Name:_____ Block:_____

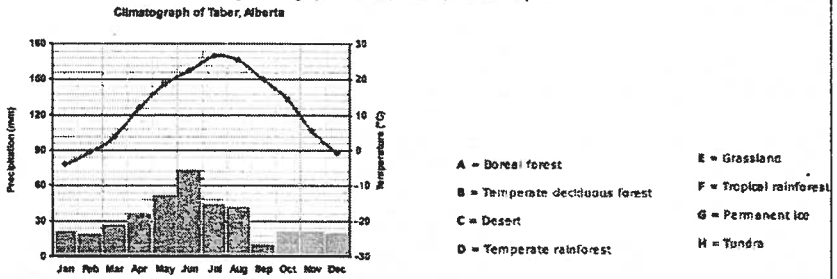
SCIENCE 10
UNIT 1: Biology Review

1) Which biome is not found in Canada?
   A) boreal forest
   B) temperate deciduous forest
   C) temperate rainforest
   D) tropical rainforest

2) Students made lists of the biotic and abiotic components of their neighbourhood. Which of the following lists describes only abiotic components of their neighbourhood?
   A) fungi, flower, water
   B) temperature, latitude, soil
   C) sunlight, moisture, bacteria
   D) grass, precipitation, latitude

3) Snowshoe hares of the boreal forest have fur that changes from summer brown to winter white to camouflage them from predators. What kind of adaptation is this an example of?
   A) chemical adaptation
   B) structural adaptation
   C) behavioural adaptation
   D) physiological adaptation

Use the following climatograph of Taber, Alberta, to answer question 4.



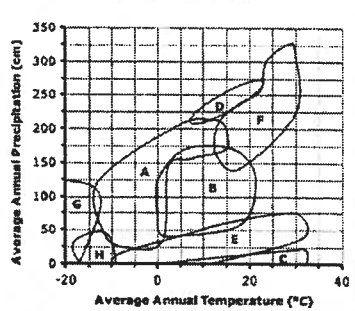
4) In which biome is Taber, Alberta, located?
   A) temperate deciduous forest
   B) boreal forest
   C) grassland
   D) desert

5) Which feature below is not a biotic component of a boreal forest biome?
   A) mammals with thick, insulating coats
   B) many marshes, shallow lakes, and wetlands
   C) coniferous trees with waxy needles to resist water loss
   D) small mammals that burrow in the ground to stay warm

6) Which combination of abiotic factors best explains why the regions along the equator receive the greatest amount of precipitation?
   A) sunlight and latitude
   B) sunlight and elevation
   C) latitude and ocean currents
   D) ocean currents and elevation

7) Which of the following animal and plant adaptations is a physiological adaptation?
   A) Caribou of the tundra biome migrate to food sources in winter.
   B) Arctic foxes of the tundra biome have compact bodies and shorter legs and ears, which reduce heat loss.
   C) Grasses of the grassland biome have deep roots that form dense mats to collect water when it is available.
   D) Plants in the desert biome produce chemicals that protect them from being eaten by animals.

Use the following graph to identify the biome described in question 8.



8) Which region has high average annual precipitation and an average temperature between 15°C and 30°C?
   A) temperate deciduous forest
   B) temperate rainforest
   C) tropical rainforest
   D) desert

9) No trees grow above the tree line in the tundra biome of northern Canada. Which combination of abiotic factors of the tundra biome can best explain the absence of trees?
   A) soil, sunlight, temperature
   B) soil, moisture, ocean currents
   C) root growth, sunlight, temperature
   D) precipitation, elevation, temperature

10) Which kind of biome would you expect to find in an area with the characteristics listed below?
• very tall trees, along the coastline, bordered by mountains on one side, average temperature range from 5°C to 25°C
   A) tropical grassland
   B) tropical rainforest
   C) temperate rainforest
   D) temperate deciduous forest

11. What is the best reason to explain why fewer plants can grow in deep water than can grow in shallow water in a marine ecosystem?
A. There are more predators in deep water.
B. The temperature of the water is colder at deep levels.
C. Water pollution is more concentrated at deep levels than at shallow water levels.
D. The amount of light available for photosynthesis is less in deep water than in shallow water.

