

# Salmon

## A Student Journal





Have a partner trace the outline of your right hand,  
figures spread out and thumb toward the bottom of the page.



# Alaska's Five Salmon

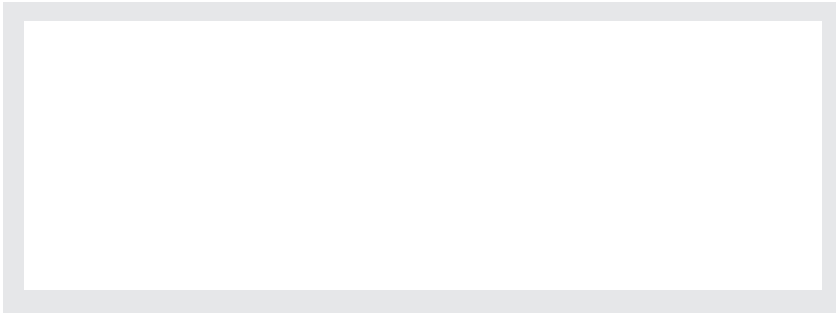
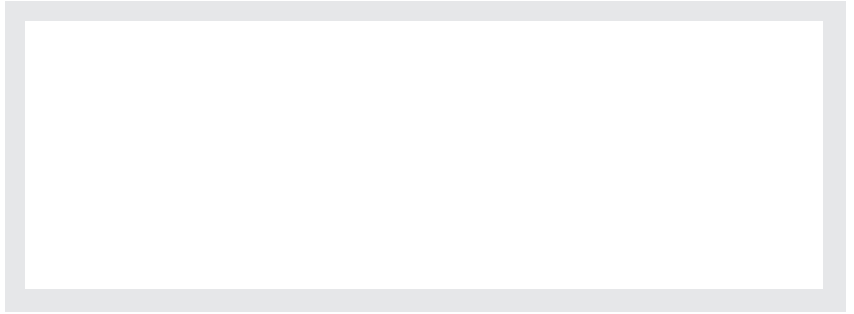
Genus: \_\_\_\_\_ means \_\_\_\_\_.



# TECHNICAL DRAWING

KING salmon =

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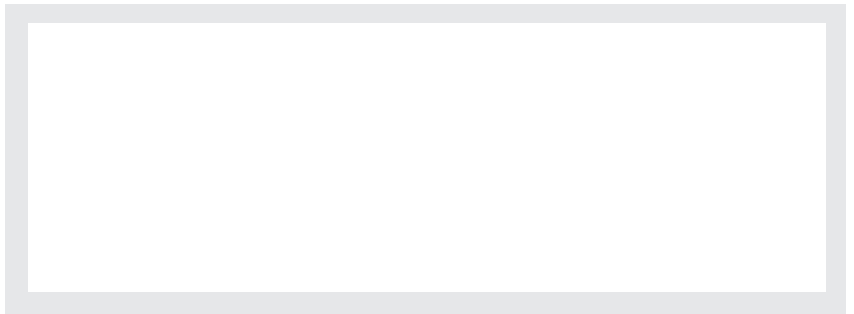


SILVER salmon =

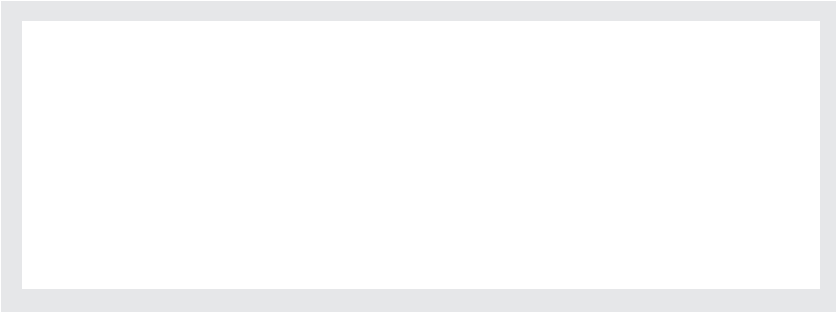
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RED salmon =

