

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

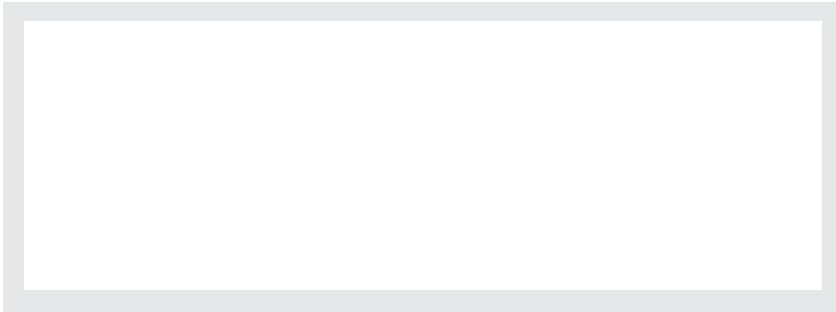
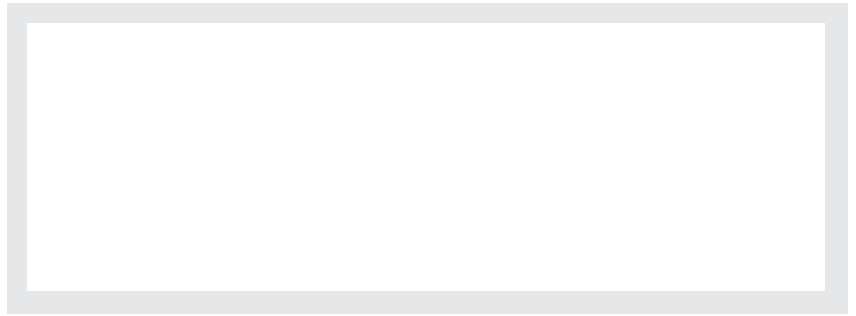


Genus: _____ means _____.



