		
1	On own	Turkey wraps	Ramen noodles	Participant	Participant	Friend is	Pack as is in
		(wrap	with freeze-	provided	provided	bringing	cooler for
		tortillas,	dried veggie mix			cookies	drive and
		turkey,	and shelf-stable				keep turkey
		mustard,	packs of chicken				in soft
		mayo					cooler on
		packets,					hike
		lettuce)					
2	Instant	Sandwiches	Pizza in town!	Participant	Participant		Pack as is in
	oatmeal	(ham, sliced		provided	provided		cooler for
		cheese,					drive and
		mustard,					keep ham
		mayo,					in soft
		spinach, red					cooler on
		pepper),					hike
		Pringles					

## Options for Additional Meals

## FREQUENTLY USED INFORMATION

Many of the workshops will use these documents and forms. Your instructor will tell you if you should turn to one of these for an activity.

- Ten Plus Essentials
- Trip Best Practices
- Blank Trip Form

### TEN PLUS ESSENTIALS

### Navigation: Map, Compass, & GPS System

Navigation systems are used before your trip when planning your route. You use them during your trip when you need help orienting yourself in your surroundings.



Know how to use a topographical or relief map as well as your compass or GPS unit before going out.

### Sun Protection: Sunglasses, Sunscreen, & Sun Hat

Sun protection is necessary to protect your skin and eyes from UV rays that can cause sunburn and skin cancer.



Consider wearing sunglasses, sunscreen, and hats. Sun-protection clothing such as pants and long sleeve shirts can also help minimize your exposure to the sun.

### Insulation: Jacket, Hat, Gloves, Rain Shell, & Thermal **Underwear**



Nature is unpredictable. Be prepared for sudden changes in weather conditions.

Pack an extra layer of clothing that reflects the most extreme weather conditions you could encounter.

### Illumination: Flashlights, Lantern, & Headlamp

You will need to bring your own lighting for many outdoor adventures.



Flashlights, lanterns, and headlamps are great options. Headlamps are preferred because you don't need your hands to use them. Be sure to pack extra batteries.

### **First Aid Supplies**

Be prepared for emergencies by packing first aid supplies with you.



Start with a pre-made kit and modify it to fit your trip and medical needs. Check the expiration date on all items and replace them as needed.

Consider including an emergency guide in case you are faced with an unfamiliar medical emergency.

### Fire: Matches, Lighter, & Firestarter

Fire can be an emergency signal and a heat source for cooking and staying warm.



Pack matches (preferably waterproof) and fire starters (items that catch fire quickly and sustain a flame, like a lighter).

Familiarize yourself with the fire use regulations of your park before heading out.

### Repair Kit & Tools: Duct Tape, & Multi-tool

Carry a basic repair kit with you to help repair equipment. The kit should include items such as duct tape, a knife, and scissors.



Consider packing a multi-tool, a compact version of many tools that can include a knife, screwdriver, can opener, and more.

Be sure to bring any tools specific to your trip and your activity.

### Nutrition: Food Makes All the Difference

You should always be prepared for possible changes to your trip plans. Pack an extra day's supply of food.



No-cook items that have good nutritional value will keep your energy high without much effort. Salty and easy-to-digest snacks like trail mix, nuts, and granola bars work well for outdoor activities.

### **Hydration: Water & Water Treatment Supplies**

Staying hydrated on your trip is of utmost importance!

Physical activity increases your risk of dehydration, which can lead to negative health consequences. Dehydration is a loss of water and forms of salt from the body.



If you're active outdoors, especially in hot weather, vou should drink water often and before you feel thirsty. Prepare your water before you need it and do not allow yourself to become dehydrated. Before heading out on your trip, be sure to identify if there are bodies of water at your destination you could collect water from. Remember to treat your water using water treatment supplies.

### Shelter



Shelter is one of the most important elements during an emergency survival situation. It can protect you from severe weather conditions and exposure to the elements.

A tent, tarp, bivvy sack, or emergency space blanket are all lightweight options for emergency shelter.

