Chapter 7

Games and Activities
Watershed Activities

**Paper Watershed Activity**

**Goal:** Give the participants a visual idea of a watershed from the mountains to the ocean

**Time:** 15-20 minutes

**Who:** Middle school, high school, or adult participants

**When:** During a day or overnight trip, perhaps getting on the river or at lunch to explain a watershed

**Where:** Ideally near the river

**Materials:** Piece of scrap paper for each group, washable marker, water bottle

Group your participants into groups of 3-4 and give each group a piece of paper, preferably 8.5 x 11.

Tell everyone to crumble it into a ball (real tight). Now unfold the paper just enough to make a mountain (don’t have them smooth it flat). You should have a crinkled paper mountain. Give each group a marker and have them mark where they think the main flow of water will run if they were to imagine dripping water onto the top of their mountain.

Have them draw a house for where they would live. Where would the water collect or flood (wetland or flood plain)? Once they do this, take the water from your water bottle and drip (with your fingers, don’t pour) onto the top of the paper mountain. Ask the participants if their guesses were right. Sometimes, depending on your crumple, you can have 2-3 watersheds per mountain.

Point out ridges, valleys, rivers, and tributaries and where the water ends up. Once you determine where the water flows (and if you have sand), you can make a model of one side of the “mountain” into the beginning of the San Francisco Bay Delta Watershed.

**Discussion Questions:**

*Who do you think lives, works and plays along these water routes?*

- Skiers in the mountains, fishermen along the river, towns near the lake, farmers in the flatlands?
- Cities, homes, roads and factories modify the watershed and affect its natural resources. Farming, recreation, hydroelectricity generation, mining, construction and forestry can also significantly affect a watershed.

*Why do you think watersheds are important?*

- Fish and wildlife also need healthy watersheds for food and shelter
- Watersheds provide water for drinking, irrigation and industry as well as hydroelectric power for communities and businesses.
- Watersheds are also important to our recreational needs, providing opportunities to enjoy natural beauty as well as boating, fishing and swimming.

**Watershed Finger Tag Activity**

**Goal:** Introduce parts of a watershed to participants. The sequencing is up to you!

**Time:** 10 minutes

**Who:** Participants from a group that is interested in learning about watersheds

**When:** Anytime

**Where:** Anywhere there is space to create a circle
Materials: No materials needed

Provide the following instructions to the group:

1. Everyone is in a circle
2. Ask everyone to bring their arms out to their sides with their left hand palm up, and right hand with its index finger pointing down and touching on their neighbor’s outstretched left palm. Left hand is flat like a plate and right hand is hovering like a fork over their neighbor’s plate.
3. In this game the word “Water” is the magic word that requires you to do two things… at the same time! You need to grab the finger in your left hand while at the same time lifting your right finger to keep it from being grabbed!
4. So understand, when you hear the word “Water!” you have to grab your neighbor’s finger, while trying to keep your own finger free

Now narrate the following story – its fine (and encouraged) to put it in your own words!

So, today we are going to be exploring “Water!” and something called a “Watershed!” A “Water-shed!” is basically an area of land that sheds “water!” We are rafting on one of California’s “Water-sheds”! It begins in the mountains of the Sierra Nevada where in the wintertime snow falls down on the peaks. Then in the spring and summer this snow melts into “Water!” and starts flowing over the land and into “watery” rivers. These rivers are full of “www-rapids”, and “www-waves” that then flow into bigger rivers such as the San Joaquin and the Sacramento. All of this “Water” is delicious, drinkable fresh “water!” These two big, fresh “water” filled rivers make their way into the Delta. The delta’s “water” moves into San Francisco Bay, where it mixes with salty “Water” and becomes brackish. The “www-wind” and “www-waves” of San Francisco Bay are the playground for many amazing animals who love to live in the brackish “Water” that then moves through the tiny opening of the Golden Gate out into the salty “Water” of the great big Pacific Ocean.

All The Water In The World Activity
Goal: Introduce the concept of limited water availability and of the importance of water conservation
Time: 15 minutes
Who: Participants of any age and ability
When: After introducing the concept of watersheds. This is a great activity to do around lunchtime.
Where: Anywhere
Materials: Inflatable Earth ball, 1 L water bottle, irrigation syringe, two cups

The Big Picture:
How have you personally used water today? The amount of fresh water available on land surfaces is a tiny fraction of the total amount in the world. Typically, people think that because water falls from the sky, it is an unlimited resource. The same water just keeps circulating around in the water cycle. Even though water is not abundant, it is perceived to be.

Toss the Globe
First, demonstrate to your group how much water there is in the world by playing “Toss the Globe”
1. Have students circle up in a large area.
2. Toss a large blow-up ball of the earth around the circle.
3. Each student that catches the ball must see where their RIGHT THUMB is touching, and shout either “WATER!” or “LAND!”
4. Hopefully, most of the students will have had their thumbs land on water.
5. So, there is a lot of water on the planet! Now move on the next part of the activity.

