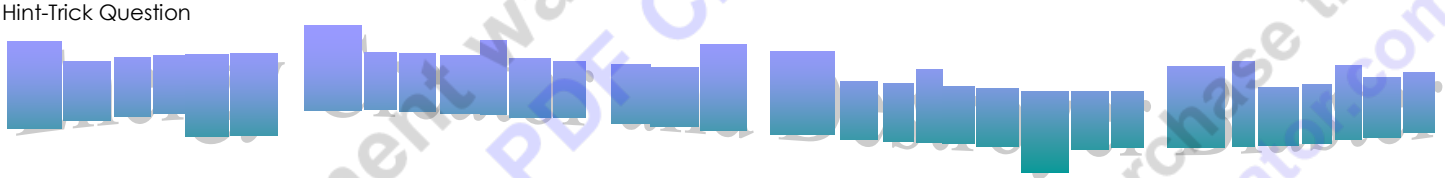
Ecology: Feeding Levels Unit

Name:
Due:

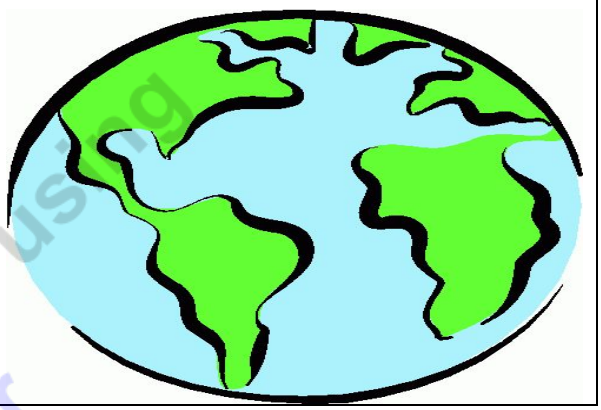
◊What is ecology and provide at least one reason why it is important to study?

◊Please respond to the Energy Creator and Destroyer Blaster below. Use your understanding of energy.

