Salmon Group: _____

School: _____

Name: _____

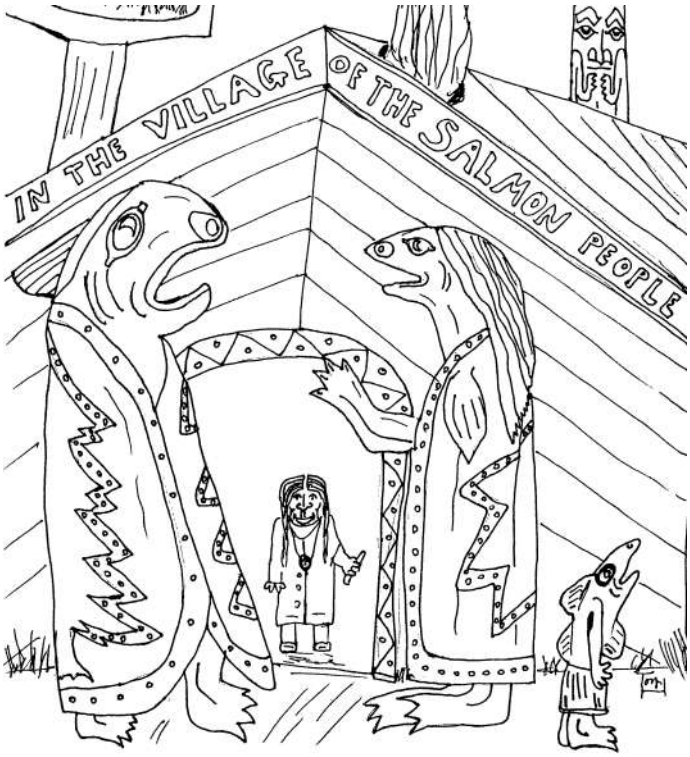
SALMON HOMECOMING ALLIANCE

Student Workbook

Northwest Indian Fisheries Commission
Lummi Nation
Muckleshoot Indian Tribe
Tulalip Tribes
Snoqualmie Tribe
Stillaguamish Tribe
Squaxin Island Tribe
The Suquamish Tribe
Seattle Aquarium
Seattle City Light
Seattle Parks and Recreation
King County
Washington State Department of Ecology
Seattle Public Utilities Protect Our Waters
WFPA

The Story of the Salmon People

The Native Americans tell a story about the Salmon People. Salmon People lived in longhouses under the sea. When they were in their village, the salmon had bodies that looked like people. Each year, the Salmon People put on robes of salmon skin and became fish for Indians to catch. After being caught and eaten, the bones were returned to the ocean. The bones came back to life as more Salmon People.



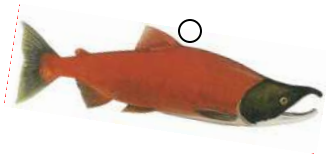
Tom Heidlebaugh

What is Salmon Homecoming?

Native Americans have always been connected to the land and the ocean. In the old days, everything they ate grew in nature. Everything they wore was made from things found in nature. They did not use watches or calendars to tell time. Instead, they watched the plants and animals and the passing seasons. Native Americans had great respect for nature and gave thanks to nature when food was plentiful. The most important food in this area was salmon.

