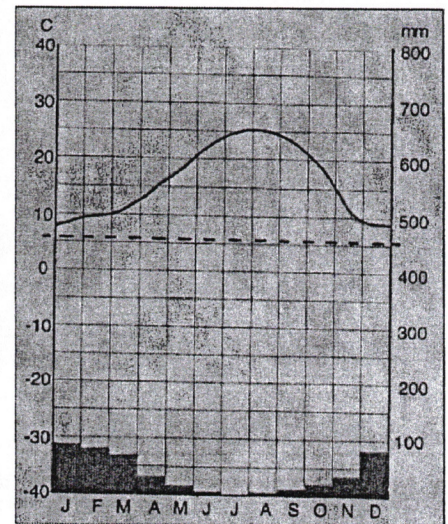


Use the world map above, climate graphs, photographs and biome data to answer the questions below.

1. Name the climate type shown by the graph on the right.

2. At which location on the world map would this climate be found? _____
3. Name the biome which corresponds with this climate type.

4. List 2 serious threats to this biome.



5. Which climate graph on page 213 is associated with Biome Data A? _____

6. Which number on the world map on p. 211 shows the biome described by Biome Data A?

7. Which map location would best represent the biome in Photograph 1 below?

8. List 2 ways the vegetation in Photograph 1 has adapted to the climate conditions in this region.

a. _____

b. _____

9. Which climate graph on p. 213 is associated with the biome in Photograph 1?

Biome Data A

Characteristics

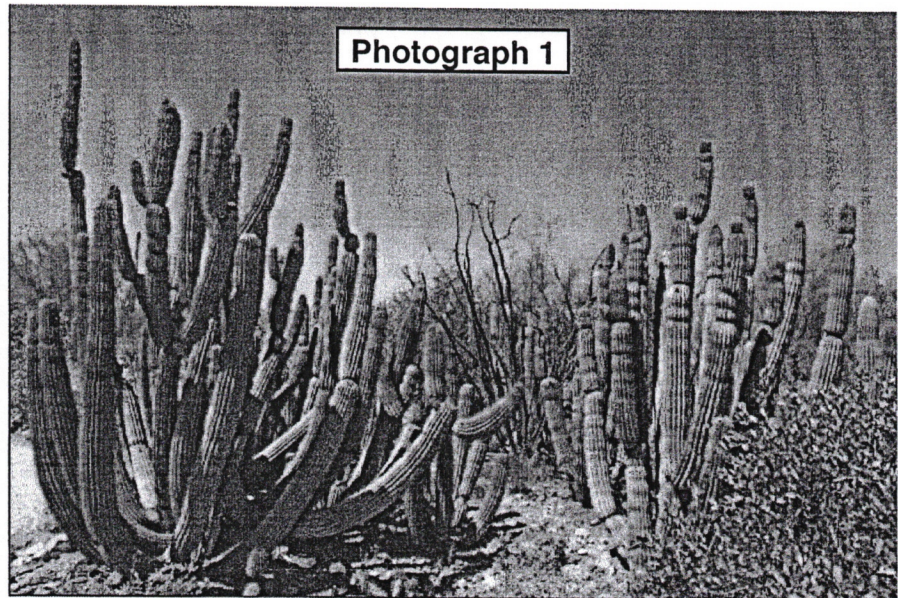
- short growing season
- mosses and lichens
- caribou migration