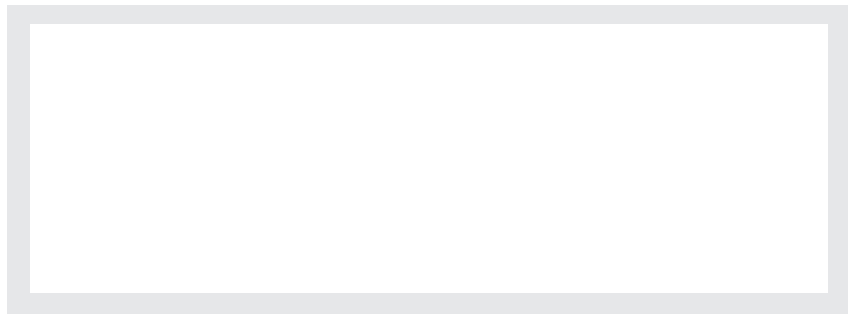
TECHNICAL DRAWING

KING salmon =

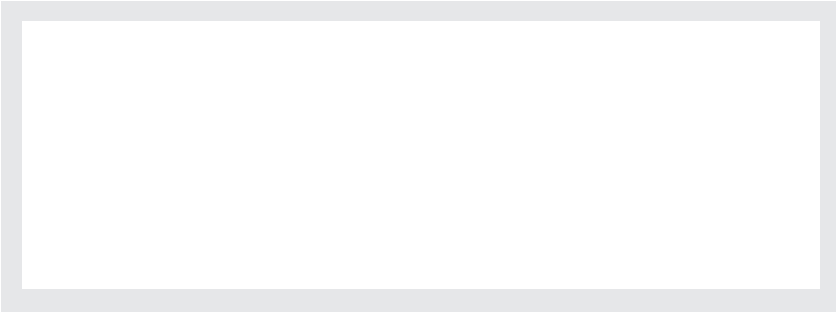


SILVER salmon =

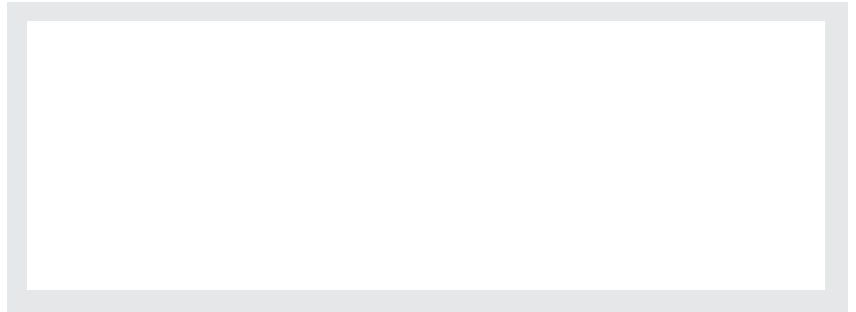
RED salmon =



Five Species of Salmon



PINK salmon =



CHUM salmon =

