Ecology Unit Review

by

Ken Pitts

1) A population is

A. A group of different species living in the same area
B. A group of plants and animals interacting in the same area
C. A group of the same species that interact in the same area
D. A group of sparrows interacting with humans and cats

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2) Energy, soil, water, and a community make up

A. An ecosystem
B. A biome
C. A community
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C. A narrow niche
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Tomato hornworms only eat tomato plant leaves

4) Producers

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B. Produce biomass using heat from animals' bodies
C. Use the process of respiration to produce food
D. Use the sun's energy to manufacture their food

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5) Coyotes: Carnivores::

A. Plants: Producers
B. Plants: Herbivores
C. Plants: Nitrogen
D. Plants: Carbon

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6) Decomposers slowly release

A. Phosphorus into the atmosphere.
B. Carbon in CO_2 to become organic compounds in plants and animals.
C. The Nitrogen found in the proteins and nucleic acids from dead organisms.
D. Water found under the ground

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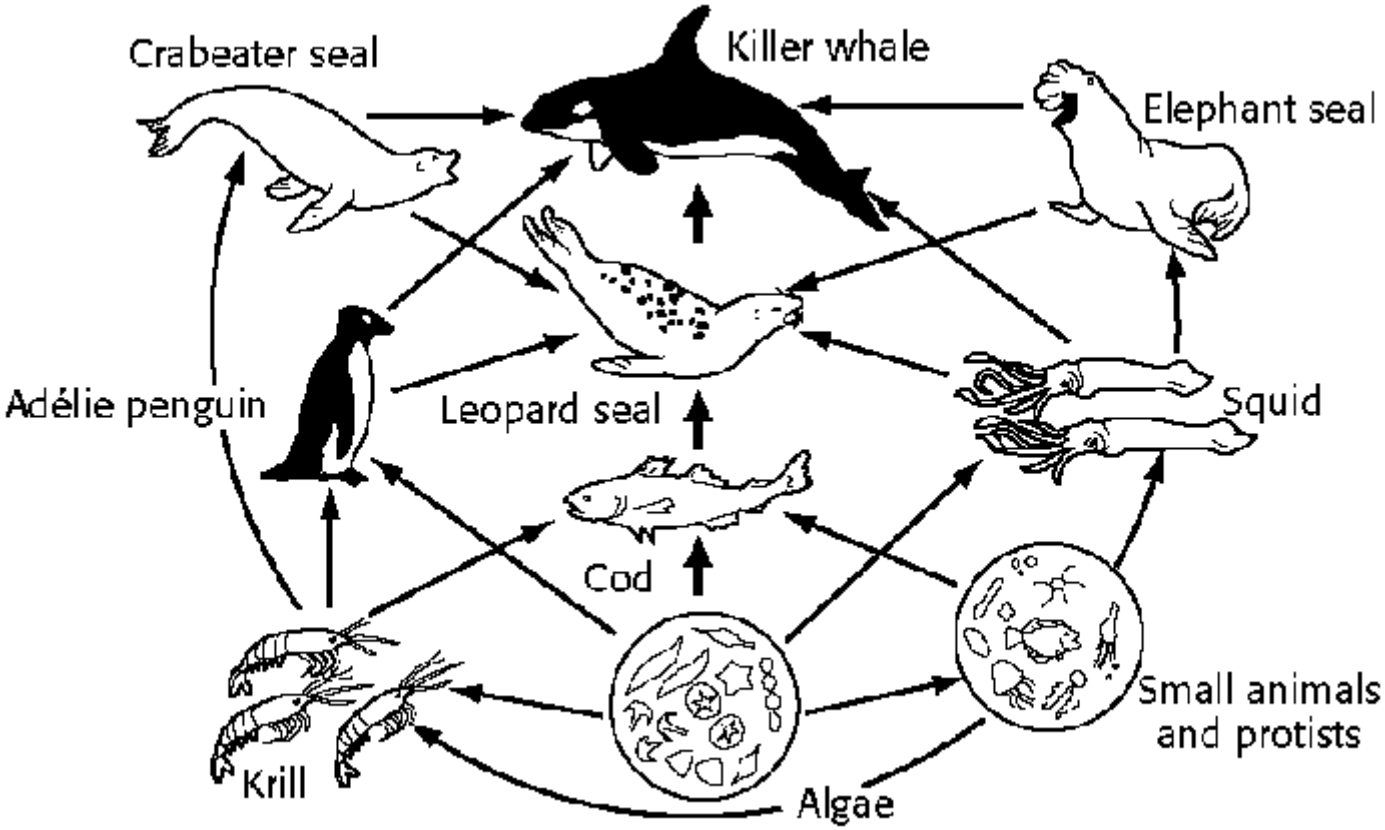


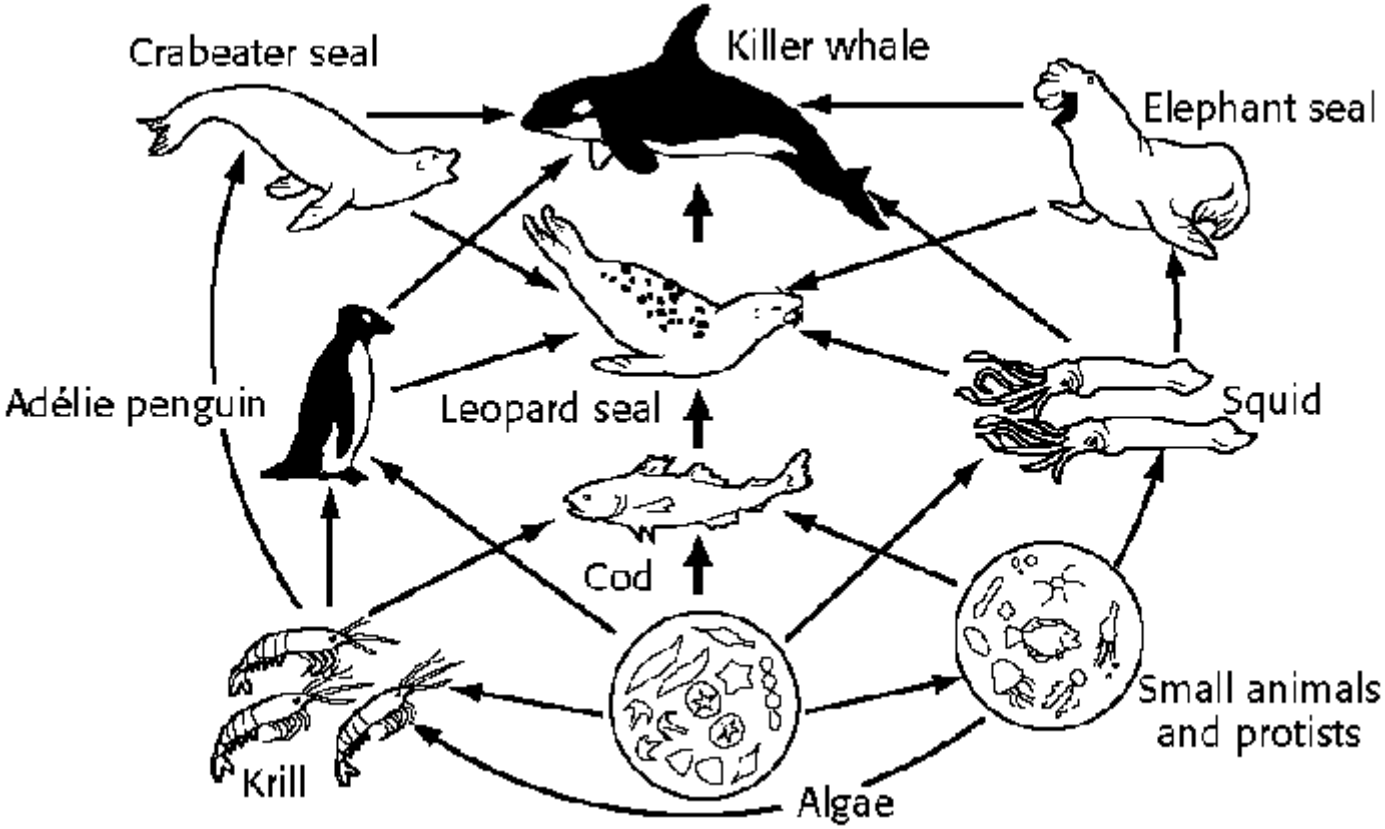
7) The Producers in the web are

A. Cod

B. Algae

C. Squid

D. Killer whales



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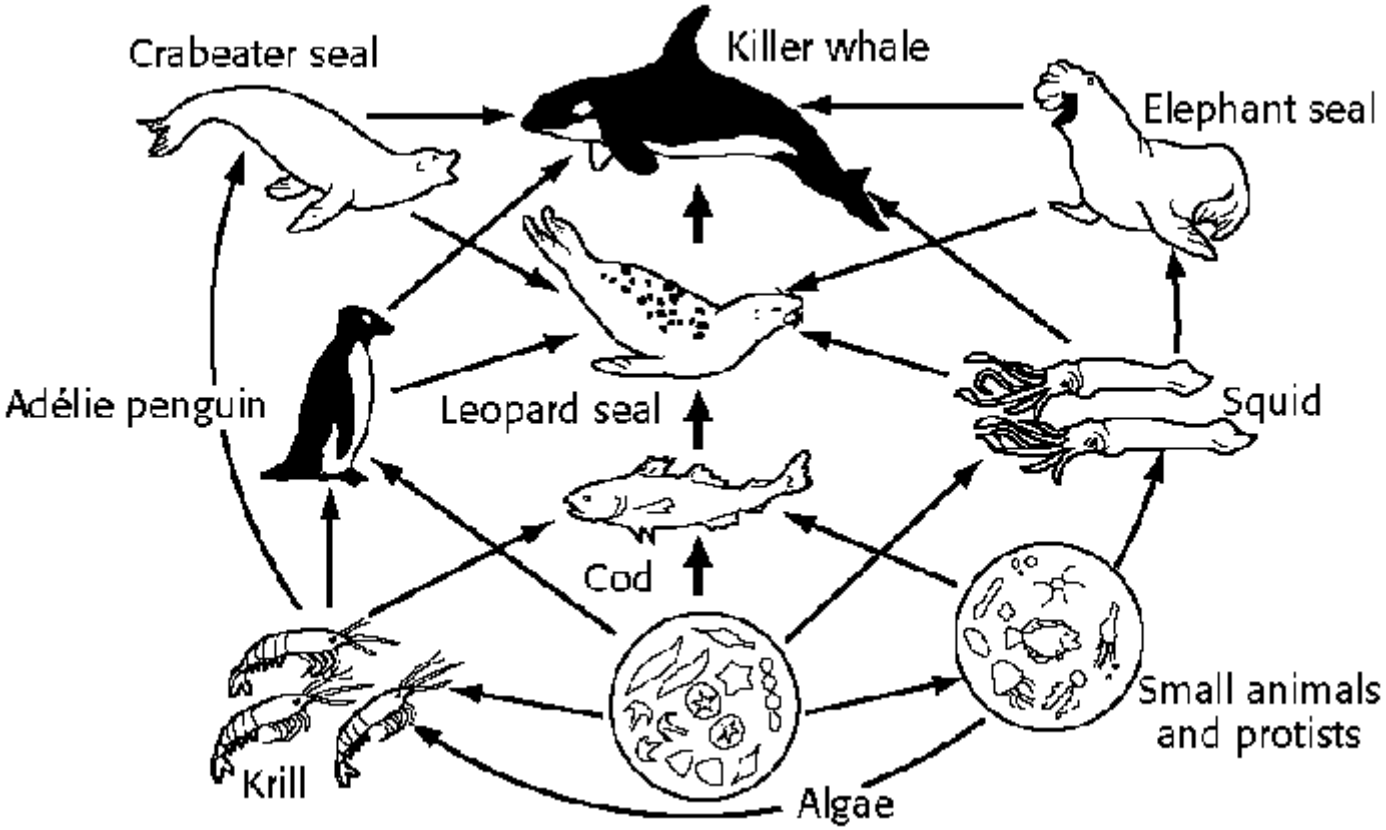
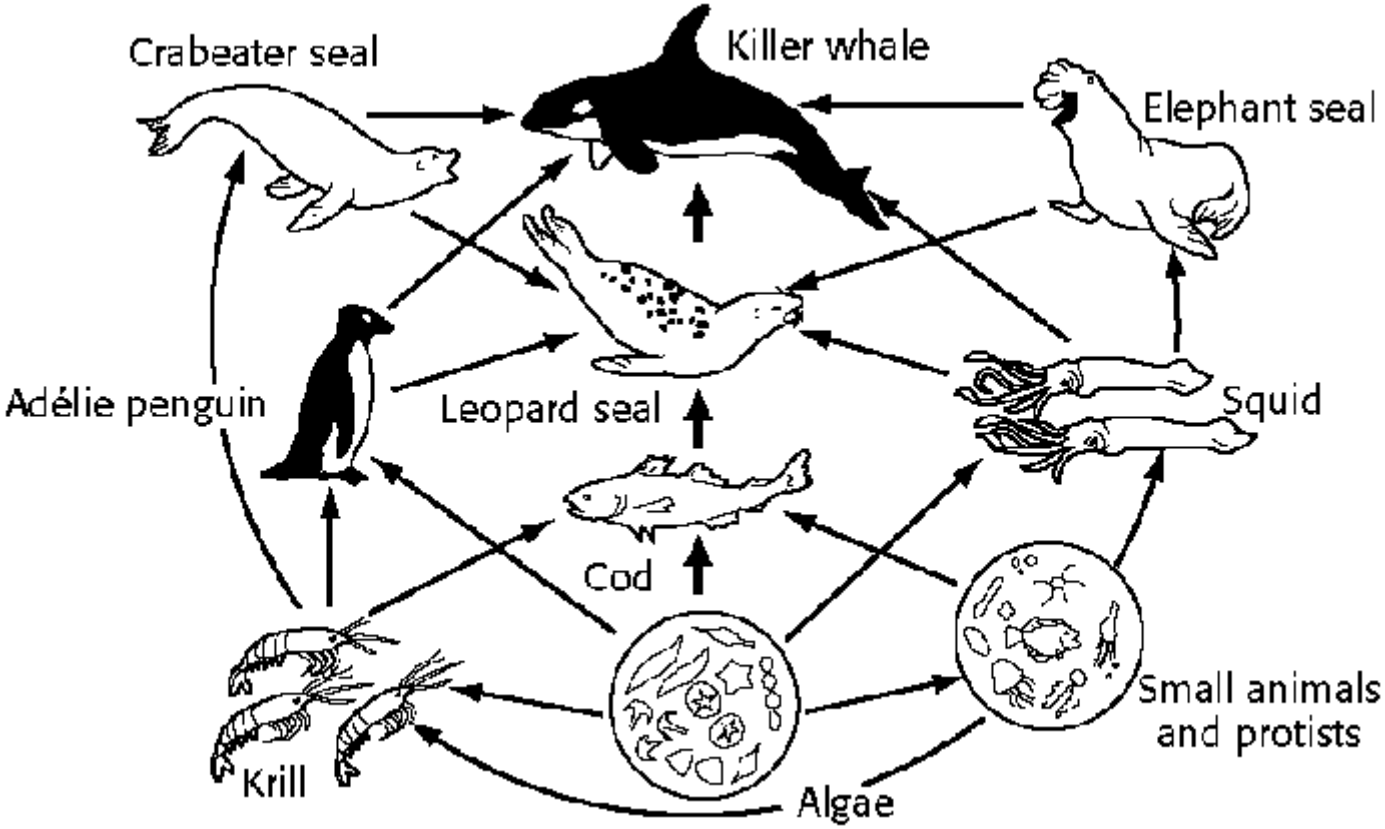