All the Water in the World
70 percent of the Earth's surface is covered by water! That should be enough for everyone! Water can be found almost everywhere on Earth. But, how much of this water is actually available for human use?
1. Ask them the following questions:
   • Name all the places you can think of where we find water in the world…
     The should come up with three categories
     o Salt Water (oceans, bays and some lakes)
     o Liquid Fresh (rivers, lakes, aquifers)
     o Frozen Fresh (ice caps and glaciers)
   • Have them guess the percent of each:
     o Salt Water is – 97%
     o Fresh Water is – 3%
       ▪ Of this 3%:
       ▪ Two thirds are locked up in ice caps and glaciers
         Only one third (or 1% of the total water on earth) is fresh surface water:
         lakes, rivers, streams, ponds, aquifers, and atmosphere
2. Can you imagine what that 1% might look like? Imagine that this water bottle represents all the water in the world. Show them a clear Nalgene (1000 mL) of water.
3. Ask - “Where is most of this water located?” – hold up the blow-up globe again and point out that, of course, it’s mostly in our oceans.
4. “Is this water drinkable or can it be used to grow our food?” – of course not, at least without the use of the very expensive process of desalination.
5. Pull out 30 milliliters (30 cc’s) with the water syringe, and pour it into a clear cup marked – Fresh Water.
6. Show them how this tiny remaining amount is only 3% of the world’s water.
7. “Okay, now, what do you find at the earths poles? That’s right, Ice. So, that means that two thirds of this fresh water is frozen, and we can’t use it.”
8. Now use the water syringe to pull out 20 milliliters from the cup and place it in another cup marked “Ice.”
9. Shake this remaining 10 mL around a bit – “This remaining amount represents all of the fresh liquid water found on the ground and lakes.”
10. Pour the remaining amount into the lid of the Nalgene, and use the water syringe or your finger to collect 1 drop of water.
11. “Of all this fresh liquid water, the actual remaining amount that is healthy, non-polluted, accessible water can be represented by this one drop. Which is about .003 percent of the total!
Astronomy Activities

Spending an evening looking at the night sky with participants can be one of the most memorable and special moments on an ETC trip. Just seeing the night sky can be powerful enough for people who don’t commonly have that opportunity.

1. Question and Answer Session – This is a good style of interactive learning and will give you an idea of what your group’s existing knowledge is.
2. Constellations – Everyone loves to lie on their back and look at the stars when there is someone who can point out some constellations. Armed with an ETC laser pointer and the knowledge of just a few well-known constellations, you can do no wrong!
3. Myths and Stories – These go hand-in-hand with constellations. There’s no wrong or right version – everyone can tell the stories in their own way and there are MANY stories from many cultures that go with the stars.
4. A Couple Solid Activities – This can be anything from the Create a Constellation Activity to sharing some of the awe inspiring facts in the It’s All Relative Activity. It is important to run the activity that you feel most comfortable with, so be sure to experiment with a few to figure out a good fit.

It’s All Relative Activity
Goal: Inspire a sense of wonder for the size and scope of the universe
Time: 15-25 minutes
Who: 5th grade and up
When: On overnights when you have at least a partial view of the stars
Where: A wide open space with few trees and a good view of the night sky
Materials: nothing

Set-Up
This collection of short activities is designed to engage your participants and get them to start thinking. After a long day, it can be tough to settle down and listen to concepts that can be hard to grasp. Reading a quote and talking a little bit about the size and scope of the universe can really set you up for success. If you have a tarp, it is nice to lay something down on the ground for everyone to lie on. If not, sweatshirts are fine.

Beginning Quote
When we think about the stars, our solar system and space, the numbers can seem overwhelming and beyond our comprehension. The following quote can be a great place to start.

“Remain motionless… Feel nothing but your breathing, your heartbeat and ponder these thoughts… You are sitting on a piece of Earth at about latitude 36 degrees, which means you are spinning west to east at a rate of about 860 miles an hour. At the same time, this Earth is moving through its orbit around the Sun at 66,661 miles per hour, and the Sun is carrying itself and its planets toward the star Vega at 31,000 miles per hour. The Sun and Vega move around the Galaxy at the blinding speed of 700,000 miles per hour and the Galaxy itself rotates at 559,350 miles an hour. Plus our Galaxy moves in relation to all
other galaxies as they rush through the universe at better than 1,000,000 miles an hour. So while you sit still we move at an accumulated speed of ... maybe two and a half million miles an hour.”

-Excerpted from Space, by James Michener

Count the Stars

How many stars are in the sky?

• Everyone look up to the stars. How many stars do you think you can see on the very darkest night with only your naked eye? Allow for some guesses. The correct answer is that at best we can see somewhere around 5,000 stars.

• As we look at the stars, we are looking into our galaxy, the Milky Way. How many stars do you think are in the Milky Way? Allow for some guesses. Roughly 100 billion! AND, the Milky Way is just one of MANY galaxies. How many galaxies do physicists think there are? Once again, the answer is about 100 billion!

• How big of a number is 100 billion? Have participants do the following to get an idea:

  “Here is what I would like everyone to do. Quietly and to yourself, I would like you to count out loud as fast as you can. No cheating! You must say each number to yourself quietly so that you don’t mess anyone else up. We will count for 30 seconds. Ready, set, go!” Time 30 seconds on your watch and tell people when to stop counting.

• How high did you get? Call on several people to get a range of numbers. You should get answers ranging from 70-130. Any higher than 150 and you will know that they were most likely incorrect or fibbing.

• Good! Now let’s say that as a group, on average we can count to 100 every 30 seconds, or 200 every minute. If you were to count at this speed for 24 hours a day, 7 days a week, 52 weeks a year, you would reach the number 100 billion only after counting continuously for 1,000 years!

• Here is another way to appreciate the size of this number: 1 billion seconds is equivalent to 31.5 years. That means that 100 billion seconds is equal to 3,150 years!

Planet and Star Comparisons

• What kinds of stars are there? There are four main types of stars: Red, Blue, Yellow and White. Red stars are generally the largest and oldest, blue and white stars are the hottest and youngest, and yellow stars are somewhere in the middle.

• What is our closest star? The Sun.