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

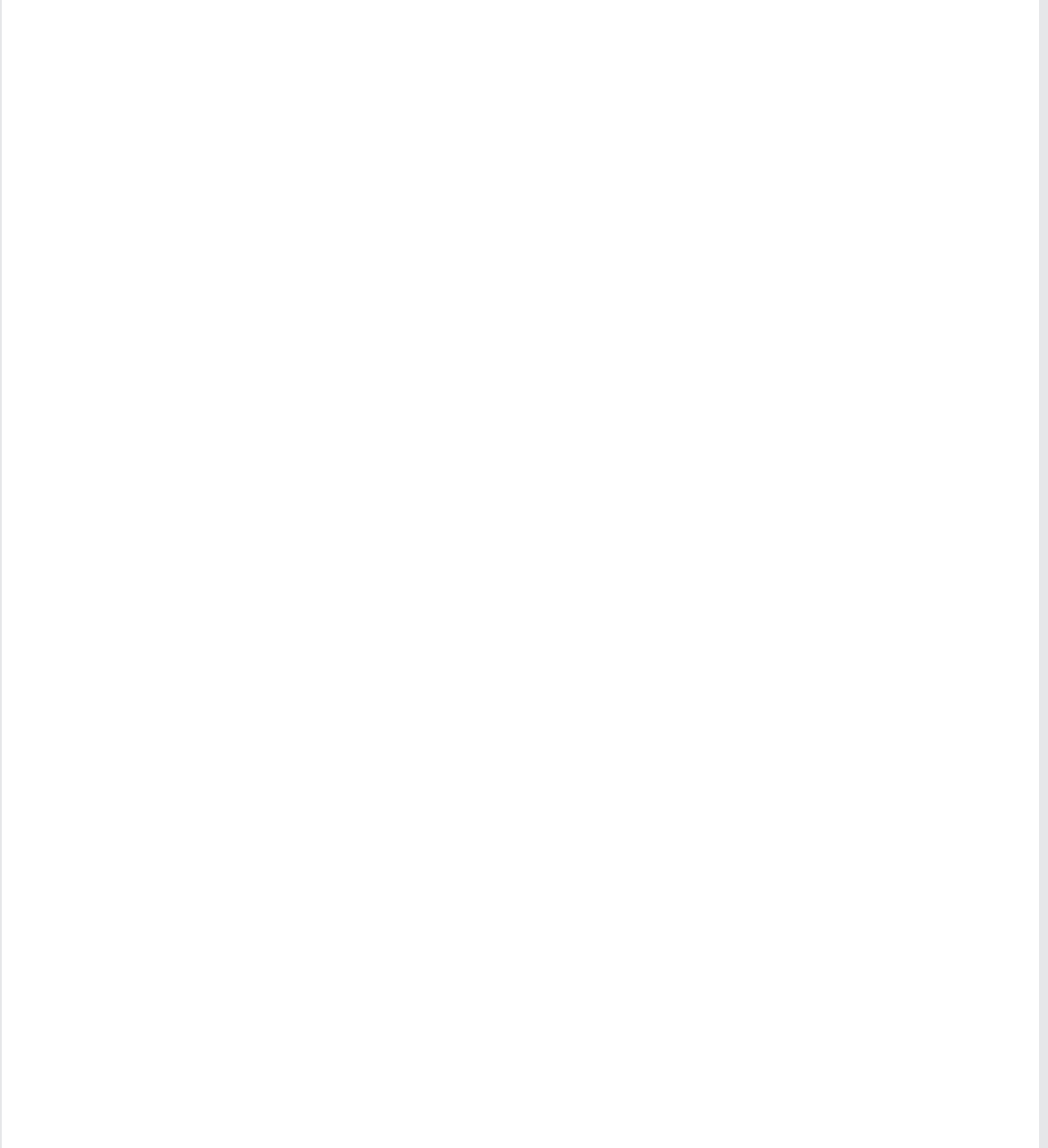
Habitat drawing and details

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

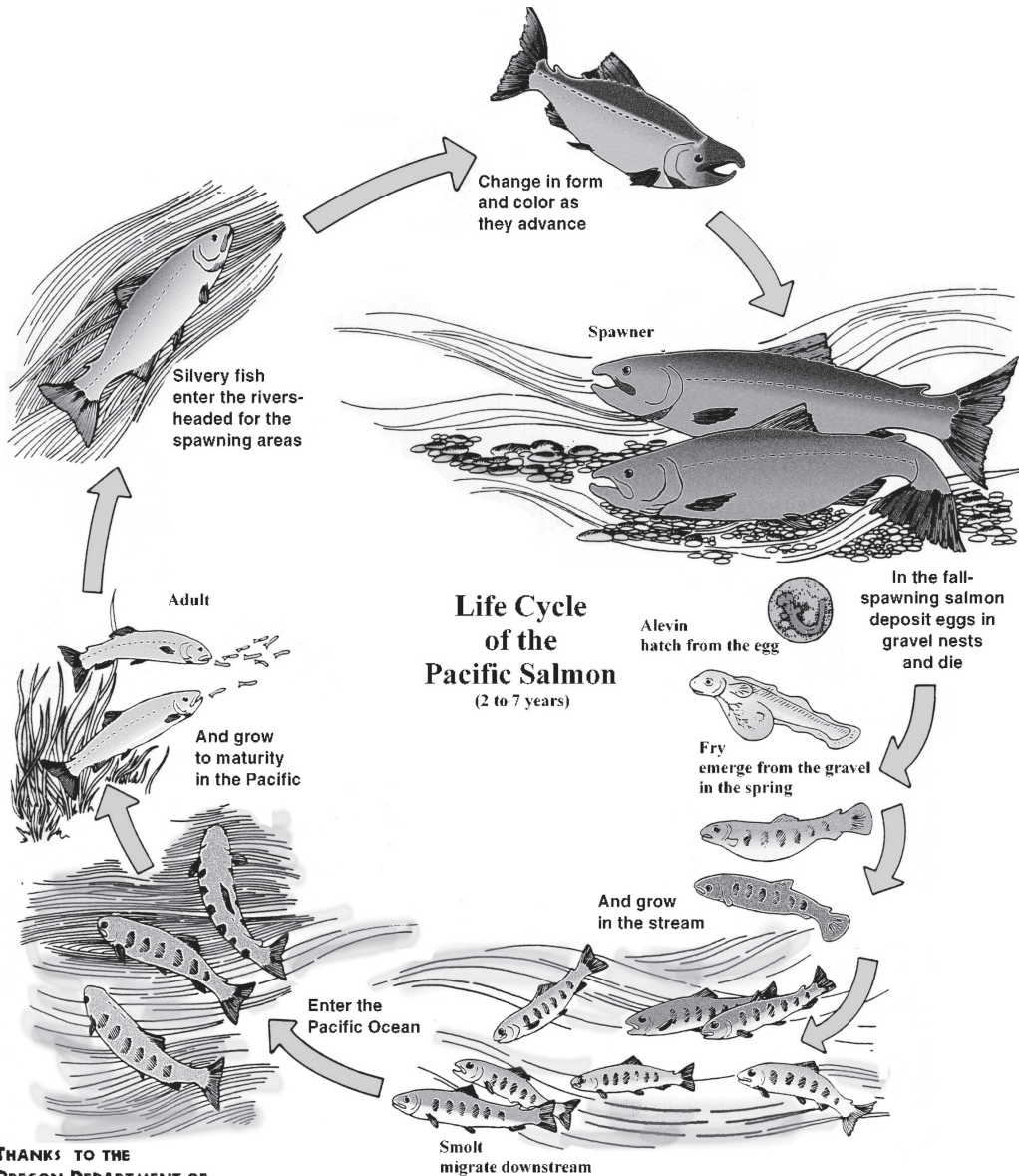
Describe your salmon habitat. What do they need for survival?