8) This diagram is

A. A trophic level energy pyramid
B. A food chain in the ocean
C. A pyramid of biomass
D. A food web in the ocean



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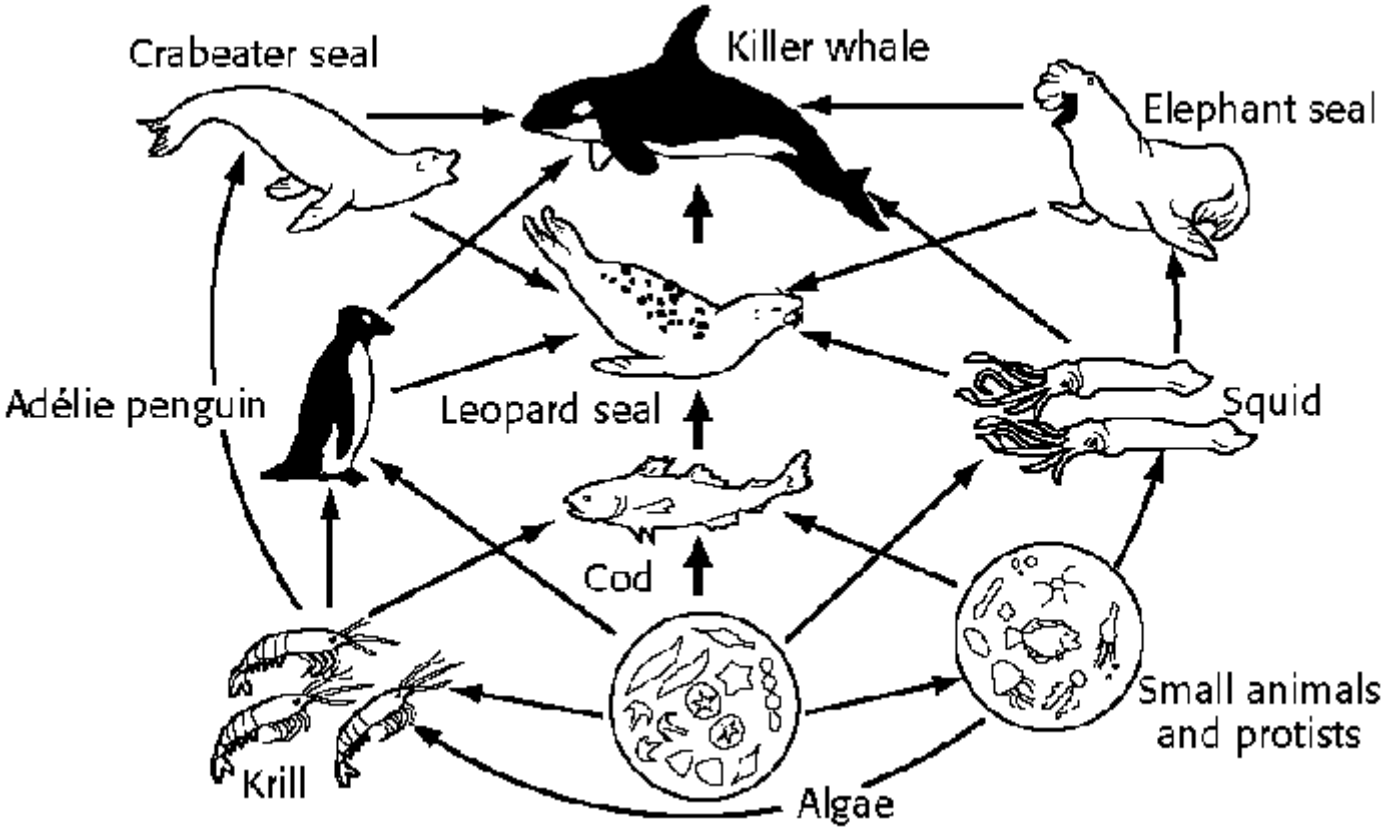
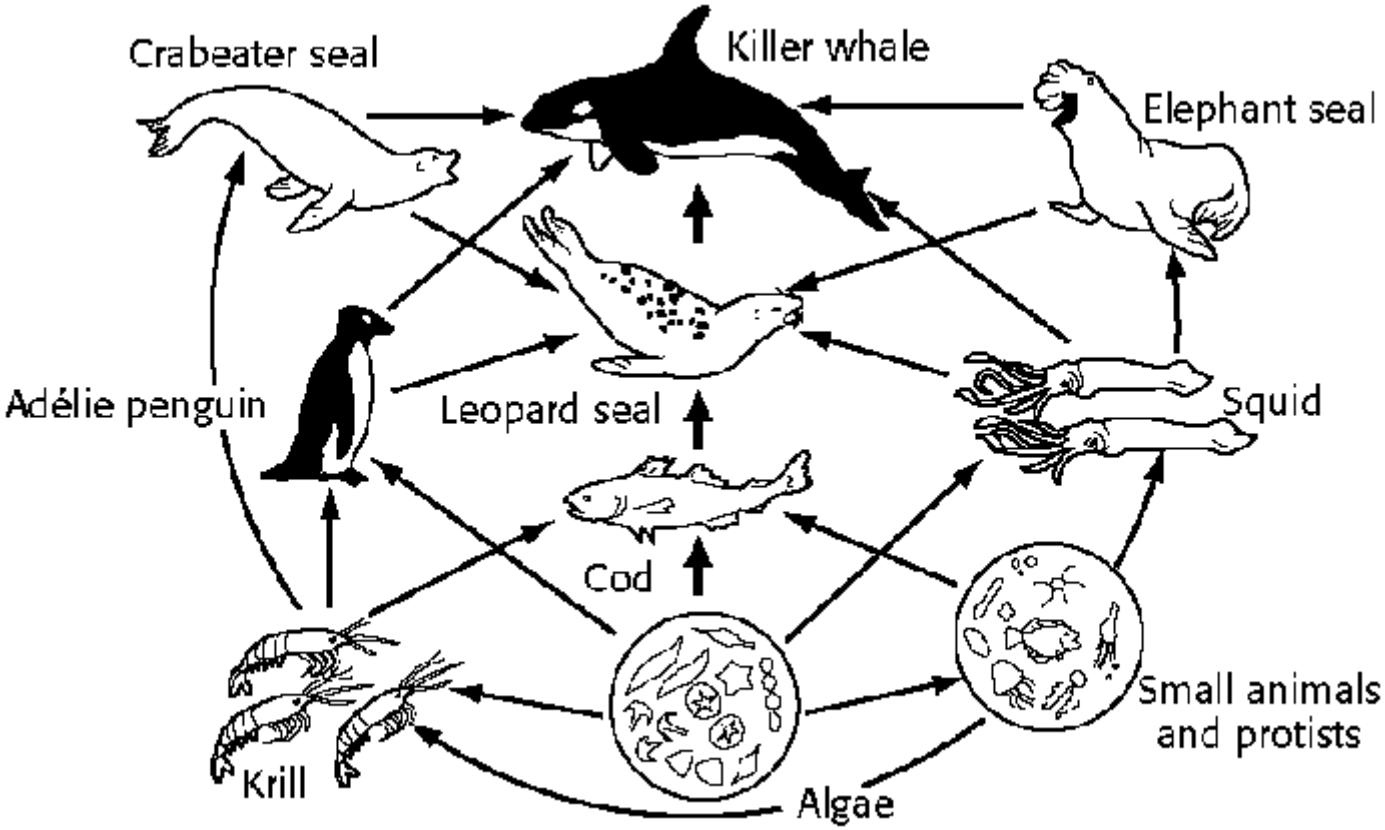


9) A carnivore in this diagram is

A. An elephant seal
B. Krill
C. Algae
D. Small animals and protists



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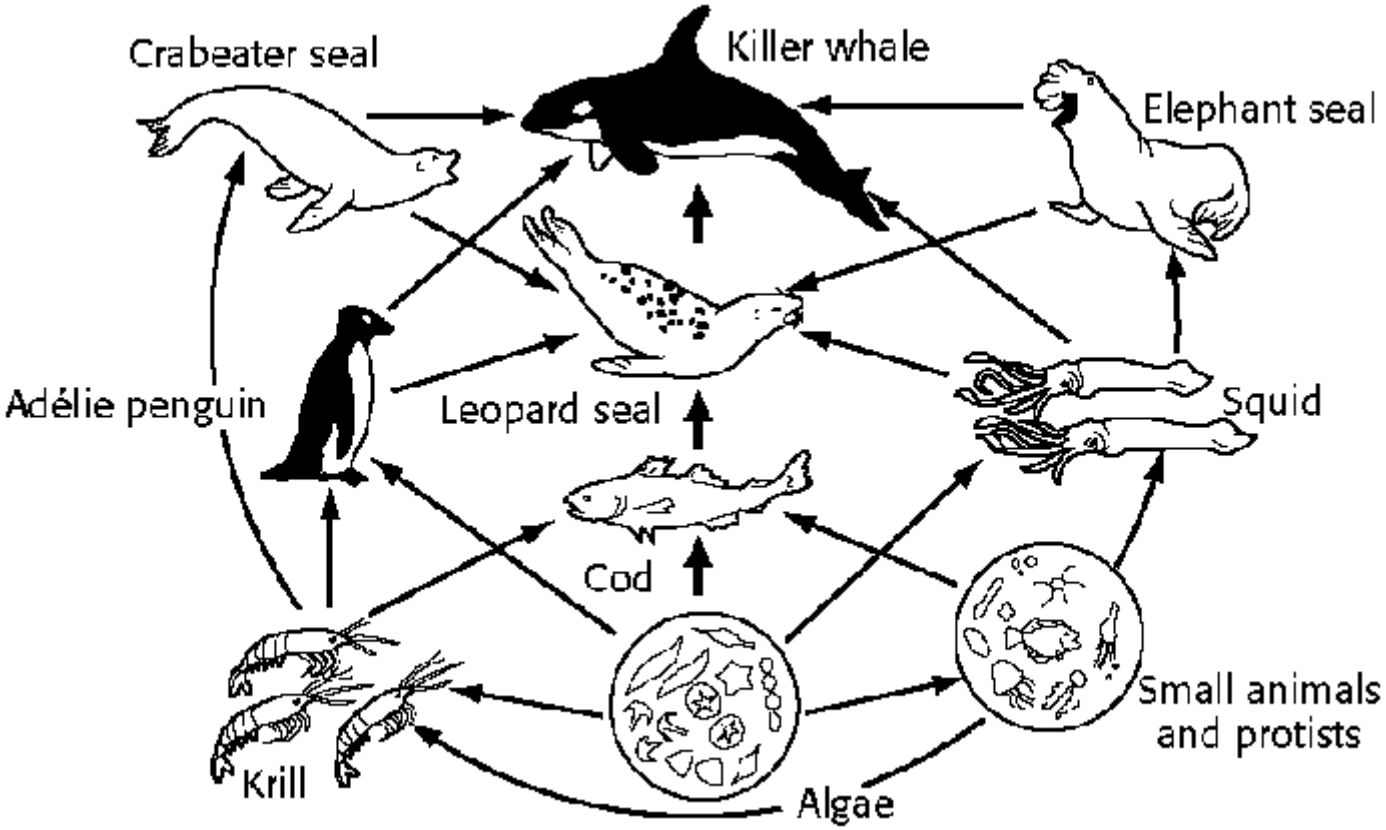
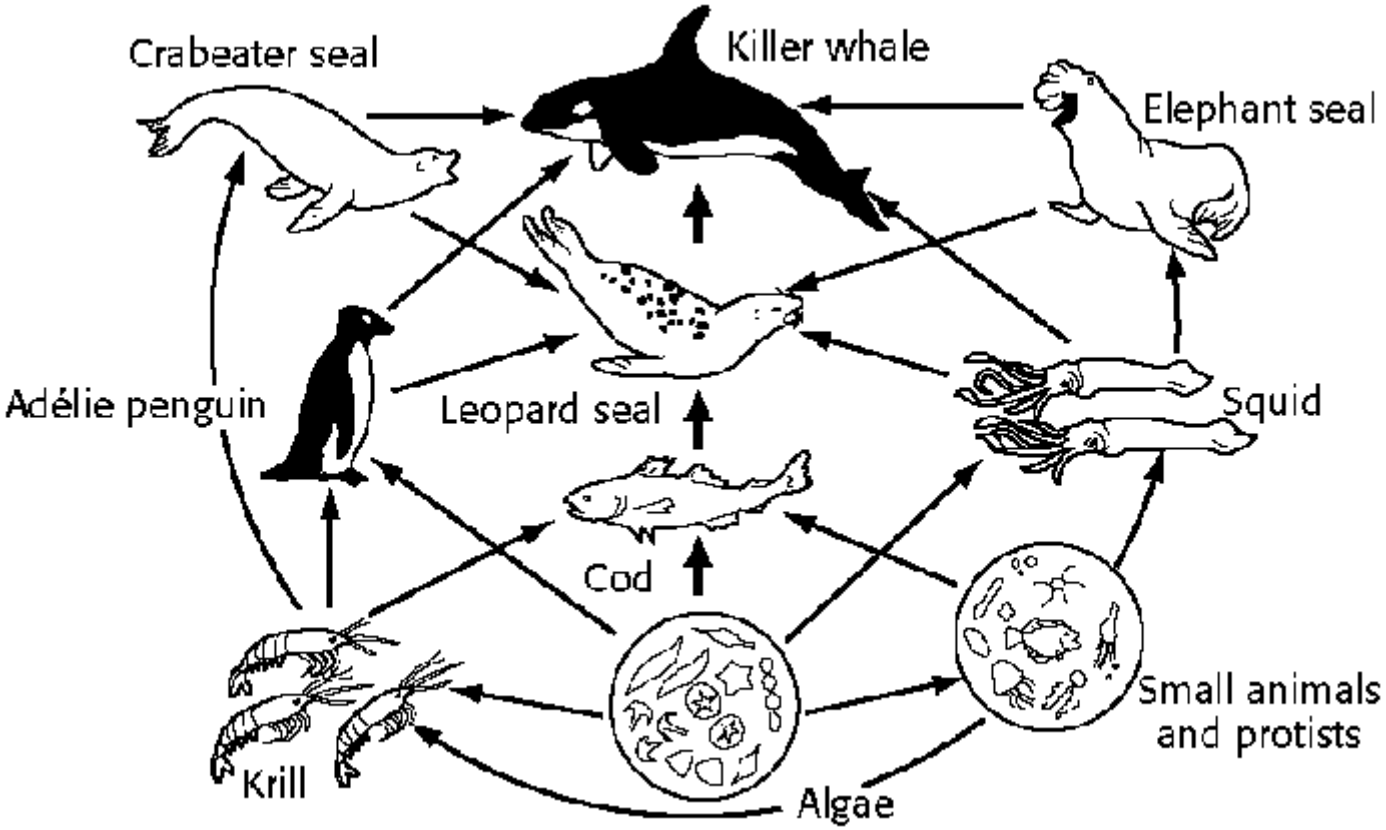


10) The killer whale is

A. At the highest trophic level
B. A 2nd order consumer
C. A 1st order consumer
D. An omnivore



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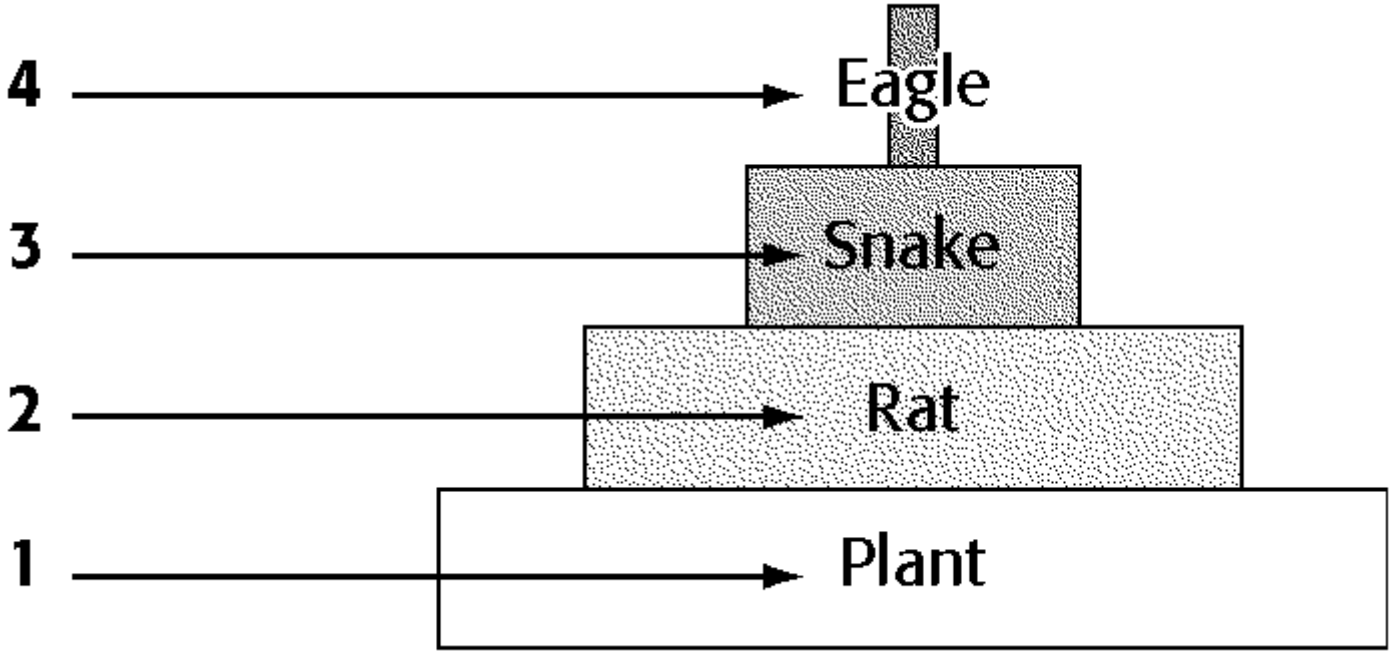
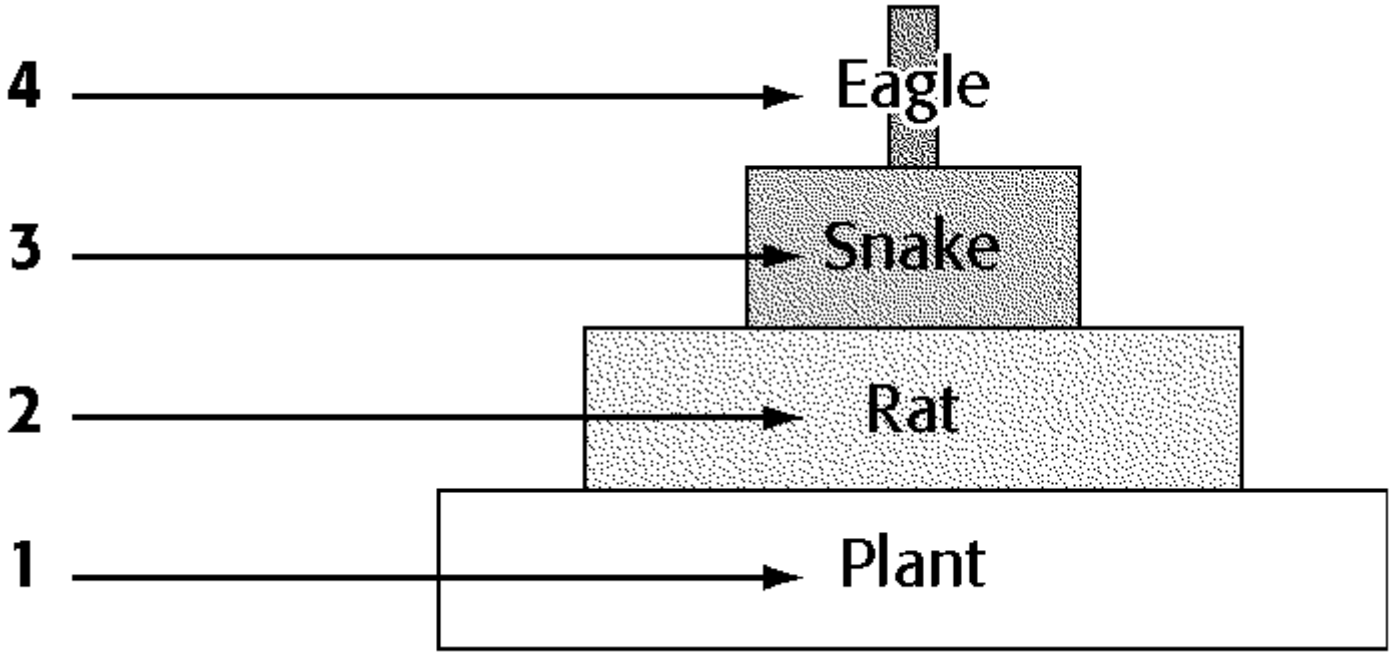