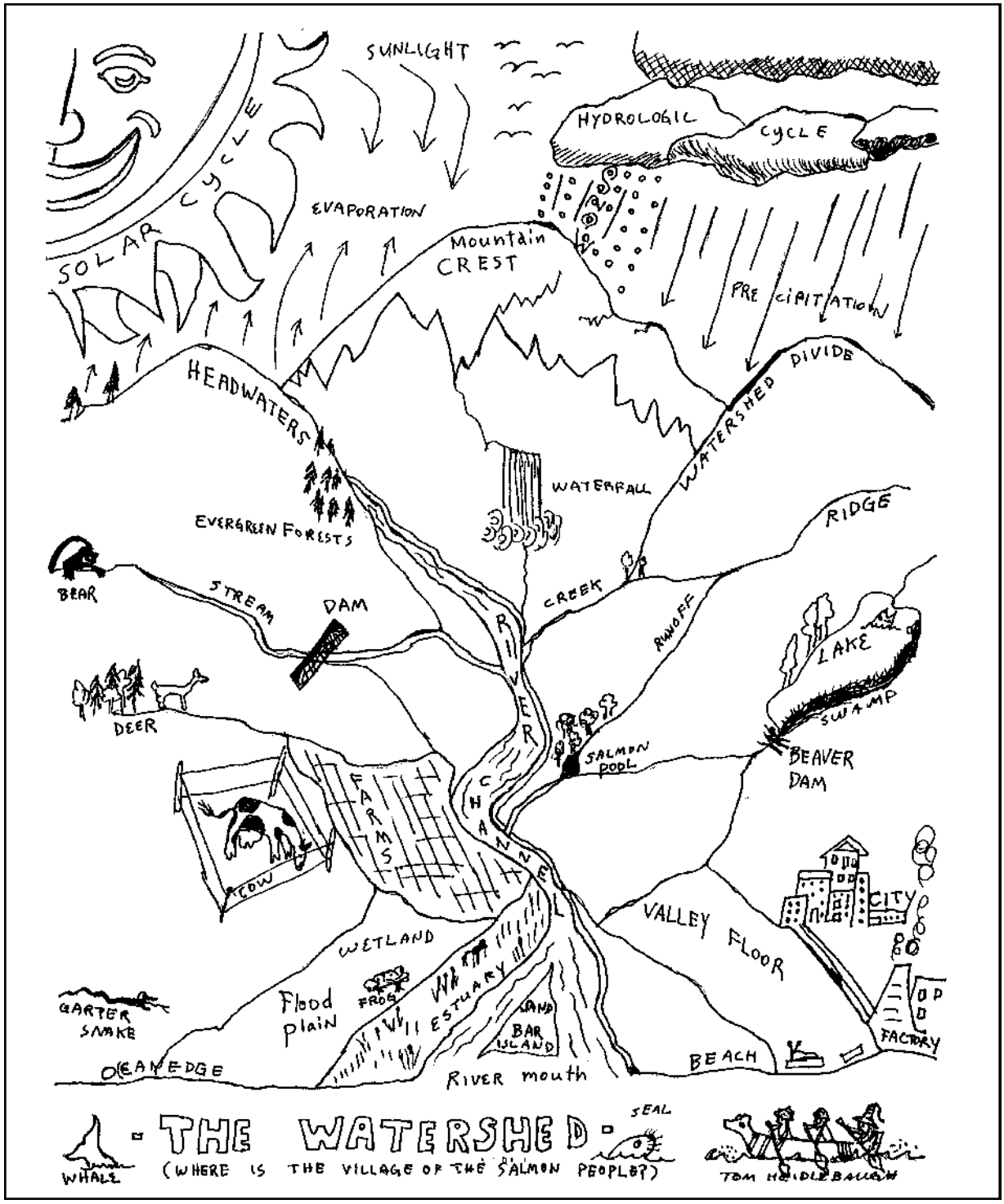
The Native Americans here have always had important traditions to show respect for the first salmon to arrive in the river each year. The fish is cooked in a special way and everyone shares a bit. Before it is eaten though, the head, bones and tail are returned to the river. All the people sing songs to tell how grateful they are for the return of the salmon and pledge that they will always show them the proper respect. The remains of the fish are brought to the river in a special ceremony so that its spirit can go back to the Salmon People and tell them that it is all right for the rest of the salmon to swim upstream because the people on the shore still remember the right way to treat them.

Today we are celebrating the tradition through Salmon Homecoming, an annual event on the Seattle Waterfront to acknowledge the return of the salmon from the ocean to spawn, the continuing Native American traditions, stewardship of the salmon, and the health of our watersheds.