• How big are stars? Stars are MASSIVE! Our Sun is a yellow star that is average in size, as stars go. We would have to line up 109 Earths next to each other to span the diameter of the Sun. AND, you could fit 1.2 million Earths inside the Sun!
Start with the Earth and work your way up, naming the planets or having participants name the planets until you get to the Sun. Wow!

- **What are some of the largest stars we can see?** With a good star chart or app on your phone, you can learn to point these stars out and then show them on the cards for comparison.

  - **Sirius** is a blue star located in the constellation Canis Major, and is the brightest star we can see in our night sky. It is 8.5 light years from Earth.
  - **Pollux** is a yellow star located in the constellation Gemini. It is just under 10 times the diameter of the Sun.
  - **Arcturus** is a yellow giant, located in the constellation Bootes, 37 light years from Earth. It is the second brightest star in our sky and about 26 times the size of our Sun.
  - **Betelgeuse** (pronounced like beetle juice) is found in the constellation Orion. It’s so big, it would take 650 Suns lined up next to each other to equal its diameter and it would take roughly 200 million Suns to fill it up. If you took this star and put it in the Sun’s place in our solar system, it would reach all the way to Jupiter!
  - **Antares** is a red giant, located in the constellation Scorpius. It is 850 times the radius of the Sun!

**Understanding Light Years**

We have mentioned light years several times now.

- **How would you measure the distance from you to me?** Participants will list inches, feet, meters, etc.

- **How do we measure the distance from where we are to our homes?** Miles. But these are too small to measure the distance to things in space. So for distance in space we use both a distance and the time it takes for light to travel that distance.

- **How fast does light travel?** 186,000 miles per second. If you could run that fast, you could run around the earth seven and a half times per second! Alternatively, in minutes, the speed of light is 11,160,000 miles per minute, and traveling at the speed of light for a minute you would be able to run around the earth 453 times!

- **A light year** is the distance you can travel by traveling at this (highly impressive) speed of light for a one year. The closest star to us after the Sun is called Proxima Centauri and it is 4.2 light years away. This means that you would have to travel at the speed of light for 4.2 years to get there!

- **Introduce the concept** that because the distances are so great, we are seeing light that was produced in the past. It is totally possible that we could be seeing a star that blew up three years ago and no longer exists, but the light it produced before it blew up is just reaching us now.

- **A few more facts:**
  - By comparison, the Moon is VERY close to us - it is about 250,000 miles from the earth or only 1.34 light seconds away.
  - The Sun is 92,960,000 miles from the Earth. The light produced by the Sun reaches us in about 8.3 minutes.
**Stewardship Activities**

**Leave No Trace Activities**

**Goal:** Introduce the concepts of connection with the natural world and the ethic of minimizing impact

**Time:** 20 minutes

**Who:** These activities are geared toward younger audiences, although LNT can be discussed with any age group

**When:** Anytime - perhaps after visiting an area that has been impacted by humans

**Where:** Anywhere. Activity 2 requires more space.

**Materials:** a series of laminated cards depicting different animals

Leave No Trace (LNT) is the most widely accepted outdoor ethics programs that teaches people to enjoy the outdoors responsibly.

There are seven LNT principles:

1. Know before you go: plan ahead and be prepared
2. Choose the right path: stay on the trail, camp on durable surfaces
3. Trash your trash: pack it out
4. Leave what you find: don’t take anything but pictures
5. Be careful with fire: keep fire in designated fire pits and know restrictions
6. Respect wildlife: don’t scare the animals or deface trees
7. Be kind to other visitors: loud voices carry

These activities are quick, fun and help to illustrate these principles. If adults or youth participants are interested in learning further, there is an online course on the Leave No Trace website as well as workshops around the country each year. The Leave No Trace Organization created these activities and principles.

**LNT Activity 1: Our Natural World**

Gather everyone in a circle. Spread out the Our Natural World cards on the ground so that everyone can see them. These cards all have pictures of things in nature. Instruct everyone to mentally choose two (don’t pick them up) and then take two minutes to think about them. For both their cards they should think about:

1. What they have in common with what’s depicted on their card
2. How the thing depicted on their card helps them

For example, if someone chooses the card with a Great Blue Heron on it, their answers might be “we both like to eat fish and watching it inspires me.” It may take a little practice, but with encouragement your participants will be able to make the connections. Once the two minutes have passed, go around the circle and have each person share. They can pick up the cards and hold them while speaking, but afterwards have them replace the cards so that someone else can use them if they chose the same ones. This activity builds empathy for things in the natural environment and is a great segue to discussions about stewardship.
Art and Reflective Activities

Andy Goldsworthy Activity

Goal: Help participants to see the beauty and details of their surroundings by engaging in a creative hands-on art activity

Time: 30 minutes to an hour

Who: All ages can enjoy this activity

When: At a point when individuals need some mellow, quiet exploration and reflection time

Where: Any place that has natural materials available. Beaches with lots of stones and debris work well.

Materials: Andy Goldsworthy example photos; an open outdoor area with natural materials

Andy Goldsworthy is a British sculptor, photographer and environmentalist that creates site-specific art made out of collected natural materials using only his hands and found tools. Most of his sculptures are temporary and only survive in pictures that he takes shortly after completing a piece. His main goal is “to understand nature by interacting with it.”

“I enjoy the freedom of just using my hands and "found" tools--a sharp stone, the quill of a feather, thorns. I take the opportunities each day offers: if it is snowing, I work with snow, at leaf-fall it will be with leaves; a blown-over tree becomes a source of twigs and branches. I stop at a place or pick up a material because I feel that there is something to be discovered. Here is where I can learn.”