11) An animal that feeds on carnivores is at

A. Level 1
B. Level 2
C. Level 3
D. Level 4



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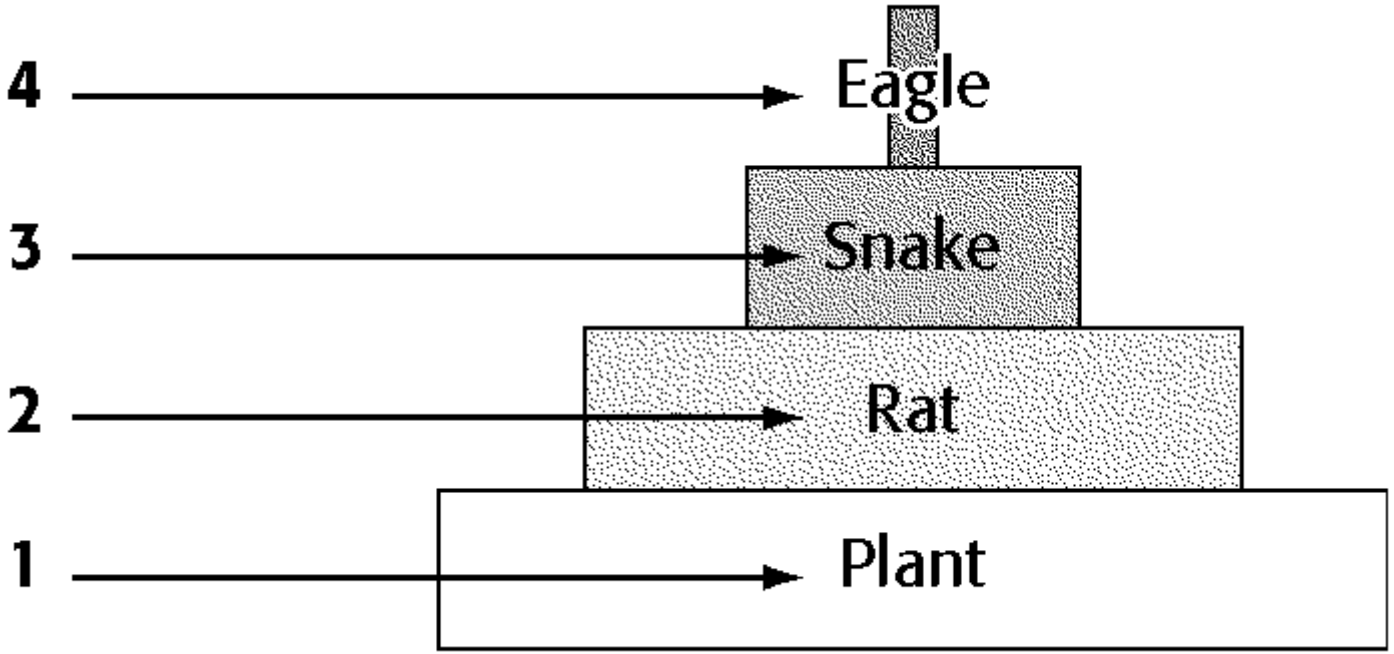

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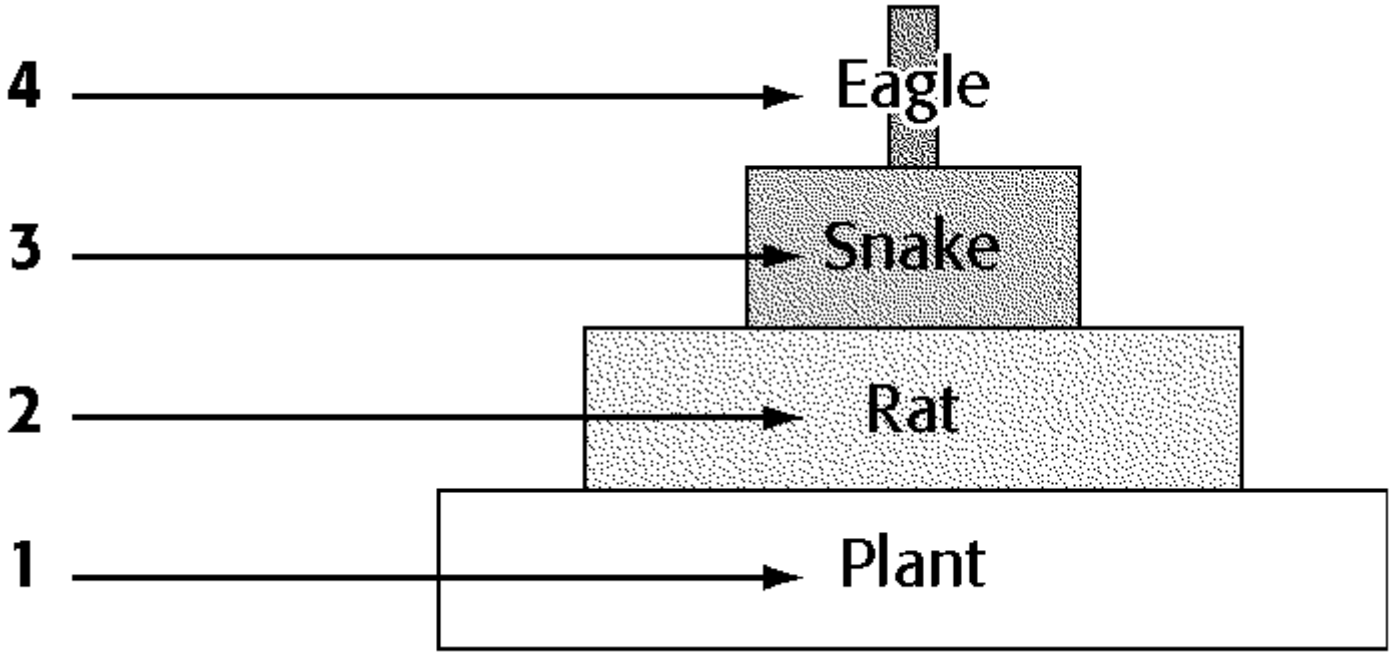

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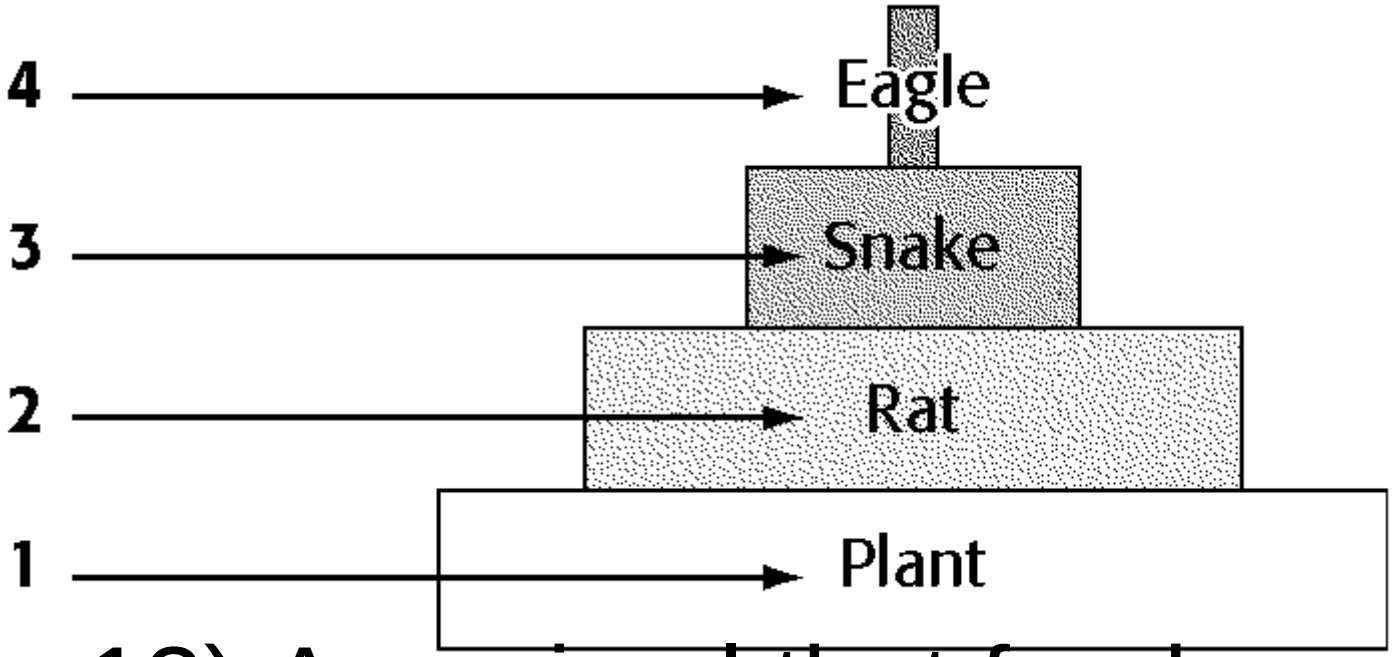

13) An animal that feeds on plant eaters is no lower than

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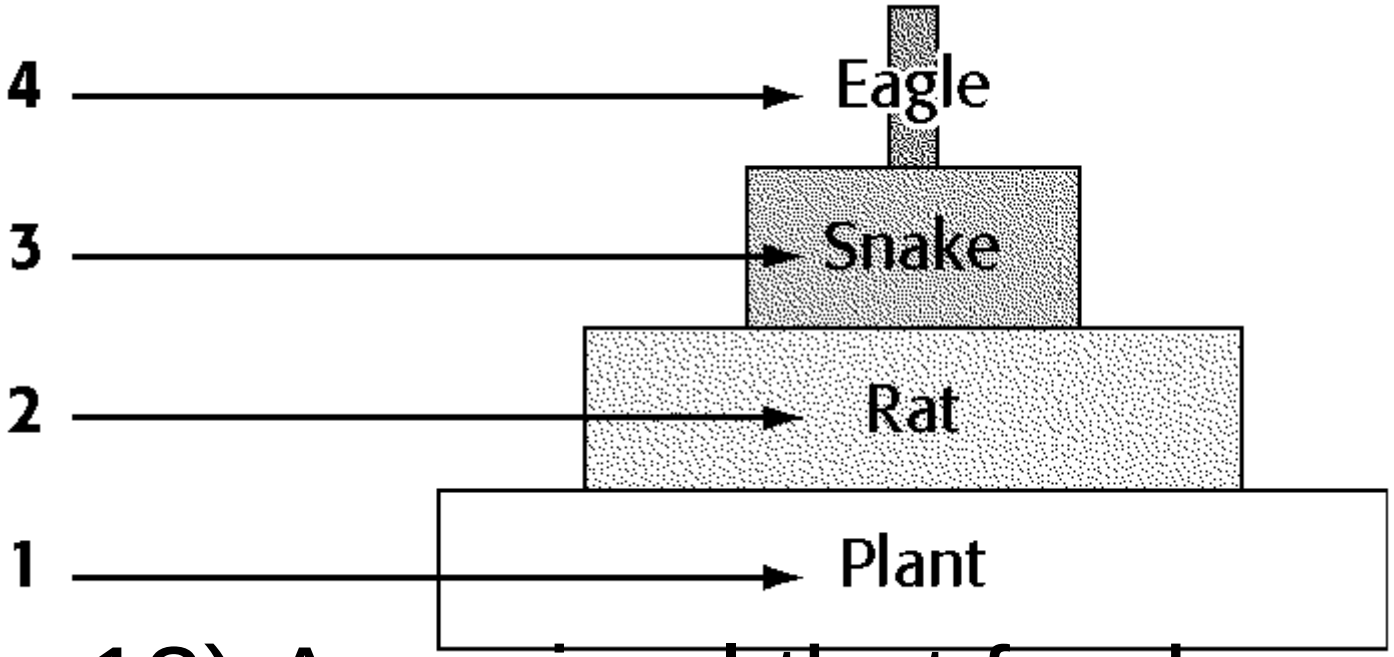

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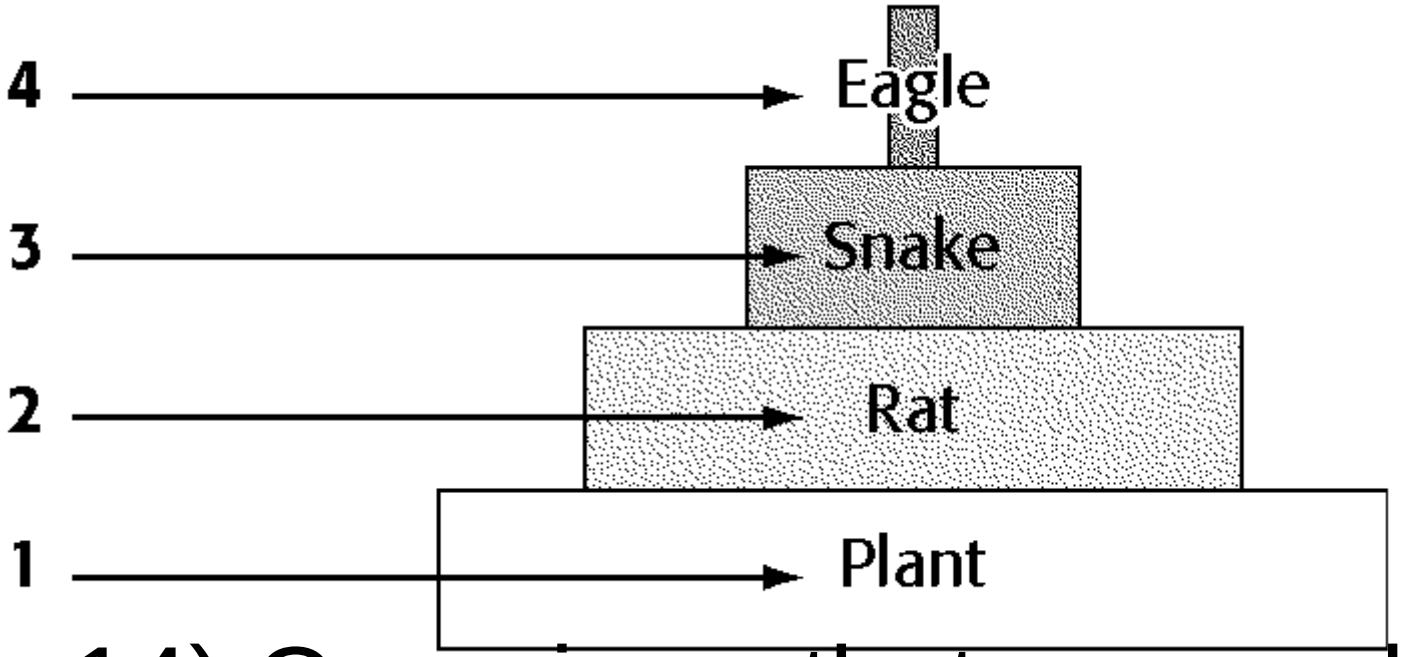