Adapted from Wenatchee River Festival Teachers Packet

What's a Watershed? A watershed is an area of land that contains a common set of streams and rivers that all drain into a single larger body of water such as a river, a lake or Puget Sound. A watershed also includes a community of people, plants, animals, and fish, including salmon, which depend on the watershed to support their life. Everywhere you go, you are part of a watershed.



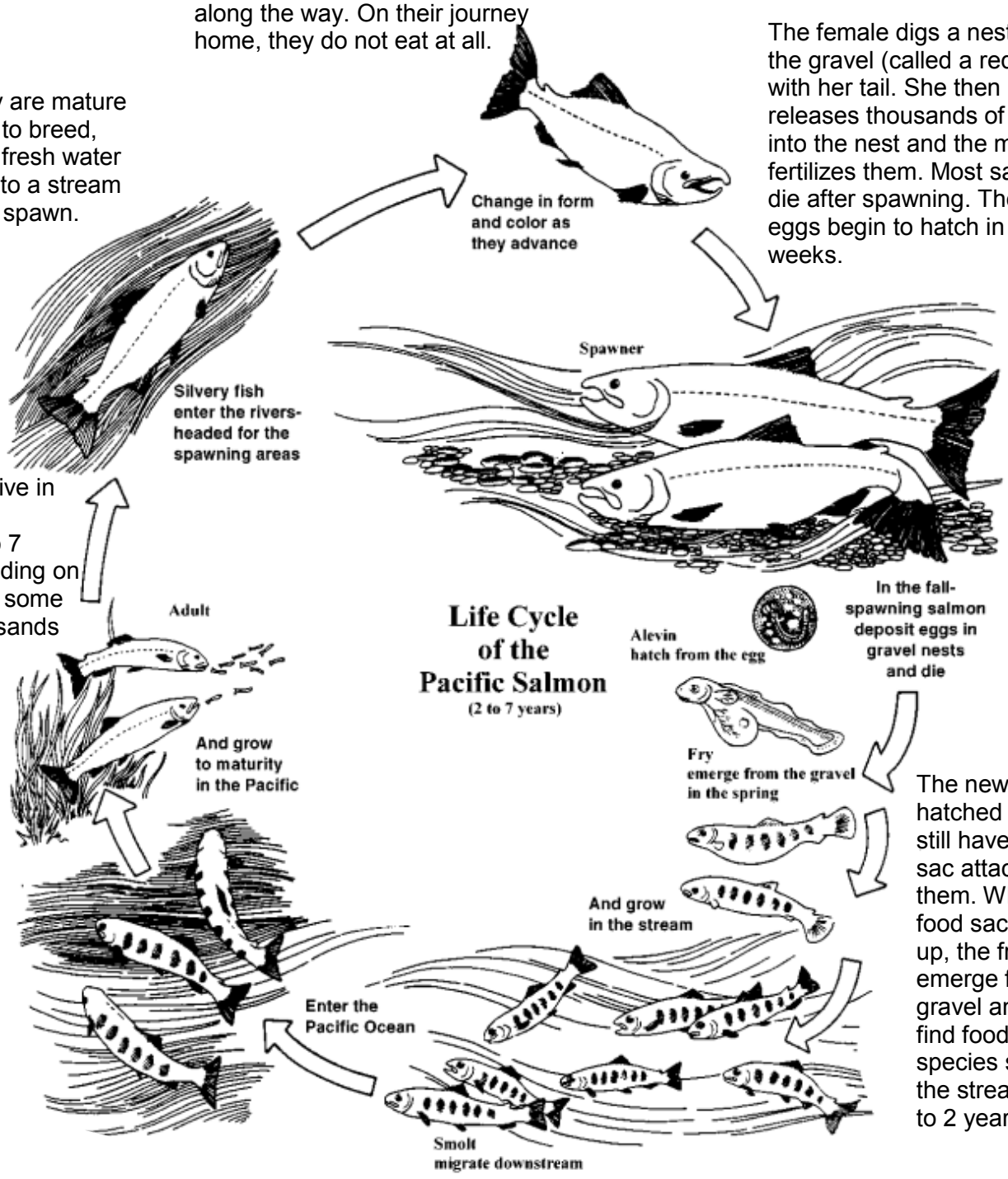
How are salmon connected with everything else?