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# Five Species of Salmon

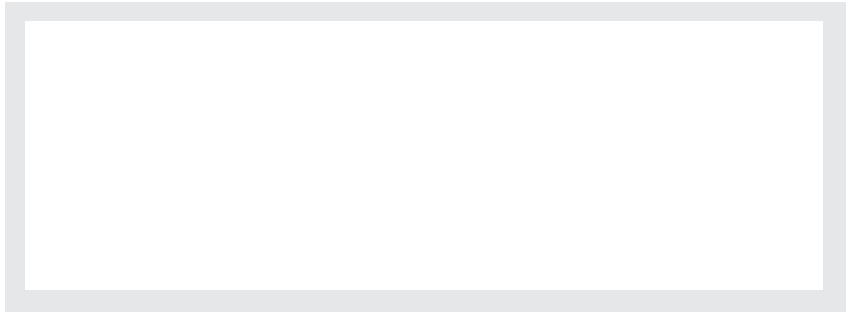


PINK salmon =

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CHUM salmon =

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[www.adfg.state.ak.us](http://www.adfg.state.ak.us)  
or Alaska's Wild Salmon, pp 11-12





Where are you? \_\_\_\_\_, Alaska.

Put a small X on that spot on the map.  
(city)

What major watershed do you live in? \_\_\_\_\_

\_\_\_\_\_. Please trace the major river  
in your watershed in blue.

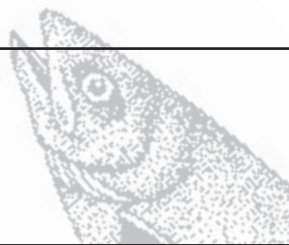
On the following page, please draw a picture of the watershed that your salmon  
originate. Be sure to include the source, major tributaries, major land features  
(mountains, lakes, etc.), and the mouth.



# Looking ahead at salmon studies



	What do you know about...	What would you like to know about...
The salmon life cycle?		
Salmon needs and threats?		
The water cycle?		
Healthy salmon habitat?		
Salmon anatomy?		
Incubation?		



# Egg Take

Date: \_\_\_\_\_

Location: \_\_\_\_\_ Time: \_\_\_\_\_

What is an “egg take?” Make a prediction.

---

Draw and describe:





# Egg Take Scavenger Hunt

Date: _____ Where: _____ Time: _____   SALMON CARCASS	Date: _____ Where: _____ Time: _____   SOMETHING MANMADE	Date: _____ Where: _____ Time: _____   SALMON PREDATOR
Date: _____ Where: _____ Time: _____   SOMETHING that POLLUTES	Date: _____ Where: _____ Time: _____   SILVER SALMON	Date: _____ Where: _____ Time: _____   HABITAT DAMAGE
Date: _____ Where: _____ Time: _____   SCIENTIFIC TOOL	Date: _____ Where: _____ Time: _____   INDICATOR of WEATHER	Date: _____ Where: _____ Time: _____   SALMON REDD

# Habitat drawing and details

Describe your human habitat. What do you need for survival?