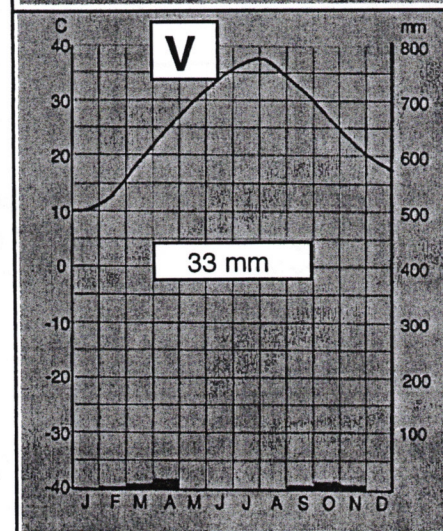
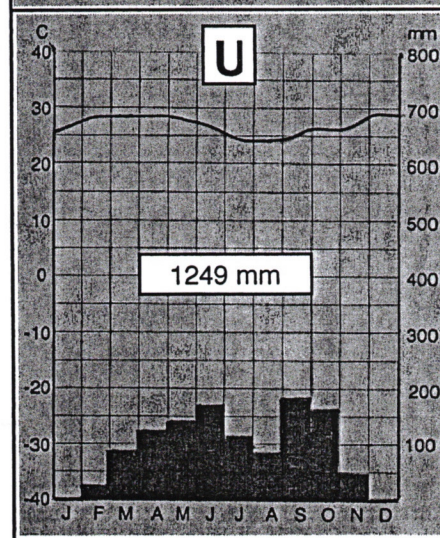
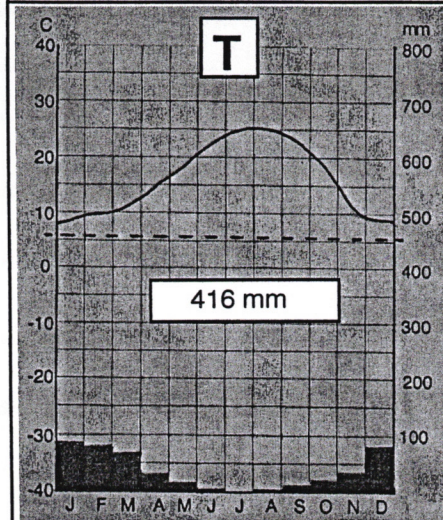
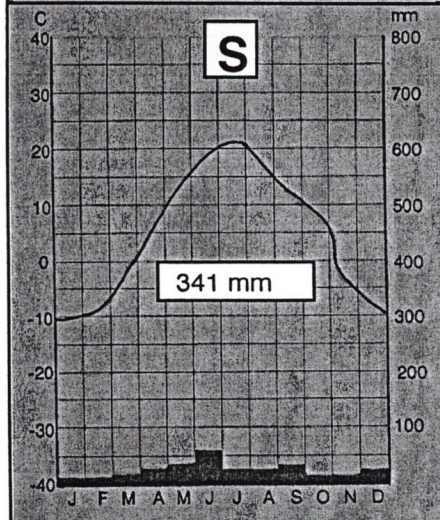
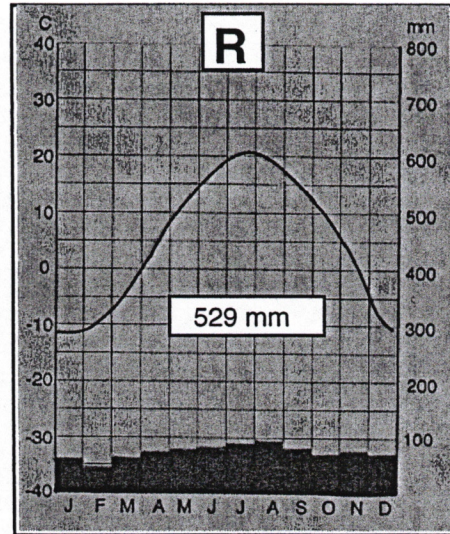
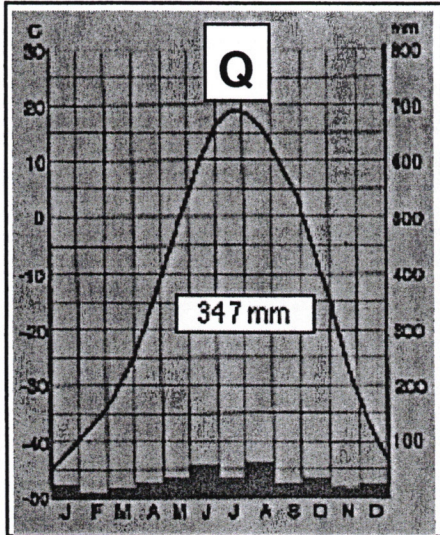