14) Organisms that are producers are all at

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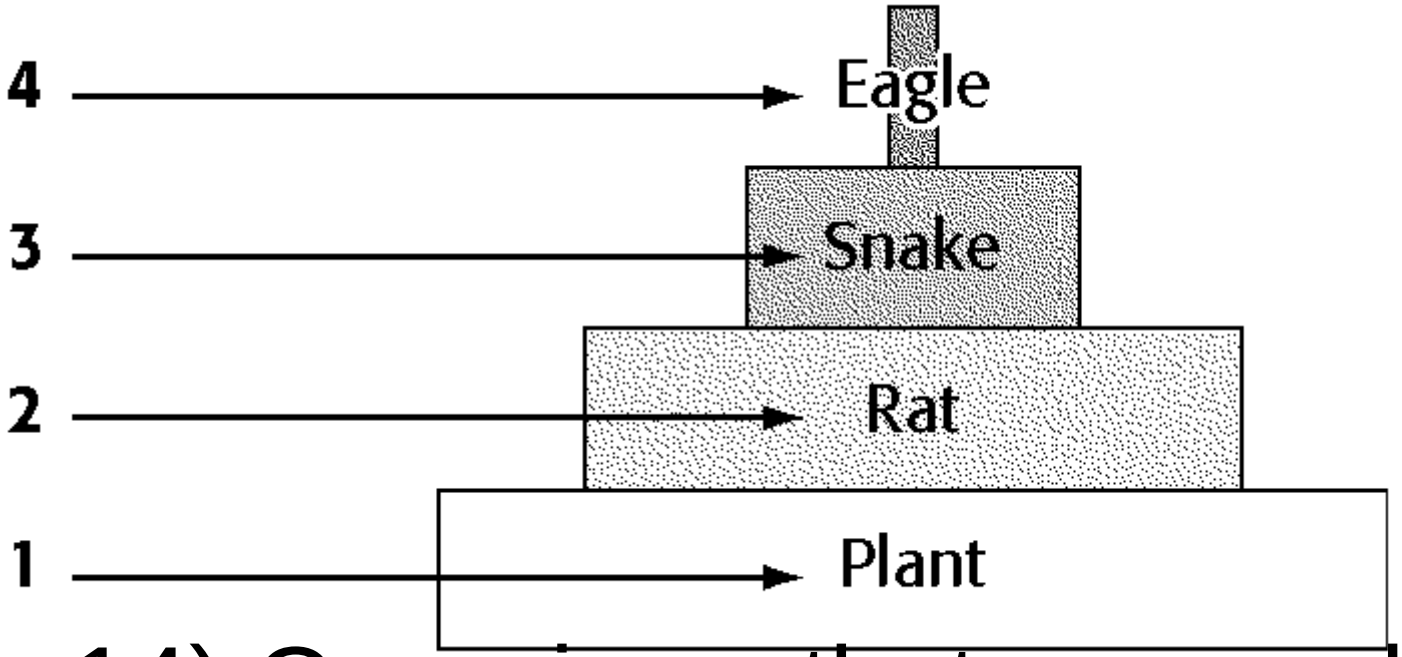

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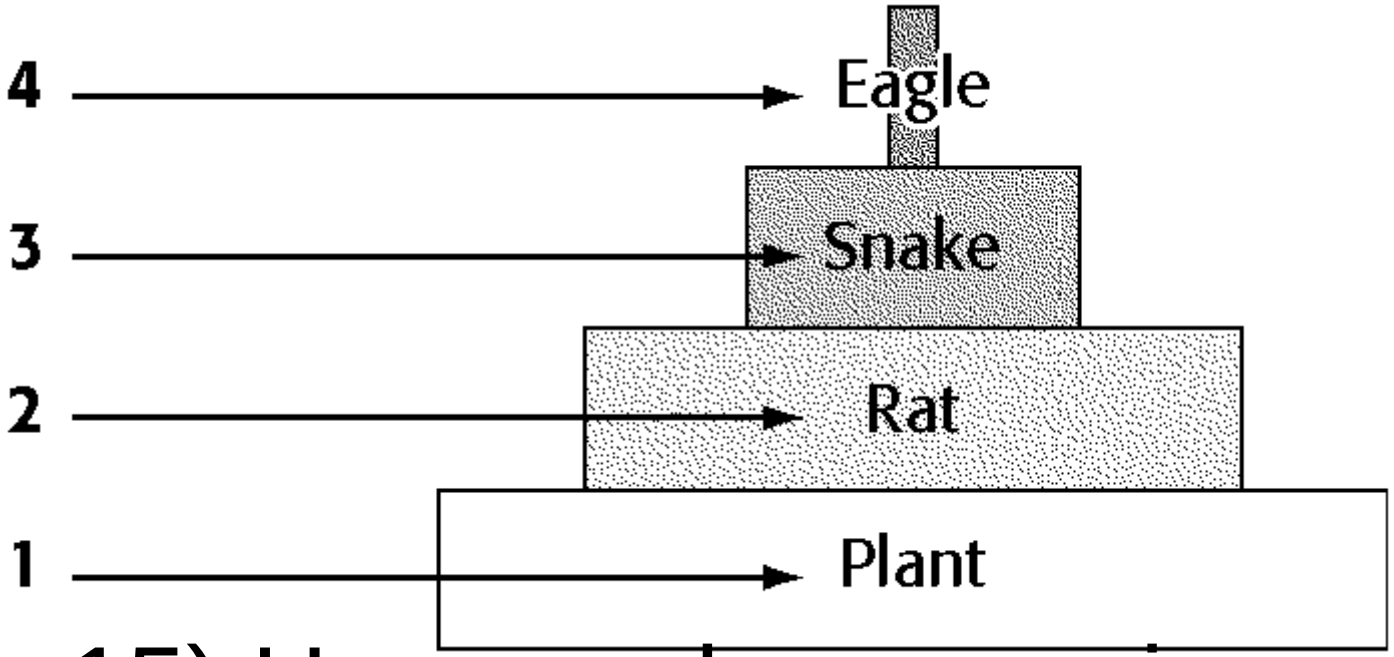
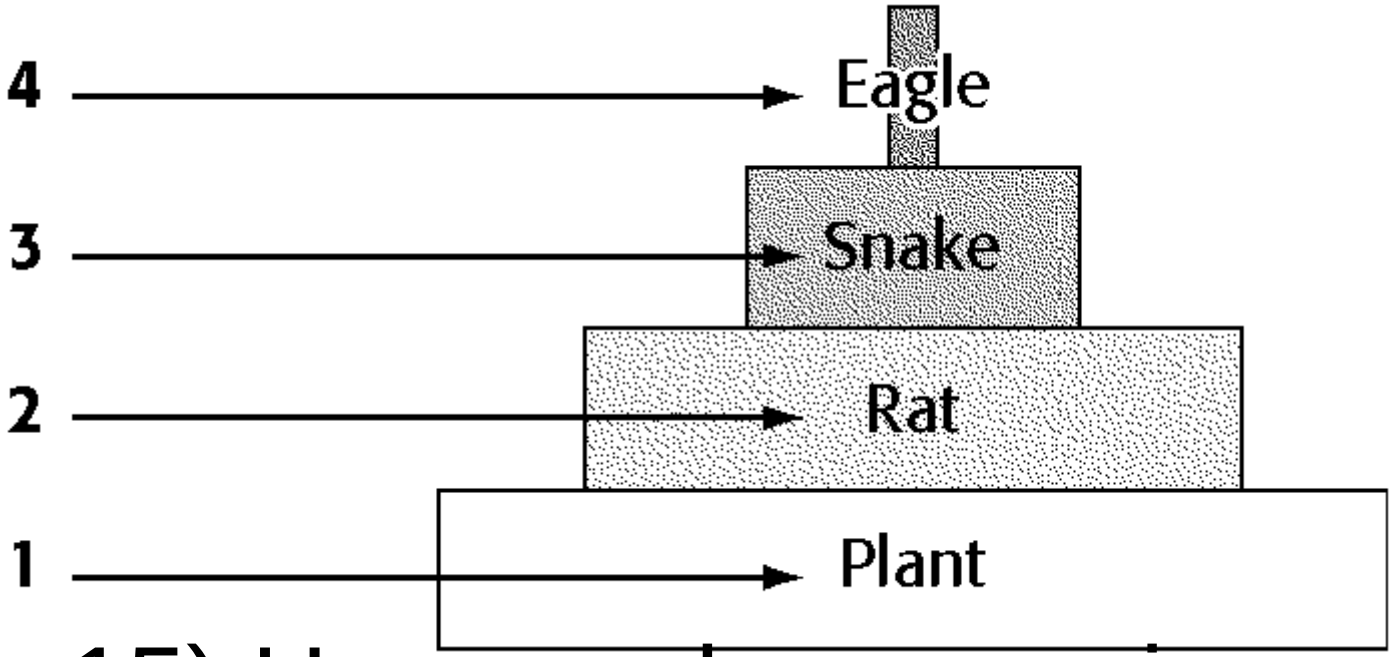


15) How much energy is available to level 4

A. All the energy of levels 1, 2, & 3
B. All the energy of levels 1 & 2 minus 3
C. 90% of the energy of level 3
D. 10% of the energy of level 3



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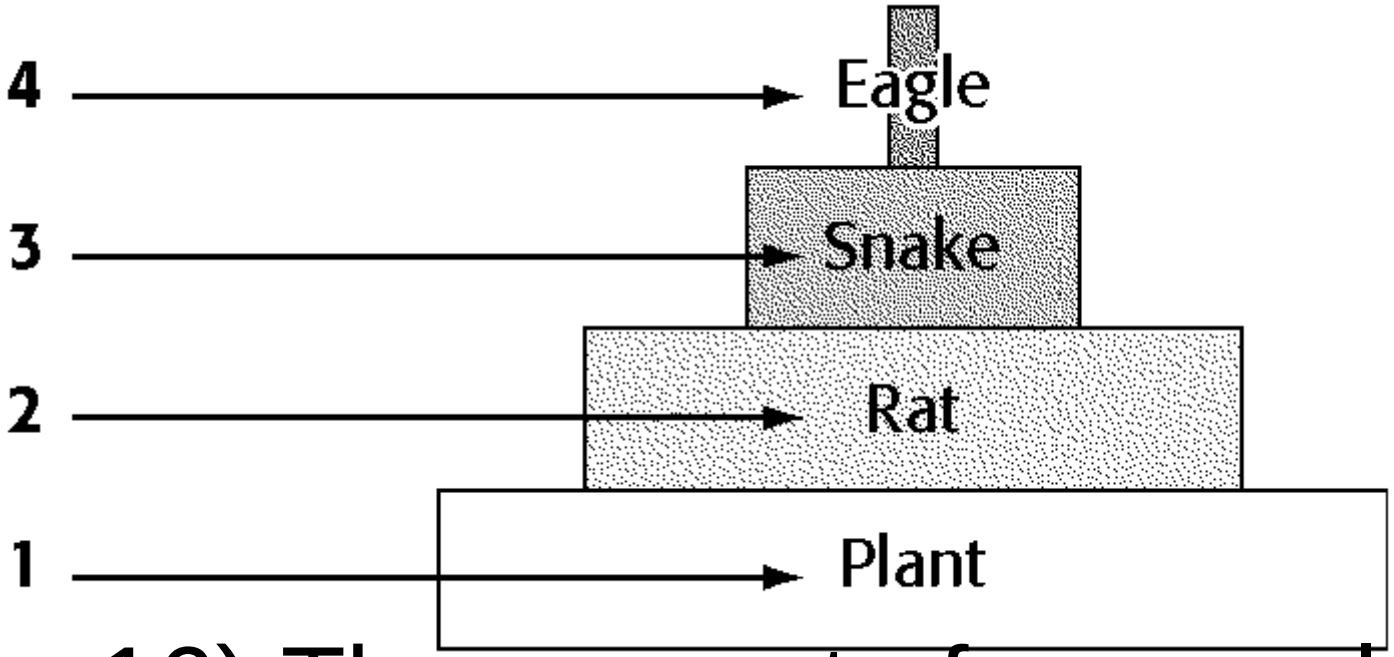
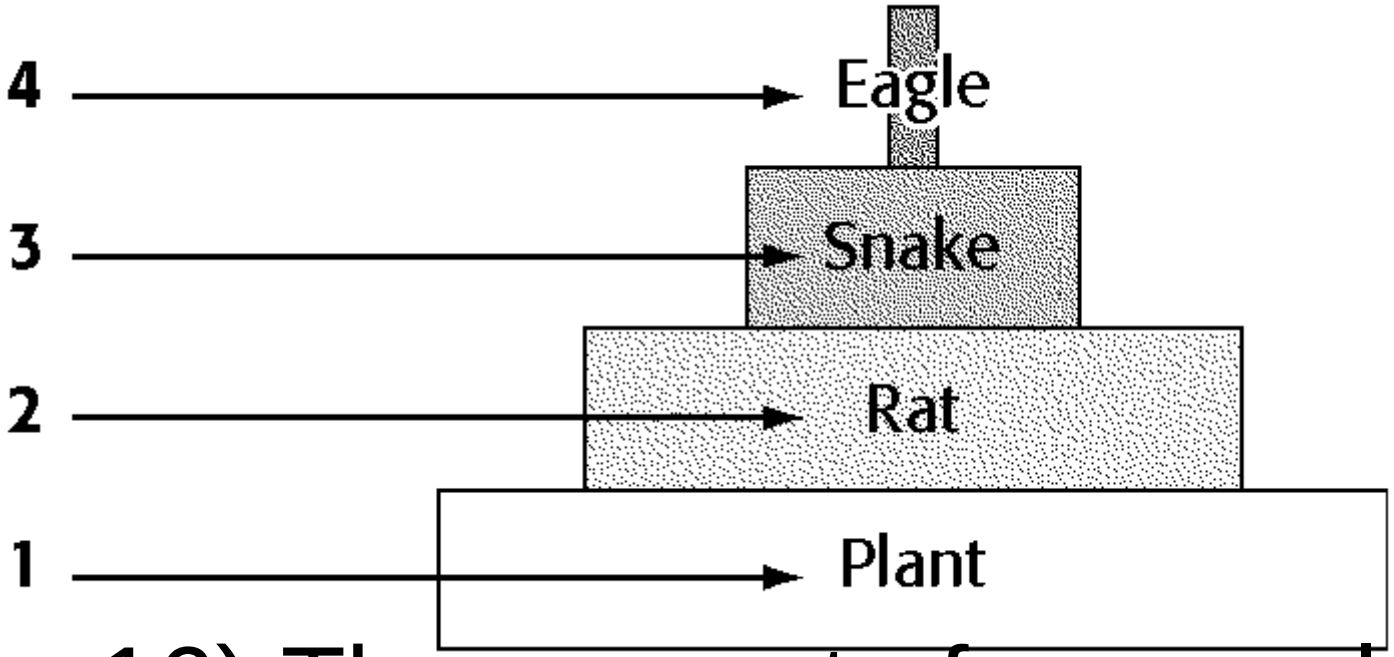


16) The amount of energy lost at each trophic level

A. Is not very much
B. Insures the numbers of top carnivores is high
C. Makes the number of trophic levels unlimited
D. Limits the number of trophic levels



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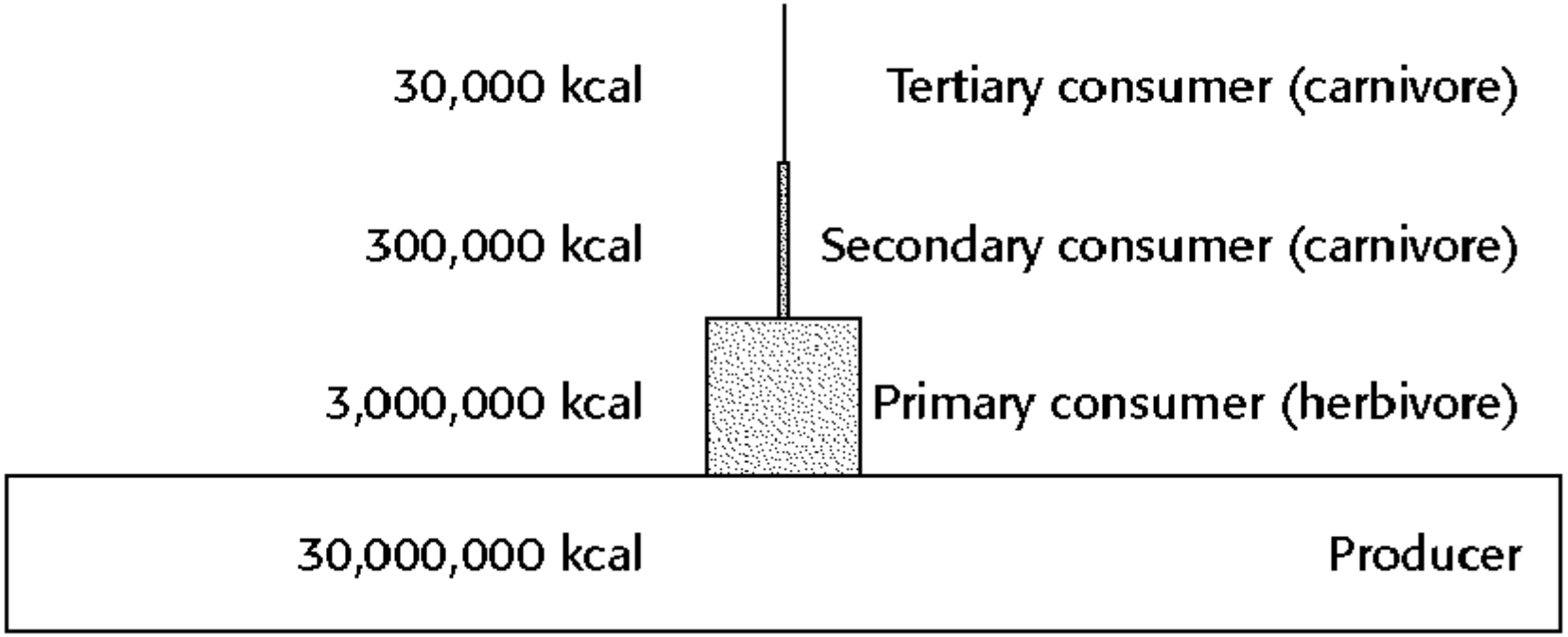
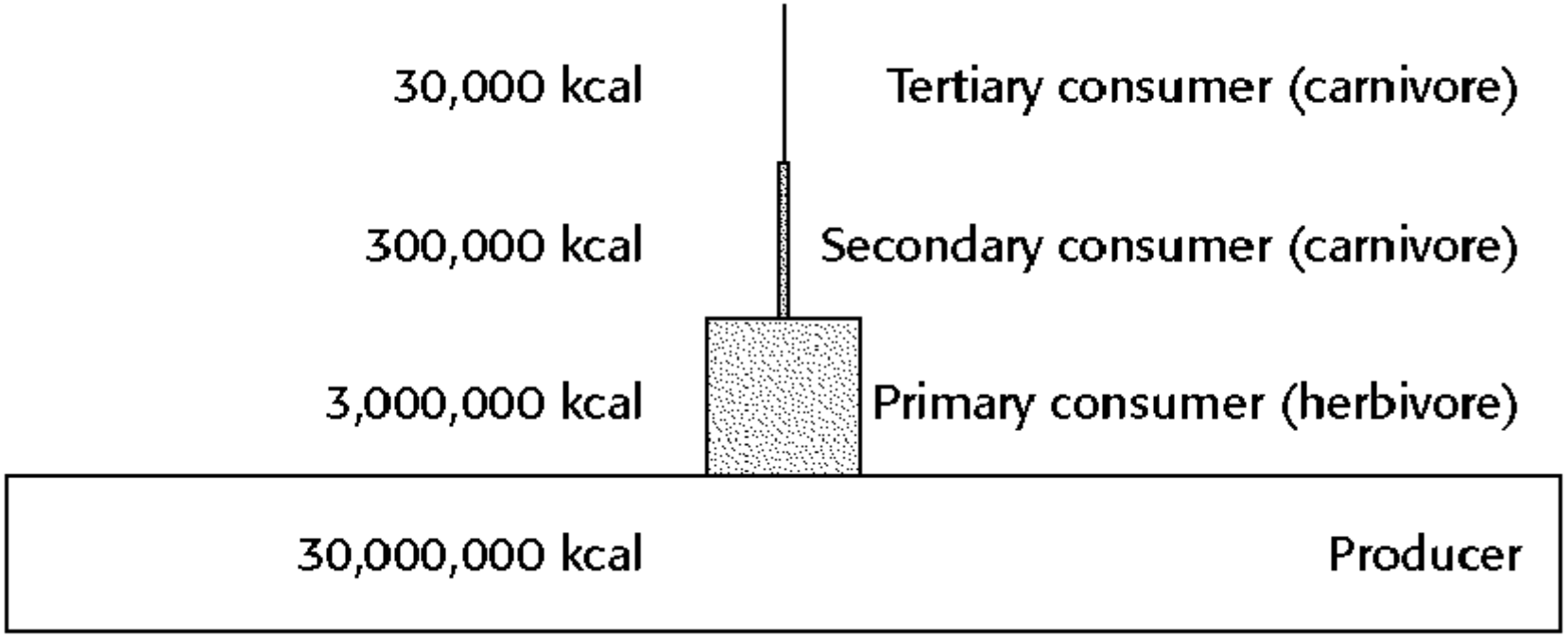