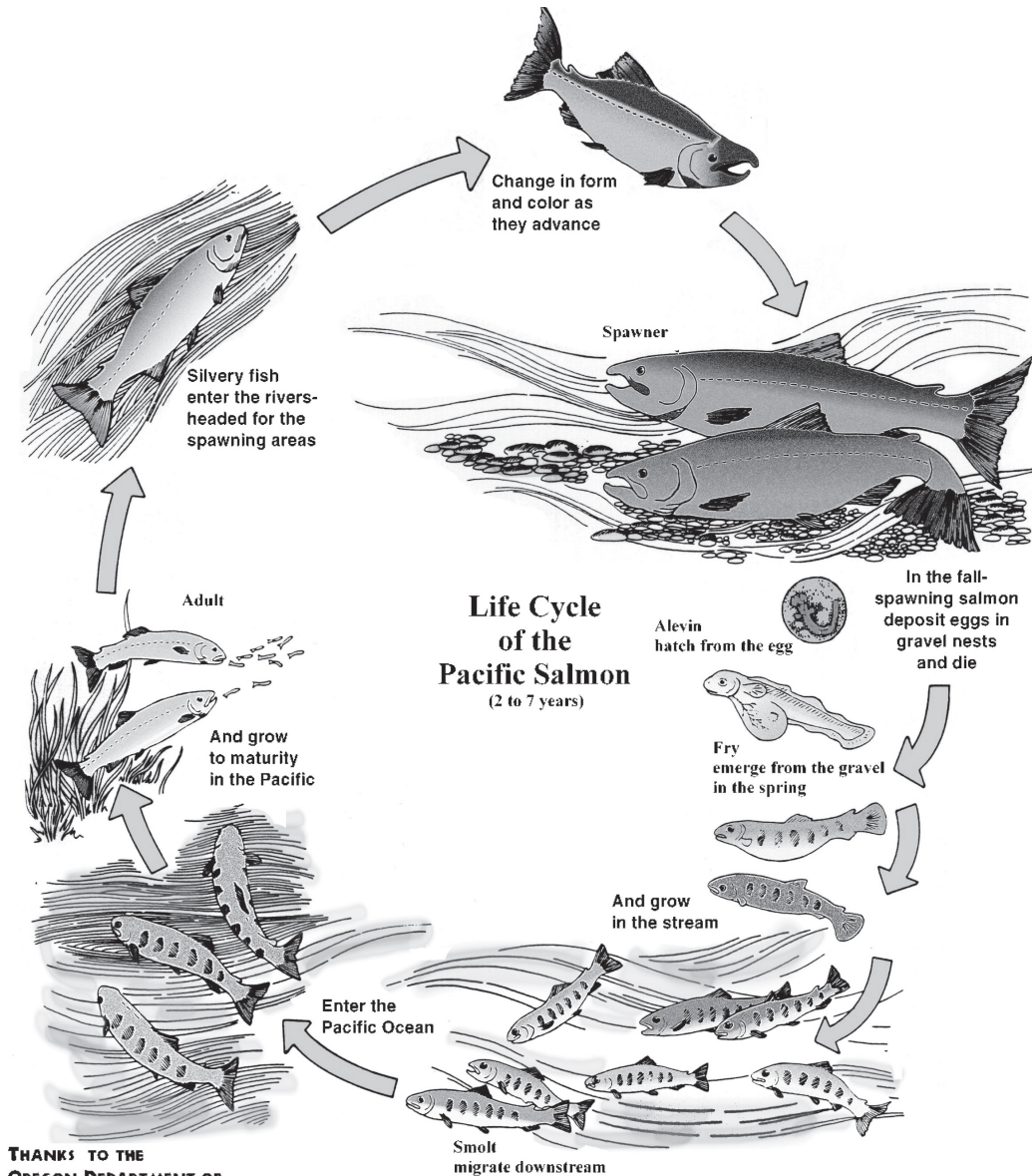
Describe your salmon habitat. What do they need for survival?



DRAW your salmon's watershed!