Andy Goldsworthy is the perfect inspiration for participants to use what is around them for a reflective and creative art activity. It is common that everyone will ask for more time for this activity than you might have available. (Without harvesting anything alive)

Setup

Begin by introducing Andy Goldsworthy and who he is. Reading the above quote works well. Then allow everyone to see the example photos of work by both Andy Goldsworthy and other outdoor education participants. Explain that now we are going to have the opportunity to create our own Andy Goldsworthy art projects. If you have a short amount of time, break everyone into small groups. If you have more time, encourage participants to complete their art projects individually. Be sure to preface with everyone the boundaries (how far they can go) and that they are not to harvest anything alive (they must collect things that are already down or unoccupied).

Activity

Spread everyone out and give them a time limit. They may have questions, so be sure to wander around and check in with people as they are working. Give a five-minute warning when the time is close. This will give you an idea of where everyone is in their process and whether they need more time or not.

Wrap-up

Come together as a group and announce that now you will travel around as a group and admire each art piece. The artist can offer an explanation of their work – or not. Preface with the group
to watch out for other pieces as they move and to be quiet and respectful when each artist is presenting their piece. Leave time for photos!

Sensory Awareness Activities

Hawk and Mouse Activity

Goal: This fun game is great to explain predator/prey relationships in nature and the concept of competition between species that rely on the same food source. It is also a great way to talk about the role of the spinal cord and what happens in the case of a spinal cord injury.

Time: About 20 minutes.
Who: This is a great adaptive game for people of all ability levels and ages.
When: Anytime – after lunch works well
Where: On a field or beach. This could also be done indoors.
Materials: Water bottle and a coin

To Play
1. Divide the whole group into two equal groups and give each the name of a hawk. For example, you could use Red Tail Hawks and Red Shouldered Hawks.
2. Have the two types of hawks line up together, across from one another. One species in one line, the other species a couple feet away in a different line.
3. Explain: the person at one end of the line is the brain of the hawk. The person at the other end of the line is the talons of that hawk.
4. Put a water bottle or some other object at the talon end of the lines on the ground, equal distance from the talons of both birds. This is the mouse or prey.
5. The game leader stands between the brains of each hawk and explains:
   • Everyone in each hawk line need to hold hands to connect your brain to your talons. You are creating the spinal cord of each hawk. Now everyone must close his or her eyes; except the brains.
   • The game leader flips a quarter coin. If it is heads, do nothing. If it is tails, the brain sends a squeeze down the hands or spinal cord of the bird to the talons. When the talons feel the squeeze they open their eyes and try to grab the mouse before the other hawk gets it. Competition. Fun!
   • Which ever hawk get the mouse first wins that round. To show they won, the talons of that hawks moves up to become the new brain and everyone else slides down a position.
   • If the brain squeezes when the coin is a head instead of a tail, it wasted energy when there was no mouse. To show this loss of energy, the brain must go down to become the talons and everyone shifts one position backwards.
   • When a hawk completes a full forwards rotation and gets back its original brain, it WINS!
   • If you don’t have time to complete a full rotation, you can say the winning hawk must get 3 new brains or 4 new brains.

Adaptation
If you are playing with a visually impaired group, you can use one and two squeezes of the hand of the brain instead of a coin.
Discussion Questions for the Group
1. What did your team do well? What could you have done better?
2. What happens if a spinal cord is injured and it can not send the signal from the brain to the talons? Explain what happens with a spinal cord injury in a person.
3. What are some other predator/prey relationships in nature?
4. What are you the predator of?
5. Who is a predator of humans?

Five Senses Activity
Goal: To tune people in to all of their senses to better appreciate the environment we are exploring
Time: 10-20 minutes
Who: Participants of any age and ability
When: At a point in the trip where group energy is conducive to a reflective activity
Where: This is a great activity to do on the water in an eddy or on a beach
Materials: None

Opening
We rely on our five senses to provide us with information daily. Let’s go ahead and name the five senses. Of course, the five senses are: smell, taste, touch, sight, and hearing. Now we are going to do an activity to tune us in to our five senses. We will begin with everyone closing his or her eyes.

Procedures
1. Have the group form a circle and then close their eyes.
2. Ask a question to a particular sense each time (usually hearing first because it is the second most important sense). Choose questions from the list below that are appropriate to your surroundings, and feel free to add your own!
3. Depending on the question and the group, allow a number of seconds or even close to a minute between questions.

Sample Questions

Hearing
1. Lift up your fist and lift a finger one at a time, as you count off five different sounds from nature.
2. Do you hear the wind blowing? Is it loud or quiet today?
3. Identify the different sounds the birds make, some are high pitch, some are low pitch. Can you identify which sound belongs to which bird?
4. Can you hear seals? Listen carefully and tell me which one is really making the noise.
5. Listen for the loudest sound. Now, listen for the quietest sound.
6. Can you hear the waves? Are they big or small?
7. Can you hear you own heartbeat? Is it fast or slow?
**Smelling**
1. Can you smell the salt in the water?
2. Do you smell the sunscreen you put on today?
3. What smells do you notice? How are they different from where you live?

**Feeling**
1. Can you feel the sun on your skin? Which direction is the sun shining from?
2. Can you feel the people around you?
3. Feel the wind on your skin. Which direction is it coming from?
4. Dip one of your fingers in the water and stir it. Is the water colder or warmer than you expected?

**Tasting**
1. Dip one of your fingers in the water and taste it. Is it salty? Or less salty than you expected? Do you like the flavor?
2. If you are near anything edible such as pickle weed or wild radish, have them taste it. What does it taste like? Does it taste similar to something?

**Sight**
1. Now open your eyes. Look around and count how many different colors of green you see.
2. Can you identify anything you might find back at home?
3. Can you identify anything you have never seen before?