17) About 10% of the energy in organisms of any level

A. Comes from the level just under it
B. Is transferred to the level just under it
C. Makes it to the top level
D. Goes off into the environment as heat



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A. Found only in rain forest biomes
B. useful for potent chemical pollutants
C. Usually only used once or twice by water, nitrogen, carbon, and phosphorus atoms or molecules
D. The way water and minerals needed by all organisms pass between biotic and abiotic portions of the environment.

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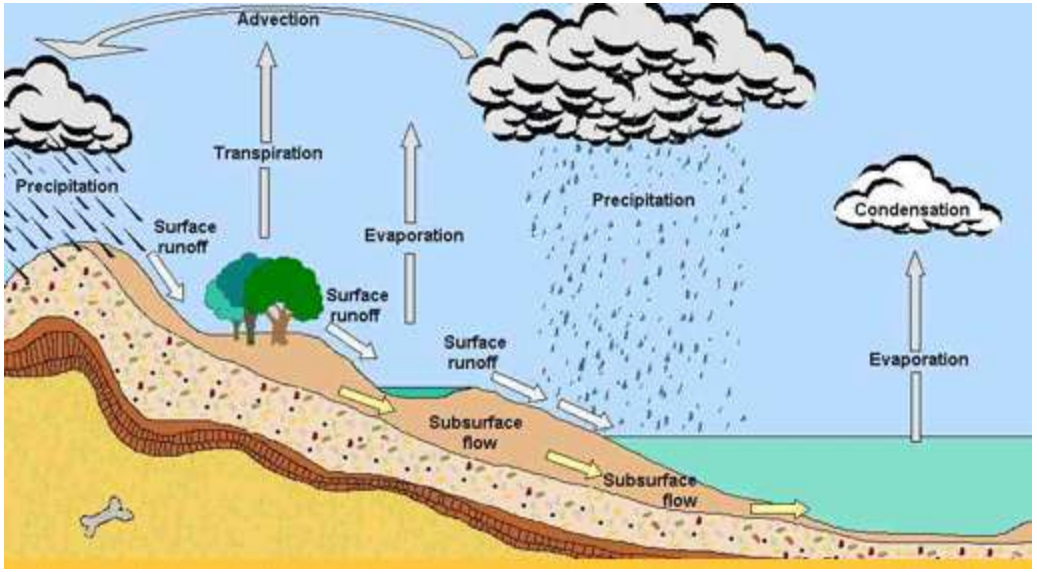
A. Precipitation and evaporation
B. Sedimentation and denitrification
C. Ammonification and nitrogen fixation
D. Assimilation and nitrification



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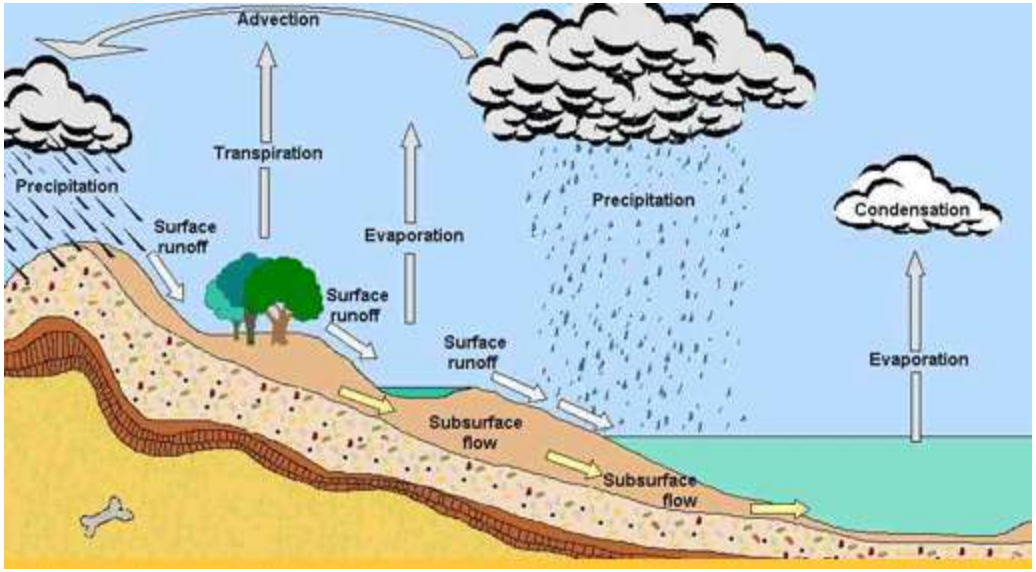

20) Proteins and nucleic acids are where plants use

A. transpiration
B. Water from underground
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21) Burning fossil fuels, cutting down forests, and destroying vegetation affects which cycle the most?

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B. Carbon cycle
C. Nitrogen cycle
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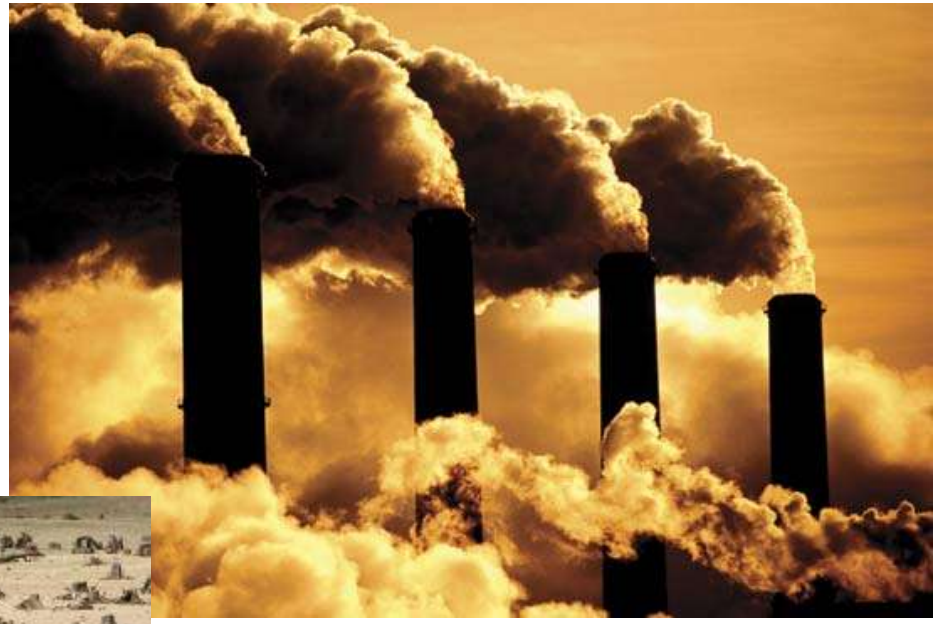

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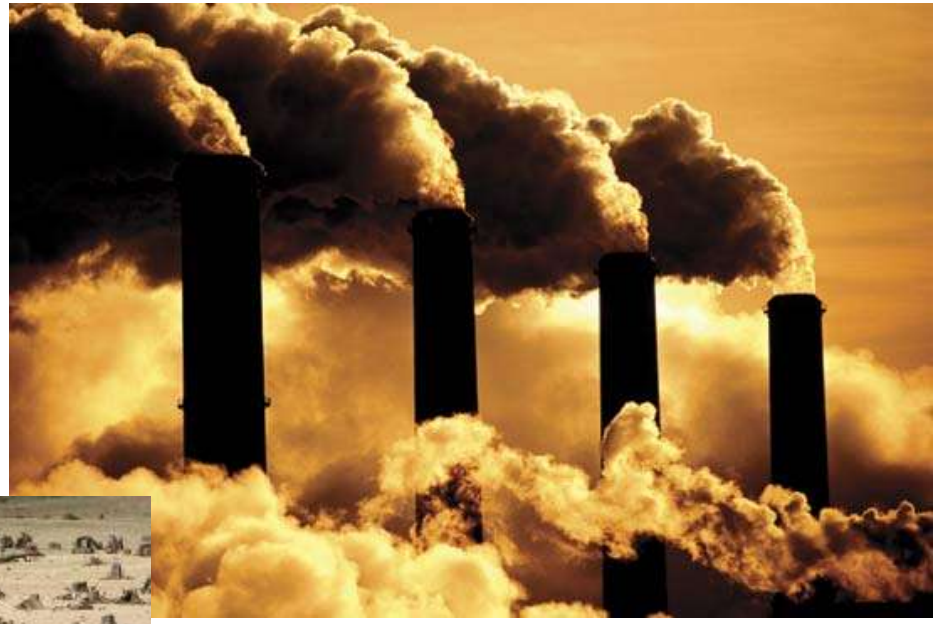

22) Which of the following is not a population?

A. All the cottontail rabbits living in Cleveland Forest
B. All the bobcats in Cleveland Forest
C. All the birds living in Cleveland Forest
D. All the Red Diamond Rattlesnakes living in Cleveland Forest

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23) When the birth rate exceeds the death rate in a population, the population

A. Stays the same
B. Grows
C. Gets smaller
D. None of the above

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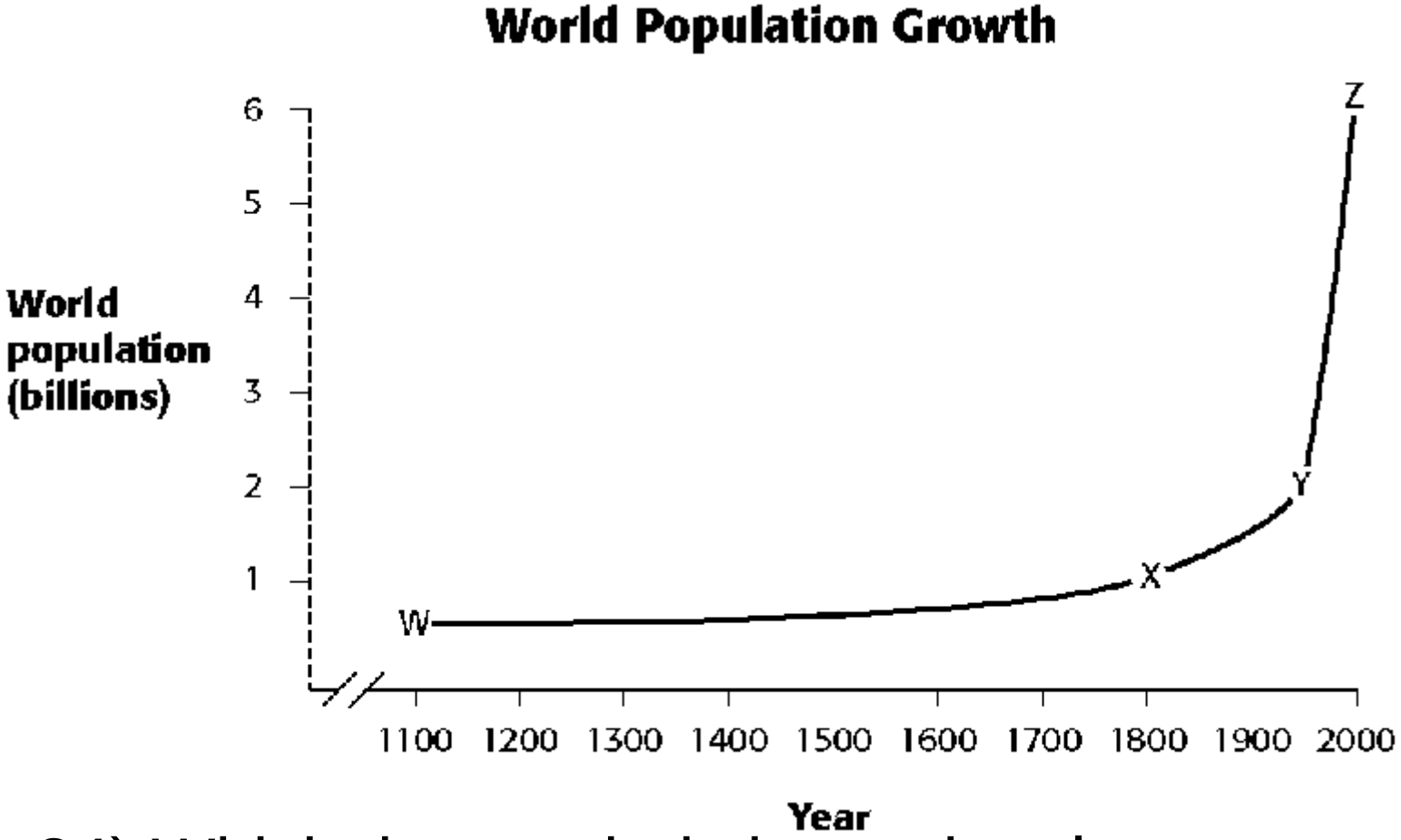
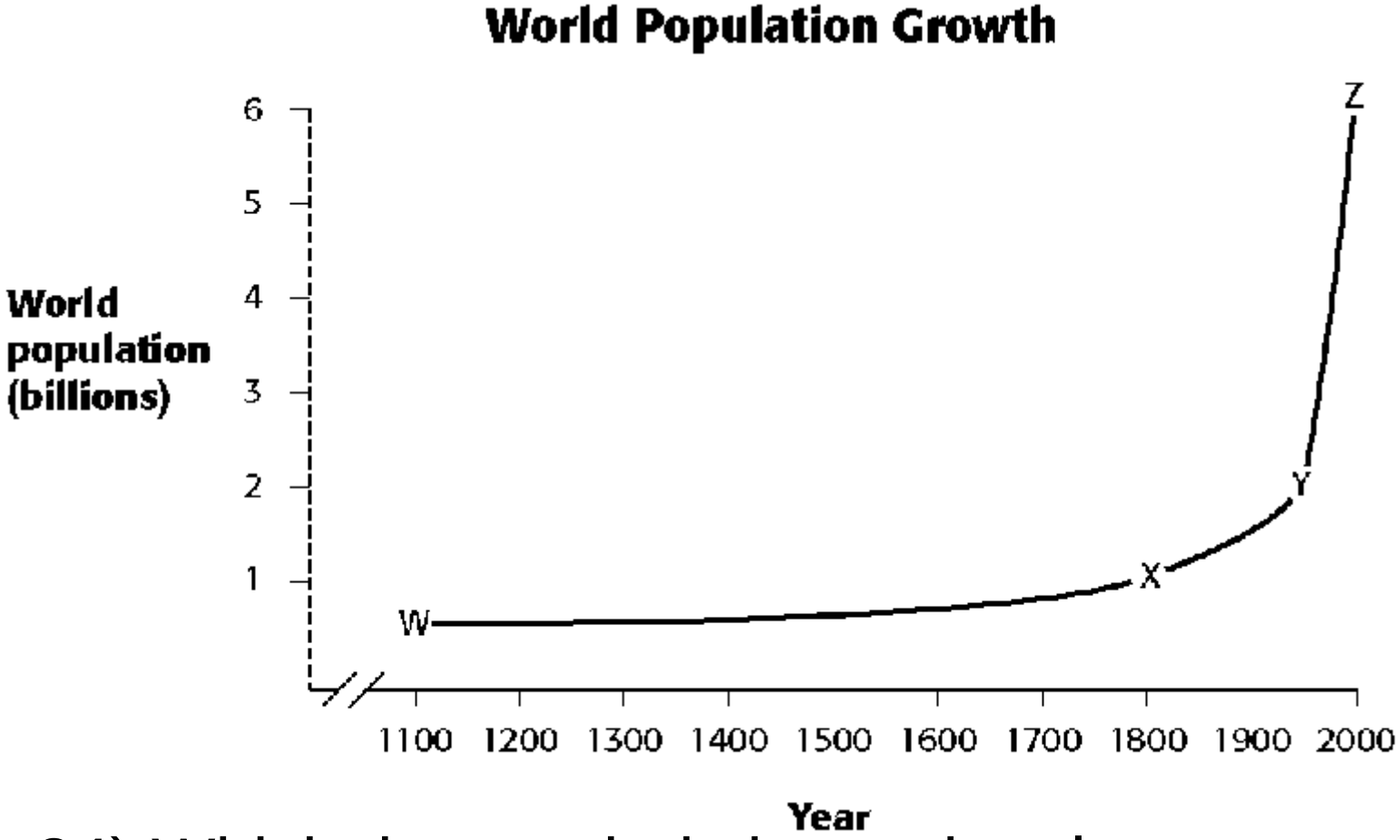


24) Which time period shows the slowest growth?