The salmon come home after a great ocean journey to a pool in a stream in a watershed. Nowadays the whole watershed is the *Village of the Salmon People*. Once the watershed was made up of only the hillsides and forests; now it contains cities and pavement. Once the salmon came home to bears, raccoons and stoneflies; now they encounter pollution and dammed rivers. Because we are part of the watershed, the salmon return to us. They come home to both our bad decisions and our restoration efforts. We celebrate their homecoming and honor the salmon because they give us this gift. The salmon runs feed us. They also support whales, eagles, and many other things we love about our Pacific Northwest. Their carcasses even help the trees grow bigger. In return we must take care our shared watershed and make sure that our presence – our cars and homes and farms and pets—do no harm. What will you do to help?

They will return to the place where they hatched and continue the cycle. No one knows how salmon return home -perhaps they remember the distinctive set of smells along the way. On their journey home, they do not eat at all.

When they are mature and ready to breed, they enter fresh water and travel to a stream or pond to spawn.

The female digs a nest in the gravel (called a redd) with her tail. She then releases thousands of eggs into the nest and the male fertilizes them. Most salmon die after spawning. The eggs begin to hatch in 6-12 weeks.



The salmon live in the sea until maturity (1 to 7 years, depending on the species); some migrate thousands of miles.

The newly-hatched *alevin* still have a food sac attached to them. When the food sac is used up, the fry emerge from the gravel and must find food. Some species stay in the stream for up to 2 years.

The smolts swim downstream to the estuary (where the river meets the sea), and their bodies change so that they can live in salt water (this is called smoltification).

As they mature, they become camouflaged (with parr marks). When they are ready to transition to salt water they are called smolts.

Thanks to the Oregon Department of Fisheries and Wildlife Stream Scene Curriculum

Only the Strong Survive

A single female chinook lays about 5000 eggs in a series of nests called a redd, but the salmon life cycle is full of threats and perils. Use the numbers below to figure out how many spawners will make it back.

Use this space to do the math

1. A salmon deposited her **5,000** eggs in a redd. _____
2. Five hundred **(500)** eggs were not fertilized. _____
3. Sixty **(60)** were washed out of the gravel when a 3-wheeler crossed the stream. _____
4. Mud from a construction site washed into the stream and suffocated **1,000** eggs. _____
5. Three hundred **300** alevin died because they were very weak. _____
6. After the alevin developed into fry, **500** were eaten by other fish in the stream. _____
7. Forty-one **(41)** were eaten by birds. _____
8. As they neared the ocean, **260** smolts died while resting in a pool where the discharge from a power plant had made the water too warm. _____
9. In the ocean, **1,500** were eaten by bigger fish. _____
10. Orcas ate **95** salmon. _____
11. Fisherman caught **556** adult salmon. _____
12. As the salmon returned to their spawning stream, bears ate **180** of them. _____
13. Three **(3)** were dashed against the rocks trying to jump a waterfall. _____
14. The rest of the salmon spawned. _____
15. **HOW MANY SALMON WERE LEFT TO SPAWN?** _____

Adapted from Alaska Fisheries Science Center

Adapted from author Tom Heidlebaugh:
One with the Watershed

The Village of the Watershed—A Tale Told by the Salmon People

We salmon live in a village that is very different from the towns people live in. To see our home, we say you have to put on **salmon eyes**. This is not so difficult. Imagine you are underwater, swimming up a stream instead of walking up a street. There! You see through our eyes.