# Salmon life cycle



THANKS TO THE  
OREGON DEPARTMENT OF  
FISH AND WILDLIFE  
"STREAM SCENE"  
CURRICULUM

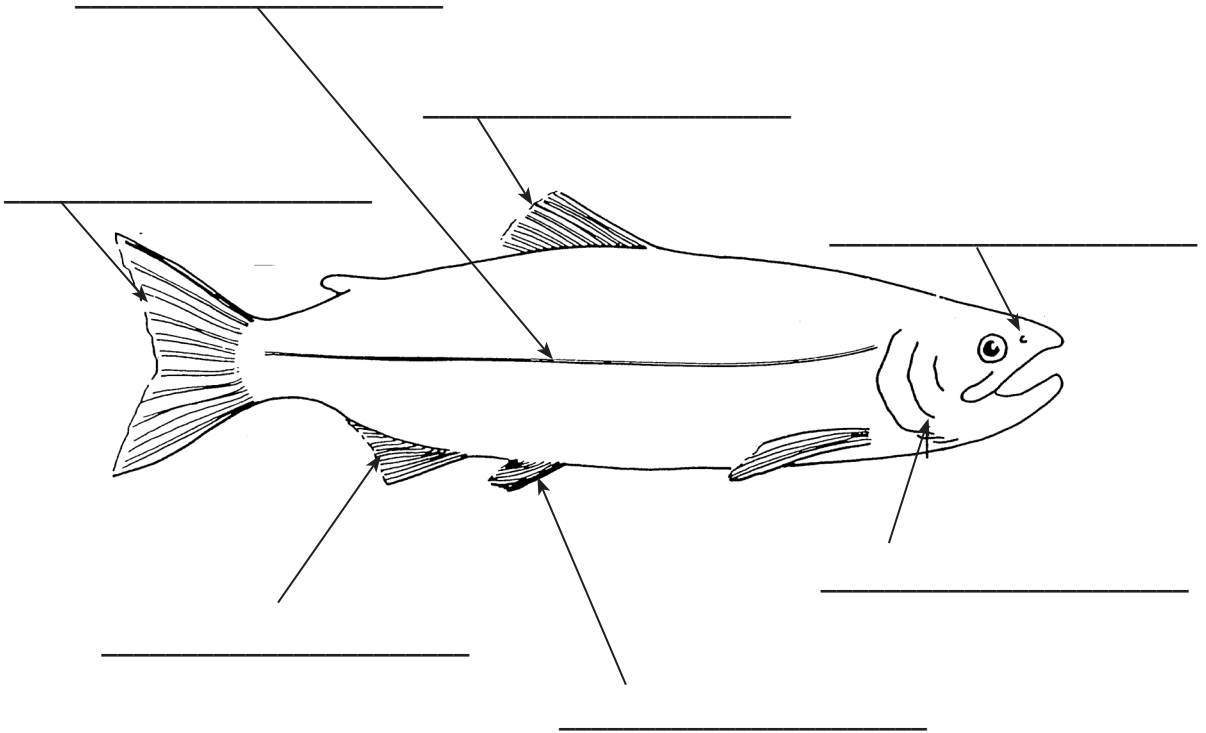
Length of life cycle varies with species and conditions

# Salmon life cycle

Life cycle stage	Needs		Threats	
	Habitat	Food	Predators	Other
Egg				
Alevin				
Fry				
Smolt				
Adult Salmon				
Spawner				

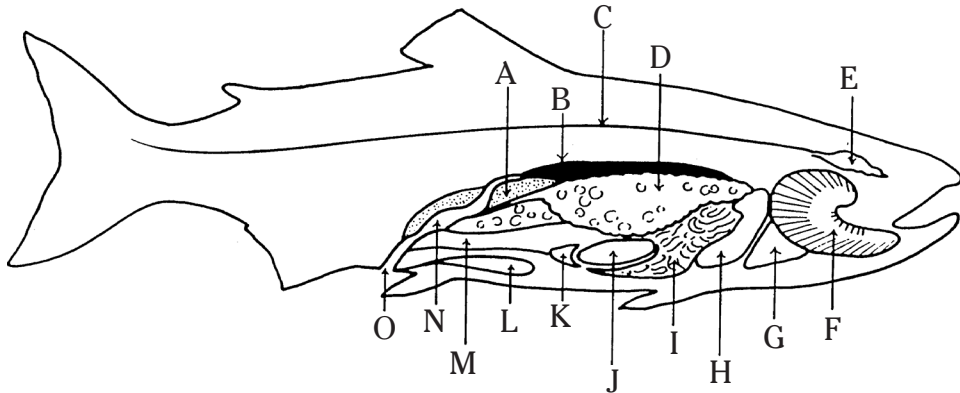
# Salmon external anatomy

Label with name and function of each structure.