A. W – X
B. X – Y
C. Y – Z
D. None of the above



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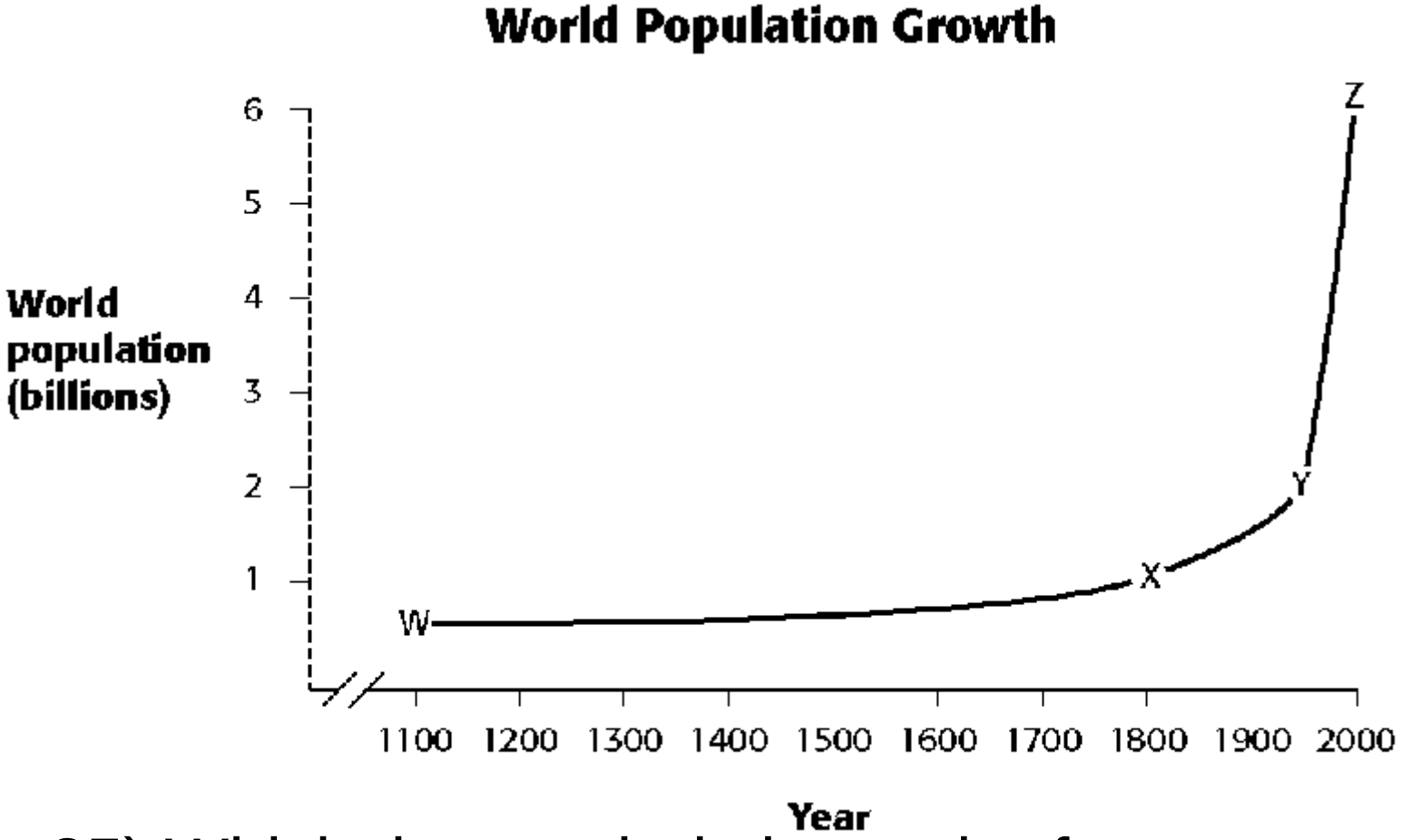

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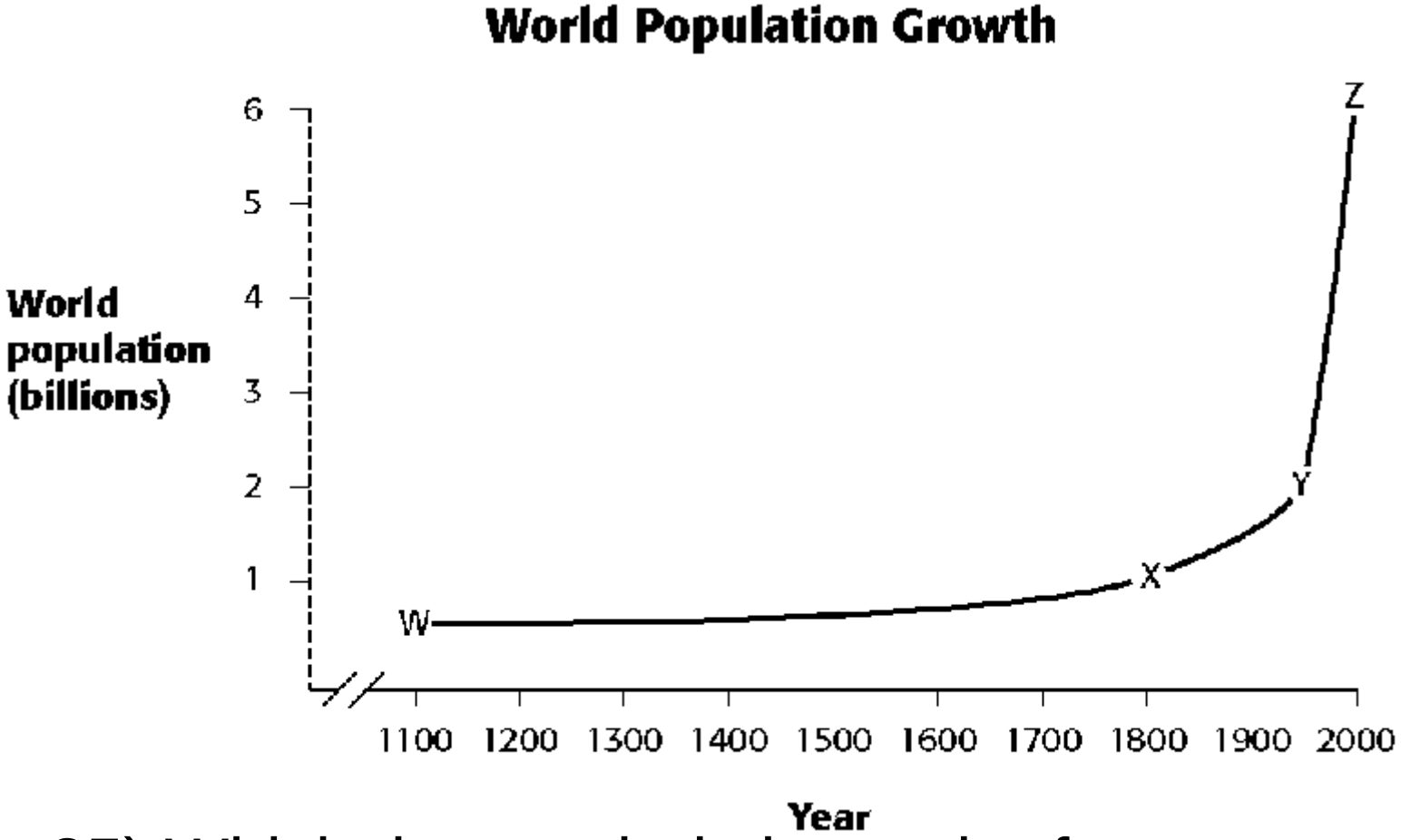

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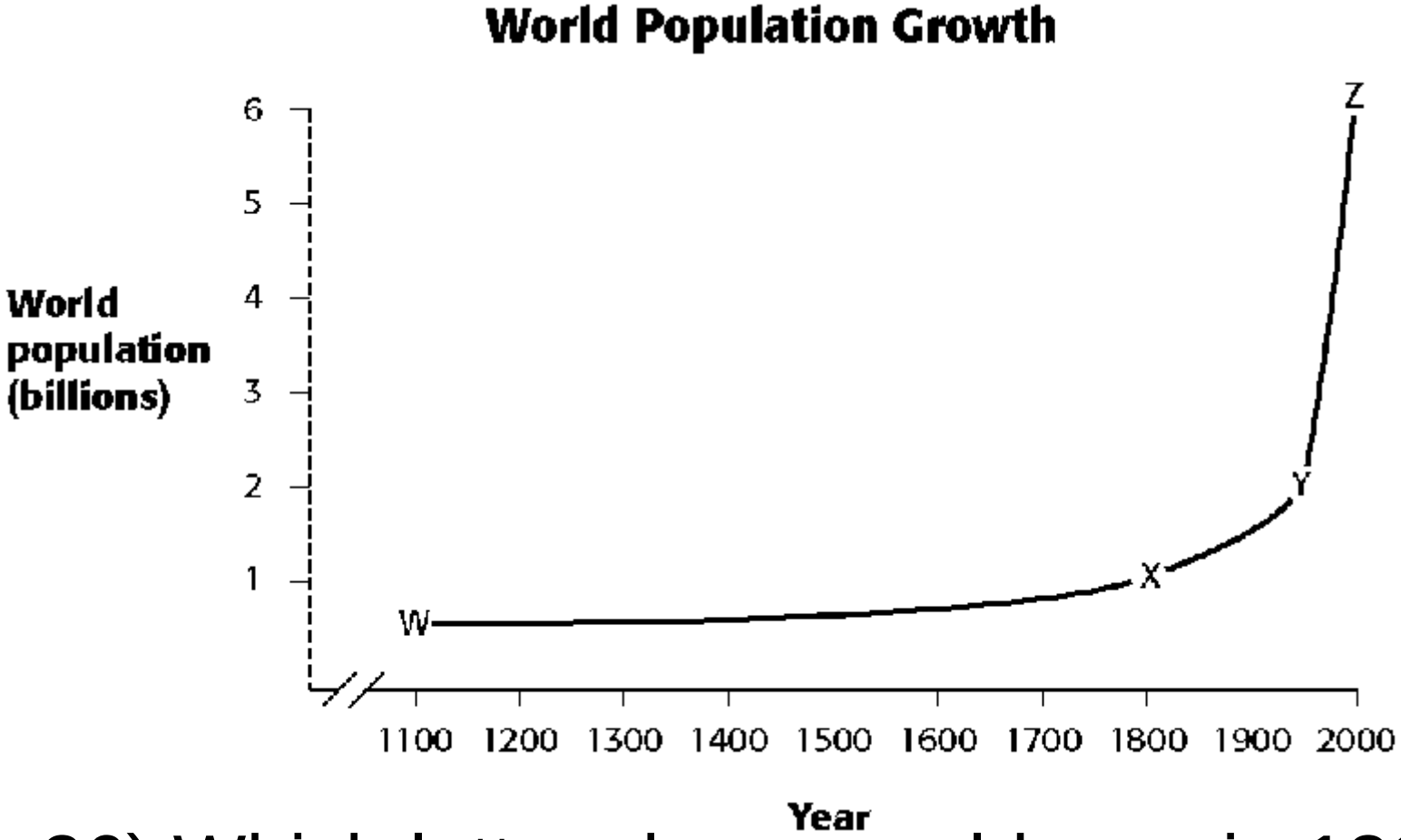

26) Which letter shows world pop. in 1800?

A. W

B. X

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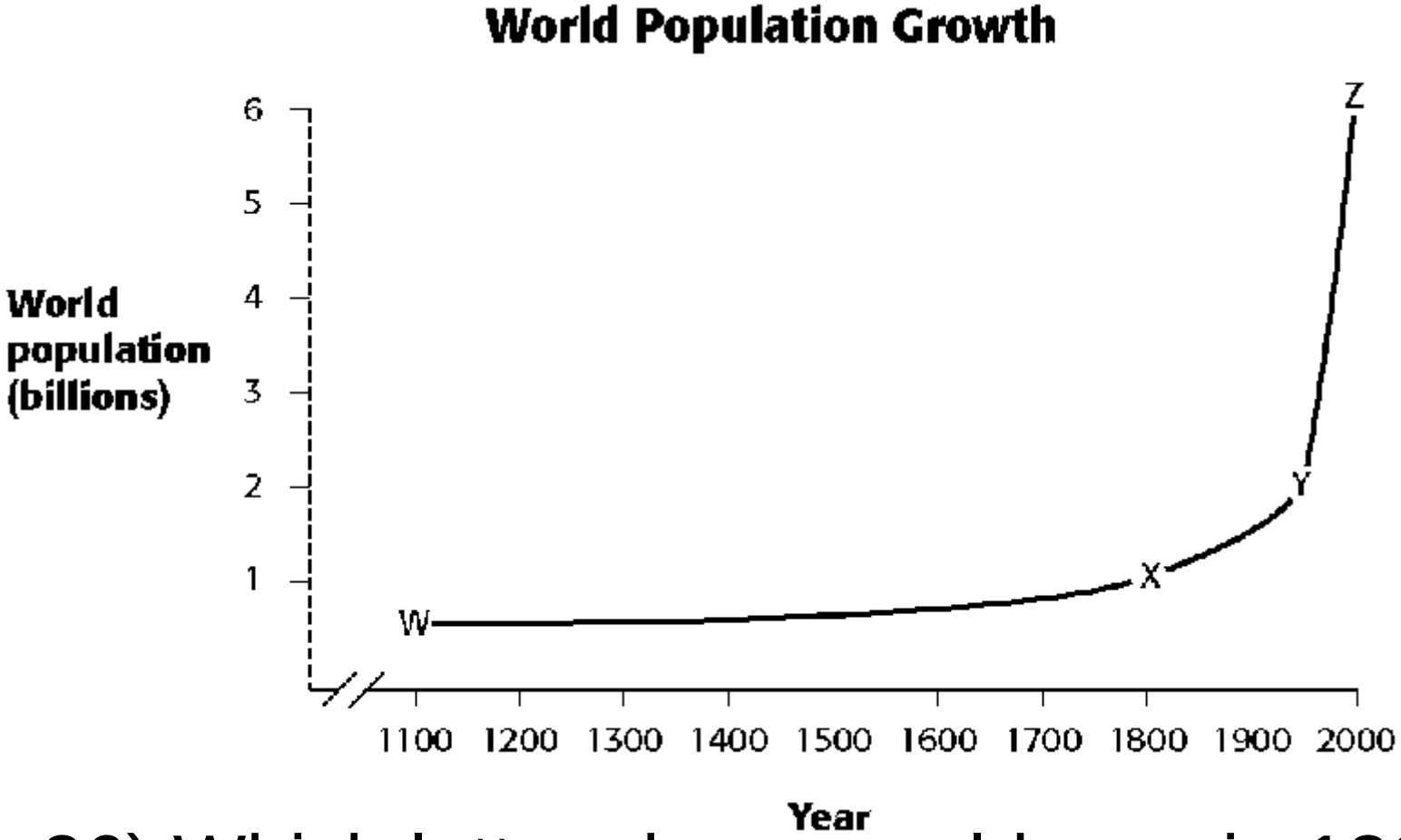

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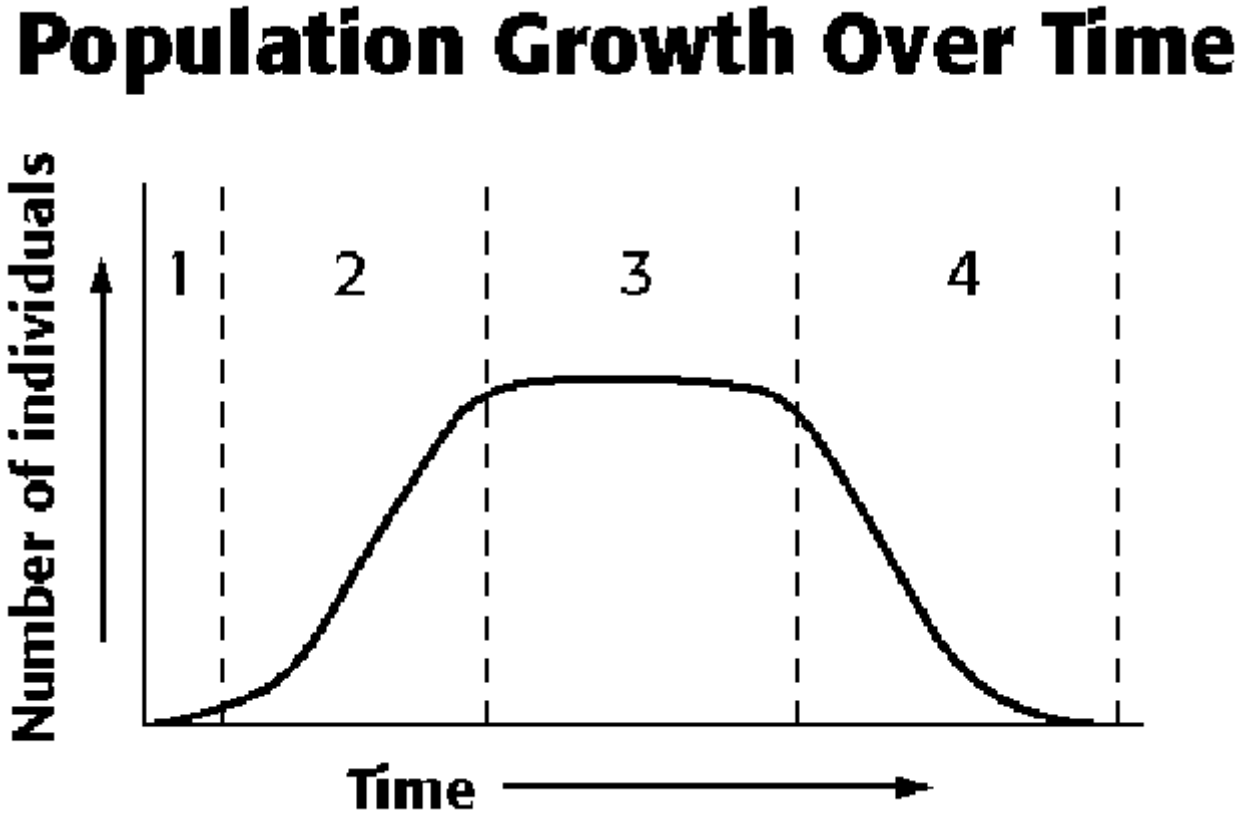

27) At which point on the graph are birth and death rates about equal?