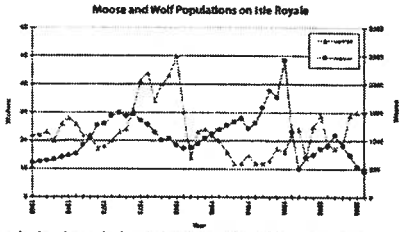
12. What is the largest division of the biosphere?
A. biome
B. habitat
C. ecosystem
D. population

13. Barnacles attach to whales and are transported to new locations in the ocean to find new food sources. Whales are not harmed in this process. What type of symbiotic relationship is this an example of?
A. parasitism
B. mutualism
C. interaction
D. commensalism

14. What is the correct order of the ecological hierarchy, from smallest to largest?
A. ecosystem, population, community, organism
B. organism, community, population, ecosystem
C. organism, population, community, ecosystem
D. population, ecosystem, organism, community

15. Which of the following statements about mutualism is false?
A. Mutualism is a symbiotic relationship in which both organisms benefit.
B. In some mutualistic relationships, two species are unable to survive without eachother.
C. In one type of mutualism, one species defends another species against attacks in return for food and shelter.
D. One species protects another species from predators by camouflage. The host species is not harmed in the relationship.

Use this graph of the population of moose and wolf to answer the question 16.



16. Isle Royale in Lake Superior has been designated an International Biosphere Reserve. The wolves of Isle Royale have no natural predators and primarily hunt and eat moose. In what years did the prey population increase likely due to a decline in the predator population?
A. 1963-1966
B. 1985-1988
C. 1978-1981
D. 2003-2006

17. A crab lives on a beach, which is where the crab finds food, shelter and a space to live. For the crab, the beach is an example of what division of the biosphere?
A. niche
B. habitat
C. ecosystem
D. community

18. Which of the following statements about water is not true?
A. Water anchors plants in place.
B. Without water, no organism would survive.
C. Water carries nutrients from one place to another in an ecosystem.
D. The cells of most living organisms contain between 50 and 90 percent water.

19. A biologist wants to introduce a new species (species A) into an ecosystem. Species B already lives in the ecosystem and occupies the same niche as species A. What will be the likely outcome if species A is introduced into the ecosystem?
A. mutualism between the two species
B. parasitism of species B by species A
C. commensalism between the two species
D. competition between species A and species B

20. Which of the following characteristics are common adaptations of predators?

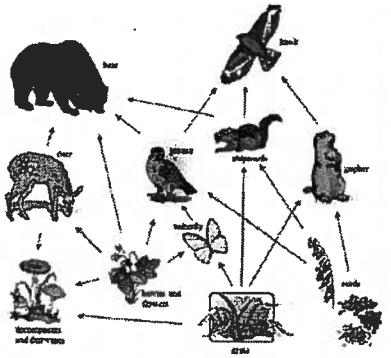
I	good eyesight
II	mimicry
III	sharp, pointed teeth

A. I only
B. I and III only
C. I, II, and III
D. II and III only

21. Which of the following statements about biomass is true?
A. Food webs are used to show the available biomass in an ecosystem.
B. Biomass is usually expressed in units of m/g or m/kg.
C. Biomass is the total mass of living plants, animals, fungi, and bacteria in a particular area.
D. The biomass of animals on Earth is over 100times greater than the biomass of plants.

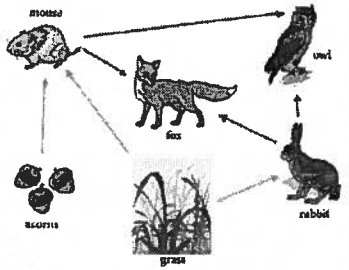
22. A field of wheat is an example of which member of a food chain?
A. decomposer
B. biodegrader
C. consumer
D. producer

Use this picture of a food web to answer question 23.



23. Which is the best description for the role of the grizzly bear in this food web?
A. detrivore
B. omnivore
C. carnivore
D. herbivore

Use this picture of a food web to answer questions 24 and 25.