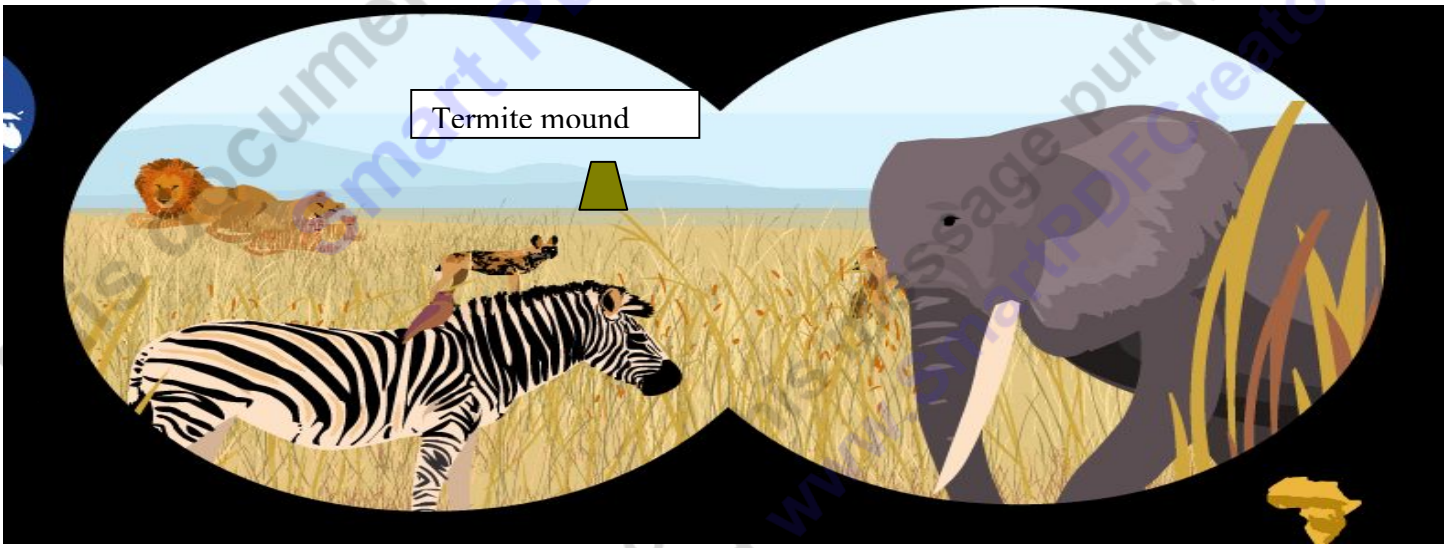
Hint-Trick Question



◊Please use the picture below to show where the energy on Earth comes from.



◊While on safari, you look through your binoculars and see the grassland ecosystem.
◊Please label the Producers, Consumers, 2nd order Consumers, and Scavengers.
◊Try and draw a decomposer if you can.



Producers:

Consumers:

2nd Order Consumers:

Decomposers – (termites on the grassland for wood)

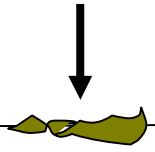
Scavengers:

◊ Complete the food chain with arrows showing energy flow through the ecosystem from start to finish.

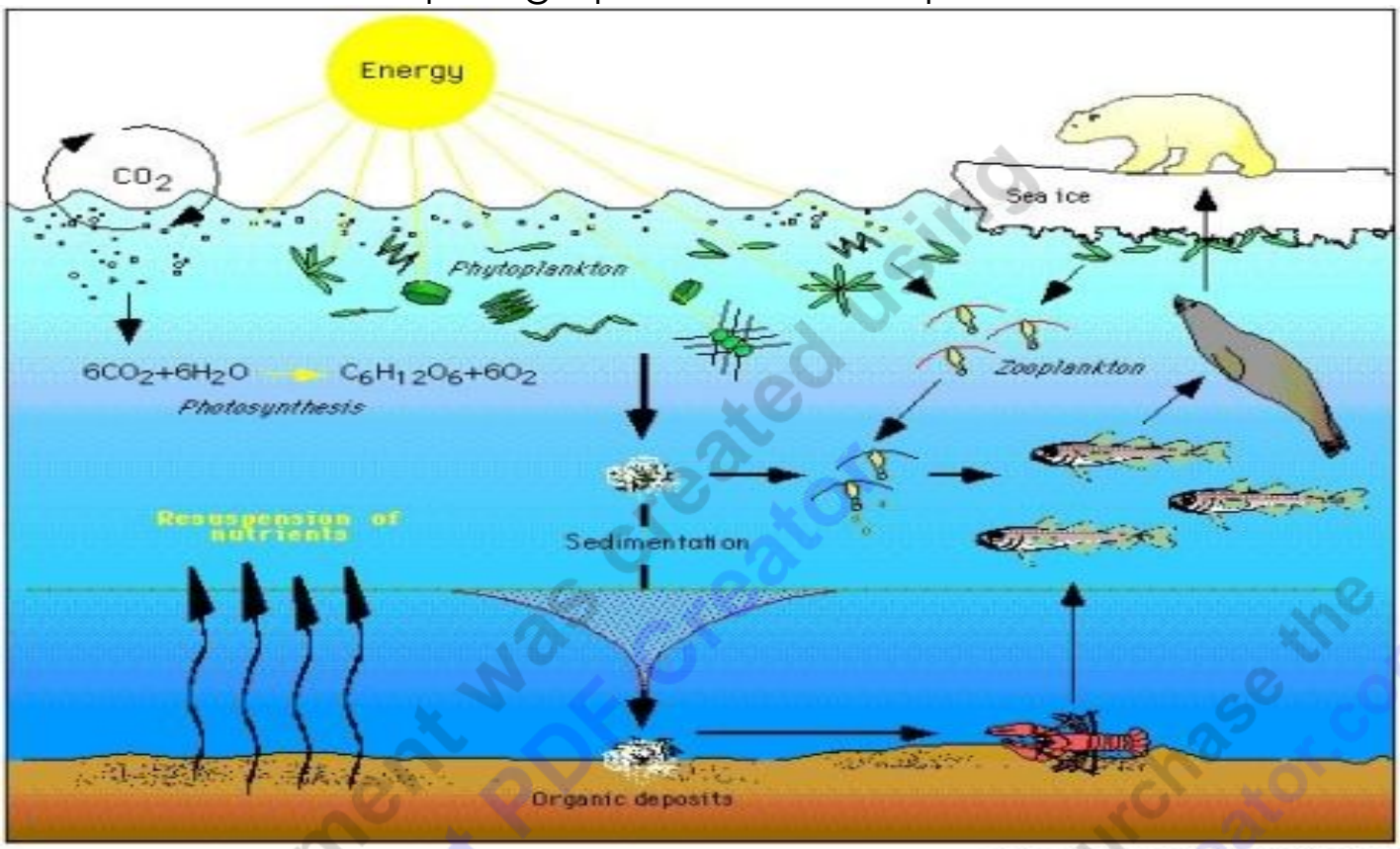
◊Label the following: Sun (Source of Energy), Producers, Consumer, 2nd Order Consumer, 3rd Order Consumer, Decomposer.