DRAW your salmon's watershed!



Salmon life cycle



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

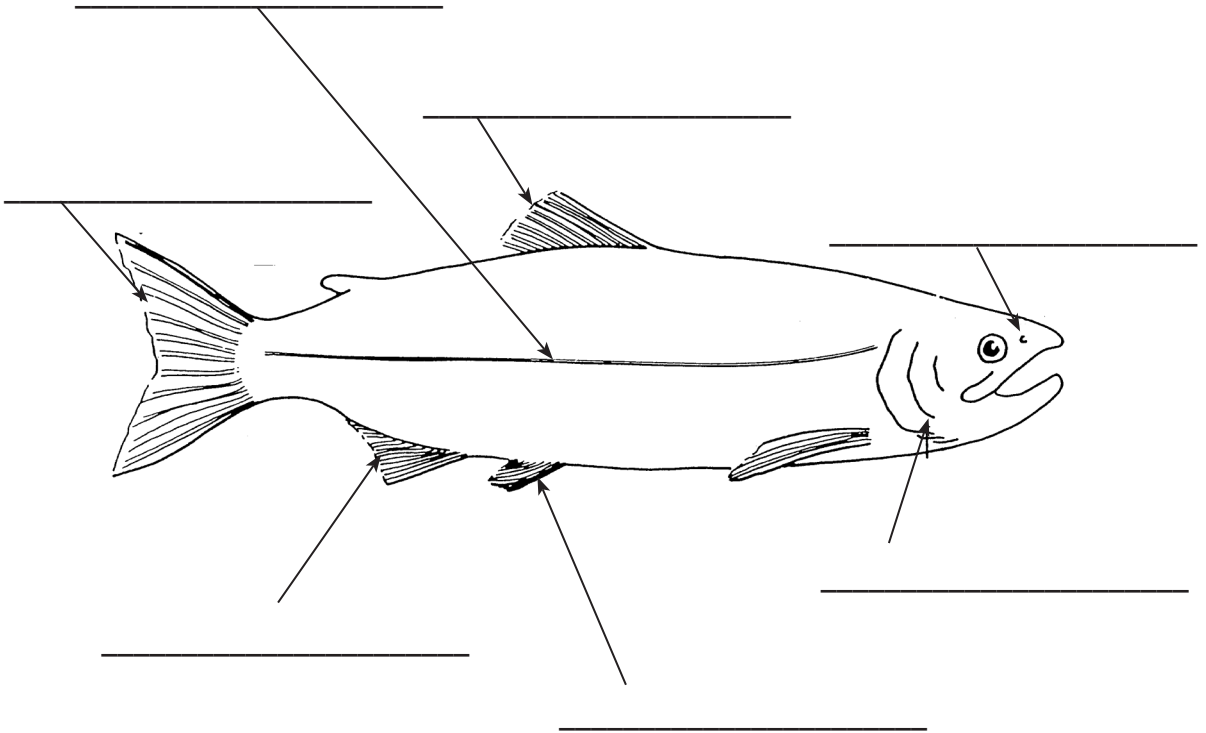
Length of life cycle varies with species and conditions