24. Which organisms in this food web are the primary consumers?
A. owl and fox
B. rabbit and fox
C. acorns and grass
D. rabbit and mouse

25. At which trophic level is the fox in this food web?
A. first
B. second
C. third
D. fourth

26. What is the best example of a detrivore from the list below?
A. earthworm
B. green algae
C. grasshopper
D. spotted frog

27. At the producer level of a food pyramid, there is 455 000 kcal/m2 of energy available. If there is a 90 percent energy loss at each level, how many kilocalories will be incorporated into the bodies of the secondary consumers?
A. 455 kcal/m2
B. 4550 kcal/m2
C. 45 500 kcal/m2
D. 500 500 kcal/m2

28. Your teacher asks you to design a diagram to show the models of feeding relationships within an ecosystem. Which type of model should you choose?
A. food web
B. food chain
C. food pyramid
D. ecological pyramid

29. Which of the following chemical nutrients is not cycled between living organisms and the atmosphere?
A. phosphorus
B. nitrogen
C. carbon
D. oxygen

30. Where is the largest store of carbon found on Earth?
A. in coal deposits
B. in terrestrial vegetation
C. in soil and organic matter
D. in marine sediments and sedimentary rock

31. Which of the following processes does not increase the amount of carbon dioxide (CO_2) in the atmosphere?
A. forest fires
B. photosynthesis
C. cellular respiration
D. decomposing trees

32. Listed below are chemical compounds matched with a location where they can be found on Earth. Which of the pairs of chemical compounds and locations is incorrect?
A. nitrate (NO_3^-) : water
B. nitrogen (N_2): atmosphere
C. carbonate (CO_3) : atmosphere
D. phosphate (PO_4) : sedimentary rock

33. Which term describes the process of converting nitrogen gas (N_2) into nitrate (NO_3^-) or ammonium (NH_4^+)?
A. uptake
B. nitrification
C. denitrification
D. nitrogen fixation

34. Biologists doing a yearly fish count in a small lake notice that the number of fish in the lake is dramatically less than the year before. They observe the bodies of dead fish near the shoreline. After testing a sample of the water, the biologists realize that the level of dissolved nitrogen has increased dramatically. What else might the biologists notice about the lake?
A. increased oxygen
B. increased algae production
C. decreased lake temperature
D. decreased algae production

35. How do carnivorous animals obtain the phosphorus that they need for growth and development?
A. Plants produce phosphorus through cellular respiration and make it available to animals.
B. Bacteria break down the phosphorus in the soil and make it available to animals.
C. The animals eat other consumers that have obtained phosphorus from plants.
D. The animals eat plants, which have absorbed phosphorus through the soil.

36. Which of the following relationships between human activities and nutrient cycles is not true?
A. The clearing and burning of forests increases the amount of phosphate (PO_4) available to organisms.
B. The burning of fossil fuels for industry increases the amount of nitrogen oxide (NO) in the atmosphere.
C. The use of fertilizers for agriculture increases the amounts of nitrate (NO_3^-) and phosphate (PO_4) in water systems.
D. The use of motorized vehicles increases the amount of carbon dioxide (CO_2) in the atmosphere.

37. Which of the following processes makes nitrogen available to plants and animals?
A. I and IV only
B. I, II, and III only
C. I, III, and IV only
D. I, II, III, and IV

I	Nitrogen-fixing bacteria in the soil
II	Nitrogen-fixing cyanobacteria in the water
III	Decomposer bacteria and fungi in the soil
IV	Nitrifying bacteria in the soil

38. Which is the best reason to explain why some synthetic and organic chemicals accumulate in the environment?
A. Synthetic chemicals are metabolized by organisms.
B. Organisms secrete synthetic chemicals as a waste product.
C. The increase in ultraviolet radiation causes chemicals to accumulate in organisms.
D. Synthetic chemicals that cannot be broken down by decomposers will build up in living organisms.

39. In which part of an animal would you expect to find the highest level of a synthetic chemical like PCB?
A. brain
B. fat storage
C. lung tissue
D. blood system

40. A biologist studied a sample taken from a squid in a marine food web. She found that the concentration of DDT in this sample was 2.0 ppm. What does a concentration of 2.0 ppm mean?
A. There are 20 particles of DDT mixed with 999 980 other particles.
B. There are two particles of DDT mixed with 999 999 other particles.
C. There are two particles of DDT mixed with 999 998 other particles.
D. There are two particles of DDT mixed with 1 000 000 other particles.