### **ESSENTIAL PLUS+**

### **Disposing of Human Waste**

As outdoor spaces are being used more and more, it is critical for the public to be better equipped to dispose of human waste on public lands.



If there is not a restroom, please take a "WAG bag." This is a disposable toilet kit with waste treatment powder or gel, toilet paper, and hand sanitizer. They are easy to use, sanitary, and easy to dispose of in a trashcan when you return from your trip.

You should also learn how to dig catholes, where to dig them, how to pack out used toilet paper, and about alternatives like backpacking bidets.

Ten Essentials list adapted from https://www.nps.gov/articles/10essentials.htm

### **Trip Best Practices**

### 1. Plan ahead & prepare. (See Trip Form)

### This includes:

- Trip purpose
- Trip location and itinerary or schedule
- Trip leaders and their contact information
- Permit requirements
- Weather report
- Safety management
- Equipment list
- Trip budget
- Trip participant list and their emergency contacts

### 2. Camp & travel on durable surfaces.

Camp in campsites that are already made or on surfaces that resist trampling.

- Durable surfaces: rock, sand, gravel, snow, trail, and grass.
- Non-durable surfaces: moss, wildflowers, wetlands, steep slopes, cryptobiotic soil.
- Stick to existing paths to keep the environment neat and healthy.

### 3. Dispose of waste properly.

Use provided trash cans and dumpsters at campgrounds and trailheads.

- On busy weekends, trashcans and dumpsters can be full. Bring heavy duty garbage bags in case you need to take your garbage home with you.
- Do not burn trash unless it can completely burn in your fire. Remove and properly dispose of anything that doesn't fully burn.

Pack it in, pack it out.

- Do a sweep of your camp to make sure there is no litter, food, or trash behind---even if it isn't yours.
- Do not let trash blow away—animals become campground pests if they find food there.

### 4. Dispose of human waste properly.

Use trailhead outhouses to minimize what you pack out.

- Don't throw trash into latrines. They are emptied using a pump system. Trash must be manually removed with great expense and difficulty.
- Do not leave any trash or human waste within 200 ft of waterways.
- Deposit solid human waste in catholes dug at least six inches deep and at least 100 ft away from trail and camp. Cover and disguise the cathole afterwards.
- Pack out toilet paper and hygiene products. This can be done with a zippered plastic bag and duct tape.
- In popular areas, canyons, or alpine areas please use a wag bag and pack out your human waste.

### 5. Minimize campfire impacts.

Use camp stoves instead of campfires.

If using a campfire, use existing fire rings.

- Do not build fires near stone or areas that will create fire scars. Remove all signs that a fire existed.
- Be aware of restrictions. Many national parks restrict fires.

### 6. Leave what you find.

Take photos of plants and cultural artifacts instead of taking the objects themselves.

- This helps others be able to enjoy them as well.
- Avoid introducing or transporting non-native species.
- Do not build structures, furniture, or dig trenches.

### 7. Be considerate of wildlife & people.

Watch wildlife from a distance.

- The recommended distances are:
  - o around 25 yards for small animals
  - o around 100 yards for large animals

The "rule of thumb" is a helpful tool for estimating distance for viewing animals.

 You should be far enough away that your thumb totally blocks your view of the animal if you extend your arm and look at the animal.

### 8. Recognize the needs of your group.

Consider the age, abilities, and experience of the group when planning an activity.

 For example, consider sharing gender assigned bathrooms if you have a large group to save valuable packing time or daylight.

### 9. Familiarize yourself with the policies of the land you are visiting.

Agencies have different policies on groups, camping, permits, and so on.

 Often state and federal lands overlap with tribal lands, which can have unique policies as well. Find out if you will be visiting a tribe's land and read their policies for visitors.  State and federal agencies follow different laws. Be sure to comply with them to the best of your ability.

