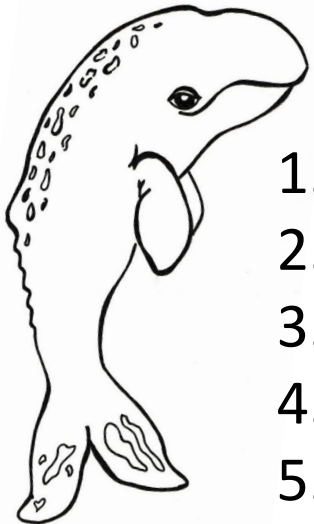
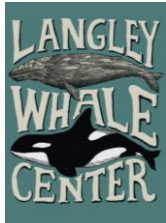


THIS
CERTIFICATE OF ACHIEVEMENT

IS BEING AWARDED TO:

FOR SUCCESSFUL COMPLETION OF
WHALES OF THE SALISH SEA JR.
AND IS HERE BY CONSIDERED A JUNIOR MARINE NATURALIST



5 FUN FACTS YOU LEARNED
ABOUT WHALES:

1. _____
2. _____
3. _____
4. _____
5. _____



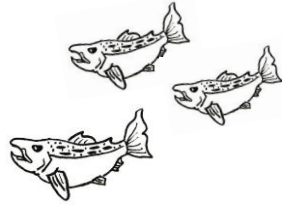
WHALES OF THE SALISH SEA JR.



CHARACTERS THAT WILL GUIDE YOU THROUGH THIS BOOK

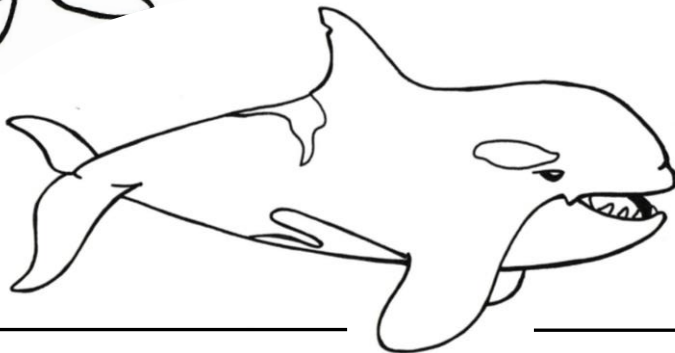
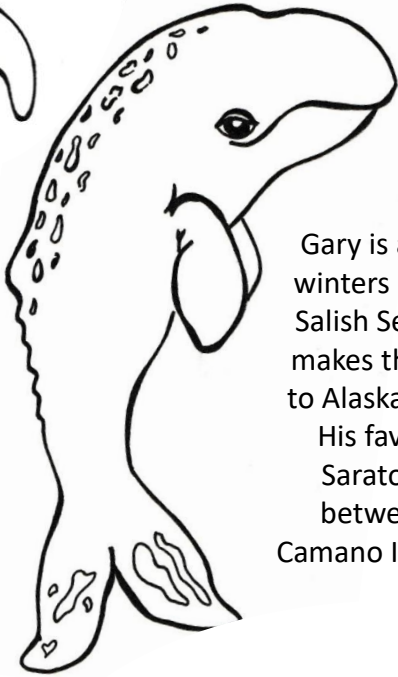
ORA

Ora is a fish-eating orca that belongs to the Southern Resident community of orcas.



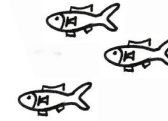
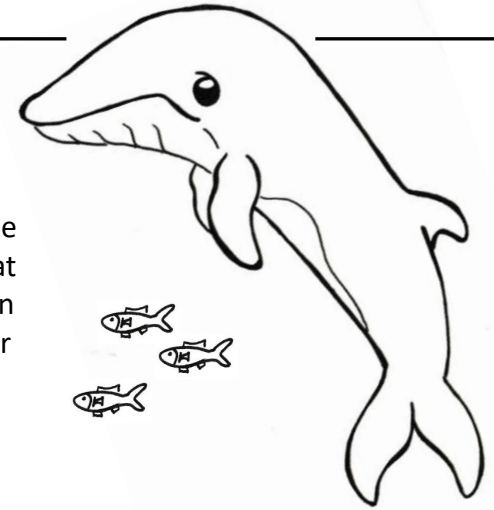
GARY

Gary is a gray whale that spends winters in Baja, Mexico, visits the Salish Sea in the spring, and then makes the rest of the trip back up to Alaskan waters for the summer. His favorite springtime spot is Saratoga Passage, the waters between Whidbey Island and Camano Island in Washington State.



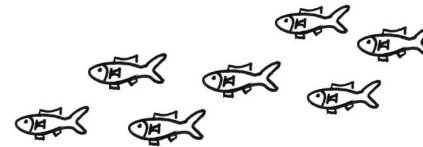
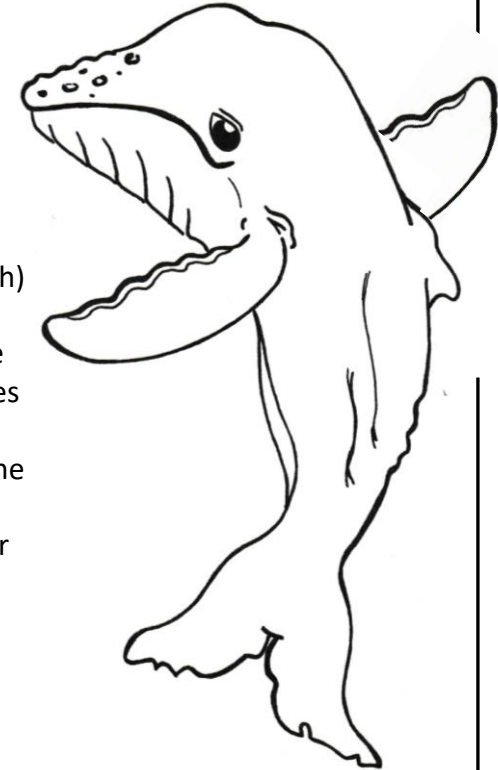
MORESBY

Moresby is a minke whale (pronounced mink-e) that spends part of the year in the Salish Sea looking for small forage fish to eat. He's a very shy guy!