**Closing Remarks**
They say that the more senses you use, the more you remember. Through our senses we make connections to the places we live and explore. So, now that your senses are tuned in to your new environment, we want you to use them. Become aware of the new things that are around you as well as those things that are familiar. And when we are out here today remember how people and the natural world are tightly bonded. We get everything we need to live life from the natural world. All our water, food, energy, and materials to build our homes, comes from places like this. Let’s use our senses to appreciate these gifts today!

**Pirate Eye Activity**
Goal: This is a fun activity that lets participants explore how night vision works and has a “wow” factor!

**Time:** About 20 minutes

**Who:** This is a great activity for people of all ability levels and ages

**When:** At night in a fully dark setting where there is minimal light pollution that would affect the group’s night vision

**Where:** On a field, road, or beach. Under tress helps to make sure it’s dark enough. This could also be done indoors.

**Materials:** A source of light (the brightest headlamp or flashlight in the group is ideal).

**To Play**
1. Have participants group up in a circle and sit down.
2. In the center of the circle, place a headlamp that is turned on.
3. Instruct participants to cover one eye with one hand so that it does not allow any light to come through. They should keep that eye open while it is completely covered with their hand. They should stare at the headlamp with their other, uncovered eye.
   - If it is a full moon, finding a low hanging oak tree can get you enough darkness for this activity to work.
   - If you can keep everyone from using their flashlights when walking to the activity area, their night vision will be better and make for a better experience. Consider reading the optional night reading at the end of this activity before starting a night walk to help encourage them to keep their lights turned off.
4. While everyone is sitting and covering one of their eyes, you should spend 3-5 minutes talking about rods and cones (the cells in our eyes that allow us to see) and tell a short pirate story.
   - **Rods and Cones:** Rods and cones are the specialized cells in our eyes that enable you to see with color or black and white / shades of gray. Cones are responsible for observing color (remember C for color), while rods are responsible for seeing shades of gray. We have a large number of cone cells, whereas other animals have a large number of rod cells. This is great for nocturnal animals because it enables them to see (hunt) in the dark. Rhodopsin is a pigment found in rod photoreceptors that allow us to receive light in low light conditions or in the dark. This protein falls apart in light or photo-bleaches. This is why when your night vision is built up and someone flashes light in your eyes, you cannot see for several seconds. For your rhodopsin to fully build back up (and for us to regain our full “night vision” ability), it takes a full 30 minutes.
   - **Why Pirates wear patches:** Many people think pirates wore patches to cover a missing eye, but this is not the real reason! Back in the day when pirates would take over other ships, they would battle on the deck of the ship. After killing the other pirates, they would have to go below the ship for the booty. It was always dark under the ship because pirates usually attacked at night. They would switch their patch from one eye to the other and would instantly have good night vision for navigating the hold of the ship. (As the facilitator you can embellish this story and add to it as you wish).
5. Now, when you say go, have everyone take away the hand that’s been covering one eye and uncover that eye. The effect is most dramatic at this point if they move their hand back and forth, switching it every couple seconds to cover one eye and then the other eye.
   - The goal here is to allow the covered eye to gain good night vision, while keeping the other eye adjusted to the light. This will allow everyone to be able to compare night vision to day vision.
   - Warning: If everyone does a good enough job, the difference between your eyes can make it hard to walk. Be sure to allow everyone enough time for his or her eyes to adjust before you get up and continue your walk.

**Optional Night Reading**
Again the fire begins to fail. Letting it die, I take my walking stick and go for a stroll down the road into the thickening darkness. I have a flashlight but will not use it unless I hear some sign of
animal life worthy of investigation. The flashlight, or electric torch as the English call it, is a useful instrument in certain situations, but I can see the road better without it. Better, in fact. There’s another disadvantage to the use of the flashlight: like many other mechanical gadgets it tends to separate a man from the world around him. If I switch it on, my eyes adapt to it and I can see only the small pool of light that it makes in front of me; I am isolated. Leaving the flashlight in my pocket where it belongs, I remain a part of the environment I walk through and my vision, though limited, has no sharp or definite boundary.

-Edward Abbey

Name Games

Give Me Five
- Accessibility
  - Requires sight
  - Requires fine motor usage
  - Requires speech
- The group stands in a circle, and everyone puts out their hands. One person goes into the middle. A leader says someone’s name. The person called then tries to say a new name before the person in the middle slaps their hand. If the person called flinches or doesn’t say a name before their hand is slapped, they are in the middle.

Bumpy Bump Bump
- Accessibility
  - Great for any age
  - Great for people in wheelchairs or with low mobility
  - This game requires sight and speech
- Participants get into a circle and introduce themselves to the person on either side of them.
- One person is the “bumper” and stands in the middle of the circle.
- The bumper points to a person and says either “left bumpy bump bump” or “right bumpy bump bump.” The person pointed to must say the name of the person to their left or right before the bumper finishes speaking. If the person pointed to speaks too slowly, they are in the middle. If not, the bumper continues pointing to new people.

Ball Toss
- Accessibility
  - Great for people in wheelchairs
  - Requires the ability to throw and catch
  - Uses sight and speech
- One player starts out in the center of the circle. Each person in the circle should introduce himself or herself briefly before the game starts. The action begins when someone in the circle who is holding a safe throw-able object says his or her name followed by the name of someone else in the circle, and then tosses that person the ball.
- The person who received the ball has to try to say their name followed by another players’ before they person in the middle can tag them. If a player is tagged, they switch places with the person in the middle. This game tends to gain speed quickly and it is sometimes helpful to call time out and remind the group to keep the ball in control.
**Limber Name**

- **Accessibility**
  - Great for deaf people, VIP’s, or people with limited speech
  - Can be adjusted for all levels of mobility
- Everyone stands in a large circle with arms distance on either side of him or her. One person starts by introducing themselves and demonstrating their favorite stretch or yoga position.
- The whole group does the stretch, and then the next person in the circle goes.