We live in the rivers. Where do we rest? Our nests, or redds, are in the shaded pools. We like our water clean and fresh. How do you like your air? We aren't happy in hot, polluted water. It would be like sleeping in a dirty bathtub. Yuck.

The water is not the only part of our watershed. In our village we need gravel for our nests. We need trees, huckleberry bushes and salal for shade. The plants along the edge of the stream also catch the mud and bits of garbage. The grass and shrubs help keep our water pure.

Our village needs trees with complex roots to catch and hold the rain. We need the skin of Earth to be open to catch the falling water. When parts of our village get paved, the storm waters have nowhere to stay. Then the water runs through the city and reaches the creeks and rivers and the sea, sick with too much metal and rubber and smog.

Long ago, we went away because people stopped respecting us. When we salmon share our gifts for your feasts, we want you to thank us. We want you to appreciate all we do. When too many of us are taken at once, when people are not careful of our needs, we go away.

We are concerned about our home. If the water is blocked in our village by dams, we don't return to where we came from. We can't lay our eggs and start the circle of salmon life all over again. The watershed, where millions of raindrops become one creek, is also the village of every other kind of life. More than Salmon People go away when the watershed is damaged.

The old story tells of the other salmon village, far over the Western Horizon. We have an island that is different from the islands of the Puget Sound. For one thing, our island is underwater. For another, each of the six tribes of the Salmon Nation (Chinook, Coho, Chum, Pink, Sockeye and Steelhead) has a lodge with beautiful carvings and paintings reminding us of the watershed. We have feasts and dances all day long, telling stories about the beautiful mountains and valleys and how we miss them.

We tell stories about how people came to our village, guided by the five natural helpers, long ago, to ask us to come back. They promised to take care of our rivers and hills so we would always have what we needed. We told them, "Just live together with us in the watershed and that will be enough."

Now Put on Your Salmon Eyes!

First, take your fingers and make circles of the thumb and first finger. When you put these over your eyes and wish, you can suddenly see with salmon eyes. How are things different?

Draw the Salmon People in Their Village

What do you think the village looked like?

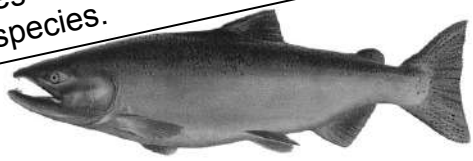
Label the parts of the salmon habitat.

Name these salmon!

Write your answer below the salmon.
(You can check the next page for help!)

Lushootseed Salmon Names
Lushootseed is the traditional language used by Puget Sound Coast Salish communities —see the name spelled out by each species.

Name that Salmon!

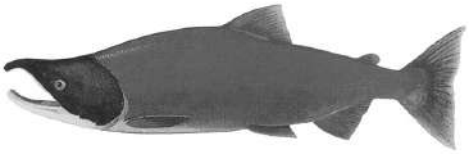


yubəč

CHINOOK *'King'* - The largest of the pacific salmon. Average weight is a whopping 22 pounds (some over 120 pounds!). Prized by commercial, sport, and tribal anglers alike. You may find them spawning in small streams or even large rivers.

skʷəxʷic

COHO *'Silver'* - Looking much like a 'King', but smaller. They spawn in the smaller streams and rivers of the Pacific Northwest.

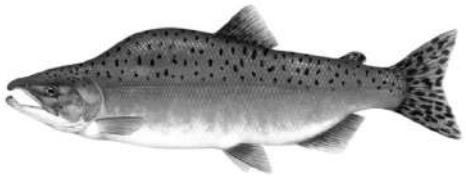


scəqi?

SOCKEYE - A very complex Pacific salmon species. They stay in freshwater one to three years before the ocean journey, or perhaps never go to sea. Sockeye are the only Pacific salmon that spawn in lakes.

ƛxʷay?