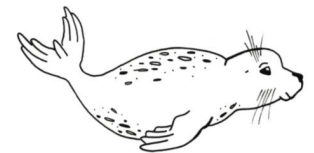
HALIA

Halia (pronounced ha-lee-ah) is a humpback whale that spends the summer in the Salish Sea and then migrates to Hawaii to spend the winter there. All the food she eats in the Salish Sea will help her survive the winter when she's not eating anything!

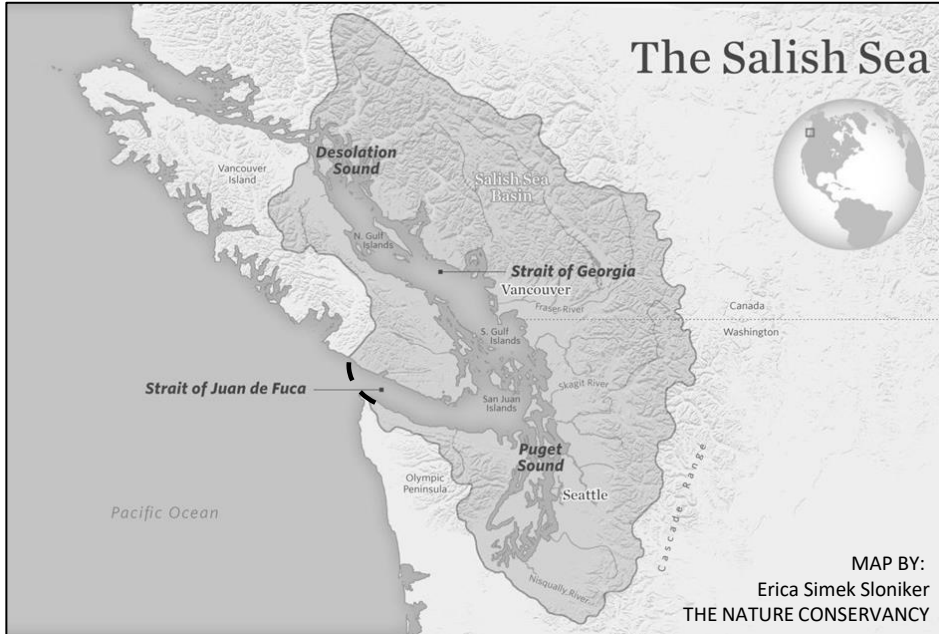


BLITZ

Blitz is a Big's orca, the kind of orca who eats small marine mammals like seals, sea lions, and porpoise. Blitz and Ora avoid each other and stick to their own separate family groups and cultures.



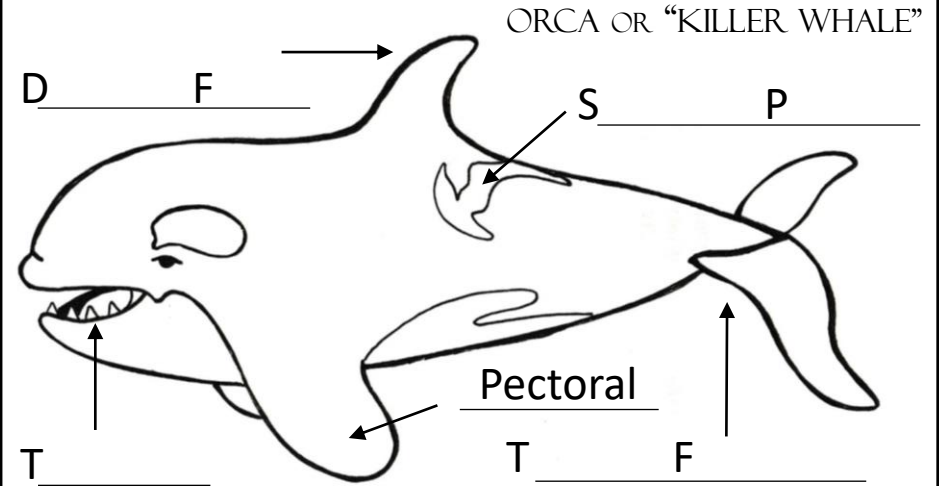
WHAT IS THE SALISH SEA AND WHERE IS IT?



- The Salish Sea (pronounced Say-ish) is a unique and special place.
- This Sea is made up of three large, interior bodies of water:
 - The Strait of Juan de Fuca (pronounced: wan-da-fyu-cah)
 - Puget Sound (pronounced Pyu-jet)
 - The Strait of Georgia
- The Salish Sea also includes all the rivers that flow directly into it (everything you see inside the boundary line). The fresh water, coming from the snow melt in the mountains, mixes with the sea water, making the Salish Sea slightly less salty than the Pacific Ocean. This fresh water also carries a lot of important nutrients into the Salish Sea. Those nutrients support all the creatures that live in, and around, the water.
- The Salish Sea is located in both the United States and Canada!
 - Can you name the state? W _____
 - Can you name the Canadian Province?
B _____ C _____
- Do you live somewhere that falls inside the Salish Sea Boundary? If you do, draw a ♥ where you live. If you don't, draw a ★ on the map at someplace you'd like to visit.