# Salmon internal anatomy

Label with name of structure

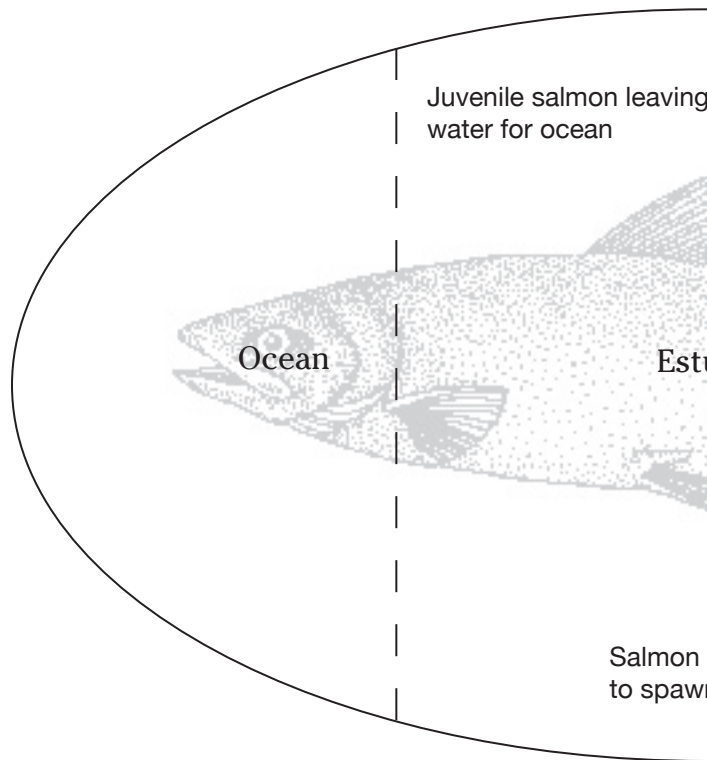


- |           |           |
|-----------|-----------|
| (A) _____ | (I) _____ |
| (B) _____ | (J) _____ |
| (C) _____ | (K) _____ |
| (D) _____ | (L) _____ |
| (E) _____ | (M) _____ |
| (F) _____ | (N) _____ |
| (G) _____ | (O) _____ |
| (H) _____ |           |

# The Food

Draw in the plants and animals in the food web of one of the salmon's major habitats (ocean, estuary, freshwater). Be sure to show who eats whom.

How would removing one organism in your habitat affect your food web?

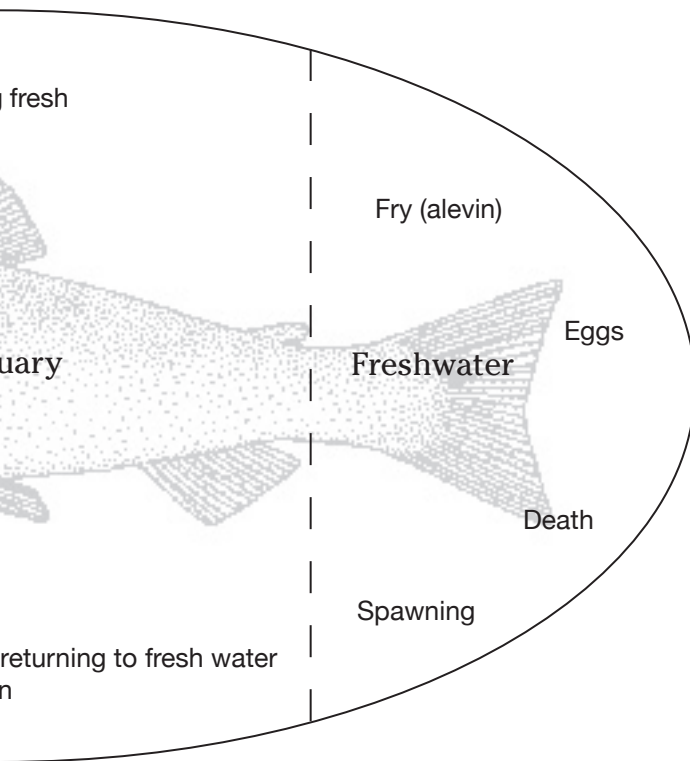




# Food Web

As human beings, how do we impact the food web (other than pollution)?

1. Freshwater \_\_\_\_\_
2. Estuary \_\_\_\_\_
3. Ocean \_\_\_\_\_



# Salmon needs and threats

What stage is the most dangerous in a salmon's life?  
Support your answer with three facts that you've learned.

Most dangerous \_\_\_\_\_

- 1. \_\_\_\_\_  
\_\_\_\_\_
- 2. \_\_\_\_\_  
\_\_\_\_\_
- 3. \_\_\_\_\_  
\_\_\_\_\_

LIST four predators

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

What is the most dangerous stage in a human's life?  
Support your answer with three facts.

Most dangerous \_\_\_\_\_

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_



# Energy use

Choose two stages of the salmon life cycle.