◊ Please draw a mushroom / fruiting body above ground and the mycelium network below ground.

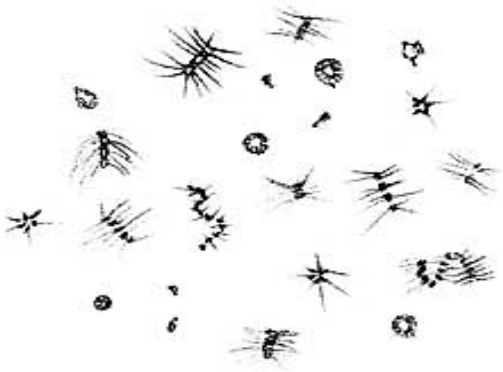
Scat



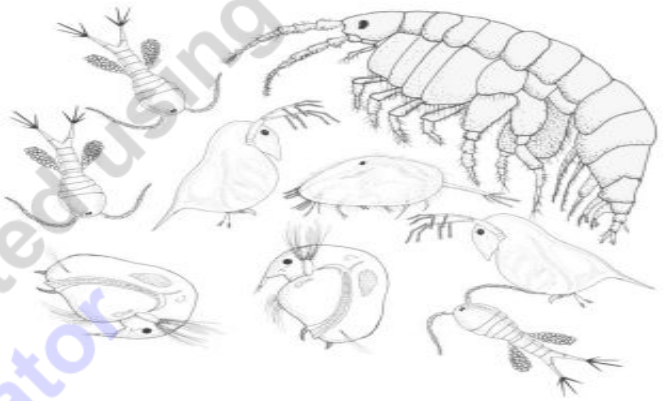
◊Please write a short paragraph about the aquatic food web below.



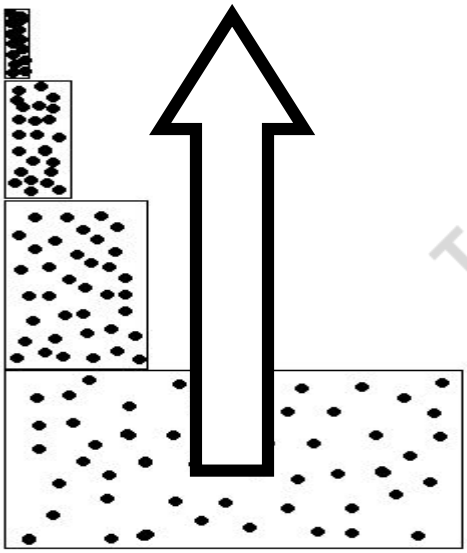
◊Which picture below represents zooplankton, and which represents phytoplankton?
◊What are the differences between the two?