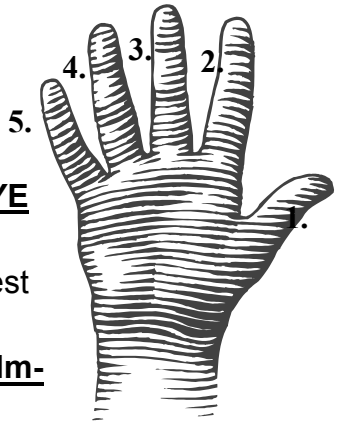
CHUM - The lowermost reaches of rivers and streams are where you will find this species spawning. They migrate almost immediately after hatching, reaching ocean waters long before their coho, chinook, and sockeye cousins.



hədu?

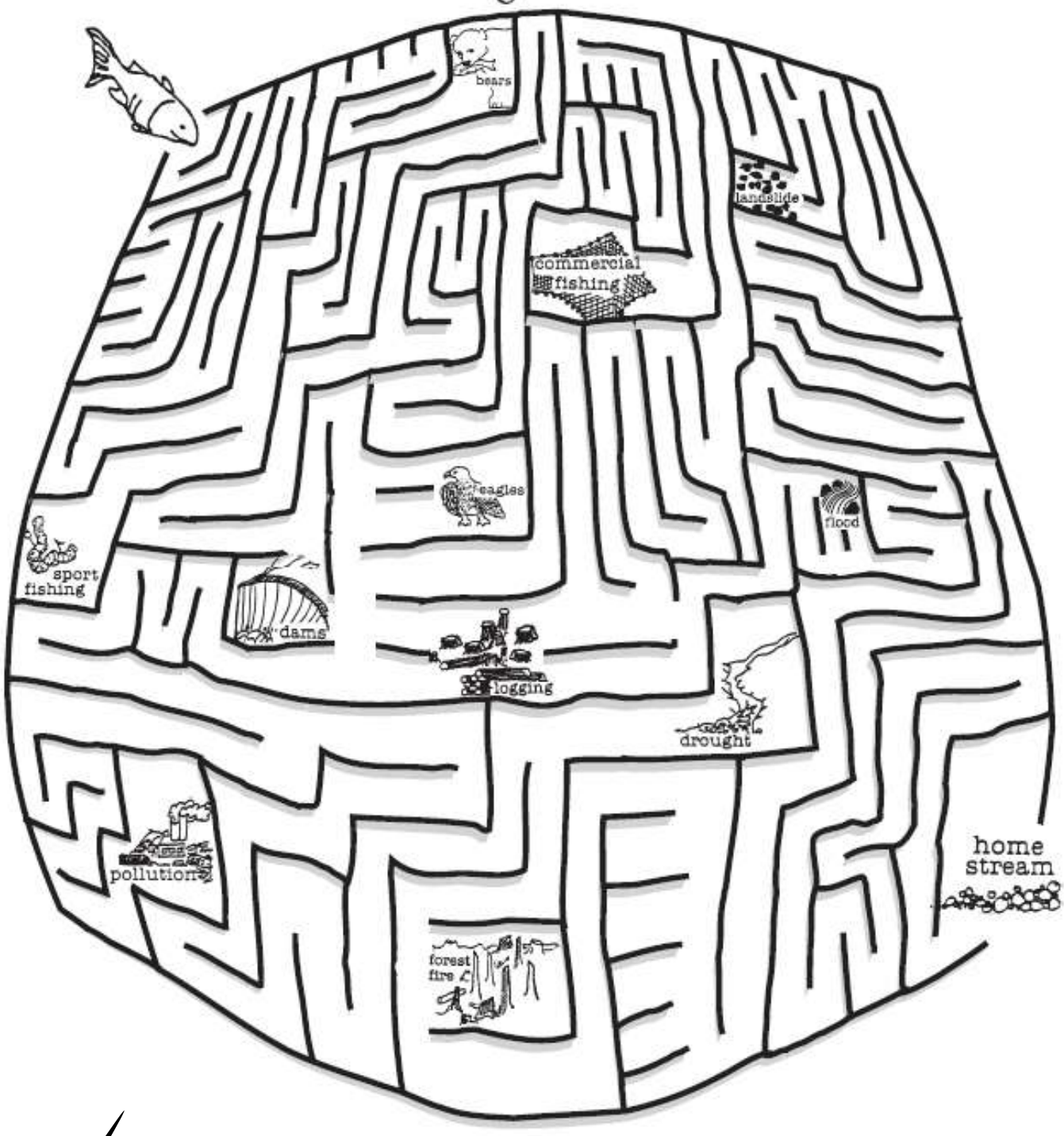
PINK *'Humpback'* - Pink salmon are the smallest and most abundant of the Pacific salmon. During their spawning migration, males develop a pronounced humped back.