Stage \_\_\_\_\_  
Gets ENERGY from

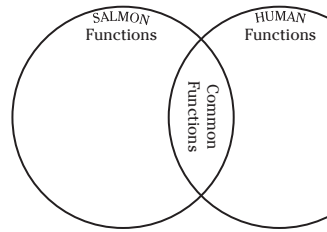
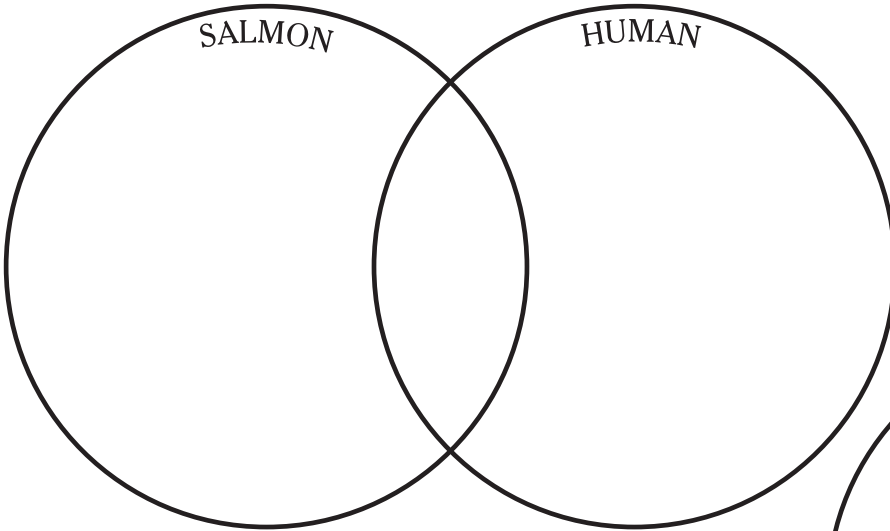
Uses ENERGY to