**Additional Name Game Topics**

Everyone in the circle have the chance to say his or her name, along with one of these topics of choice. Use in any fashion that will fit the group dynamic and energy. These are typically accessible to everyone, and are good for large groups. Morph some of the topics and questions together for more action!

1. Express a line from a song that you care about or that is similar to your mood.
2. If you could have a superpower what would it be? Why?
3. What is one of your favorite sounds? Why?
4. What is one of your favorite smells? Why?
5. Describe your ideal day?
6. What is your greatest strength?
7. How are you unique?
8. It’s the last battle on Earth, what would you ride in on and what superpower would you have?
9. What’s one of your favorite parts of being around nature?
10. What’s the funniest face you can make?
11. What would your ideal gusher be filled with?
12. What are you most excited about today?
13. If you could jump into a pool of anything, what would you jump into?
14. What is your favorite dessert? Act out how you would prepare it!
15. What color exemplifies your mood today?
16. If you could be a tree or a plant what would it be and why?
17. What is your favorite dance move?

**Shoe ID**

- **Accessibility**
  - Can be adapted for people in wheelchairs by putting shoes on a table and having everyone sit around it
  - Can be adapted by people with low mobility by randomly passing out shoes and helping participants find partners
  - Can use pen and pencil for deaf or mute participants’ interviews
  - Good for all ages
  - This game requires sight
- Everybody takes off a shoe and throws them in a large pile on the floor.
• On the count of three, each person grabs a shoe from the pile and finds the person with the matching shoe on their other foot. They ask their new partner their name and three things about them they didn’t already know. Works best with larger groups.

Hula-Hoop Introductions
• Accessibility
  o Great for all ages and VIPs
  o Deaf people would need an interpreter
  o Difficult for people who use wheelchairs
• The entire group stands in a circle holding hands and the leader places a hula-hoop between two people. The hula-hoop must go around the circle without anyone letting his or her hands go.
• The entire time you are touching the hula-hoop you must tell the group about yourself.

Touch Blue
• Accessibility
  o Requires some mobility
  o Easily adapted for deaf people by showing instead of saying the color or object people need to touch
  o Requires sight
• With everyone standing in a circle and the leader in the center; the leader asks everyone to “Touch Blue” and everyone hurries to touch some article of blue clothing or shoe, etc. on someone else. Everyone returns to the circle and the leader might say, “Touch a back shoe” or something else.
• A more advanced version of this game looks a bit like Twister. Same as above but if the leader first said touch blue and you did that, and then they say touch pink you still have to keep part of your body in contact with blue while you try to touch pink. The last one to fall down laughing is the winner.

Have You Ever?
• Accessibility
  o Great for all ages
  o Deaf people will need interpretation
  o People with difficulty speaking can use paper and pen or have a few pre-written questions to choose from
  o Requires movement
• Have the group stand in a circle with one person in the middle. Each person in the circle puts an object at his or her feet. The middle person then says something they like to do or have done (I like to ride my bicycle).
• Everyone who has also done that has to find a new spot. The person in the middle will then try to steal a spot. Whoever doesn’t get a spot is now in the middle.

Tag Games

Blob Tag
• Accessibility
  o Great for all ages
Easily adapted for VIP’s by having a few sighted staff or participants around the edges to tell people when they are leaving the boundaries or having people play in pairs.

- Great for deaf people. Directions are simple and could be mimed easily.
- Requires mobility. May be difficult for people in wheelchairs to hold onto the blob while moving.

- Leader explains to the group that a Blob is nasty, sticky, oozing, living thing that tries to eat everything it comes in contact with. With children, you can tell them what the Blob sounds like, and have them mimic the noise.
- Start with one person as the original Blob. It’s great to play this in a field or on a beach with designated boundaries. The Blob counts to ten, giving everyone time to scatter. Then they run and try to tag someone.
- If the Blob tags you, you become part of it by linking hands with it. If the Blob grows to become four people they can divide in half, and there are now two Blobs on the loose.

**Killer Eyes**

- Accessibility
  - Great for all ages
  - Deaf people will need interpretation of directions or to be shown this page
  - Requires no mobility
  - Requires no speech

- Everyone stands in a circle with some object placed in the middle (backpack, sweater, anything). The leader instructs everyone to stare down at the object, and then when he says “Eyes Up” you stare at someone else in the group. If the person you are looking at is also looking at you, and eye contact is established, then you have both died and step out of the circle. The game continues until there are three people left, and the final “Eye’s up” is called. The last one alive is the winner.

**Guessing Games**

**20 Questions**

- Accessibility
  - Great for low mobility and VIP’s
  - Deaf people may need an interpreter
  - Mind game, may be difficult for younger groups

- There are no preparations or materials to play. Works best with small groups of 2 to 5 players.
- Select one person to begin by choosing a person, place, or thing. Basically anything can be chosen, but try to make the selected item something that can be reasonably guessed. It’s no fun to play a guessing game that is impossible to solve!
- After the person has chosen a person, place, or thing, the other players take turns and ask “yes” or “no” questions in an attempt to figure out what the chosen word is. After each guess, keep track of the number of guesses that are used until it reaches the limit of 20.
- If a player correctly guesses the word before they reach 20 questions, they pick the next word. If not the word is revealed and a new person picks a word.
Contact

- **Accessibility**
  - Great for VIPs and low mobility
  - Deaf people may need an interpreter
  - Mind game, may be difficult for younger groups
- One person selects a word and tells the group the first letter of their word.
- The person tries to explain the word by giving hints. EX: if the letter was A, the person may say it is a red fruit.
- The other teammates would know it was an apple and scream, “3 2 1 CONTACT APPLE!” Before the person giving hints said Apple. If the rest of the group says an incorrect word first, the person giving hints has to give the group the next letter in the word.
- The game continues until the group figures out the word.