Decomposing organic matter

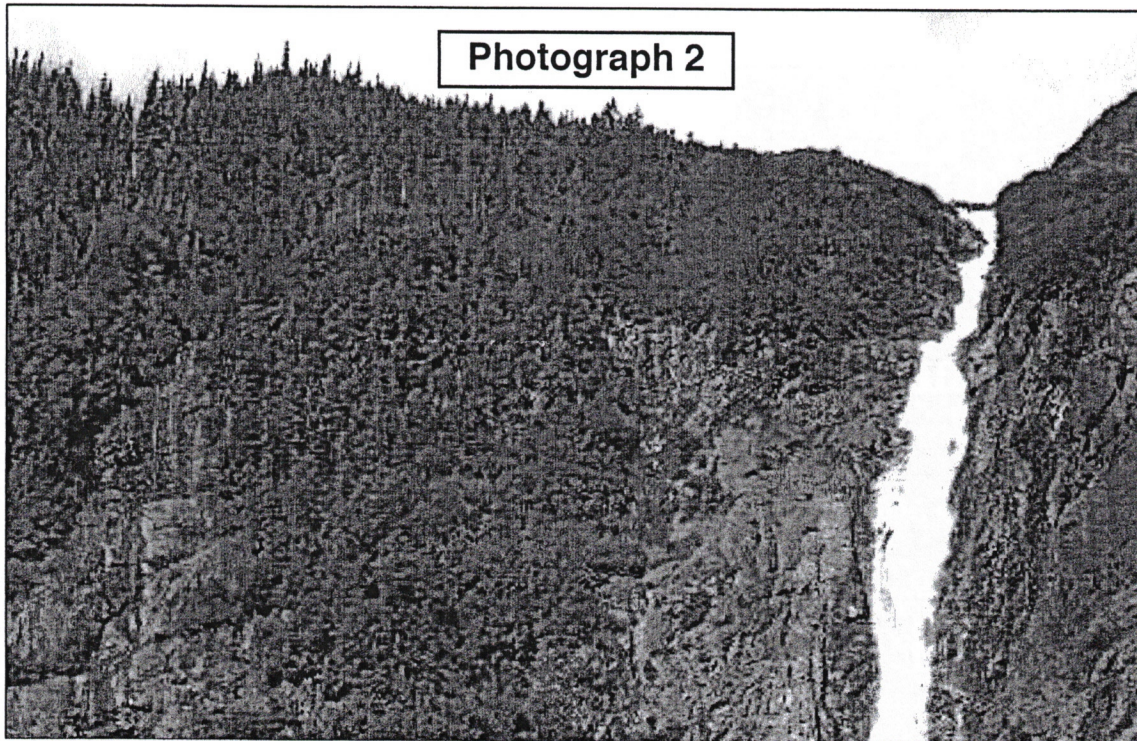
Permafrost;
slow decomposition;
waterlogged layers

Bedrock
Parent material





CLIMATE GRAPHS



Use Photograph 2 above to answer questions 10-16

10. Which map location on p. 211 best represents the biome in Photograph 2? _____

11. Name this biome. _____

12. Which climate graph on p. 213 best represents the biome shown in Photograph 2? _____

13. List three serious threats to this biome.

14. Which human activity listed below best represents this location? Circle the correct letter.

- | | |
|---------------------|---------------------|
| a. grain farming | b. fruit production |
| c. softwood logging | d. cattle ranching |

15. Name the soil of this region. _____. Why is this soil so acidic?

16. Give 2 ways that the conifer trees of this region combat the effects of heavy winds.

Use Biome Data B below to answer questions 17-22

17. Which map location best represents the biome data on the right?

18. Identify the natural vegetation found in this biome.


19. Which of the following human activities best represents this location?

- a. citrus fruit growing
- b. softwood lumber industry
- c. deciduous hardwood harvesting
- d. ranching and grain growing