Stage \_\_\_\_\_  
Gets ENERGY from

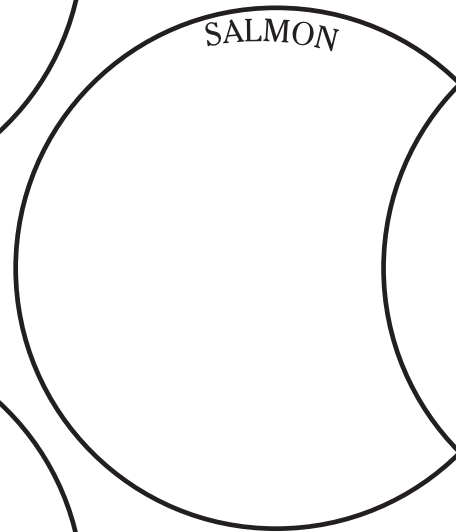
Uses ENERGY to

# Compare & contrast organ

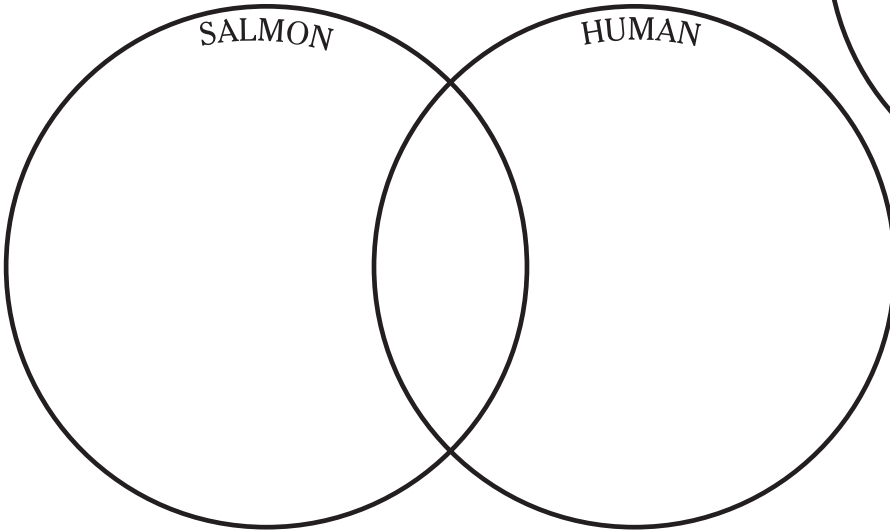
Respiratory system



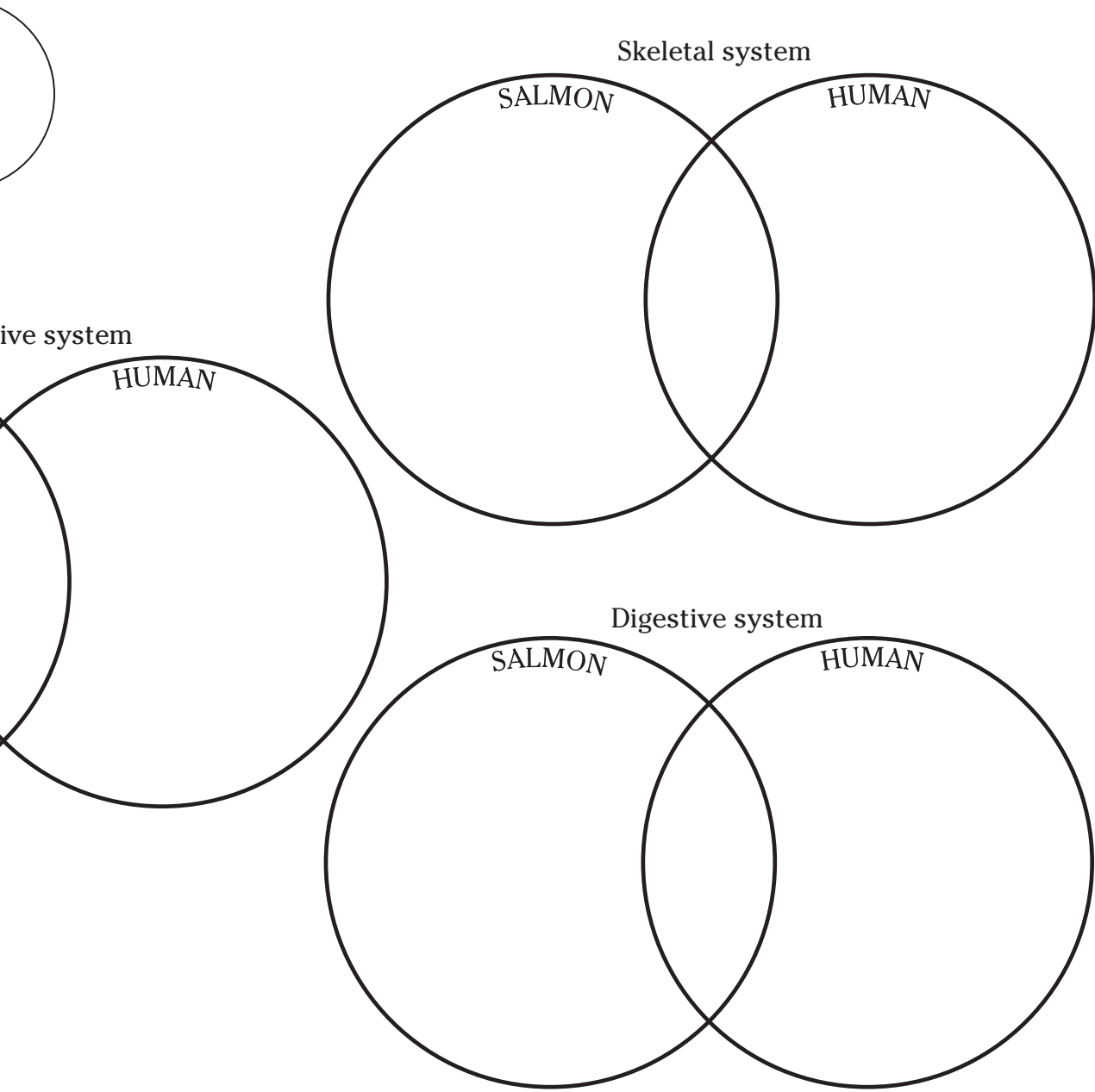
Reproduct



Circulatory system



# function of salmon vs. human



# Egg survival

in the classroom tank

	Date	Total	Loss	Variable
Eggs				
Alevin				
Fry				

# Fishing Frenzy

...or...how do ***you*** catch salmon?

