

Name: _____

Period: _____

Date: _____

Homework: Marine Food Chains & Webs

Directions: Use the food chains below to answer the questions. *Each question is worth 10 points.*

1. Kelp→Tuna→Orca Whale
2. Kelp→Krill→Seagull→Leopard Seal
3. Kelp→Krill→Mullet fish→Penguin→Orca Whale
4. Kelp→Krill→Smelt fish→Leopard Seal
5. Kelp→Krill→Squid→Leopard Seal
6. Kelp→Crab→ Leopard Seal

1. What is/are the **producer(s)** in these food chains? Where do they get their energy from?

2. What organism(s) are **herbivores**?

3. Which organism(s) are **carnivores**?

4. Which organisms are primary (1°) or **first consumers**?

5. Which organisms are secondary (2°) or **second consumers**?

6. Which organisms are **top consumers/top carnivores** (nothing eats them)?

7. What would happen to the **leopard seals** if all the krill died? **Why?**

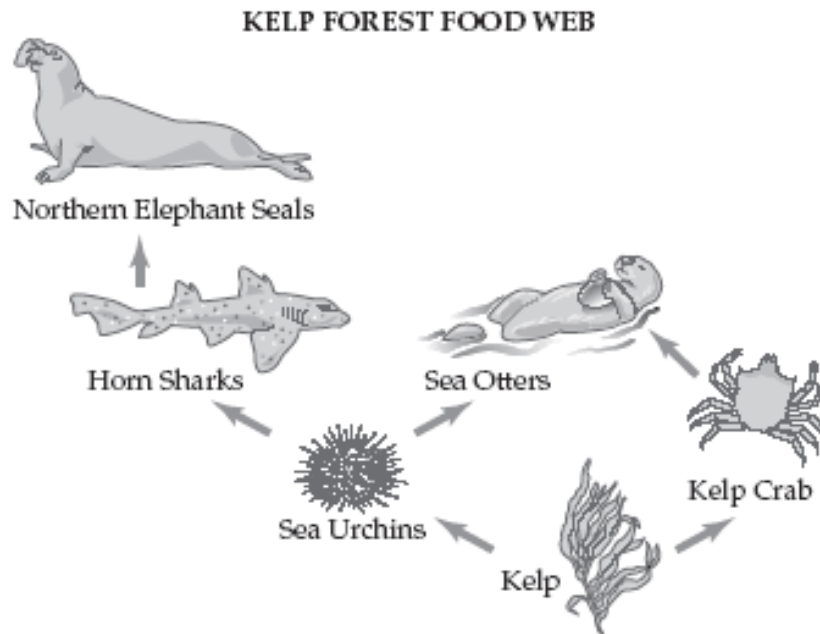
8. What would happen to the **krill** population if all the kelp died? **Why?**

9. If the krill population increased (gets bigger), what would happen to the **penguin** population? **Why?**

10. What would happen to the population of **krill** if the **leopard seals were removed** (taken away) from the food web? **LOOK CAREFULLY!**

11. Label the food web below with the following labels and use it to answer the following questions.

- a) Label the **producers** in the food web (as producer)
- b) Label the **primary consumers** (as 1st consumer)
- c) Label the **secondary consumers** (as 2nd consumer)
- d) Label the **top consumers** (as top consumer)
- e) Using the food web, write one example food chain on the line below:



Classwork: Food Chains & Webs

Directions: Use the food chains below and the corresponding food web drawn on the board to answer the questions below. Each question is worth 10 points.

1. Grass→Rabbit→Hawk
2. Grass→Grasshopper→Garter snake→Hawk
3. Grass→Grasshopper→Toad→Hognose snake→Hawk
4. Grass→Grasshopper→Praying mantis→Sparrow
5. Grass→Grasshopper→Mouse→Hawk
6. Grass→Mouse→Hawk

1. What is/are the producer(s) in this food web? Where do they get their energy from?
Grass; sun (2 points each)
2. What organism(s) are herbivores in at least one food chain?
Rabbit, grasshopper, mouse (3 points each)
3. Which organism(s) are carnivores in at least one food chain?
Hawk, garter snake, toad, hognose snake, praying mantis, sparrow, mouse (1 point each)
4. What organisms are secondary (2°) or second consumers?
Hawk, garter snake, toad, praying mantis, mouse (2 points each)
5. Which organisms are tertiary (3°) or third consumers?
Hawk, hognose snake, sparrow (3 points each)
6. Which organisms are top consumers/top carnivores (nothing eats them)?
Hawk & sparrow (5 points each)
7. How would the population of hawks be affected if the grasshoppers were removed? **Why?**
They would decrease since their prey (garter snakes, etc.) and organisms that rely on their prey would decrease in number.
8. How would the garter snake population be affected if the rabbits were removed? **Why?**
*Garter snake population would increase because there's more grass to eat. OR
Garter snake population would decrease because hawks need to eat more snakes.*
9. If the preying mantis population increased, how would the sparrow population be affected?
Why?
Sparrows would increase because they have more food.
12. What would happen to the population of **grasshoppers** if the **hawks were removed** (taken away) from the food web?
The grasshoppers would decrease because they would have too many predators.