41. Sea otters that live off the west coast of Canada primarily eat sea urchins. The sea urchins are one of the main consumers of algae such as kelp. Toxic levels of synthetic chemicals in the sea otter population prevented the sea otters from reproducing, and the population of sea otters began to decrease significantly. As a result, the sea urchins and other herbivores quickly severely reduced the kelp, allowing barnacles and mussels to flourish at the cost of other species in the ecosystem. Which is the best description for the role of the sea otter in this marine ecosystem?
A. keystone species
B. indicator species
C. top carnivore
D. niche species

42. Which of the following statements about PCB contamination and orcas is not true?
A. Orcas retain high levels of PCBs in their bodies because PCBs have a long half-life.
B. The presence of high amounts of PCBs in orcas is an example of biomagnification.
C. PCB-contaminated orcas usually give birth to calves that have no PCB contamination.
D. PCBs are synthetic chemicals that were widely used in industrial products.

43. Which of the following contaminants have these four characteristics in common?
A. lead and PCBs
B. DDT and PCBs
C. lead, cadmium, and mercury
D. cadmium, mercury, and DDT

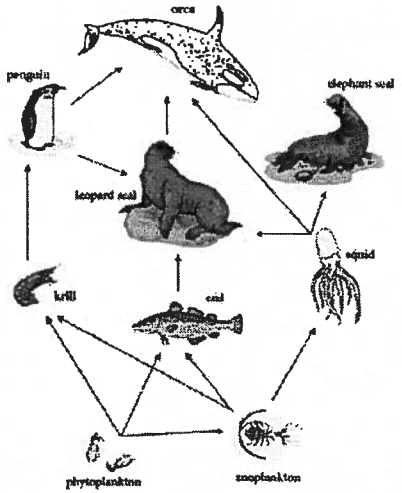
potential to bioaccumulate within organisms
naturally present on Earth
binds to soil particles
toxic to animals

44. After an oil spill near Vancouver Island, the oil company decided to use bacteria to clean up the pollution created by the spill. What type of process is this an example of?
A. biocleaning
B. bioremediation
C. bioaccumulation
D. biomagnification

45. Which of the following is not an example of how humans can be exposed to heavy metal poisoning?
A. smoking cigarettes
B. ingestion of methylmercury
C. skin absorption due to direct contact
D. eating shellfish contaminated by a red tide

46. Marsupials are mammals that have a pouch in which females raise their young through early infancy. Many marsupials, such as kangaroos and koala bears, live in Australia, where it is believed that they all evolved from a common ancestor. Each species occupies its own ecological niche within Australia. This an example of which type of process?
A. artificial selection
B. adaptive radiation
C. primary succession
D. ecological succession

Use the following picture of a marine food web to answer question 47.



47. The squid in this food web was tested and found to have a DDT concentration of 2.0 ppm. Which organism would you expect to have a concentration of 16.0 ppm?
A. cod
B. krill
C. zooplankton
D. orca

48. Which of the following are natural sources of heavy metals on Earth?
A. I and IV only
B. II and III only
C. I, II, and IV only
D. I, II, III, and IV

I	volcanic eruptions
II	geothermal springs
III	battery manufacturing
IV	rock weathering

49. Which of the following statements about natural selection is not true?
A. The finches of the Galapagos Islands are an example of natural selection.
B. The development of antibiotic-resistant bacteria is an example of natural selection.
C. Natural selection occurs when an organism tries to change and adapt to new surroundings.
D. In natural selection, members of a species who have a favourable trait will be more likely to reproduce.

50. What do the following events have in common?
• flooding • tsunami • drought • insect infestation
A. They occur only in coastal areas.
B. They result in primary succession.
C. They affect biotic and abiotic factors of mature communities.
D. They have all increased in frequency because of climate change.

51. Which of the following statements regarding pioneer species is not true?
A. Galapagos finches are an example of a pioneer species.
B. Pioneer species change the biotic and abiotic environment in a variety of ways.
C. Pioneer species are the first organisms that survive and reproduce in an area.
D. Lichens that grow on rock in areas where glaciers have retreated are an example of a pioneer species.