Where do you live?

Commercial or personal use?

Method of fishing?

What do you know about sustainable harvesting of a resource?



# Fish Processing

How do ***you*** prepare/preserve salmon?





# Salmon Match Game

Write the word from the column on the left in front of the correct meaning.

Humpy	_____	1. A young salmon ready to go to sea.
Chum	_____	2. A round hole in a gravel bed where salmon eggs are laid.
Fry	_____	3. To lay and fertilize eggs.
Alevin	_____	4. Any fish that is hatched in fresh water but lives most of its life in salt water.
Spawn	_____	5. Very tiny plants and animals that live in the sea.
Chinook	_____	6. Salmon young that have used up their yolk sac.
Redd	_____	7. Newly hatched salmon with its yolk sac still attached to its body.
Sockeye	_____	8. A kind of circle of life. The chain of life from birth to death, to birth again.
Life cycle	_____	9. The symbol of male animals.
♀	_____	10. The symbol for female animals.
Plankton	_____	11. Another name for a smolt.
Fingerling	_____	12. Red salmon
Anadromous	_____	13. King salmon
Coho	_____	14. Dog salmon
Smolt	_____	15. Silver salmon
♂	_____	16. Pink salmon

16 right: Biologist    13-15 right: Better luck next time    10-12 right: Just getting started    Under 10 right: Well, I like to eat fish!

# 3-2-1 SPAWN

3 things  
I learned


2 things to  
tell my mom


1 question to ask  
Fish & Game

--



# Only the strong survive

(adapted from the Alaska State Museum's Salmon Kit)

Use the numbers below to find out how many salmon are left.

Use this page for your work.

1. A salmon deposited 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 building a new subdivision eroded into the stream and suffocated one-thousand (1,000). \_\_\_\_\_
5. Three-hundred (300) alevins died because they were very weak. \_\_\_\_\_
6. After the alevins developed into fry, five-hundred (500) were eaten by other fish in the stream. \_\_\_\_\_
7. Forty-one (41) were eaten by birds. \_\_\_\_\_
8. As they neared the ocean, 260 salmon were caught in a pool where they got too hot because of thermal pollution from a coal-fired power plant. \_\_\_\_\_
9. In the ocean 1,500 were eaten by bigger fish. \_\_\_\_\_
10. Seals ate 95. \_\_\_\_\_
11. Fishermen caught 556. \_\_\_\_\_
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? \_\_\_\_\_

# Your favorite salmon recipe



# Word search

Can you find the 13 “salmon words” in the square below? Some words may be diagonal or even backwards!

R	E	U	S	A	M	O	N	P	V	I	Q	U	Y
M	O	Z	R	M	N	U	Y	L	B	D	D	E	R
X	N	C	G	A	P	A	K	S	O	C	I	M	F
S	O	C	K	E	Y	E	D	S	P	A	U	N	T
L	M	A	I	R	O	D	N	R	N	A	S	B	O
N	L	R	O	T	I	G	N	Y	O	V	V	S	T
I	A	H	B	S	P	A	W	N	M	M	I	G	K
V	S	I	C	L	D	E	M	E	U	N	O	T	S
E	G	H	S	C	T	A	R	S	H	O	N	U	T
L	N	S	I	A	P	E	N	U	C	T	P	A	S
A	I	G	R	N	O	B	B	L	E	O	P	S	I
Q	K	G	U	N	S	V	E	S	T	E	H	R	D
S	I	E	S	P	I	N	K	S	A	L	M	O	N
M	S	U	H	C	N	Y	H	R	O	C	N	O	Y

1. ALEVIN
2. ANADROMOUS
3. CHUM
4. COHO
5. EGGS

6. FRY
7. KING SALMON
8. MIGRATE
9. PINK SALMON
10. REDD

11. SOCKEYE
12. SPAWN
13. STREAM

# Things I've learned about salmon



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