A. 1
B. 2
C. 3
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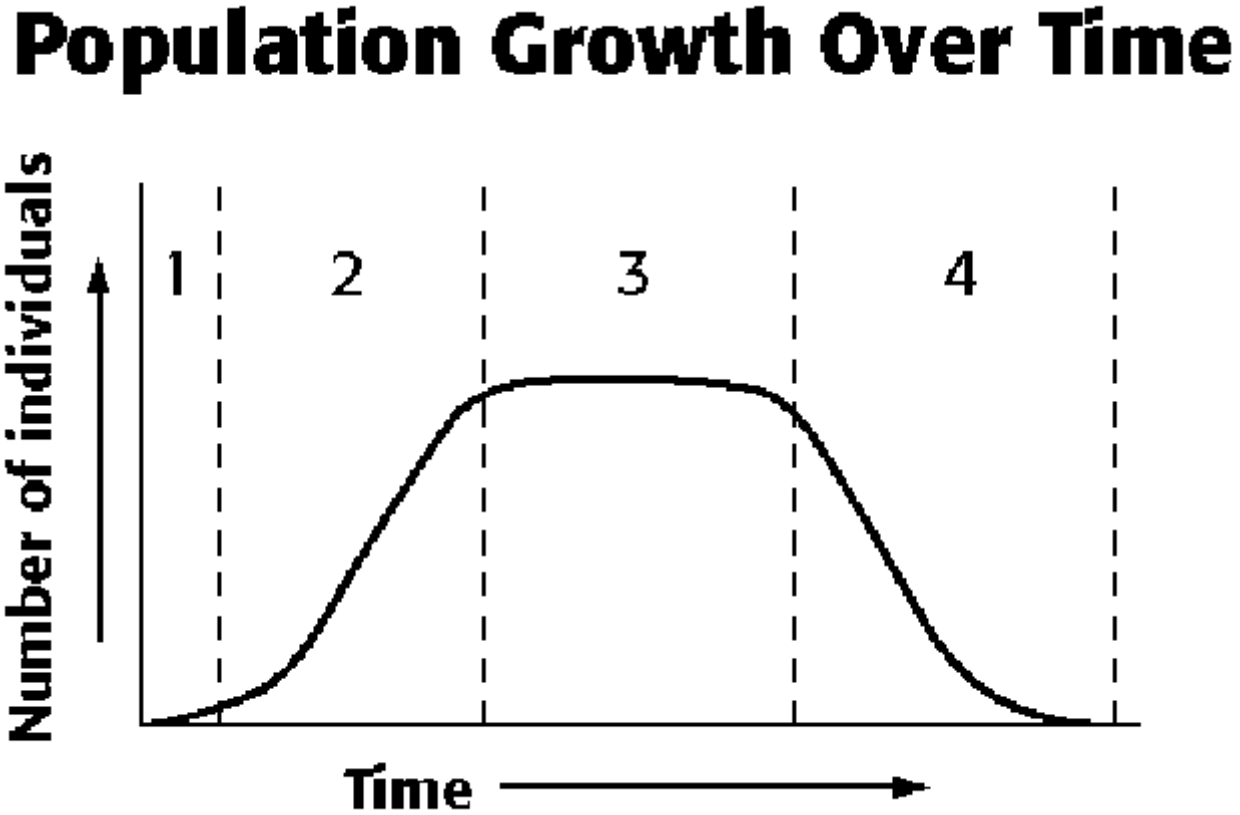

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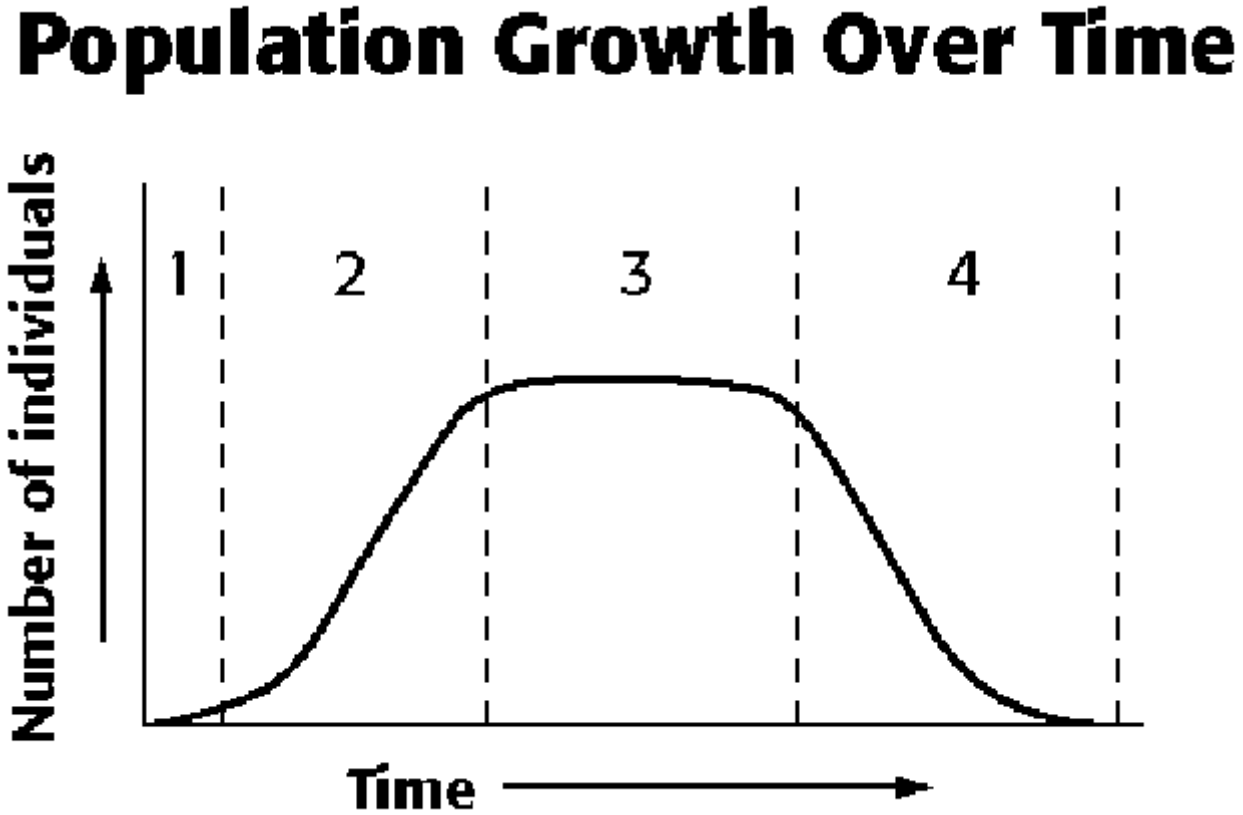

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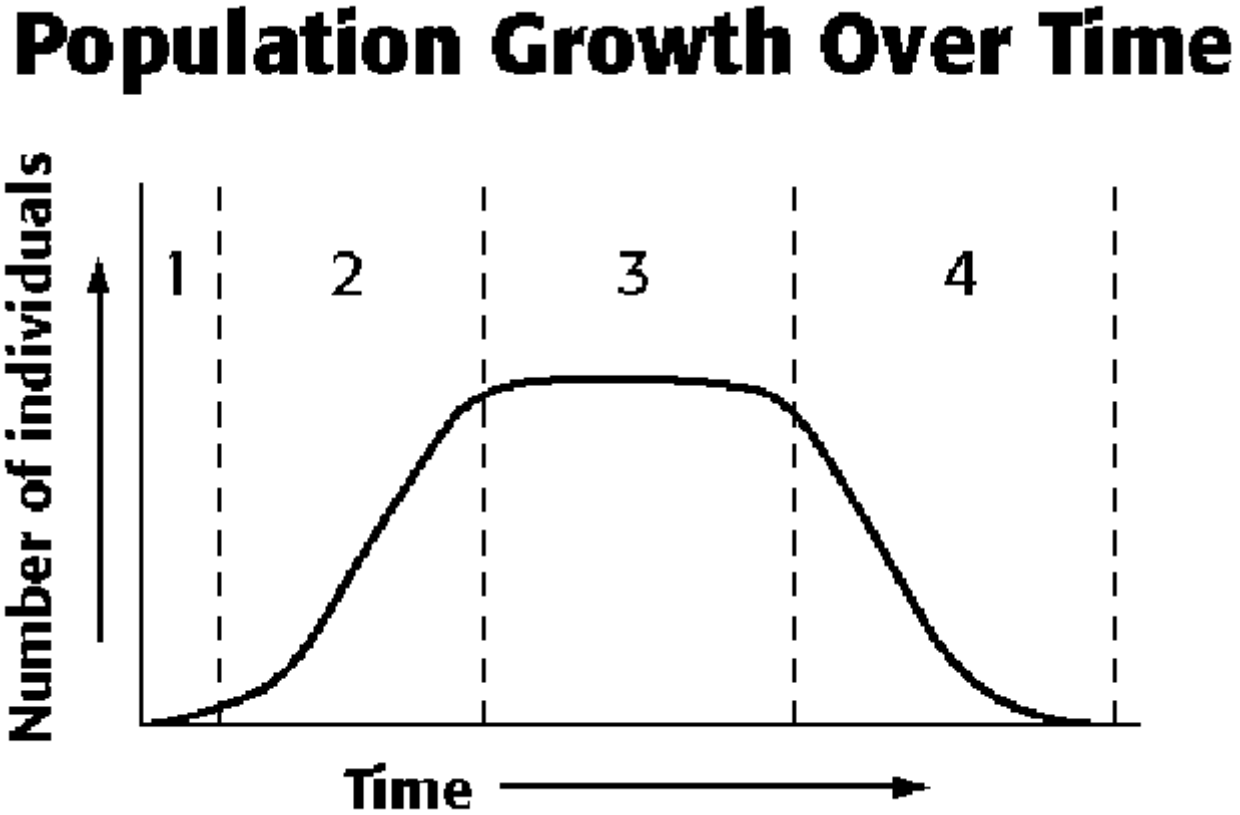

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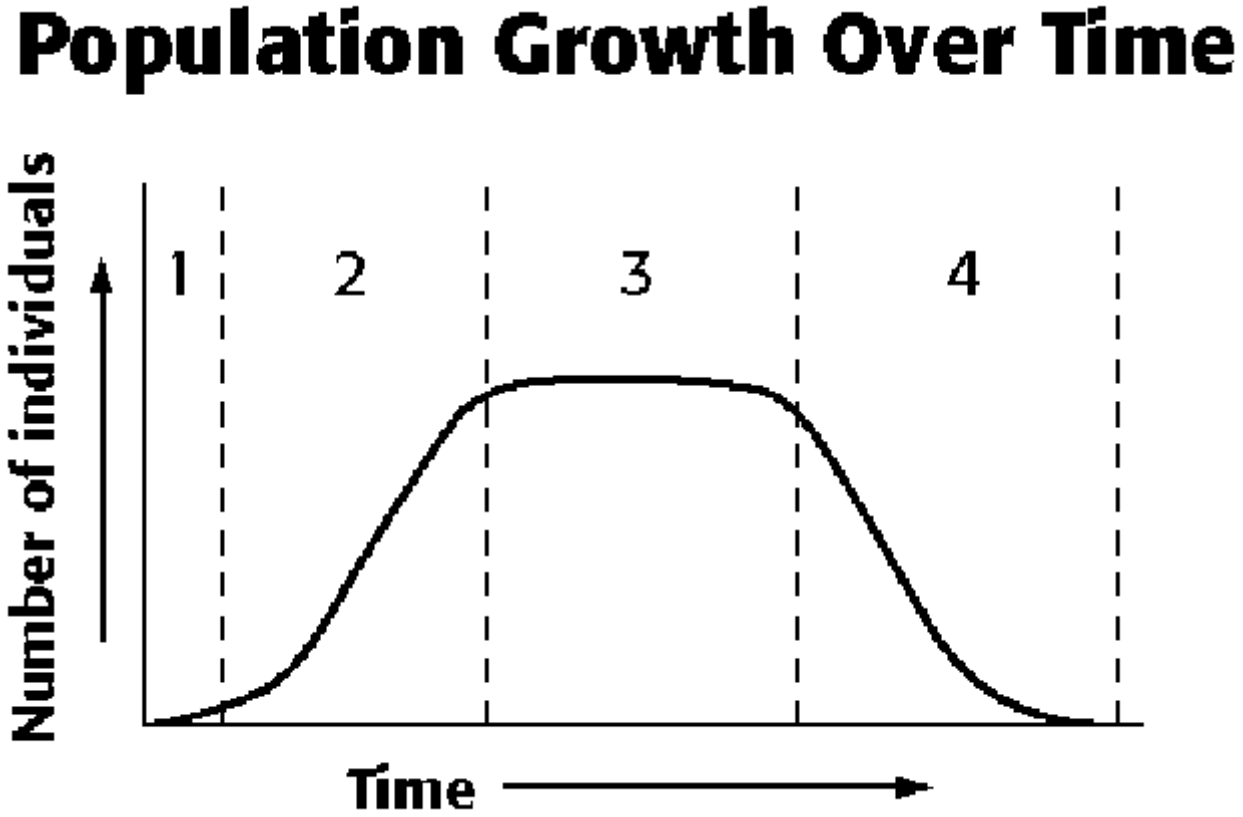

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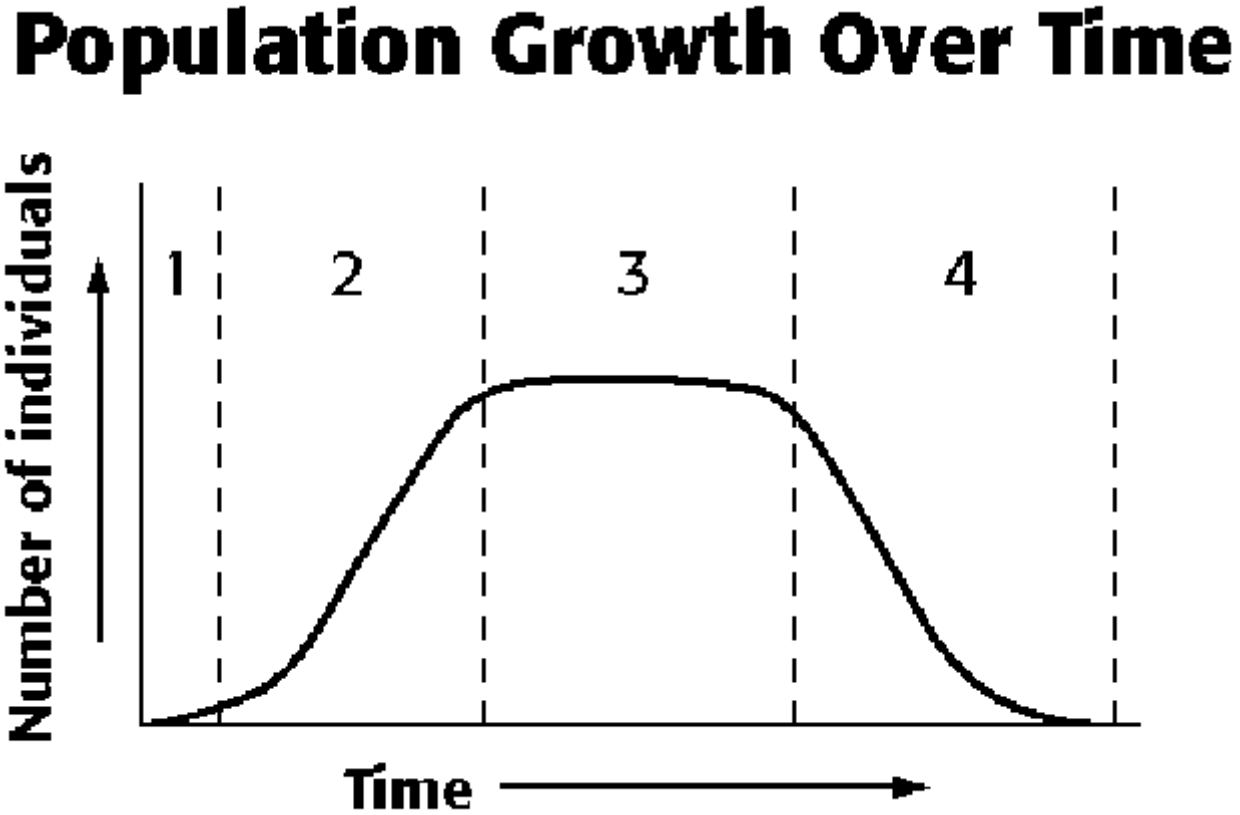

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B. Survive introduction of a new predator
C. Be devastated by a disease outbreak.
D. Survive pollution introduced into the environment by man.