Ghost Letters

- **Accessibility**
  - Great for VIP’s and low mobility
  - Easily signed for deaf people if someone knows the sign language alphabet or writes on a board
  - Mind game, may be difficult for younger groups
- A player selects a letter and says it aloud. The next player must add a second letter to the first letter so that the two letters are the beginning of a word but not a finished word.
- For example, if the first player says the letter "A," the second player should not say the letters "N" or "T," because they would produce the finished words "an" or "at." He can say the letter "G" because "Ag" is the beginning of possible words, such as agriculture or agrarian.
- The third player can add a letter to the first two letters (if they can think of a word), add a letter (and act like they can think of a word), or challenge the last player that no words begin with those letters.
- If the third player thinks that no words begin with the letters A and G, she can challenge the second player. If the second player can name a word, however, player 3 loses. If a player cannot think of a letter to add to a word, or is forced to complete a word, he or she loses.

Two Truths and a Lie

- **Accessibility**
  - This game requires speaking or writing
  - Great for VIP’s, people in wheelchairs, and people with low mobility
- Each person thinks of two true things about themselves and one lie. Each player gives a brief description of the three stories that have happened in their life, two are true, and one is false. The rest of the group then tries to figure out which story is a lie.

Killer Wink

- **Accessibility**
  - This game is great for all mobility levels and all ages
o For deaf or mute participants, adapt the accusation by having the accuser raise their hands to pause the game and accuse someone
o For VIPs, the game uses a handshake instead of eye contact and the killer tickles the other persons’ palm with their middle finger.

- Have everyone stand in a circle. One person must be the moderator (who doesn’t play that round). All players close their eyes and the moderator selects one person by tapping his or her shoulder. This person is now the secret “killer”.
- The group mingles around and looks each other in the eyes. The mystery killer tries to wink at other players without being detected by others. If a person is winked at, they must continue mingling for a few seconds and soon “die” a horrible death. Play continues.
- If someone suspects they have detected the killer, they say I ACCUSE and the game stops. They point to who they think the killer is. If they are correct, they win. If they are wrong, they die and the game continues.
- There is NO TALKING or communicating of any kind allowed!

**If this person were a _____, what would they be?**

**Accessibility**
- This game is great for all mobility levels
- Can be easily adapted for people who are deaf if an interpreter is present
- This game is best for groups of people who know one another pretty well
- This game is best for people who can think in an abstract manner, maybe not the best for younger people.

Have one person be chosen to guess. This person must leave the group while the group discusses whom they will describe to the guesser.

The group decides on one person to describe in abstract clues to the guesser. The guesser will ask 7 questions to figure out who the person being described is. If they can’t guess, no big deal, it is just a good way to think creatively.

**Example questions:**
If this person were a bird, what would they be?
If this person were a fruit, what would they be?
If this person were a color, what would they be?
If this person were a car, what would they be?
If this person were a cartoon character, who would they be?
If this person were a record found in a garage sale, what would they be?
If this person were a season, what would they be?
If this person were a place, what would they be?

**Filler Games**

**Rain**

- Accessibility
  o This game is not good for deaf people
  o This game does not require speech
  o Great for VIP’s or people with low mobility
  o This game is great for young people with a lot of energy
• Everyone sits in a circle, and then closes their eyes for a few moments of quiet. Each person is instructed to repeat the sound the person on his right will be making. The leader begins by rubbing his palms together, back and forth. The person to his left joins him, and then the next until everyone in the circle is rubbing palms and we can listen to the drizzling rain building in intensity. Then the leader starts to snap his fingers. One by one around the circle, we replace palm rubbing with finger snapping and the drizzle turns into a steady patter.

• Then the leader switches to hand clapping, as we begin to hear a hard rain. The storm now builds to a downpour as the leader begins slapping his thighs, then the skies open and thunder crashes as the next round has us stomping are feet. Then the storm begins to subside, just as it grew- foot stomping, thigh slapping, hand clapping, finger snapping, and back to palm rubbing. For the final round the leader stops rubbing his palms and takes the hand of the person to his left, as each of us does in turn around the circle until there is silence once again.

**Finger to Palm**

- **Accessibility**
  - Great for all ages
  - Deaf people will need an interpretation of the story or the game could be adapted to be a certain motion like putting the pinky up
  - Requires some upper body fine motor skills
  - Great for people in wheelchairs

- This is a short game and very easy to play. Have the group stand in a circle with their right index finger pointed down on the left palm of the person to their right. So each person should have their left palm facing up at their side and their right index finger pointed on someone else’s palm. The leader tells the group a key word and then begins telling a story. When the group hears the word everyone tries to grab the index finger in their palm while trying to keep their finger from being grabbed.

**Human Knot**

- **Accessibility**
  - Great for Deaf people, people who cannot speak and VIP’s
  - This game requires mobility

- Knots can be a useful way to get a group to work as a team, and work on communication skills, as well as identify ones’ role throughout the process. Each knots group should have about six to nine people to be effective and safe. Everyone stands in a circle shoulder to shoulder and the leader asks everyone to reach across with his or her right hand and take someone else’s hand across the circle. Then repeat with the left hand. Make sure that no one in the group is holding two hands of the same person. Before they are allowed to start explain that safety is very important and if at any time someone shouts “Stop” then everyone needs to let go. The object is for the group to untangle themselves while still holding hands. Switching your grip on someone’s hand is allowed, to avoid sprains.