An easy way to remember the names of Pacific salmon:



1. Your thumb rhymes with chum, for **CHUM salmon**!
2. You may use your pointer finger to sock someone in the eye, for **SOCKEYE salmon**!
3. Your middle finger is the largest finger for the **CHINOOK 'KING'**, the largest salmon!
4. Your ring finger is where you might wear silver...for a **COHO 'SILVER' salmon**!
5. And your pinkie finger is the **PINK salmon**!

AMAZING SALMON



From Wenatchee River Festival Teachers Packet

The 4 R's of Native Ecology and Stewardship

For Native American culture, the environment is the heart of the circle of life. Their belief is that we are connected with the animals, the rocks, trees, the science and mystery of the world. The four Rs are steps to understanding and stewardship.

NATIVE ECOLOGY

These four areas of Native American teachings bring us closer to the natural world and our place in the web of life.

RELATIONSHIP

Native stories tell us that once all beings could communicate. When making choices, we must keep in mind our ancestors and future generations. How will your actions impact the environment?

RESPONSIBILITY

We all have work to do, and each of us is capable and strong. When asked to do something, respond with determination, courtesy, and joy.

RESPECT

We are all part of the circle of life, so our actions make a difference on the quality of our environment. Listen and pay attention, and be careful to treat others as you would like to be treated.

REASON

Each of us has a purpose in the world, and each one of us contributes to the community of life. You have a place in the watershed, along with the plants, animals and salmon. Your choices and actions can help the forests stay healthy and the waters stay clean.

STEWARDSHIP

These four actions help us create a sustainable relationship with the natural world and support healthy communities.

1 REDUCE

Before you ask for or buy something, think about whether you really NEED it. Reduce the amount of energy you use by riding a bike or walking, and turning off appliances and lights when you are not using them.

2 REUSE

If it's still perfectly good, reuse it again! Find things that are reusable or can be repaired. If something is useful and fixable, fix it! This means fewer things will be thrown away.

3 RECYCLE

Recycling requires a lot of energy, but in most cases is still better than putting things into the garbage which then goes to a landfill. And don't forget, food isn't garbage anymore—you can compost it!

4 RESTORE

Our parks and creeks are forests in the city; we can protect them. We can remove invasive plants and replace them with native trees and shrubs, remove litter from beaches, and volunteer to help with watershed restoration projects.

Adapted from author Tom Heidlebaugh

WHILE YOU'RE AT IT....ANSWER THIS!

Cultural Booths

1. What natural objects did you see used by Native Americans at the event? _____
   _____
2. What piece of Native American art or story did you like the best? _____
   _____
3. What instruments did you see being used during stories or ceremonies?_____
   _____

Environmental Booths

1. List two environmental exhibits that you visited and describe what you learned there.

Booth / Organization	What I learned

Aquarium

1. Name an animal or fish at the top of the food web in Puget Sound. _____
   _____
2. List parts of the food web that include that fish or animal. _____
   _____
3. What was your favorite part of the Aquarium?_____
   _____