### **Examples:**

- Cannabis is illegal on any federal land, even if that land is in a state that has legalized it.
  - Vaping and smoking indoors is illegal in Utah and California with limited exceptions, and it is prohibited in federal buildings.
  - Nevada bans guns in state parks unless they are unloaded in a vehicle or on a concealed carry permit holder. Firing a gun is illegal even in selfdefense. National parks allow open carrying but defer to state laws regarding concealed carry.
  - Alcohol is generally allowed away from vehicles and outside of buildings.

	TRIP FORM	
Trip Na	ame	
Trip Lo	ocation	
Trip Pu	urpose and Objectives	
Trip Le	eader 1 Name	Cell Phone #
Trip Le	ader 2 Name	Cell Phone #
Trip Er	nergency Contact	Cell Phone #
Checkl	ist	LIST OF VEHICLES
	Permits Printed or Saved	
	Weather Links sent to participants	
	Driving Directions sent to participants	PECOLIBEEC
	Map or topo info sent to participants	RESOURCES
	Additional resource info sent to participants	
	participants	WEATHER
		REPORT (update morning of trip)

TRI	P ITINERARY		
Date			
TIME	ACTIVITY		LOCATION
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Address & Phone # of Hospita			nearest to
destination)	is (along the way	una	Thearest to
,			
Name & Phone # of Search an	d Rescue (Count	v She	eriff)
	(	,	,
List of Participants with First A	<b>Nid Training</b> (and	thei	r level of training)
		Ι_	
Checklist  ☐ Communication device or	nlan (othor	Ste	ergency Response
than the leader's cell phor	•	1.	STOP and assess
☐ Liability/waiver form for o	•	2.	
	. g		injured based on
			your training
		3.	Decide if an
			evacuation is
			needed and make a plan
		4.	Communicate with:
			Other
			participants
			• Search &
			Rescue
			<ul> <li>Medical</li> </ul>
			assistance -
			Emergency
			contacts  • Your
			organization(s)

TEN PLUS ESSENTIA	ALS PACKING LIST
Navigation: Map, Compass, & GPS	Sun Protection: Sunglasses,
System	Sunscreen, & Hat
<b>♦</b>	<b>-</b> ₩-
Insulation: Jacket, Hat, Gloves, Rain	Illumination: Flashlight,
Shell, & Thermal Underwear	Lantern, & Headlamp
	- <del>Ö</del> -
First Aid Supplies	Fire: Matches, Lighter, & Firestarter
	1
Repair Kit and Tools: Duct Tape &	Nutrition: Food Makes All the
Multi-tool	Difference
	7 \
Hydration: Water & Water	Shelter
Treatment Supplies	
Disposing of Human Waste	

TRIP BUDGET					
Expense	Amount	Notes			
Transportation					
Food					
Permit					
Supplies/Gear					
Total					
# of Participants					
Cost per Participant					
		TRIP ROSTE	R		
Name (role)	Contact #	Emergency Contact	Emergency Contact #	Health Considerations & Signs of Issues	
1.				- C	
2.					
3.					
4.					
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11.					
12.					
<u> </u>	1	l	l		

### **Food Plan Form**

Day	Breakfast	Lunch	Dinner	Morning	Afternoon	Dessert	Prep
	(groceries)	(groceries)	(groceries)	Snack	Snack		
1							
2							
_							
3							
4							
				1		1	
	1	l .	1	1	I	1	

### **APPENDICES**

- Appendix A: Glossary
- Appendix B: Gear Guide
- Appendix C: Additional Resources

### **APPENDIX A - GLOSSARY**

This section provides a list of terms and definitions. Diagrams of items can be found in their respective modules.

### **Organizations and their initialisms**

- Bureau of Indian Affairs (BIA)
- Bureau of Land Management (BLM)
- Bureau of Reclamation (Reclamation)
- Fish and Wildlife Services (USFWS)
- International Grizzly Bear Committee (IGBC)
- National Park Services (NPS)
- Outdoor Recreation Leaders Program (ORLP)
- Sierra Interagency Black Bear Group (SIBBG)
- Southern Nevada Area Partnership (SNAP)
- United States Forest Services (USFS)
- United States Geological Survey (USGS)

### **Vocabulary**

**3-season tent:** A tent designed for spring, summer, and autumn. They tend to be light and fine for most uses. 3-season tents have more mesh and airflow making them better for warmer temperatures.