Salmon life cycle

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

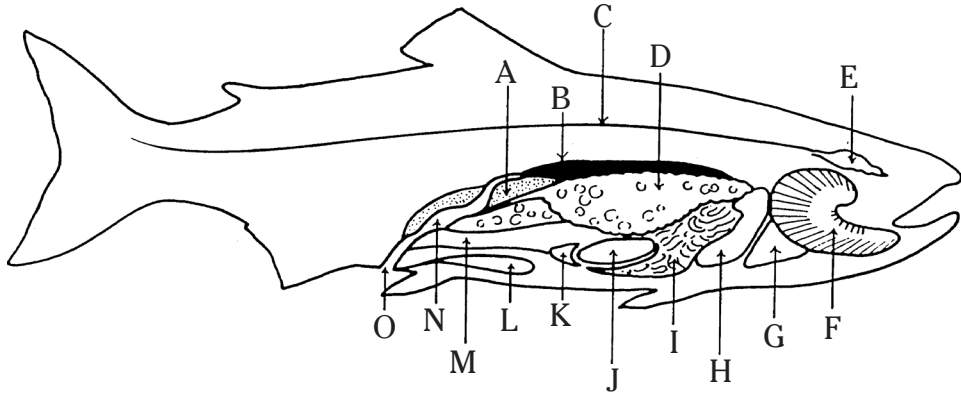
Salmon external anatomy

Label with name and function of each structure.



Salmon internal anatomy

Label with name of structure

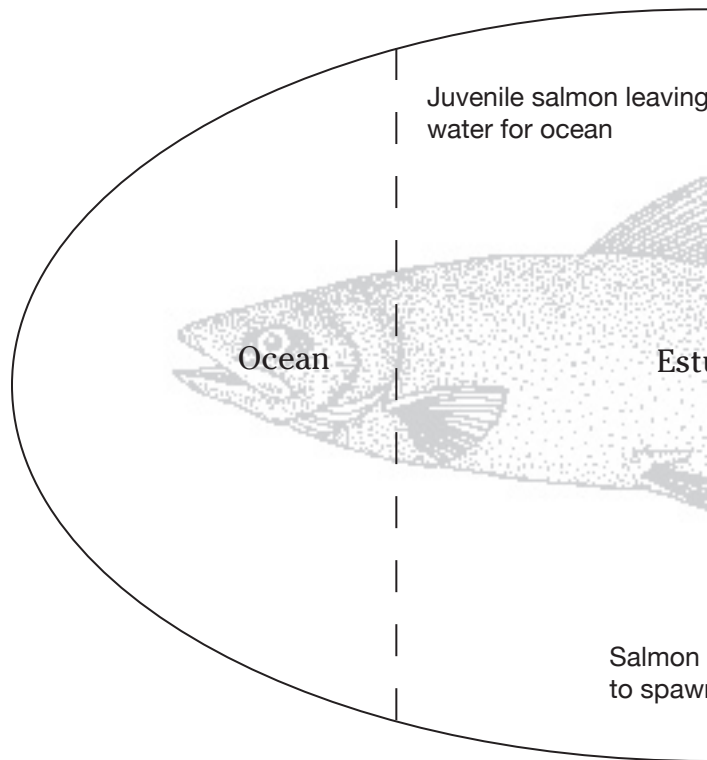


- | | |
|-----------|-----------|
| (A) _____ | (I) _____ |
| (B) _____ | (J) _____ |
| (C) _____ | (K) _____ |
| (D) _____ | (L) _____ |
| (E) _____ | (M) _____ |
| (F) _____ | (N) _____ |
| (G) _____ | (O) _____ |
| (H) _____ | |

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?