(All of the above are green in color)



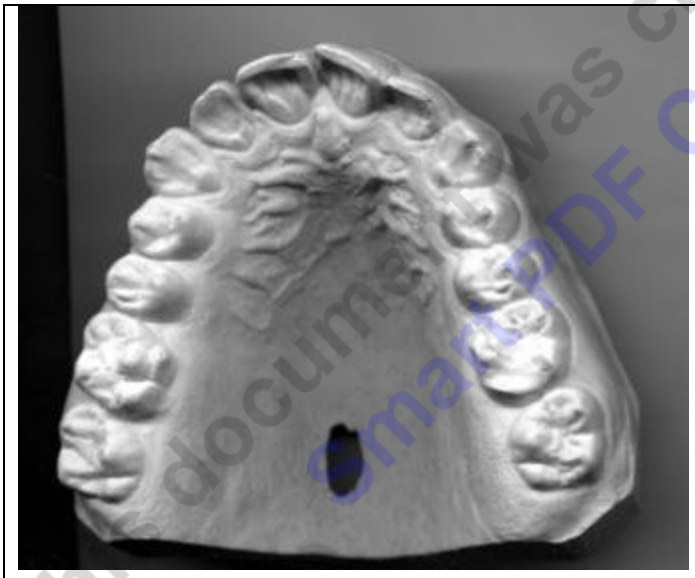
◊1) Please use your knowledge of bioaccumulation and biomagnification to describe the visual below.
◊2) Draw pictures of organism you might find next to each box.
◊3) What's happening to the levels of pollution as you move up the boxes?



◊Which statement from the group below is completely bogus? Can you make it correct?

- The ultimate source of energy (for most ecosystems) is the sun.
- The ultimate fate of energy in ecosystems is for it to become completely destroyed.
- Energy and nutrients are passed from organism to organism through the food chain as one organism eats another.
  - Decomposers remove the last energy from the remains of organisms.
  - Inorganic nutrients are cycled, energy is not.

◊Please label the following pictures of a human mouth with the correct dentition.



◊Please label the following skulls as herbivore, carnivore, or omnivore based on dentition and skull structure.

1.)_____

2.)_____

3.)_____

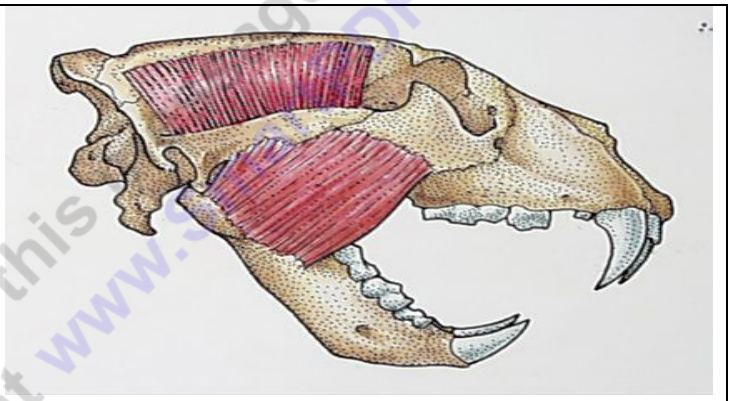
4.)_____

5.)_____

Warning! 3 Part question! ◊1) What can you identify on the skulls below?

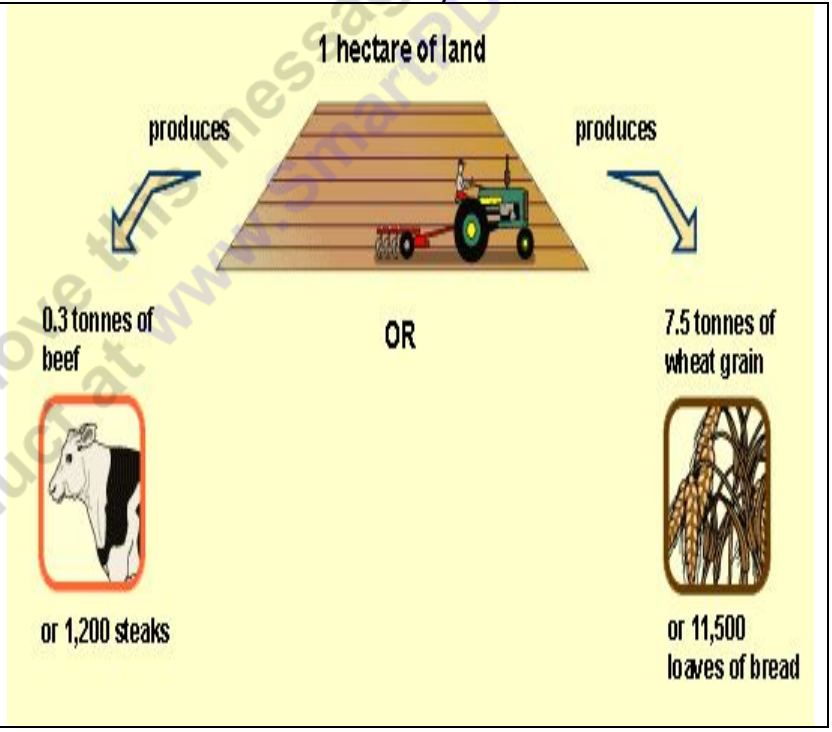
◊2) Which is a herbivore? Which is a carnivore?

◊3) Can you label any of the teeth or features of the skull?

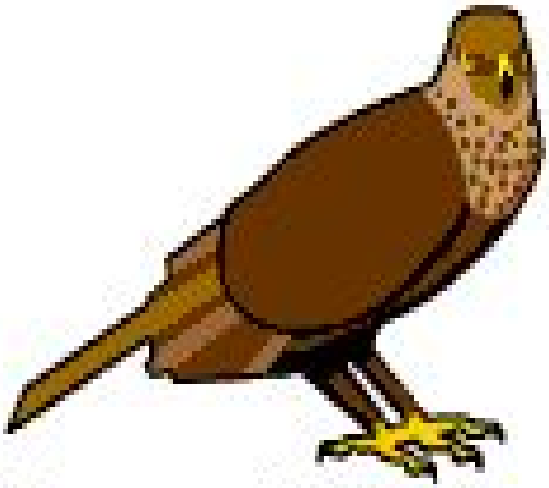


◊Which skull has homodont dentition, and which has heterodont?
◊What do these two terms mean?

◊Use the picture below to describe how being a vegetarian (eating only plants) uses less energy than someone who only eats meat.



◊Please create realistic numbers to the picture below for both a pyramid of numbers

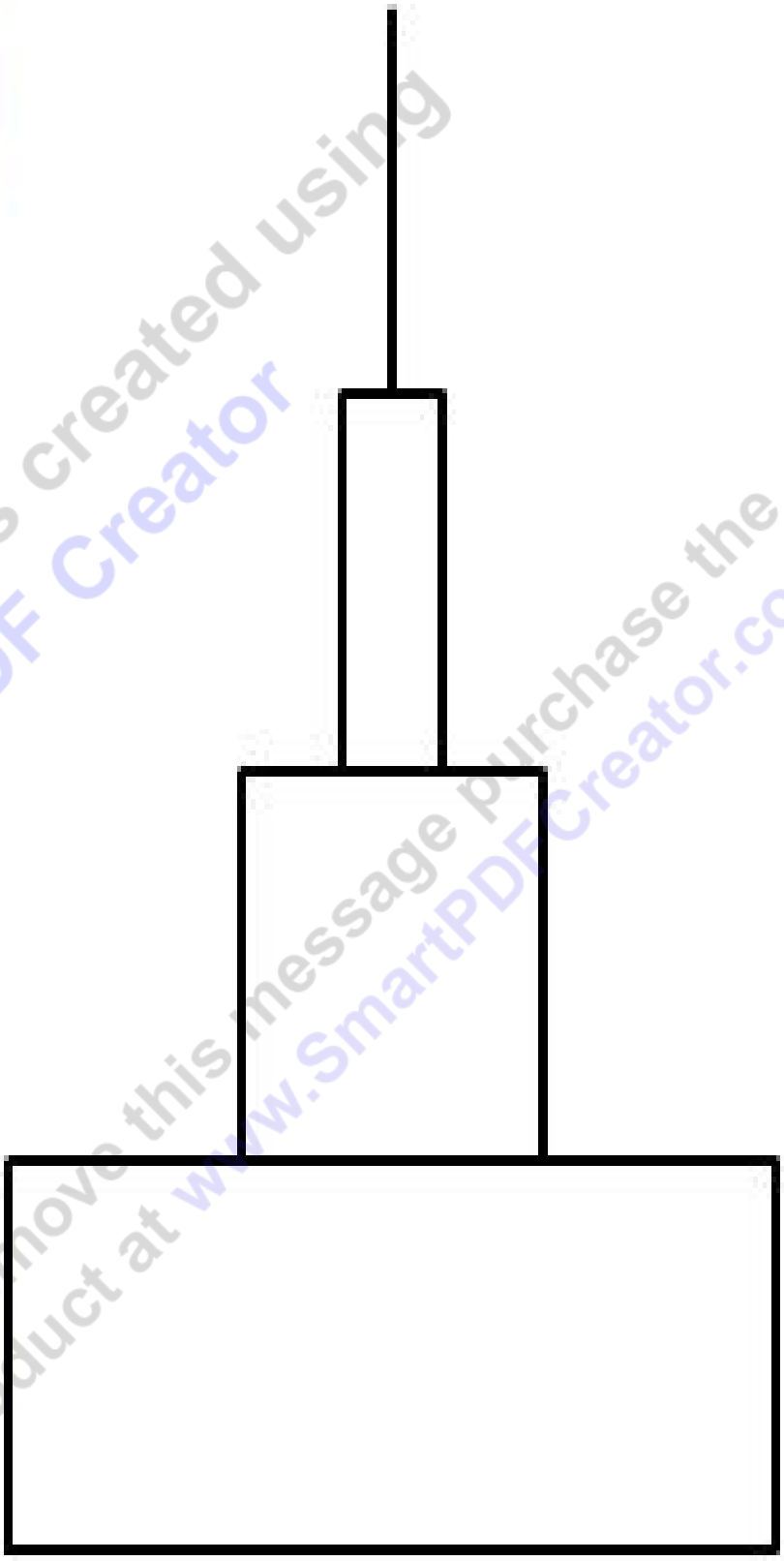


Sparrowhawk

Bluetit

Caterpillar

Oak tree



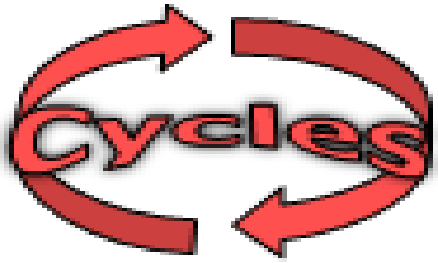
◊Please try and draw a colored arrow from the term to its definition below. Shade both the word and its definition with the same color. These are all of the teacher hero words that we covered.

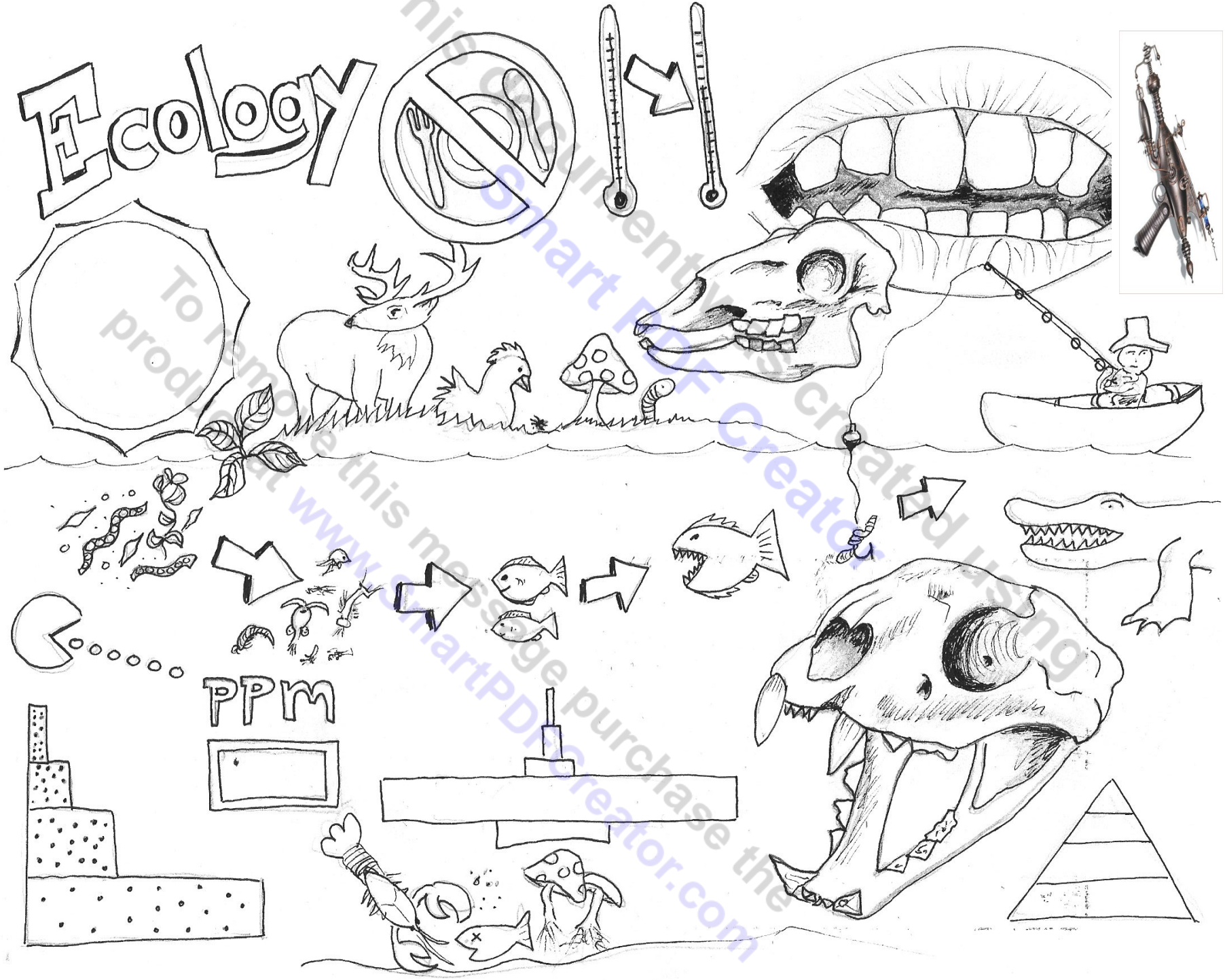
Food Chain Ecology Producer Consumer Decomposer Organism Phytoplankton Zooplankton Aquatic Biomass Inorganic Nutrients Ecosystem Cycle Concentrated Cells Biomagnification	• When pollution increases up food chain • Small unit of life • Study of organisms in environment • Weight of living material • Living in water • Not living • An organism that breaks down waste • An organisms that makes its own food • Chemicals living things need • To repeat • Tiny organisms that make their food • A living thing • Tiny organism that eats food • To gather together • An organisms that eats food • The place a group of organisms lives. • Group of organisms that feed upon another group.

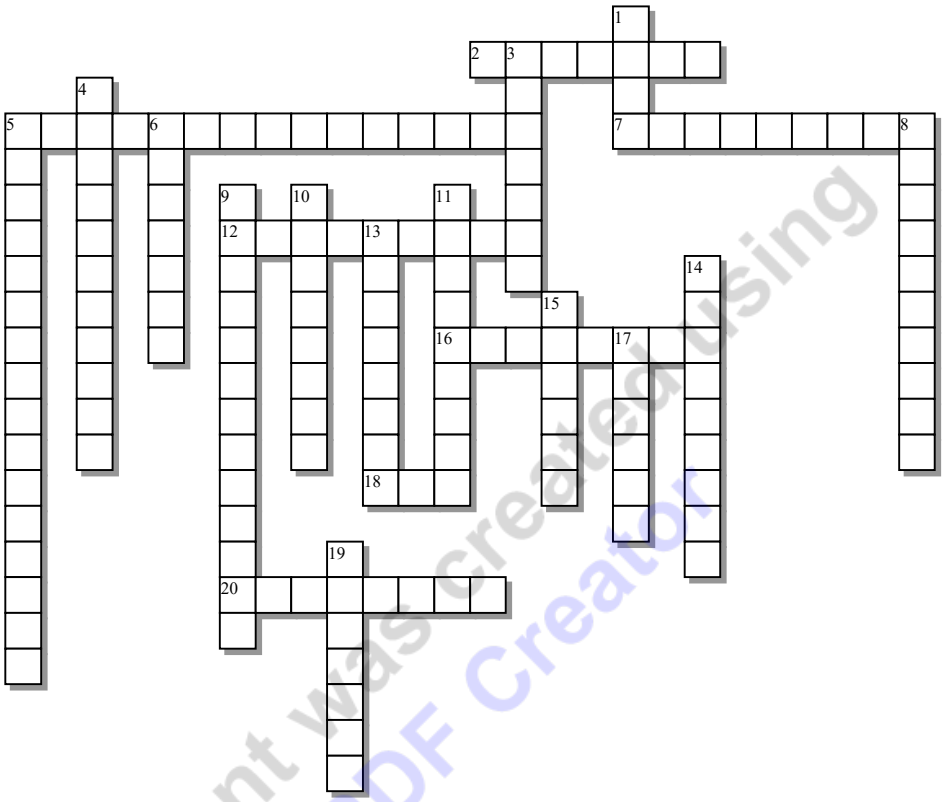
◊Since we are studying ecology, please create a picture of an aquatic environment full of organisms. Please include producers such as phytoplankton. In this ecosystem, consumers such as zooplankton feed to increase their biomass. Unfortunately, they also concentrate inorganic pollution in their cells which then biomagnifies up the food chain. When anything dies, decomposers return nutrients back to the system and the nutrient cycle continues.

Draw Here

What can you tell me about each of the pictures below? Try and provide an example from the unit.







Possible Answers for Crossword:
Bioaccumulation, Biomagnification, Biomass, Canines, Carnivore, Cold, Consumer, Created, Decomposer, Destroyed, Ecology, FoodChain, Herbivore, Incisors, Molars, Omnivore, Phytoplankton, Producer, Sun, Useful, Zooplankton

Across:

2 - This is the study of the relationships between living things and the environment.
5 - The process whereby an increasing amount of pollutants are concentrated in the cells of plants and animals.
7 - Energy cannot be created or _____.
12 - General name for an animal that only eats plants
16 - Name for an animal that eats plants or other animals.
18 - This provides all of the energy on Earth.
20 - General name for an animal that eats both plants and animals.

Down:

1 - Heat flows from warm to _____.
3 - These animal teeth are used for stabbing and killing.
4 - Tiny aquatic animals that cannot make their own food.
5 - When contaminants increase at each step of the food chain.
6 - Energy cannot be _____ or destroyed.
8 - Name for an organism that feeds on and breaks down organic matter.
9 - Very small free floating aquatic plants that get energy from sun.
10 - Name for an organism that can make its own food.
11 - This is a community of organisms where each member is eaten in turn by another member.
13 - These animal teeth are used for cutting.
14 - General name for an animal that eats only other animals.
15 - Energy goes from _____ to non useful.
17 - These large teeth are used for crushing and grinding.
19 - Pyramid of _____ - Is the total mass (quantity) at each level trophic level.