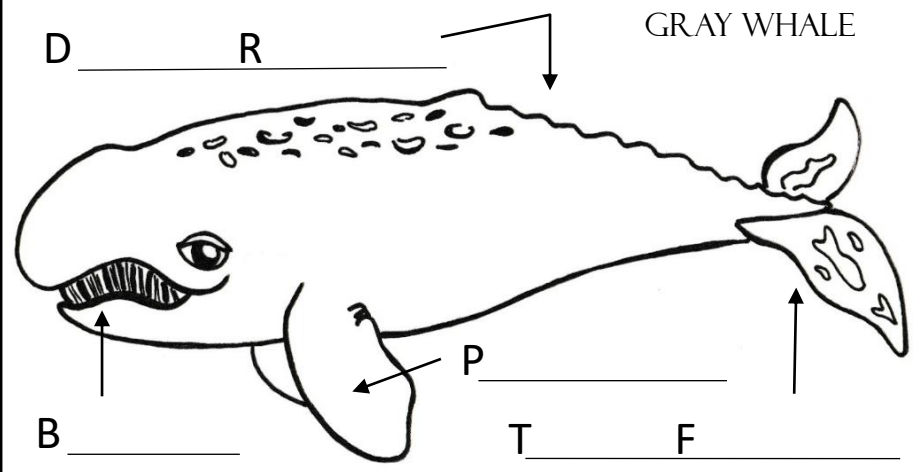
Use the **word bank** to help you fill in the blanks. Cross out each word once you've put them in the right spot. We have done the first one for you.

LEARN THE PARTS OF A WHALE



WORD BANK

PECTORAL	SADDLE PATCH	BALEEN
DORSAL RIDGE	TAIL FLUKES	DORSAL FIN
TAIL FLUKES	PECTORAL	TEETH



ORCAS

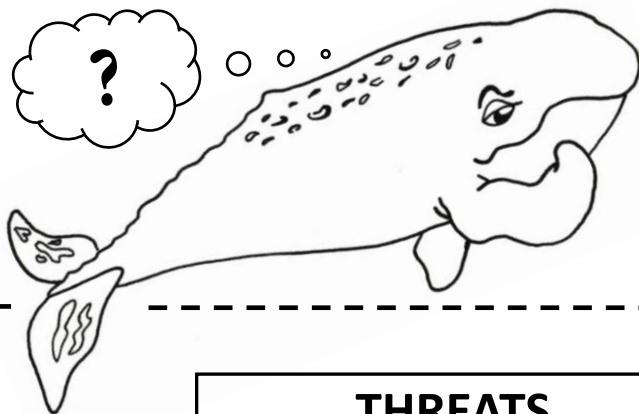
UNSCRAMBLE THE WORDS TO FINISH THE PARAGRAPH!

There are two types of orcas, or killer whales, in the Salish Sea. **R**_____ (driesten) orcas eat only fish and live in big **F**_____ (isla^fmie).

Bigg's, or transient, orcas eat only **M**_____ **M**_____ (r^manei ^mlamsma) and live in smaller **P**_____ (dosp). These two types of orcas **L**_____ (oklo) and **S**_____ (n^sudo) different from each other. Which of these two types of orcas is **E**_____ (dna^edregne)?

Do you know why?

Help Gary the Gray Whale figure out if he's found a Resident orca or a Bigg's orca! Look at the **clues** to help you make your decision.



Who are they?

ENDANGERED

When a population of animals has lost a lot of individuals, they are endangered. Endangered means their population is **at risk of disappearing forever**. If that population does not recover and disappears, it would then be **extinct**.

Once a species, or population, goes extinct, **we cannot bring them back**.

THREATS

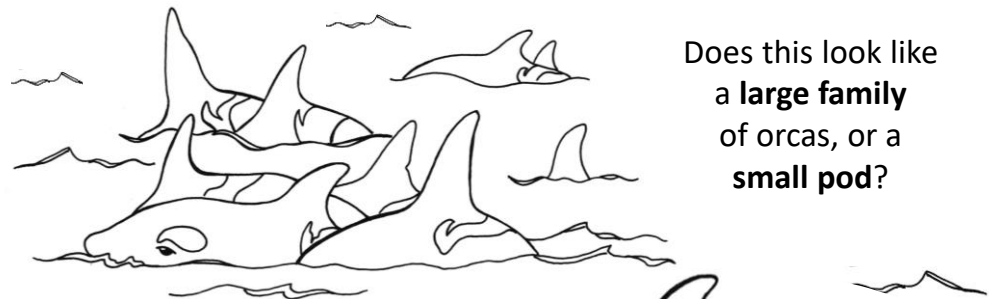
LOSS OF PREY



POLLUTION & TOXICANTS

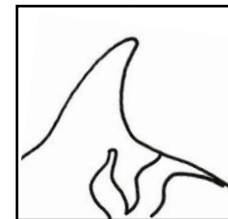
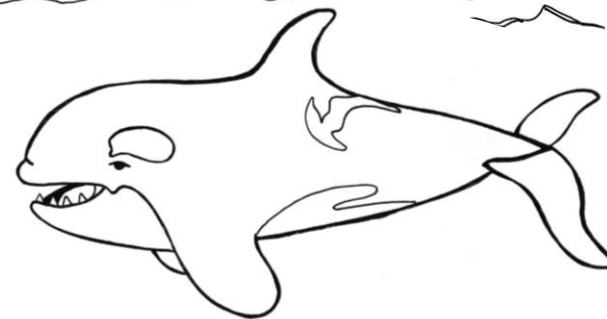
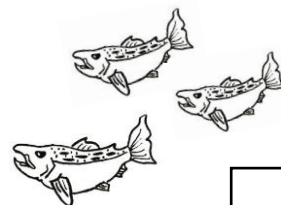


VESSEL NOISE



Does this look like a **large family** of orcas, or a **small pod**?