All season tent (or 4-season tent): A tent designed to handle strong weather including heavy rain, wind, and snow and generally have less mesh and are warmer than 3-season tents.

**Base weight:** The total weight of all non-consumables in your pack, including the pack itself. This excludes food, water, and fuel (but not fuel containers). Typical backpacker base weight is 25-30 lbs., lightweight backpacker base weight is generally

10-20 lbs., and ultralight is under 10 lbs. Reaching a base weight of under 10 lbs. requires specialty gear that is typically very expensive and leaving behind items many backpackers feel are essential.

**Bathtub:** The waterproof floor of a tent that is designed with raised edges, typically a few inches high, to prevent water from entering the tent.

**Burner:** The part of the stove with the fuel and flames.

**Bivvy:** (aka bivy) This term is short for bivouac shelter. A small shelter that is functionally a waterproof layer for a sleeping bag. Historically these were lighter than tents, but that generally no longer true. The term is also used for lightweight disposable emergency shelters made from mylar or a similar material. They are similar to emergency blankets, but resemble a sleeping bag in design.

**Capacity:** The volume of space in the packs, typically measured in liters. Some manufacturers include large external pockets in their estimate of capacity, so read product details carefully for internal capacity.

**Cardiopulmonary Resuscitation (CPR):** An emergency lifesaving procedure that combines chest compressions and artificial ventilation to maintain circulatory flow and oxygenation in a person who has suffered cardiac arrest.

**Cathole:** A hole dug for solid human waste in the wilderness. Catholes should be at least 6" deep and at least 100 feet away from trail and camp. Cover and disguise a cathole after use.

**Closed cell foam:** The foam equivalent of an egg carton with the foam protected by an outer coating that may add some insulation.

**Daisy chains:** Term used to describe straps sewn into a series of loops instead of lying flat. Can be used to attach items to the pack.

**Dispersed camping or backcountry camping:** Camping in undeveloped areas outside of designated campgrounds, often in remote or wilderness locations. This type of camping usually involves setting up a tent or other shelter without amenities such as running water, toilets, latrines, or established fire pits.

**Down insulation:** A natural material that comes from the soft, fluffy plumage of ducks, geese, and other waterfowl. Traps air to prevent heat loss. Lightweight and breathable. Loses insulation properties when wet. Some down is treated to repel water, but it can still lose insulation properties. It is often used for sleeping bags and jackets.

Dry campsite: A campsite that doesn't have access to water.

**Durable surfaces for camping:** Surfaces that resist tramping and don't take much damage from camping. Examples include rock, sand, gravel, snow, trail, and grass.

External frame packs: Older backpack technology that isn't common today. It has a visible metal frame with the pack on one side and straps on the other. These can carry heavier loads, provide better airflow to your back, are less expensive than internal frame packs, and have many attachment locations for items on the exterior. They tend to be heavier and stick out from your body which can be uncomfortable, restrict head movement, and make it difficult to pass through tight spaces.

**Fill Power:** How lofty or fluffy insulation filling is. Higher fill power means insulation is loftier and warmer at a lower weight.

**Fire blanket:** A blanket made of fire-resistant materials used to smother flames.

**Fire starter:** A tool or material used to help ignite a fire more easily. Fire starters are designed to catch fire quickly and burn hot enough to ignite larger pieces of fuel like wood or charcoal. They come in various forms, including chemical fire starters, wax-coated sawdust, or natural materials like fatwood and may supplement or replace tinder (see below).

Frameless packs: These packs are backpacks with shoulder straps and often a hip belt. These are exceptionally lightweight but are missing many features of heavier packs. They don't tend to have as many organizational pockets, padding for the back to protect from hard objects, ventilation for the back, or the ability to transfer weight to the hips. They require careful packing and cannot carry the same weight as more structured packs even if there is capacity for more items. These packs are popular with ultralight backpackers.