52. An example of natural selection is the increase in the population of dark-coloured moths during the Industrial Revolution in England. During this time, large amounts of ash and soot released into the atmosphere blackened the trees and vegetation near industrial areas, which was the habitat of the moth. Before the Industrial Revolution altered the environment, the lightcoloured moth population was much higher than the dark-coloured moth population. Which of the following reasons best explains the increase in the dark-coloured moth population?
A. The colour of the moths alternates every few years between light and dark.
B. The dark-coloured moths were better able to avoid predators through camouflage against the dark-coloured trees.
C. The dark-coloured moths were the moths that were more exposed to pollution, which changed their pigmentation.
D. The light-coloured moths were more susceptible to the environmental impact of the ash and soot in their environment.

53. Vegetation gradually takes hold on bare rock formed by cooling lava. What kind of ecological process is happening?
A. secondary succession
B. primary succession
C. adaptive radiation
D. natural selection

54. In which of the following locations would you expect the process of secondary succession to occur?
A. on lava after a volcanic eruption
B. in a rocky landscape in the Arctic
C. in an area left from a retreating glacier
D. in an empty field where crops were once grown

55. Which of the following is not true about flooding?
A. Flooding can cause tsunamis.
B. Flooding can cause widespread disease.
C. Flooding can be part of the normal cycle of an ecosystem.
D. Climate change may have caused an increase in flooding.

56. Which of the following statements regarding the mountain pine beetle are true?

I	Pine beetles have a symbiotic relationship with a fungus
II	Pine beetles only attack older, weaker pine trees
III	The spread of the pine beetle in British Columbia has decreased spruce, fir, and younger pine populations
IV	Tree resin can trap beetles

A. I and II only
B. III and IV only
C. I, III, and IV only
D. I, II, III, and IV

57. What is the correct order for the following stages of primary succession, from earliest to latest?
A. II, III, V, IV, I
B. III, II, IV, V, I
C. III, II, V, I, IV
D. IV, II, III, I, V

I	A mature community develops
II	The decay of pioneer species creates soil
III	Lichens begin breaking down rocks and forming soil
IV	Micro-organisms and insects begin to occupy the area
V	Sun-tolerant trees begin to grow

58. Across all six rocks, an average of 40 percent of the species became extinct in the smaller patches. What could the researchers conclude from this experiment?
A. This experiment shows how to create a sustainable ecosystem.
B. Habitat loss does not affect the biodiversity of the rock ecosystem.
C. Many of the species living on the rock were affected by habitat fragmentation.
D. The species were able to move among the smaller patches to obtain the nutrients they needed.

59. Which of the following is not a characteristic of a sustainable ecosystem?
A. biodiversity
B. no resource use
C. responsible land use
D. ability to sustain ecological process

60. Which of the following is an example of a sustainable land use approach in British Columbia?
A. grassland management plans
B. urban expansion into farmlands
C. cutting large areas of forest
D. draining and drying out wetlands

61. Which of the following statements about deforestation are true?

A. I and II only
B. I, II, and III
C. II only
D. II and III only

I	Deforestation is a problem only in tropical rainforests
II	Deforestation reduces the number of plants and animals living in an ecosystem
III	Deforestation can cause soil erosion

62. Which of the following statements about land use is not true?

A. Bare fields can cause topsoil erosion.
B. The use of tractors can cause soil compaction.
C. Mine reclamation can cause water contamination.
D. Road construction can cause habitat fragmentation.

Use this picture of an open-pit copper mine, similar to those found in British Columbia, to answer question 63.

63. Which of the following practices is likely to happen after the mine closes?

A. use of plants to decontaminate soil
B. use of topsoil to fill in the open pit
C. resource exploitation
D. destruction of habitat

64. Which of the following is a likely outcome of overexploitation?

A. biodiversity
B. extinction
C. sustainability
D. ecological succession

65. Which of the following is an example of traditional ecological knowledge?

A. soil compaction of agricultural lands
B. the introduction of non-native plant species
C. the overexploitation of the salmon fishery
D. the spring burning of prairie grasslands in Alberta

66. Which of the following statements about forest fires is not true?

A. Secondary succession can occur after a forest fire.
B. Forest fires are an example of resource exploitation.
C. Controlled burns of forest fires can improve the diversity of the forest.
D. Forest fire suppression practices have resulted in large numbers of dead or diseased trees.