What type of **food** is the orca chasing?

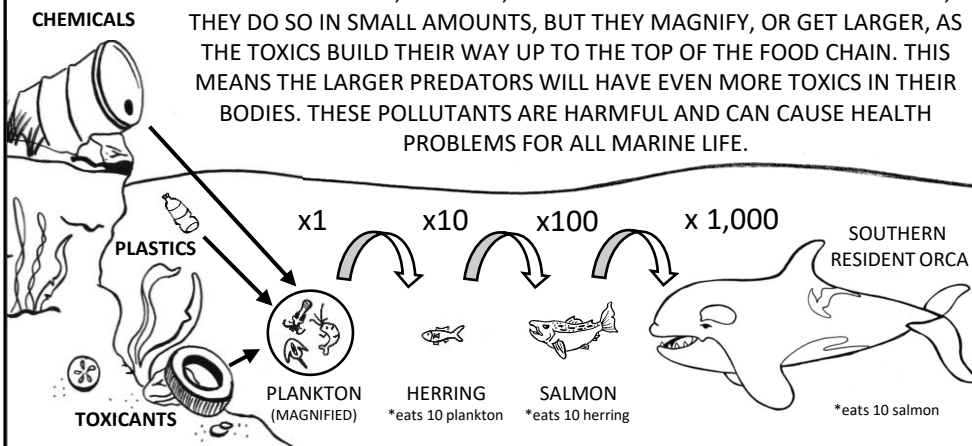


Circle the kind of **saddle patch** this orca has. Is her **dorsal fin** pointy or rounded on top?

orcas

BIOMAGNIFICATION IN THE FOOD CHAIN

WHEN **CHEMICALS**, **PLASTICS**, AND **TOXICANTS** ENTER THE FOOD CHAIN, THEY DO SO IN SMALL AMOUNTS, BUT THEY MAGNIFY, OR GET LARGER, AS THE TOXICS BUILD THEIR WAY UP TO THE TOP OF THE FOOD CHAIN. THIS MEANS THE LARGER PREDATORS WILL HAVE EVEN MORE TOXICS IN THEIR BODIES. THESE POLLUTANTS ARE HARMFUL AND CAN CAUSE HEALTH PROBLEMS FOR ALL MARINE LIFE.



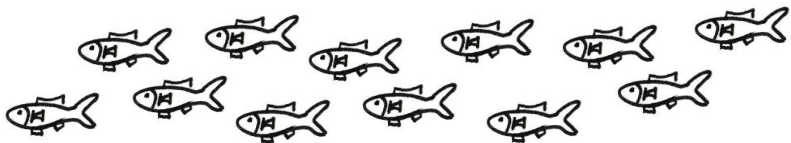
MINKE WHALES

pronounced mink-e

UNSCRAMBLE THE WORDS TO FINISH THE PARAGRAPH!

Minke whales are small **B**_____ (nelaeb) whales that are about the same size as an orca. Each summer they visit the Salish Sea to feed on **H**_____ (rngerhi) and other **F**_____ (hifs).

Some minke whales have figured out an interesting way to find their food. They look for **B**_____ (dribs) who are feeding on big bait balls of fish, and then come up underneath and grab a **M**_____ (tulmfohu) for themselves.



ONE OF THE THREATS TO MINKE WHALES IN THE SALISH SEA IS ILLUSTRATED BELOW. EVEN THOUGH BIGG'S ORCAS USUALLY LOOK FOR SEALS, SEA LIONS, AND PORPOISE, THEY SOMETIMES HUNT FOR MINKE, TOO! BUT BIGG'S ORCAS **CAN ONLY BE SUCCESSFUL IF THEY CAN BE QUIET!**



MINKE WHALE RHYMING GAME:

A minke whale with really smelly breath is a:

S_____ minke (isnkty)

A minke whale who loves junk food is a:

T_____ minke (eiwtkni)

A smart minke whale is a:

T_____ minke (tkhyin)

A really small minke whale is a:

D_____ minke (yndik)

A minke whale who likes to hide is a:

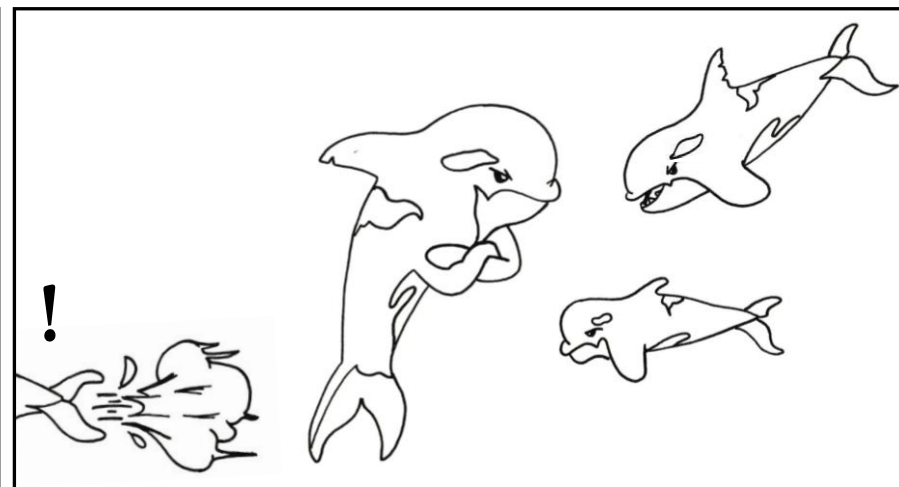
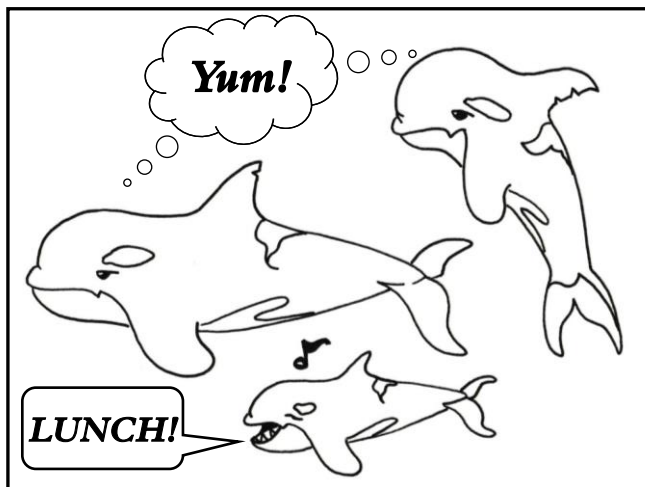
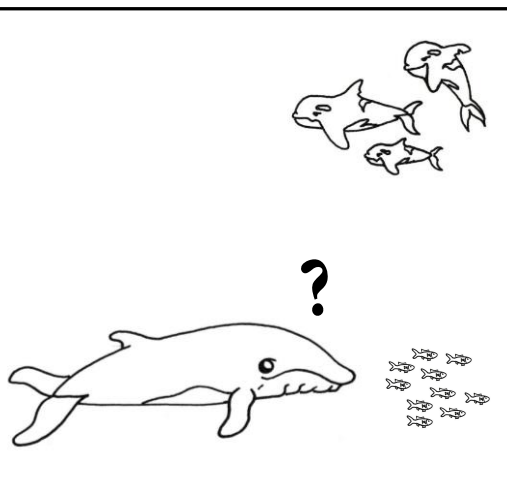
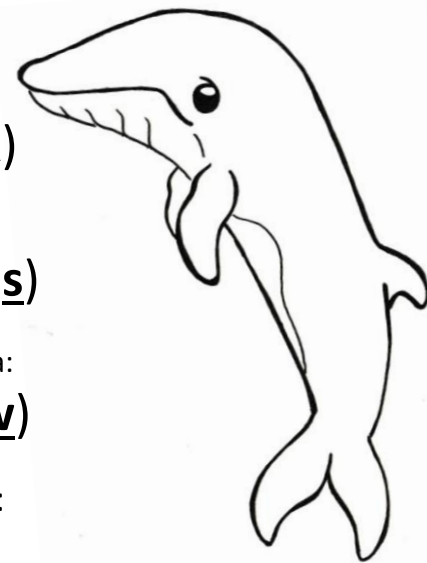
S_____ minke (kinyls)

A minke whale with one eye closed is a:

W_____ minke (ynikw)

A minke whale who likes to write is an:

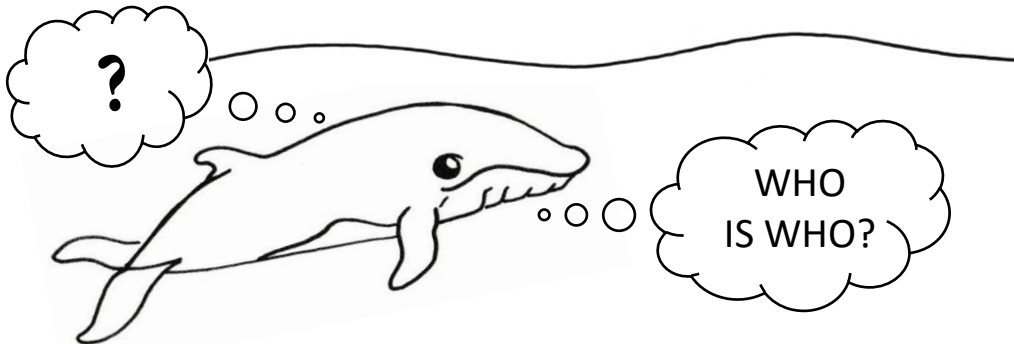
I_____ minke (ynik)