**Freestanding tent:** A tent with support poles that can maintain its shape without being staked down.

Frontcountry camping: Camping in established campgrounds that are easily accessible by vehicle, typically offering amenities like restrooms, picnic tables, fire rings, and sometimes even electrical hookups. Frontcountry campsites are often located near roads, parking lots, and recreational facilities, making them more convenient and less rugged than backcountry or dispersed camping. They can also be called developed campsites.

**Fuel Regulator:** The knob that controls the fuel flow out of the burner.

**Gas regulator:** Controls the amount of fuel pressure that feeds into a Coleman-style stove.

**Global Positioning System (GPS):** A navigation system using satellites developed by the Department of Defense for military use in the 70s. It is now managed by the National Executive Committee for Space-Based Positioning, Navigation and Timing (PNT) since most users are no longer military.

Ground cloth (or Footprint): A sheet of fabric that goes underneath your tent. It provides extra protection for the bottom of your tent and can keep it dry when the ground is damp. It is less expensive to replace a ground cloth than an entire tent. Ground cloths may attach to a tent, be made for a specific tent model, or be an inexpensive tarp. Those for specific models are called footprints.

**Guylines:** A cord used to tie down a tarp, tent or rainfly using stakes. They keep the rainfly away from the tent to prevent leakage. They also create stability against high winds or snow.

Hang bag: A bag that keeps food up and off the ground outside your tent. Often counterbalanced by a bag weighted with rocks. These are often not allowed in places with bears and should be well sealed to prevent animals and birds from dropping into them from above. May also be called a food bag. These generally hang from hardware that is different from the hardware used to close the bag.

**Haul loop:** A loop at the top of the bag for lifting. You should always use a haul loop to lift a backpack and never the shoulder straps.

Hip belt: The main way packs transfer weight to the hips. A properly fitted hip belt will put about 80% of the pack weight on your hips. The shoulder straps of bags with hip belts are largely designed to help the pack stay in position on your body so the weight sits on your hips instead of your shoulders. Some hip belts pivot with your body to reduce pack movement when you hike. Some companies make accessory pockets that can be added to hip belts. Padding on hip belts varies between brands and some brands fit bodies differently. Try on several packs with weight in them to find what works for you. Some companies use materials that can be molded to your personal shape using heat. Work with a certified person in-store to get the best results.

Hydration sleeve: A pocket in some packs that isolates a hydration bladder from the rest of the pack. Some pockets are positioned for bladder access without opening the pack. Others are fully inside the main compartment. These sleeves may feature a clip for hanging the bladder so it doesn't get compressed at the bottom of the bag. Many backpackers prefer water bottles to hydration bladders because bottles are easier to access and the water level can be seen easily.

*Inflatable pad:* A pad that requires you, or a pump, to get air into it.

Internal frame packs: Newer back technology with thinner and lighter support frames entirely inside the pack. These packs are designed to have a smaller profile and move with the hiker's body, making it easier to navigate rough terrain and tight spaces. They weigh less than external frame packs but cost more and have fewer spots for attaching items. The structure transfers weight to your hips reducing fatigue and back strain. Many, but not all, offer some amount of

ventilation for the back, which can reduce discomfort in hot and humid weather.

**Isobutane fuel canister:** Canister for camping stoves filled with isobutane. They are lighter than propane canisters and have more energy for their volume. Use only with isobutane stoves.

*J-straps and S-straps:* Versions of the shoulder straps of a backpack based on their shapes. J-straps are more common and appear to come straight down from the top of the backpack and then curve to attach to the bottom of the pack. S-straps were designed for men with larger chest muscles and women and curve out at the chest to create extra room.

**Kevlar bag:** A bag designed to hold up to bear claws. Lighter and easier to pack than canisters. Not approved at all bear locations. Small animals can chew holes through Kevlar.

**Kindling:** Small combustible material used to help logs catch fire and burn. Kindling is typically materials like twigs, small sticks, and dry leaves.