- Variations: Have the group complete the task without talking, or have some people blindfolded.
**Count to 10**
- Accessibility
  - Deaf people may require an interpreter
  - Requires speech
  - Great for VIP’s or people with low mobility
- This activity creates group cohesion and almost a symbiotic feeling quite subtly. The leader tells the group that they have two try to count to ten as a group, with one person saying each number. If two people say the same number they have to start over. They can not go around the circle, each saying the next number, plan out verbally who will say what number, or nod their heads of signal who should speak. Often a group will struggle for some time to get to “Three” then somehow they will get in the flow and keep counting to Thirty.

**Birthday Lineup**
- Ask everyone in the group to see how fast they can lineup by their birth month and day, without talking.

**Prui**
- This game is as much fun to watch as it is to play. This game should be played in an open area without obstacles around. Ask for 2-4 volunteers to be spotters. Everyone else should be spread out randomly around the playing area. Leader tells everyone to shut their eyes, and says he taps their head than they are Prui. One person is tapped to be Prui. Prui’s job is to stay in the same place and let everyone come to them. They also get to keep their eyes open. Everyone else is told that they need to go search for Prui with their eyes shut. They should put their hands up in front of them as bumpers. When they bump into someone, they should ask, “Are you Prui?” If the person is not Prui they say so and then both continue looking. If you ask someone, “Are you Prui?” and they don’t answer, you will know you have found Prui because he doesn’t talk. Now link arms with Prui and open your eyes to watch the rest try to find you. The spotters are needed to make sure nobody goes walking off away from the game.

**Trust Walk**
- A trust walk can be used as an activity in and of itself of can be used as a way to transition to a new location or challenge. A great way to transition into the trust walk formation is to ask the group to shut their eyes then get into a line from shortest to tallest. Now if everyone places their hands on the shoulders of the person in front of them, you are in formation for a trust walk. Explain to the group that this is a time to concentrate on what they hear, feel, smell, and sense around them. Most trust walks are done in silence. The leader begins the walk be guiding the first person and everyone follows in caterpillar formation. If the walk is being done on a hill or in rough terrain, it is important to have spotters on both sides of the line. Some leaders guide the entire walk and some prefer to tell the first person to open their eyes and let them lead for a short time, then that person goes to the end of the line and the next person gets a chance at leading the group. Always have a debriefing after a trust walk.
Entourage
In order to play entourage, everyone will need to know how to play rock, paper, scissors. Throughout the game, everyone will play rock, paper, scissors against others in the group. If you win the game of rock, paper… then the person who loses joins your “entourage”. They will follow you around for your next match. While you play another opponent, your entourage will cheer you on, rooting for you to win. In every round that you win, you inherit your opponent as well as your opponent’s entourage into your own entourage. Likewise, when you lose a round, you become a part of your opponent’s entourage and therefore must cheer them on for every match they partake in. In the end of the game, it will be one entourage verses the other. Whoever wins this match, inherits everyone as his or her entourage and is the winner!

Fold the Tarp
• Appropriate Populations: 12 years old and up, wouldn’t work well for those in wheelchairs
• Activity Description: Have all participants stand on a tarp, which is sized to fit everyone standing with not a lot of extra room. The goal is to flip the tarp over, but without touching the ground or stepping off the tarp. This is most successfully done by twisting the tarp like a candy wrapper.
• Materials Needed: A tarp
• Debrief Questions: What worked well? What was challenging? What enabled you to ultimately achieve this? Was everybody heard? Did anybody have an idea that didn’t get voiced? Were ideas presented that didn’t get used? What kind of leadership/communication worked well? What did it look like?

Debrief Activities/Discussions

Least Common Denominator
• Activity Purpose: Get to know each other in the boats, get people talking
• Activity Description: In pairs, have participants try to find something that they have in common that is actually really uncommon. Not “we both have blue eyes” or “we’re both rafting right now” but “My first pet was a goldfish and it was named goldy.” Give a set amount of time and when that time is up, have people share their findings.

Rose, Bud, Thorn
• Activity Purpose: Reflect on the day, crystallize some lessons that may have been learned, share experience of the day with others
• Activity Description: Give everyone the opportunity to share their rose, their bud and their thorn from the day. The rose is something that was really great, that they enjoyed or that was special. The thorn is something that was less than ideal, that could have gone better or that was hard. The bud is something that they are looking forward to.

Highlight, Lowlight
• Activity Purpose: reflect on the experience, crystalize lessons
• Activity Description: Give everyone in the boat the opportunity to reflect on the best and most challenging parts of their day on the water.

**Appreciation Circle**

• Activity Purpose: Reflect on the day, on the teamwork, and give value to each person’s contributions

• Activity Description: This can be done in a number of ways - one option is to start with one person who appreciates or honors the person next to them, then that person appreciates or honors the person next to them until it goes all the way around and each person has been appreciated. Groups can also pick a person in the group to appreciate first and each person in the boat can give a shout out to that person in the hot seat before moving on to spotlight someone else.

• *(You could also ask the question, “What is a positive interaction you’ve had with another person today?”)*

**What did the river teach you today?**

• Activity Purpose: Reflect on the day and think about the lessons about life that can be drawn from the river

• Activity Description: Give everyone in the boat the opportunity to reflect on the day stating a lesson that the river taught them.