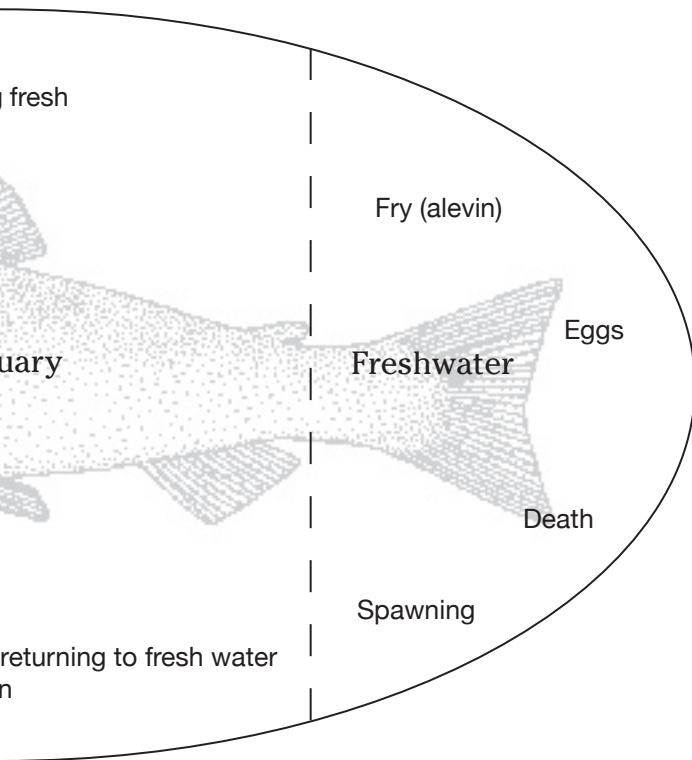
Food Web

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. _____

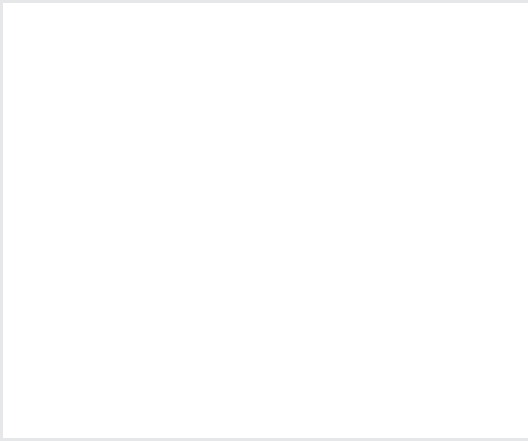
3. _____



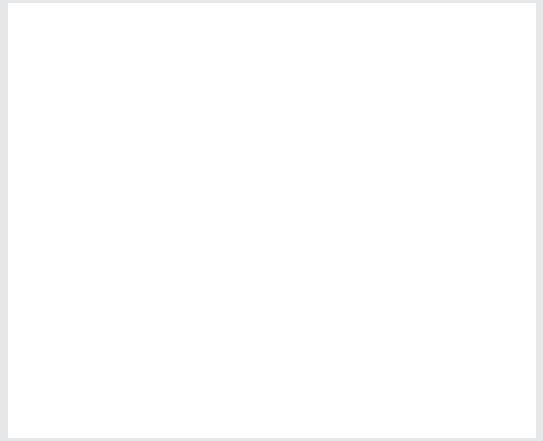
Energy use

Choose two stages of the salmon life cycle.

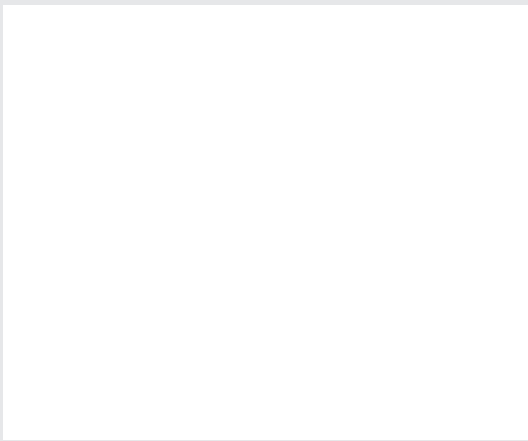
Stage _____
Gets ENERGY from



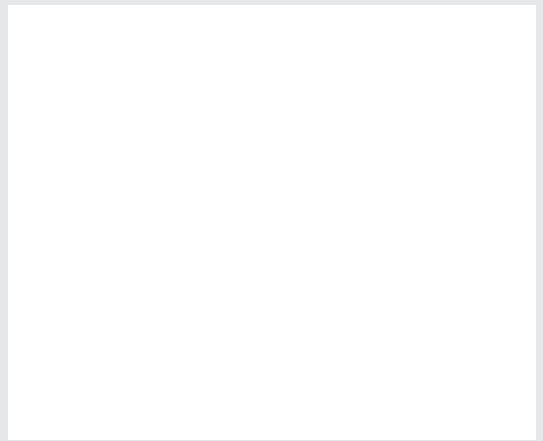
Uses ENERGY to



Stage _____
Gets ENERGY from

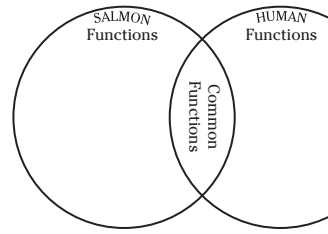
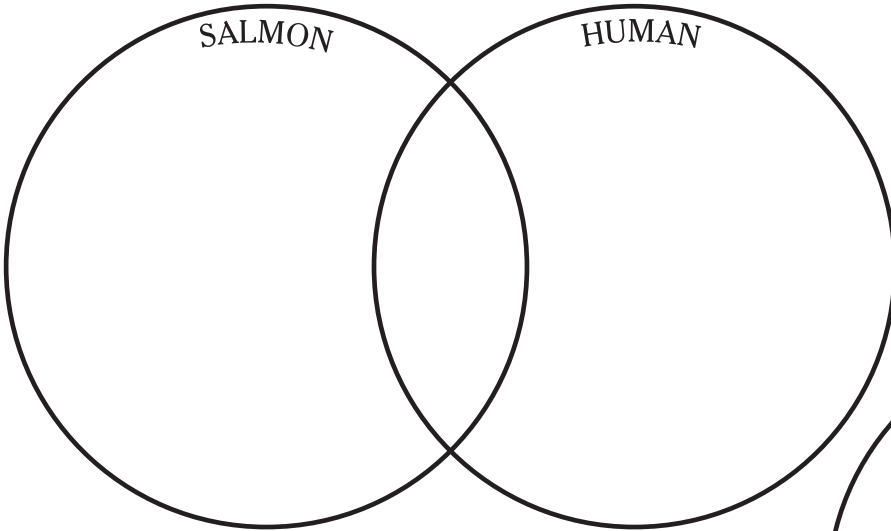