**Latitude:** Degrees measured from the equator (0°) to the poles (90°). Latitudes north of the equator may be indicated as north or with a positive number. Latitudes south of the equator may be indicated as south or with a negative number.

**Latrine**: A simple outdoor toilet, often a pit or trench, used in remote or undeveloped areas. Also called a pit toilet.

Lid (also known as the Brain): A top compartment in some packs. These sit over the main compartment to provide additional storage. Some are removable and some have straps to turn into a fanny pack.

**Load lifter straps:** Small straps at the top of the backpack that connect the main compartment with the shoulder straps. They help pull weight off shoulders and should be angled around 45°. Often missing on inexpensive and ultralightweight packs.

**Longitude:** degrees measured east and west of the Prime Meridian in Greenwich, England. The Prime Meridian is 0°, with longitude going up to 180° east and west where they meet on the other side of the planet.

**Microtrash:** Small pieces of litter, such as cigarette butts, plastic bits, and food wrappers, that are often overlooked but can harm the environment.

**Mummy sleeping bag:** A sleeping bag that is tapered to fit your body snugly. Faster to warm up and lighter than rectangular sleeping bags. Include a hood to keep your head warm. Some find them constraining or claustrophobic.

**Non-durable surfaces for camping:** Surfaces that are dangerous for camping or are damaged easily. Examples include moss, wildflowers, wetlands, steep slopes, and cryptobiotic soil.

**Non-freestanding tent:** A tent that requires staking to have any shape at all. Some utilize hiker trekking poles for support.

**Out-and-back hike:** A hiking trail that begins and ends at the same location, connecting two points like a trailhead and a destination.

**Personal Locator Beacon (PLB):** A device that uses a satellite connection to call for help. These may only function to contact search and rescue or may have additional capabilities including messaging personal contacts.

**Piezo Igniter:** The part of the stove that sparks to ignite the fuel. Also available as a separate tool.

**Pop-up tent:** A tent with built in poles that can be set up quickly and easily. This term may be used to describe tents with built-in telescoping poles, or those with tensioned wire rings similar to some windshield shades.

Pot Support: A structure that supports a pot above a burner.

**Propane fuel canister:** Canister for camping stoves filled with propane. They are heavier than isobutane canisters but fit more common tent camping stoves. Use only with propane stoves.

**R-value:** A measurement for insulation. The higher the value, the better the insulation. Values below 2 are only suitable for warm weather. Values from 3-4 appear to be most popular, but values can go above 10.

**Rain cover:** Protects backpack from rain. Backpacks are generally not waterproof. Some packs come with rain covers but others need to be purchased separately. An inexpensive alternative to a rain cover is to use a high-quality trash bag to line your backpack. Your pack will get wet and heavier, but your gear will stay dry.

**Rainfly:** A waterproof cover that fits over the roof of the tent. It can be used for rain or for additional warmth. It also reduces condensation inside the tent from people breathing inside as the condensation will form on the rainfly instead of the tent.

**Rat bag:** A chainmail type bag that is much harder for small animals to chew through. These are heavier than regular hang bags. The food inside can be squashed by larger animals if it is not hung up.

**Self-inflating pad:** A pad that has a valve that will allow air to enter the pad automatically when it is open. These pads must be stored inflated to function properly and may require a little air from your breath or a pump to fully inflate.

**Semi-freestanding tent:** A tent that will stand without stakes, but not have its full shape. Often a few stakes will make it fully supported. These are sometimes called freestanding by manufacturers.

**Shroud:** A part on a Jetboil-style stove made of plastic that allows you to safely hold the burner without injury. This is an insulted layer around the pot.

Sleeping quilt: A blanket shaped like a mummy bag but missing the part you lay on and hood. Some are closed at the bottom while others are open. Less common than other bag types and often more expensive. People sleep on sleeping pads directly with the quilt wrapped around them. Lightweight but still warm. Flexible for temperature because they can be thrown off like a blanket.