67. Which of the following characteristics accurately describe most invasive species?

A. I and II only
B. I, II, III, and IV
C. I, III, and IV only
D. III and IV only

I	aggressive competitors
II	low reproduction rates
III	lack natural predators in new habitats
IV	contribute to biodiversity loss

68. An invasive predator species is introduced into a new environment. The predator is quickly able to find suitable prey. In a short period of time, the prey population has been dramatically reduced by the new predator. Which of the following best explains how the predator was able to do this?

A. The prey population began to occupy a new niche.
B. The prey population had a high reproduction rate.
C. The invasive predator became a parasite on the prey species.
D. The prey population probably did not have adaptations to escape or fight the new predator.

69. What type of impact has the European starling had on native birds in British Columbia?

A. predation
B. competition
C. habitat alteration
D. disease and parasites

70. Which of the following species have these three characteristics in common?

• invasive species
• outcompete native species
• found in British Columbia

A. gypsy moth and grey squirrels
B. grey squirrels and American bullfrog
C. gypsy moth and American bullfrog
D. grey squirrels and red squirrels

71. Which of the following statements accurately describes introduced species?

A. They naturally inhabit the new environment.
B. Native species is another name for introduced species.
C. Many are harmless or beneficial in their new environment.
D. They are always intentionally introduced into a new environment.

72. Which of the following are reasons why there has been an increase in invasive introduced species?

A. I, II, and III only
B. II and IV only
C. III and IV only
D. I, II, III, and IV

I	creation of new niches in ecosystems
II	increased international air travel
III	increase in biodiversity of ecosystems
IV	climate change

Use the following information to answer questions 73 and 74.

Rabbits were introduced to Australia by European settlers. The rabbits quickly multiplied and spread throughout the country, feeding on the native vegetation and destroying food and habitat for many native species. The Australian government decided to use myxoma virus to eradicate the rabbit population. The myxoma virus is from Uruguay, and it causes the fatal disease myxomatosis. It is usually transmitted by mosquitoes or fleas.

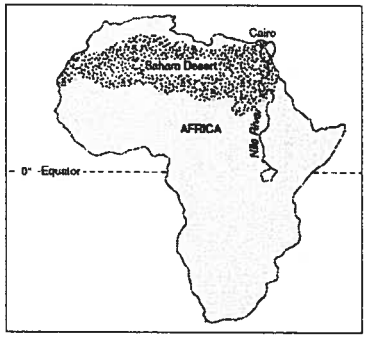
73. Which of the following best summarizes the actions of the Australian government?

A. the use of an introduced species to control an invasive population
B. the use of a native species to control an invasive population
C. the use of an invasive species to control a native population
D. the use of a foreign species to control a native population

74. Initially, the virus killed 90 percent of the rabbit population. In more recent years, the rabbit population has begun to grow again even though the virus is still present in the environment and continues to kill up to 50 percent of the rabbit population annually. What is the best explanation for why the virus currently kills only half of the rabbit population?

A. The rabbit population became a native species.
B. The rabbit population found a new niche to occupy.
C. The rabbit population learned to hide from the virus.
D. Natural selection favoured virus-resistant rabbits that were able to survive and reproduce.

Use the following picture to answer question 75.



75. Which of the following is an example of a biome?
A. the Equator
B. the Nile River
C. the city of Cairo
D. the Sahara Desert

76. Which of the following is a characteristic of the boreal forest biome?
A. coniferous trees
B. a permafrost layer
C. a constant temperature throughout the year
D. annual rainfall of more than 250 cm per year

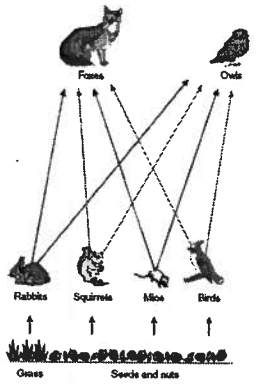
77. An ecologist wants to gather information about a stream along a mountainside. Which of the following is a biotic factor?
A. water flow rate
B. mineral deposits
C. water temperature
D. variety of life forms

78. What relationship exists between the honeybee and the flower?
A. predation
B. parasitism
C. mutualism
D. commensalism

79. Which of the following contain the greatest carbon stores in gigatonnes of carbon?
A. marine life
B. oil and gas deposits
C. organic matter in soil
D. marine sediments and sedimentary rocks

80. Which of the following do nitrogen fixation and the decomposition of organic wastes have in common?
A. Both enrich the soil.
B. Both are part of the carbon cycle.
C. Both decrease levels of nitrogen in the soil.
D. Both are responsible for increased levels of carbon dioxide in the atmosphere.