Uses ENERGY to

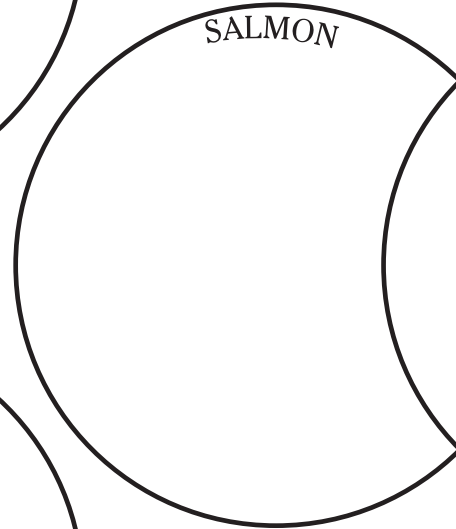


Compare & contrast organ

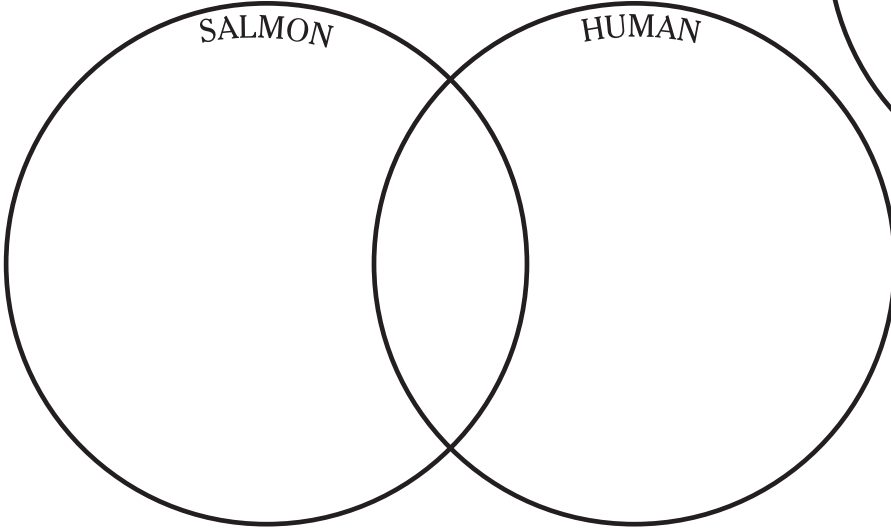
Respiratory system



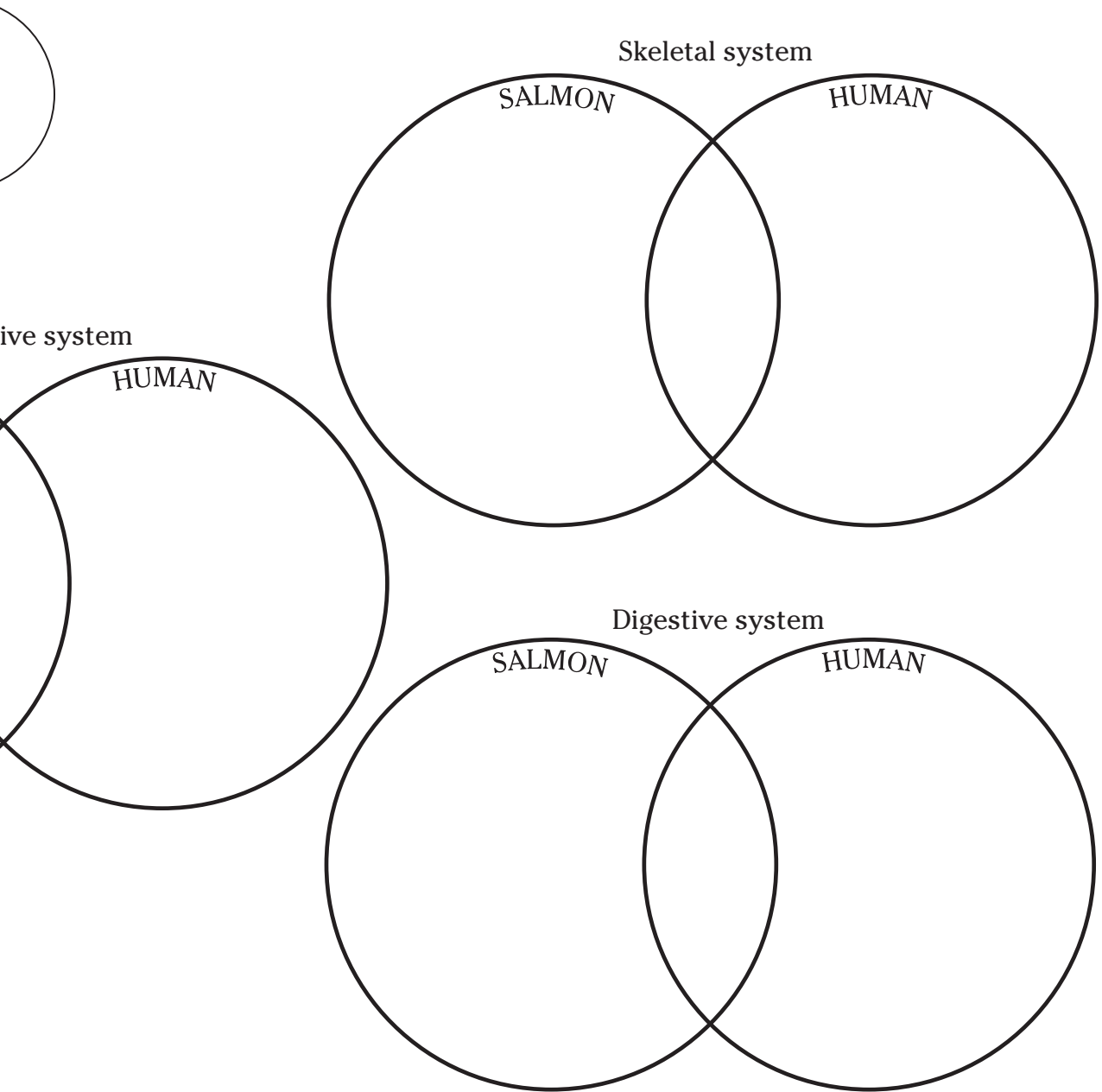
Reproduct



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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Jay Baumer

Aquatic Education Fisheries Biologist

Alaska Department of Fish and Game

Division of Sport Fish, Region II

Publication design by Pamela Butcher

ASD Science Teachers:

Judith Onslow

Catherine Boutin

Shannon Bolog

Susan Oliver

Ella Bredthauer

Helen O'Harra



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