**Human Impact on the Biosphere Questions:**  Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Earth- I can explain how human activities impact, biosphere, nutrient cycles and the water cycle*

Refer to the article and respond to the following questions. **/10**  **NY EM D P EX**

1. What is biodiversity? /1
2. What is the difference between an ecosystem/community with a high biodiversity versus a low biodiversity? /2
3. Why is high biodiversity beneficial to an ecosystem? State two reasons. /2
*
1. List 2 ways that biodiversity can benefit humans? /2
*
*
1. What is anthropogenic change? Give 2 examples of actions that negatively impact biodiversity.
 /3

*Earth- I can explain how energy flows through the biosphere and abiotic and biotic factors influence biodiversity and organisms at different trophic levels*  **/12**  **NY EM D P EX**

1. Use the internet to look up and define the terms biomagnefication and bioaccumulation. /2

Bioaccumulation-

Biomagnefication-

1. Refer to the article and the diagram below to answer the following questions
2. How does this diagram demonstrate biomagnification
 and bioaccumulation of toxins in this food chain? /2
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3. Which organism in this food chain would be most negatively impacted by chemicals like DDT and PCB’s in the environment? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Explain why?** /2
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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 **Concentration
 Toxins in body tissues**

1. Mercury is another substance that will bioaccumulate in living organisms.
2. What are the major sources and causes of mercury pollution? /2
3. What are some side effects and/symptoms of mercury poisoning or exposure? /2
4. Explain how you personally could be exposed to mercury. How might you limit your mercury intake? Refer to diagram in article. /2

*Cut out the following organisms that represent a polar region aquatic food chain. Arrange them in order by trophic level on your desk! Check order with teacher. Then glue the organisms on the back of the first page of assignment questions. Label each trophic level, the type of consumer (herbivore, omnivore, carnivore) and energy flow arrows between organisms.*

-------------------------------------**cut along this line and then cut out organisms**----------------------------------------





Shrimp

Ringed Seal

Copepods

 

 Algae

Arctic Cod

Polar Bear

# File:Sun with sunglasses.jpg - Wikipediahttps://www.registrelep-sararegistry.gc.ca/document/doc2202/Atlantic_Cod_GTaylor.jpg