81. Which of the following is likely to occur if a large number of squirrels are removed from the area?
A. an increase in the fox population
B. an increase in the owl population
C. a decrease in the plant population
D. a decrease in the rabbit population



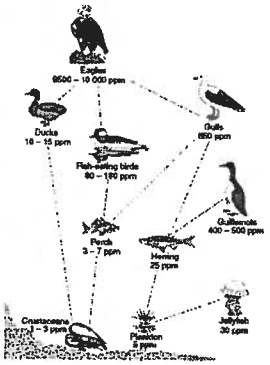
82. Which of the following elements have these three characteristics in common?

• dissolved in water
• stored in sediments
• present in the atmosphere

A. carbon and nitrogen
B. carbon and phosphorus
C. nitrogen and phosphorus
D. carbon, nitrogen and phosphorus

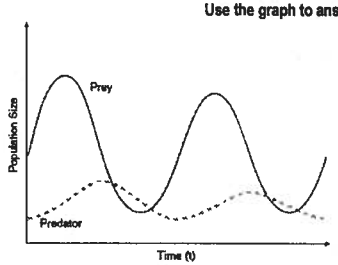
83. Which of the following best explains the distribution of temperate rainforests?
A. warm, moist air near the equator
B. intense solar radiation causing arid conditions
C. presence of large numbers of small herbivores
D. presence of coastal mountains causing high annual precipitation

Use the following diagram to answer question 84



84. Which statement best explains the relatively high level of PCBs in eagles compared to those of guillemots?
A. Both species are carnivores.
B. Guillemots eat more herring than eagles do.
C. Levels of PCBs are higher in marine environments.
D. Eagles occupy a higher trophic level than guillemots.

Use the graph to answer questions 85-86



85. The increase in the predator population size lags behind the increase in the prey population size.
A. The statement is supported by the graph.
B. The statement is refuted by the graph.
C. The statement is neither supported nor refuted by the graph.

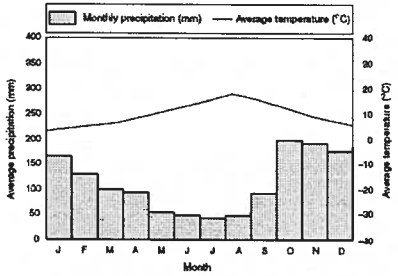
86. Which of the following situations contributes to the shape of the graph?

I	When the prey population is small, the predators have more difficulty capturing food and their population starts to decline.
II	In response to predator decline, the prey population starts to increase
III	Both predator and prey populations increase until the increased number of predators causes the prey population to decline.
IV	As the predator population increases and eats more prey, the reduced prey population will lead to starvation among predators.

A. I and II only
B. I and IV only
C. II and III only
D. I, II, III and IV

Use the following climatograph to answer question 87

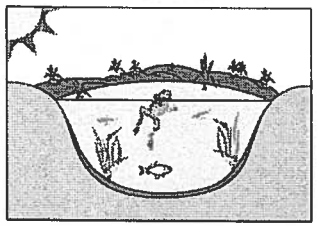
87. Which world biome is represented by the data in the climatograph?
A. desert
B. tundra
C. tropical rainforest
D. temperate rainforest



88. Which of the following species is most likely to occupy the second trophic level in an ecosystem?
A. apple
B. bird-eating cat
C. insect-eating bird
D. apple-eating insect

89. Which of the following best explains the limited amounts of nitrogen in agricultural land?
A. Denitrifying bacteria are scarce.
B. Decomposers remove nitrogen from the soil.
C. Bacteria that perform nitrogen fixation are rare.
D. Ammonium, nitrite and nitrate leach from the soil.