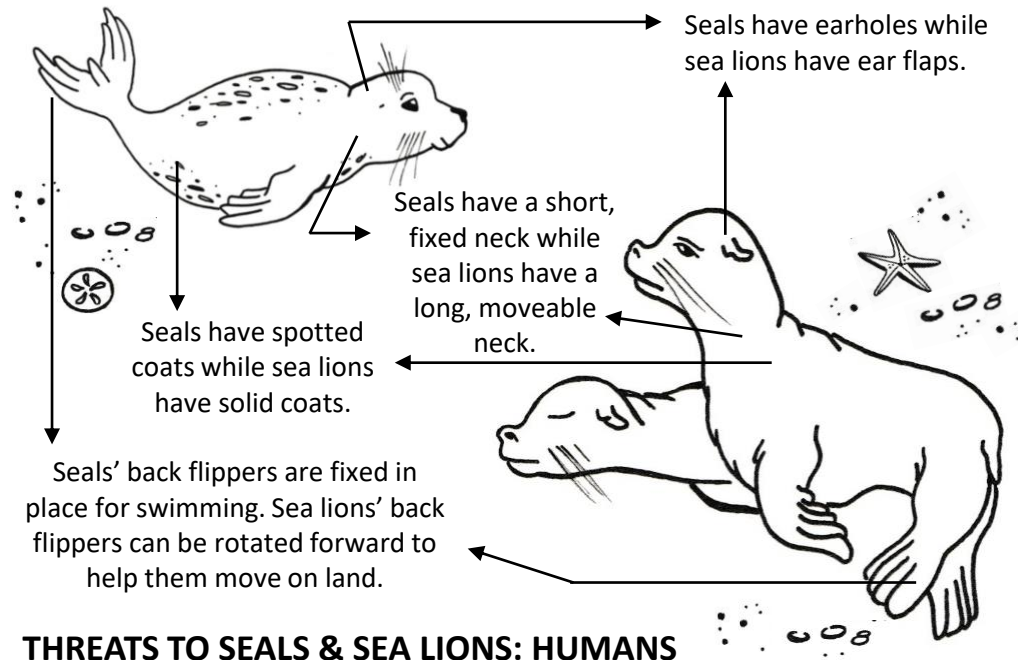
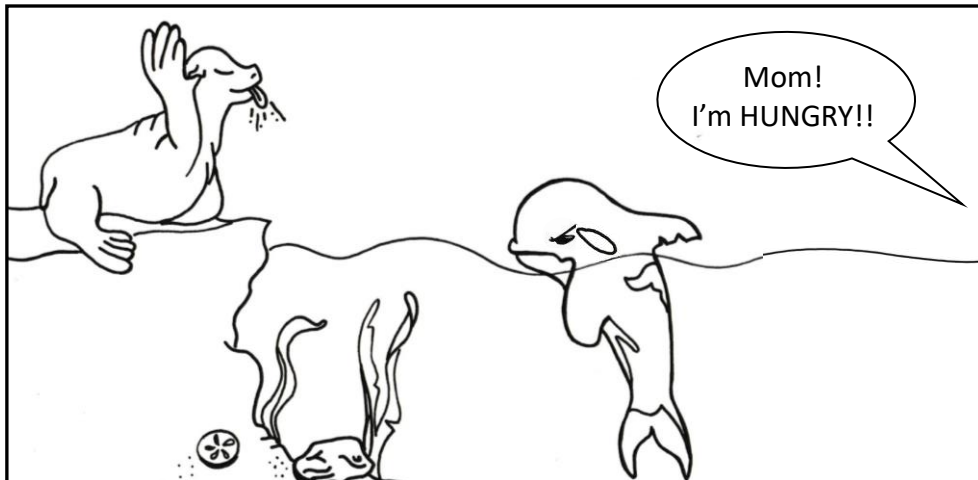
PINNIPEDS – SALISH SEA SEALS & SEA LIONS

UNSCRAMBLE THE WORDS TO FINISH THE PARAGRAPH!

Pinnipeds, which means "fin-footed", are a group of marine mammals that have **F**_____ (plif^rps^e) for feet. They spend part of their time in the **W**_____ (er^wta) and part on land. There are four Pinniped **S**_____ (secip^se) in the Salish Sea - the **H**_____ **S**_____ (rh^baor^lase), the **E**_____ (plen^htea) seal, the **C**_____ (fial^cnroia) sea lion and the **S**_____ (rel^slte) sea lion. Do you know what the differences are between seals and sea lions?



THREATS TO SEALS & SEA LIONS: BIGG'S ORCAS



THREATS TO SEALS & SEA LIONS: HUMANS

Seals and sea lions haul out on beaches and rocks to rest and to warm up their body temperature. This is a **normal** and **important** behavior for them.

For this reason, you **should never** approach a seal or sea lion, pour water on it, or try to get it back into the water. **Report the animal to a local Marine Mammal Stranding Network** if it looks hurt, sick, or is dead, so that a trained person can find the animal and make a plan for how to help them.



If you see a marine mammal on the beach: **Do not** approach them. Stay at least 100 yards away to prevent disturbing them!



100 yards = _____ feet (?)

CIRCLE THE **CORRECT** ACTIONS TO TAKE WHEN YOU FIND AN INJURED SEAL:

Pour water on the seal while you wait for the stranding network to arrive

Try to scare the seal back into the water

Call your local stranding network to report the seal

Keep other people from getting too close to the seal

Figure out what beach you're on to make sure the stranding network can find the seal

Try to feed the hurt seal bread

To report sick, injured, beached or dead marine mammals (including live stranded and/or beached porpoise & whales):
Call - 866-ORCANET or Email - info@orcانetwork.org

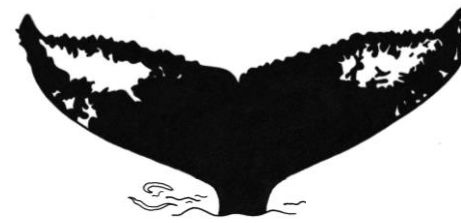
For more information, go to:
www.nmfs.noaa.gov and
www.orcanetwork.org/strandings.html

HUMPBACK WHALES

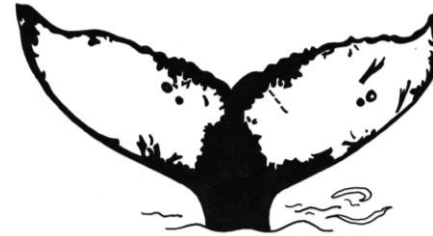
UNSCRAMBLE THE WORDS TO FINISH THE PARAGRAPH!