Biome Data B

Characteristics

- rainshadow region
- convection rainfall in summer months



Black, dark brown humus-filled loam

Yellowish brown subsoil

Gray yellow silt loam

Lime carbonate

Bedrock

Parent material

20. Which climate graph from p. 213 is associated with this biome data ? _____

21. Name the soil type in Biome Data B above? _____

22. For this soil, which of the following is a prominent soil forming process?

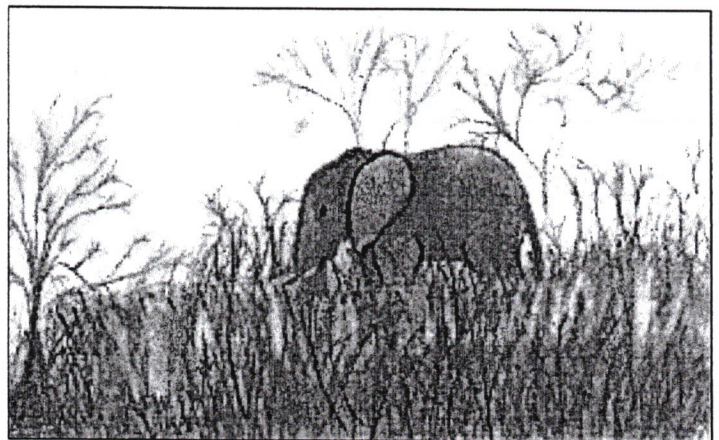
- a. leaching
- b. capillary action

Use the illustration below and the climate graphs on page 213 to answer questions 23-25

23. Which map location best represents the biome in this illustration?

24. Which climate graph best represents the biome in this illustration?

25. List 2 threats to this biome.



Unit 4: Biosphere

Topic: Biomes, climates, soils

Name _____

Use Biome Data C to answer questions 26-31

26. Which map location best represents Biome Data C?

27. Name the climate of this region.

Biome Data C

Characteristics

- low pressure belt
- wet all year
- broadleaf evergreen forest, lianas



Thin humus layer

Red iron oxide concentrations

Red subsoil

Bedrock
Parent material

28. List 2 ways the vegetation in this biome has adapted to the climate conditions in this region.

29. List 3 serious threats to this biome.

30. The soil of this biome is severely leached. Define leaching.

31. Explain why the soil of this region is the most severely leached soil in the world.

Fill in the blanks choosing the correct term from the box below.

laterite	deciduous	microtherm	podzol
silviculture	wetlands	xerophytes	biome
lianas	biotic	chernozem	leaching
sierozem	prairie	fertilizers	terracing
humus	capillary action	extirpation	fallow
transpiration	herbivores	permafrost	food chain
pampas	extinction	terra rosa	abiotic
crop rotation	carnivores	photosynthesis	steppe

1. Drought loving plants of desert regions. _____
2. The red iron rich soil of tropical rain forests is called _____.
3. Non-living components of ecosystems are referred to as _____.
4. Animals that feed on plant tissue are known as _____.
5. _____ is the sticky, partly decomposed organic matter at the soil surface.
6. A plant that can endure low temperatures is a _____.
7. The science of caring for our forest lands. _____
8. Dissolved nutrients are brought to the surface in dry areas by this process. _____
9. _____ refers to the local elimination of a species.
10. Flesh eating consumers are called _____.
11. _____ refers to the loss of water vapour from plants to atmosphere.
12. Acidic soil of coniferous forest region. _____
13. Living components of ecosystems are referred to as _____.
14. Death of all members of a species. _____
15. Temperate grasslands of North America found in the rain shadow of great mountain ranges.

16. This sandy soil has a poor profile and is found in desert regions. _____
17. Frozen subsoil in the sub-arctic is called _____.
18. A bi-product of this process is oxygen. _____
19. This nutrient rich soil is found in temperate grasslands of North America and Asia.

20. The cause of growing number of dead zones in our oceans _____.

21. Soil found in the Mediterranean region with chaparral vegetation. _____
22. Grassland region stretching from Asia to China is called _____.
23. Dissolved nutrients are taken deep into the lower soil layers by this process. _____
24. These grasslands are found in Argentina. _____
25. _____ trees drop their leaves and remain dormant through the cold winter months.
26. The movement of energy through a system is known as a _____.
27. A planetary ecosystem that has specific plants and animals is known as a _____.
28. This process allows the native vegetation to flourish and over several years the nutrient content of the soil recovers naturally. _____
29. Tropical rain forest vines. _____
30. This farming method conserves nutrients in the soil keeping soils healthier. _____
31. _____ is a method of farming on severe slopes that significantly reduces water erosion.
32. To help minimize the reduction in the number of all types of birds, it is essential to preserve _____, which are stop-overs on long migration routes.