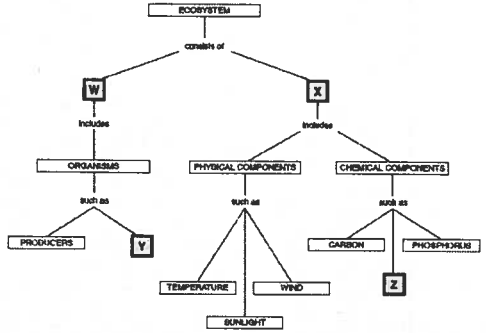
Use the following diagram to answer question 90-91



90. Which of the following is an abiotic factor?
A. fish
B. frog
C. plant
D. water

91. What process is responsible for providing energy to the ecosystem?
A. decomposition
B. commensalism
C. photosynthesis
D. bioaccumulation

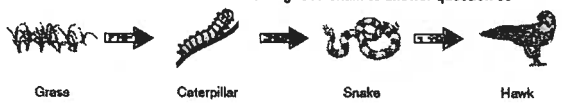
Use the following diagram to answer question 92.



92. Which of the following sets of terms correctly represent each of the shaded boxes shown above?

	Box W	Box X	Box Y	Box Z
A.	biotic	abiotic	biome	water
B.	biotic	abiotic	consumers	nitrogen
C.	abiotic	biotic	biome	water
D.	abiotic	biotic	consumers	nitrogen

Use the following food chain to answer question 93



93. If many hawks were killed, what would likely happen to the caterpillar population?
A. It would increase.
B. It would decrease.
C. It would remain stable.
D. It would increase, and then level off.

94. Which of the following is an example of parasitism?

A. The red-billed oxpecker climbs over the skin of giraffes, searching for insects to eat. The giraffe is helped because the oxpecker takes away the irritating pests.
B. The dodder is a plant that lives on other plants, getting nutrients from them. Dodders do not have any chlorophyll necessary for photosynthesis and do notmake their own food.
C. The remora fish has a suction disk on top of its head, which it uses to harmlessly attach itself to sharks. It is then protected by the shark and can pick up scraps of food the shark drops.
D. Acacia ants protect the acacia tree in Costa Rica. They bite animals that try to eat parts of the tree. In return, the tree provides the ants with a safe place to nest inside its large thorns. The tree also produces a sweet substance for the ants to eat.

95. Which of the following will remove carbon dioxide from the atmosphere?

I	planting trees
II	burning a forest
III	cutting down trees
IV	maintaining a mature forest

A. I and IV only
B. II and III only
C. III and IV only
D. I, III and IV only

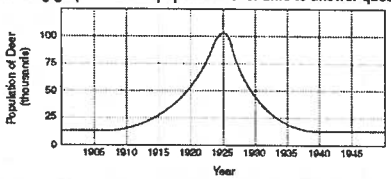
96. Which of the following describes how phosphorus is made available for plants to use?
A. Lightning fixes atmospheric phosphorous.
B. Weathering releases phosphorus from rock.
C. Volcanoes release phosphorus from the earth.
D. Cellular respiration releases phosphorus to the atmosphere.

97. Which of the following abiotic factors would be similar within the boreal forest biome?

I	industrial pollution
II	average temperature
III	annual precipitation

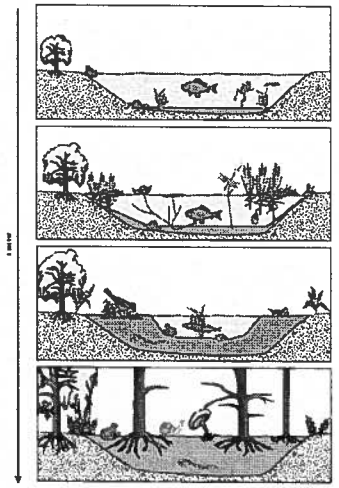
A. I only
B. I and II only
C. I and III only
D. II and III only

Use the following graph of a deer population over time to answer question 98.



98. Which of the following is the most likely explanation for the change in the number of deer from 1925 to 1935?
A. Food resources were depleted and starvation occurred.
B. Drought caused a large number of deer to enter the area.
C. Improved natural habitat provided additional protection from predators.
D. A number of predatory species drove the local deer population to extinction.

Use the following diagram to answer question 99.



99. Which of the following is represented?
A. biodegradation
B. natural selection
C. adaptive radiation
D. ecological succession