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32) Organisms that coevolve with their host, are smaller than their host, and generally are annoying to their host are

A. Predator species
B. Commensal species
C. Mutualist species
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The ant keeps predators away from the acacia tree.

The acacia provides shelter and food for the ant.

1

The cow eats grass.

The sheep eats the same grass.

2

The tree provides nutrients and a sunlit location for the orchid living on it.

3

The dog provides nutrients and shelter for the tapeworm living in its intestines.

4

33) Which one of the above relationship is competition?

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33) Which one of the above relationship is competition?

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A. Predator species
B. Commensalistic species
C. Mutualistic species
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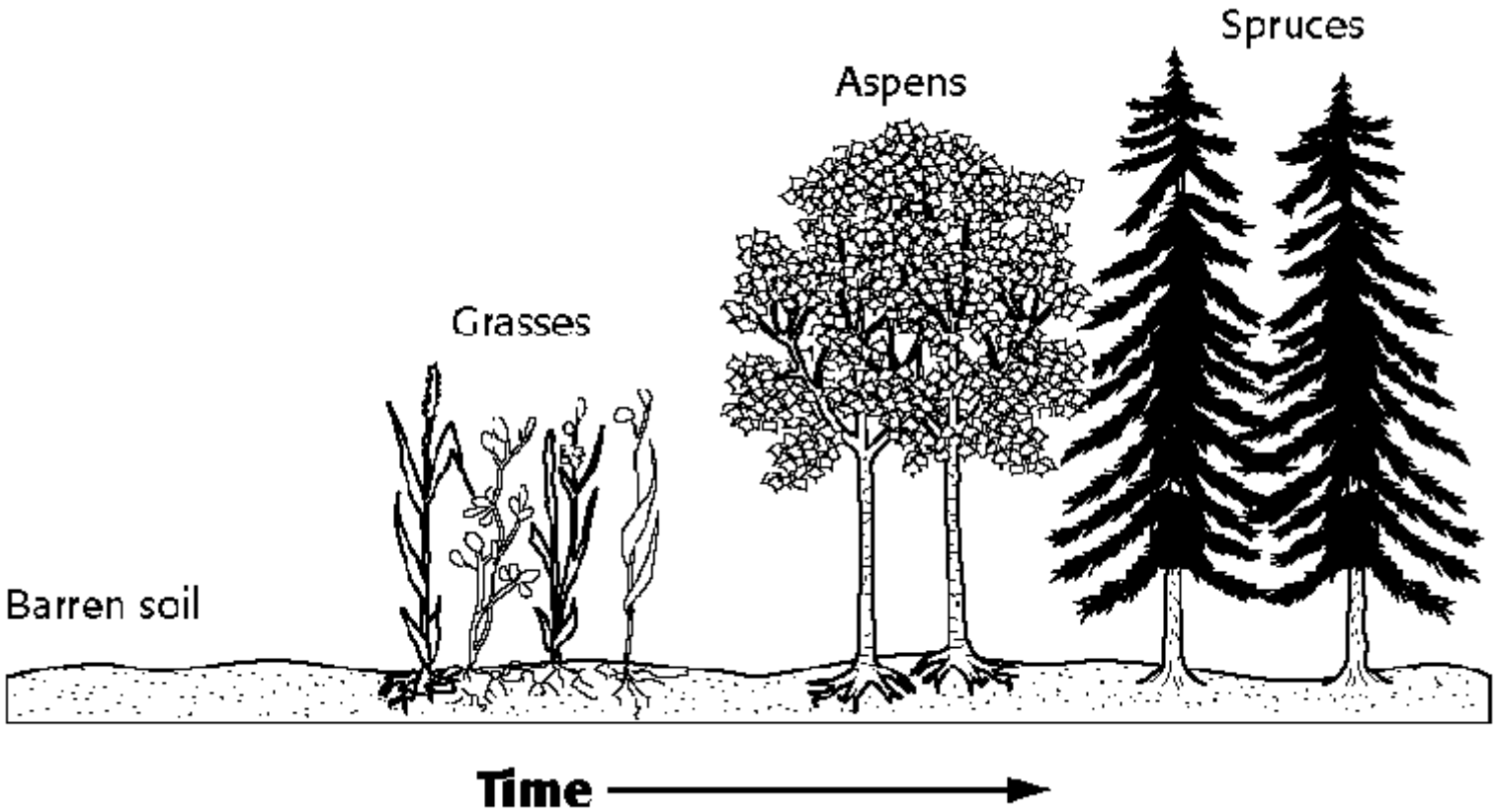
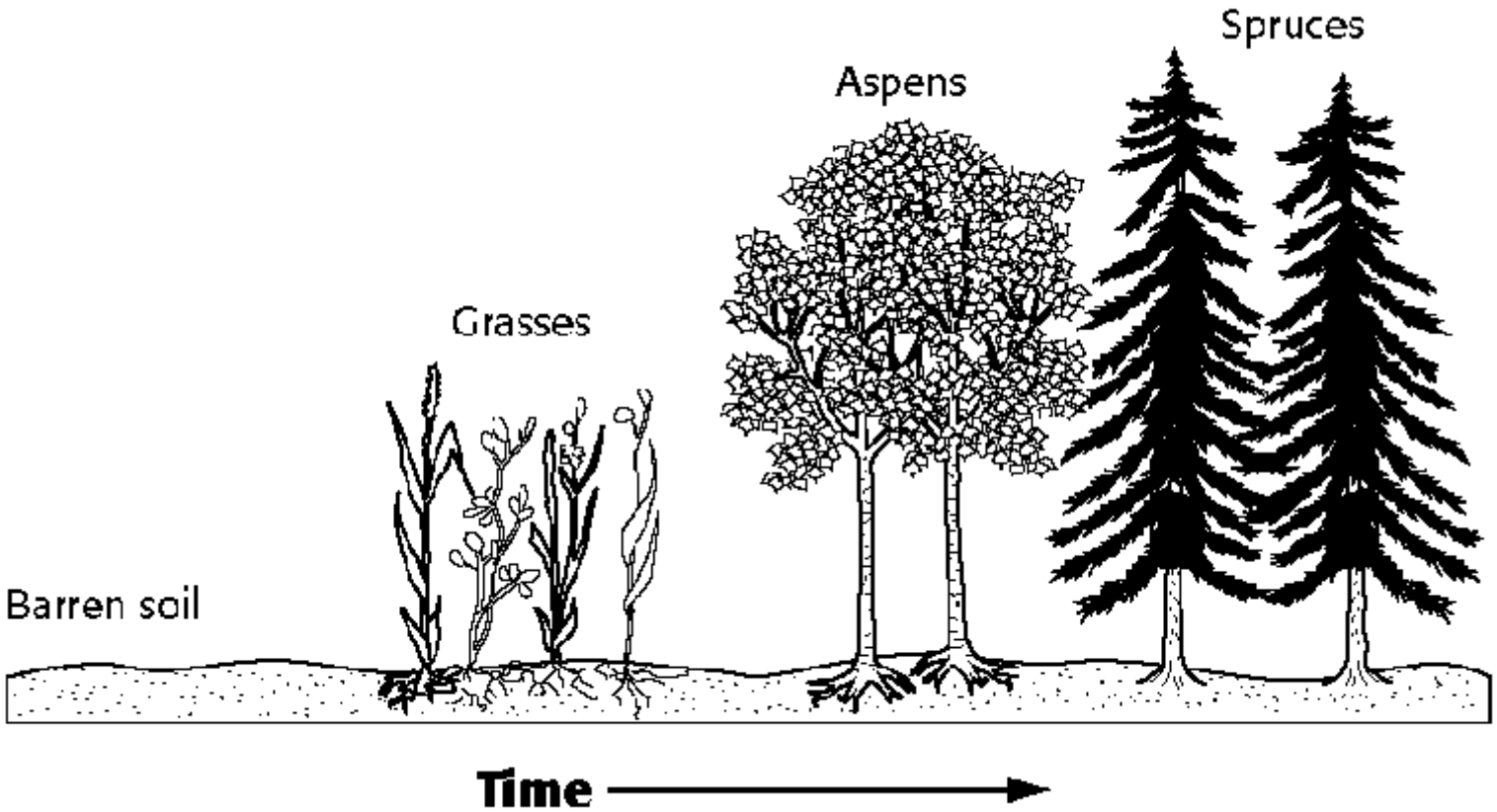


38) The diagram above is all about

A. symbiosis
B. succession
C. homeostasis
D. metabolism



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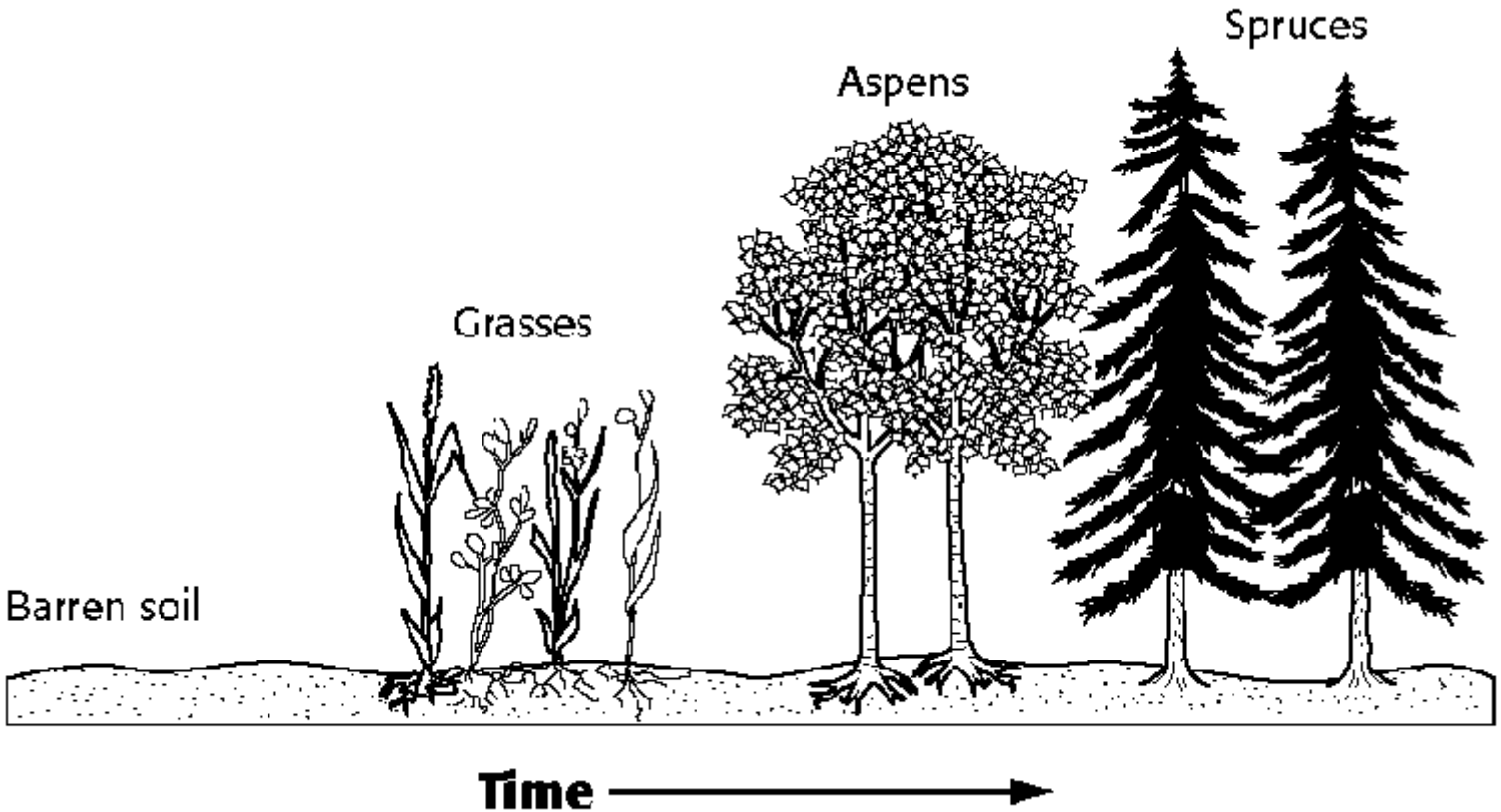

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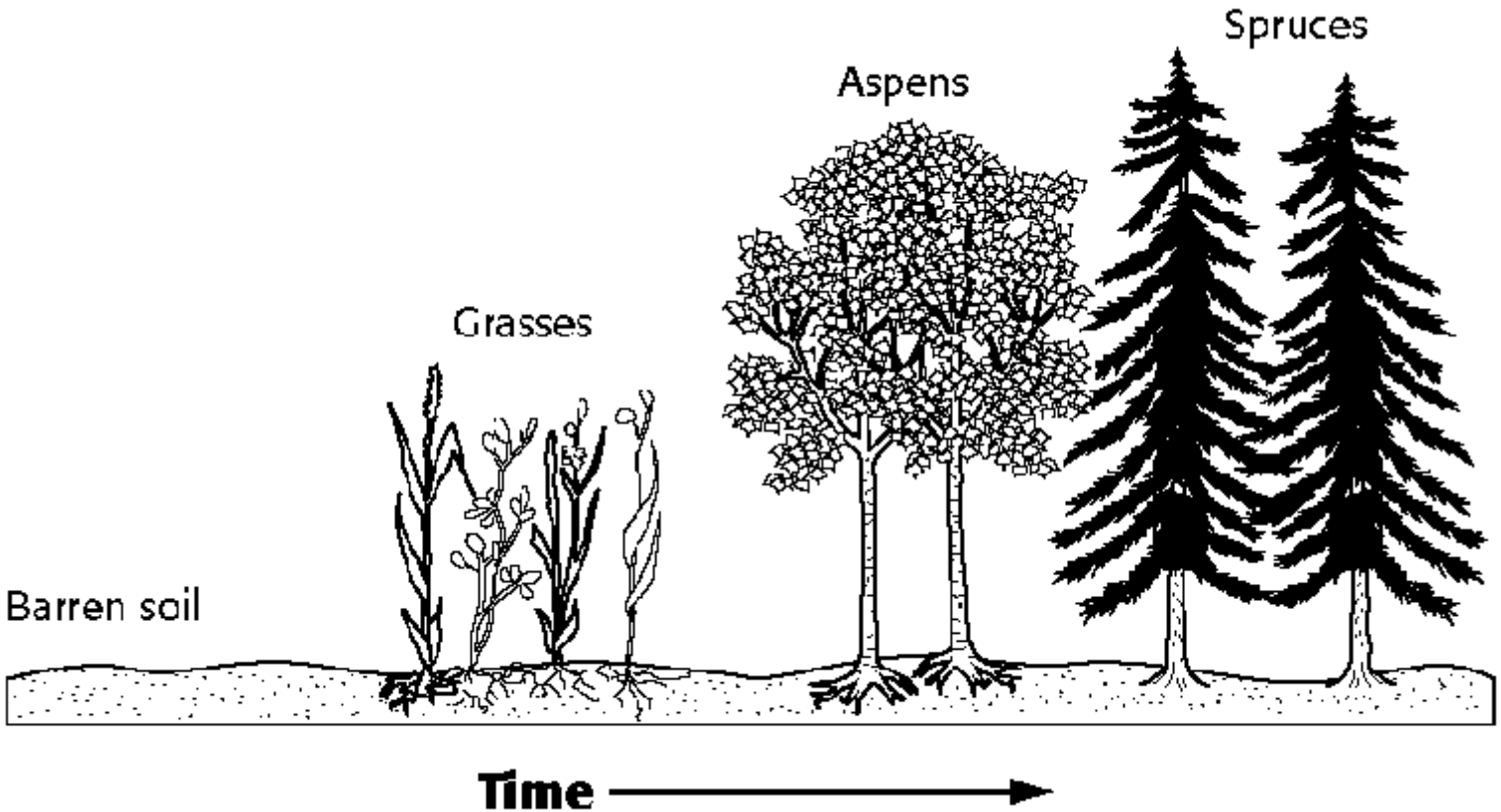
B. Primary succession
C. Secondary succession
D. None of the above



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A. It is a gas found in the stratosphere
B. It is responsible for the ozone layer getting thinner
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B. Global warming by burning fossil fuels
C. Erosion of the ozone layer by manufacturing CFC's
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A. Abiotic factors
B. Simulations
C. Computer programs
D. Biodiversity
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B. Oceans to heat up
C. The atmosphere to heat up
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