Humpback whales have many **T**_____ **G**_____ (a**t**hrot oev**g**ors) that expand when they take a gulp of **W**_____ (etaw**r**) to **F**_____ (ift**l**re) fish and krill through their baleen. Some of them **L**_____ (ngul**e**) through the water to catch their fish, and some work together to trap fish in a net made of **B**_____ (lb**e**busb). Many humpback whales return to the Salish Sea each **S**_____ (mrus**m**e) after spending the winter in **H**_____ (iwah**i**a) and **M**_____ (eom**x**ci).

DID YOU KNOW? The humpback was given its common name because when they bend their body to dive deep, you can see a hump form just before their dorsal fin.



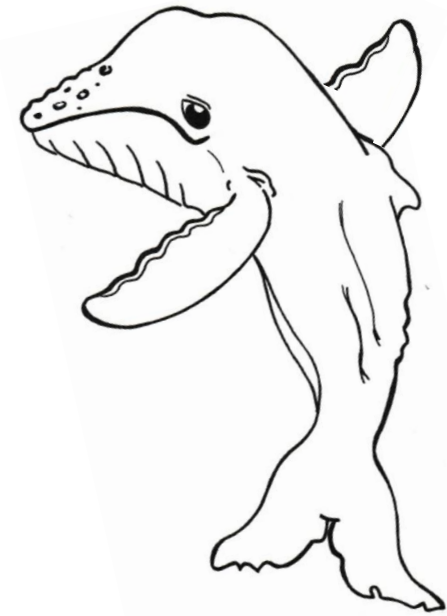
“ _____ ” humpback



“ _____ ” humpback



“ _____ ” humpback

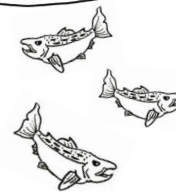
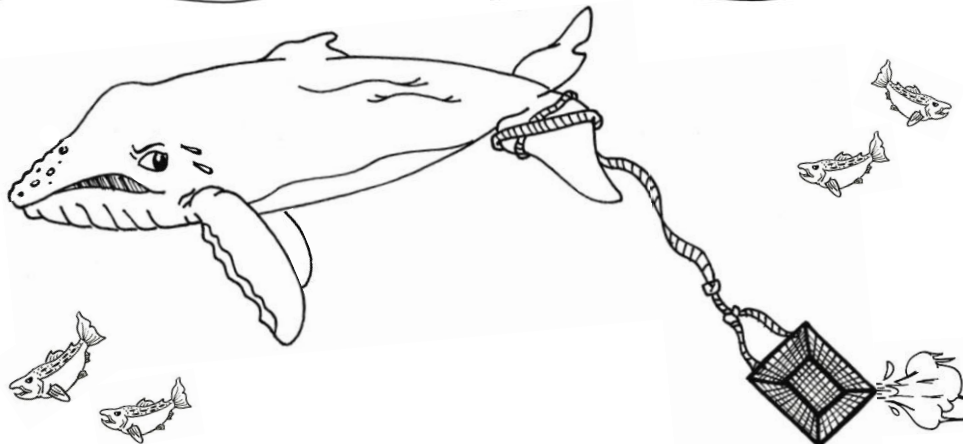


Each humpback whale has different markings on their tails making each whale unique! Scientists identify them by these markings. Whales with mostly black tails are known as “X” humpbacks. Whales with some white marks are known as “Y” humpbacks, and whales with a lot of white on their tails are mostly “Z” humpbacks!

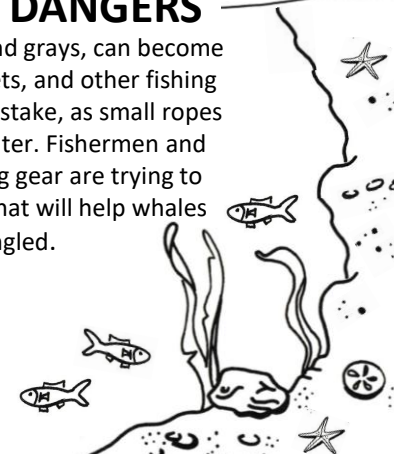
Look at the humpback tail flukes and help Halia the Humpback decide which tail is an “X” tail, “Y” tail, or “Z” tail!

ENTANGLEMENT DANGERS

Baleen whales, like humpbacks and grays, can become entangled in crab pots, fishing nets, and other fishing gear. This typically happens by mistake, as small ropes are hard to see in deep, dark water. Fishermen and the companies that make fishing gear are trying to brainstorm new ideas for gear that will help whales not become entangled.



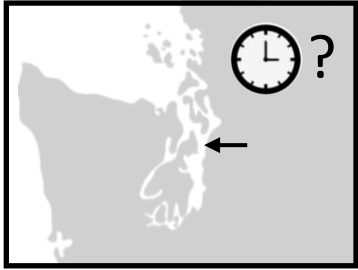
?!



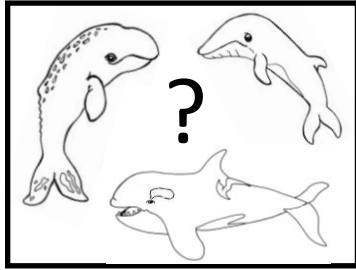
HAVE YOU SEEN WHALES?

Call 866-ORCANET, or email info@orcانetwork.org, or report directly to us on our Facebook Page: Orca Network

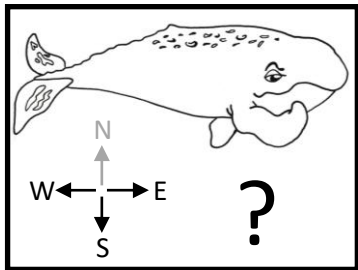
Here's what should be included in your report:



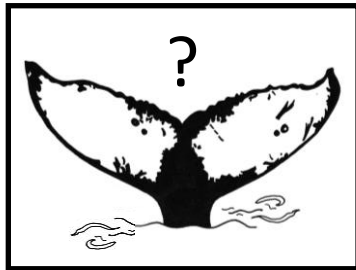
1. The location of the whales; then where you are reporting from & what time you had your sighting. Include the date.