**Stakes:** Stabilizers for tents that are similar to large nails. They come in a variety of materials, shapes, and sizes. Should be considered a required part of pitching a tent. They prevent the tent from moving in windy or stormy weather. Stakes may be required to keep the rainfly off the main tent or to add ventilation.

**Sternum straps:** Small straps that run between the shoulder straps across the sternum or chest to stabilize the pack when hiking. These straps help stabilize the bag while hiking. Sternum straps should be adjusted to about an inch below the collarbone. They should be tightened to avoid slack, but not restrict movement and breathing.

**Temperature control knob:** Controls the height and heat of a flame on a Coleman-style stove.

**Tinder:** Smaller combustible material used to ignite a fire. Once ignited, tinder burns rapidly and provides the initial heat needed to ignite kindling, which then helps build a larger, sustained fire.

**Topographical map:** A map with lines that show elevation.

**Trailhead:** The starting point or entrance of a hiking trail, often marked with signs or maps.

**WAG bag (Waste Alleviating Gel bag):** A resealable plastic bag with waste alleviating gel inside. Used to carry solid human waste out of wilderness areas.

*Widowmakers:* Dead, loose, or broken branches or debris in trees that could fall and harm those below.

**Wilderness First Aid (WFA):** A specialized type of first aid focused on providing medical care in remote or outdoor settings where professional help may be delayed.

**Wilderness First Responder (WFR):** A trained individual certified to provide advanced medical care and emergency response in remote or wilderness settings, often acting as the primary medical provider until professional help arrives.

Wind shield: Foldable walls for a stove that help block wind.

# APPENDIX B – ADDITIONAL RESOURCES

In this section we list a number of ORLP staff vetted resources that instructors and participants can use to review or learn more about the topics covered in the ORLP curriculum. Note, websites were vetted in December 2024 and may not continue to work or may not continue to provide good information. They have been grouped by workshop topic, but Camping is covered in three workshops and so those have been combined. In addition, please note that resources listed under Planning Day and Overnight Trips may include good information for camping and backpacking.

#### Camping Information:

https://www.nps.gov/subjects/camping/how-to-camp.htm

https://www.blm.gov/programs/recreation/camping

https://www.npr.org/2020/07/22/894312084/new -to-camping-heres-how-to-get-started

https://www.blm.gov/programs/recreation/recreation-activities/nevada

https://parks.canada.ca/voyagetravel/hebergement-accommodation/camping-101

http://www.backcountryattitude.com/campfire-problems.html

https://www.rei.com/learn/expert-advice/campfire-basics.html

https://www.rei.com/learn/expert-advice/camping-for-beginners.html

https://www.coleman.com/camping-101-guide.html

Outdoor School Hiking and Camping: The Definitive Interactive Nature Guide

How to Camp in the Woods: A Complete Guide to Finding, Outfitting, and Enjoying Your Adventure in the Great Outdoors by Devon Fredericksen

#### 10 Plus Essentials Information:

https://www.nps.gov/articles/10essentials.htm

https://americanhiking.org/resources/10essentials
/

https://www.outdoors.org/resources/amcoutdoors/outdoor-resources/the-10-essentialswhat-to-pack-for-a-backcountry-hike/

https://visitguadalupemountains.com/desert-hiking-essentials/

https://lnt.org/how-to-reduce-stops-by-packing-the-10-essentials-on-your-next-trip/

https://www.backpacker.com/survival/survival-gear/ten-essentials-less-important-than-you-think/

### **Trip Best Practices:**

https://lnt.org/why/7-principles/

https://www.thisexpansiveadventure.com/blog/planninganadventure/

https://www.outsideonline.com/outdooradventure/exploration-survival/everymans-guideplanning-epic-adventure/

https://veggievagabonds.com/adventure-planning/

https://recreation.richmond.edu/common/PDF/oar-planning-future-trips-.pdf

# Planning a Day or Overnight Trip (also see Camping Resources):

https://www.outsideonline.com/outdoor-adventure/hiking-and-backpacking/how-plan-day-hike/

https://americanhiking.org/resources/planningyour-hike/

https://www.hikingdude.com/hiking-planning.php

https://forecast.weather.gov/MapClick.php?lat=36 .2176&lon=-115.0232#.YeXmzRPMI-Q

https://mtcharlestonweather.com/

https://weather.com/weather/today/I/Lake+Mead +National+Recreation+Area+NVNPSLAME:13:US

How to Suffer Outside: A Beginner's Guide to Hiking and Backpacking by Diana Helmuth

Pocket Guide to Hiking/Backpacking by Ron Cordes

The Ultimate Hiker's Gear Guide (2nd Ed.): Tools and Techniques to Hit the Trail by Andrew Skurka

Websites to reserve campsites on public lands:

https://parks.nv.gov/about/reservations

https://www.recreation.gov/

### Trip Safety:

https://wildernessmedicine.com/

https://www.nols.edu/en/

https://www.coursera.org/ (search for wilderness first aid courses)

https://www.rei.com/learn/expertadvice/wilderness-first-aid-basics.html

https://intermountainhealthcare.org/classesevents

https://www.acls.net/wilderness-first-aid-basics

https://www.redcross.org/take-aclass/cpr/wildernesssports?srsltid=AfmBOorUXUfINeFBXN4kmKgMKVIS hldJ6Q3xd2WgS0CVd2j9wUyRpCKA

Medicine for the Outdoors: The Essential Guide to First Aid and Medical Emergencies by Tate Higgins and Ali Arastu

### Navigation:

https://americanhiking.org/resources/how-to-use-a-compass/

https://www.rei.com/learn/expert-advice/navigation-basics.html

https://www.backpacker.com/skills/how-to-use-a-compass/

https://www.gore-tex.com/blog/how-to-use-a-compass

https://wildernesstimes.com/how-to-use-a-compass/

https://www.maptools.com/declination

https://edrnet.com/wpcontent/uploads/2014/08/US-Topo-Map-Symbols.pdf

https://pubs.usgs.gov/gip/TopographicMapSymbols/ s/topomapsymbols.pdf

information can be found here:
<a href="https://www.usgs.gov/faqs/where-can-i-find-a-topographic-map-symbol-sheet?qt-news-science-products=0#qt-news-science-products">https://www.usgs.gov/faqs/where-can-i-find-a-topographic-map-symbol-sheet?qt-news-science-products=0#qt-news-science-products</a>

In case your maps are all VERY old, additional

If you have time to go into symbols in more detail: <a href="https://s3.amazonaws.com/wateratlasimages/HowToReadTopoPlusActivity.pdf">https://s3.amazonaws.com/wateratlasimages/HowToReadTopoPlusActivity.pdf</a>

Wilderness Navigation: Finding Your Way Using

Map, Compass, Altimeter & GPS, 3rd Edition (Mountaineers Outdoor Basics) by Bob Burns and Mike Burns. Mountaineers Books. February 24, 2015.

Wilderness Navigation: Finding Your Way Using Map, Compass, Altimeter & GPS, 3rd Edition (Mountaineers Outdoor Basics) by Bob Burns and Mike Burns. Mountaineers Books. February 24, 2015

# Backpacking (also see Day and Overnight Trips):

https://andrewskurka.com/beginner-first-time-backpackers-advice-info-tips-resources/

https://outwardbound.org/blog/beginners-guide-backpacking/

https://www.shedreamsofalpine.com/blog/backpacking-for-beginners

https://amandaoutside.com/backpacking-tips-for-beginners/

https://www.backpacker.com/skills/beginner-skills/the-total-beginners-guide-to-backpacking/

### https://www.rei.com/learn/expert-advice/backpacking-beginners.html

#### https://www.treelinereview.com/backpacking

The Backpacker's Field Manual, Revised and Updated: A Comprehensive Guide to Mastering Backcountry Skills by Rick Curtis

How to Survive Your First Trip in the Wild: Backpacking for Beginners by Paul Magnanti

The Backpacker's Handbook (4th Ed.) by Chris Townsend