2. What type of whale & how many of them? ***If you're seeing orcas, how many males (large dorsal fins)?**



3. What direction were they going?



4. Any behaviors to note? **(chasing prey, traveling fast, jumping, splashing, etc.)**

Now you try one! Look at the scene on the next page and fill in the blanks to report what you are seeing. **We've filled the first one out for you.**

1. Location, Time, and Date:
Lime Kiln State Park Lighthouse,
2:38pm on Saturday July 5th, 2019

2. Type of whale? How many?

How many, large male dorsal fins?

3. What direction were they going?

4. Any behaviors to note?

My Whale Dream (Madlibs)

Last night I had a dream that I was floating on a(n) _____ Salish Sea.
(color)

There were _____ soaring over my head, and _____
(type of bird) (type of fish)

in the water. I was the only human out there. Suddenly I was surrounded by

_____ whales! There were _____ of them, and
(type of whale from this book) (number)

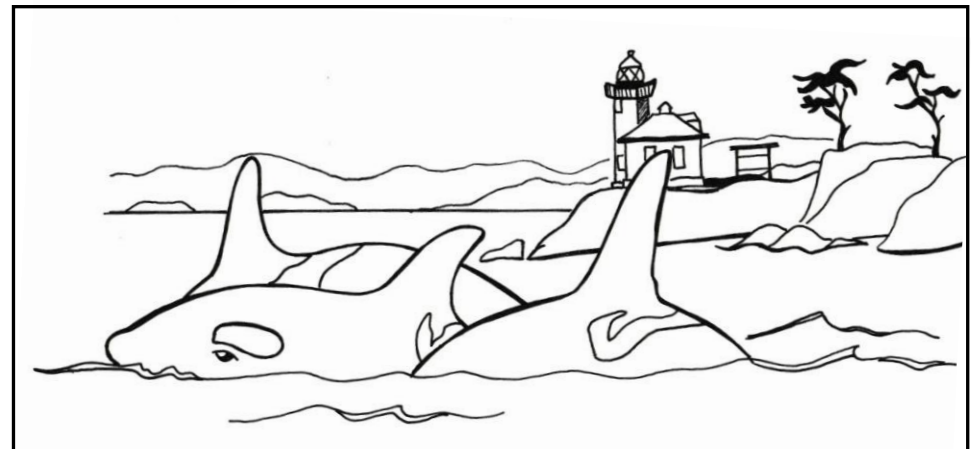
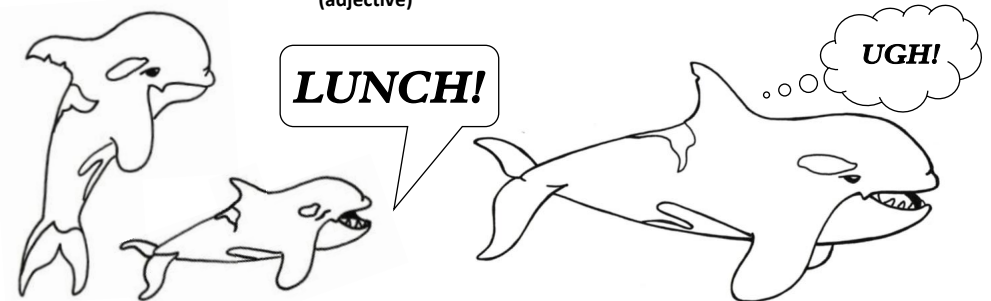
_____, the leader of these whales, asked me if I could help

them find _____. I said yes! We had to dodge some _____
(type of food) (pollution)

but no one got hurt, thankfully! We finally found their food! They were just about

to share with me when I woke up! What a _____ dream! I will always
(adjective)

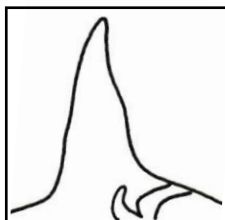
remember those _____ whales!
(adjective)



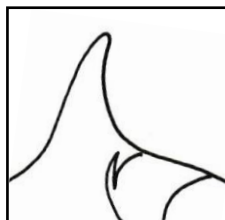
NOW THAT ORA AND GARY HAVE TAKEN YOU THROUGH THE BOOK, LEARN HOW TO DRAW FRIENDS FOR THEM!

SOUTHERN RESIDENT ORCA

Remember! If drawing a "him", make sure to give your orca a much TALLER dorsal fin!



MALE DORSAL FIN

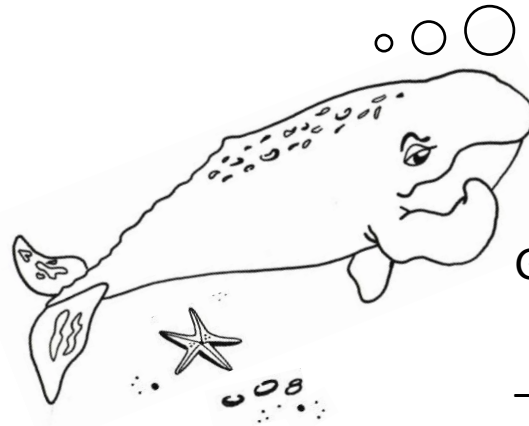


FEMALE DORSAL FIN

GRAY WHALE

ORCA:

Did you remember to name your whales? What are their names?



GRAY:
