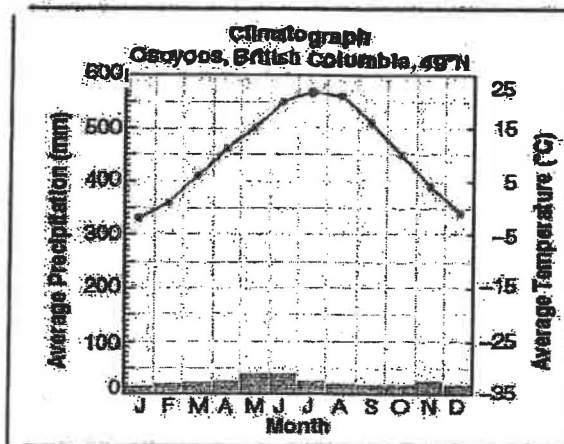
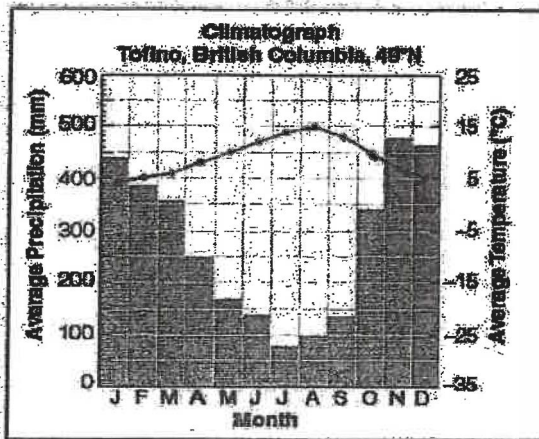


Climatograph

1. You can compare biomes using the information shown in _____.
2. A climatograph shows the _____
for a location a period of _____ years or more.
3. The bars on the graph show the average _____.
4. The line on the graph shows the average _____.

Examine the difference between the climatographs for Tofino and Osoyoos. Answer the following questions.



The statistics for this graph came from Tofino, BC, which is in the temperate rainforest biome.

The statistics for this graph came from Osoyoos, BC, which is in the desert biome

1. a) What does the horizontal axis of a climatograph show? _____
- b) Does the line connecting the dots show temperature or precipitation? _____
- c) What does the right vertical axis on a climatograph show? _____
- d) What is the average temperature of Tofino in October? _____
- e) What is the average temperature of Osoyoos in July? _____
- f) In which month does Tofino have the lowest average temperature? _____
- g) What does the left vertical axis on a climatograph show? _____
- h) What is the average precipitation^{Tofino} in August? _____
- i) How much precipitation is received in Osoyoos during its driest month? _____
- j) How do the average temperatures compare for the two locations in October? _____

Name: _____ Period: _____

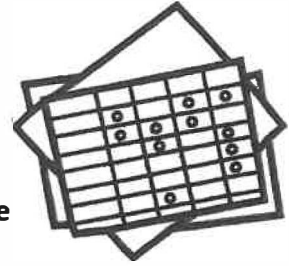
Climatograph Activity

Ecological Problems – Modified by M. Oliphant from R. Young

BACKGROUND INFORMATION

Like we talked about in class, one of the most important factors in defining a biome is the CLIMATE.

Climate is the LONG TERM AVERAGE WEATHER for an area and is mostly based on the TEMPERATURE and the RAIN experienced.



Ecologists create graphs called CLIMATOGRAPHS to help them understand the climate of biomes and communicate that information to other ecologists.

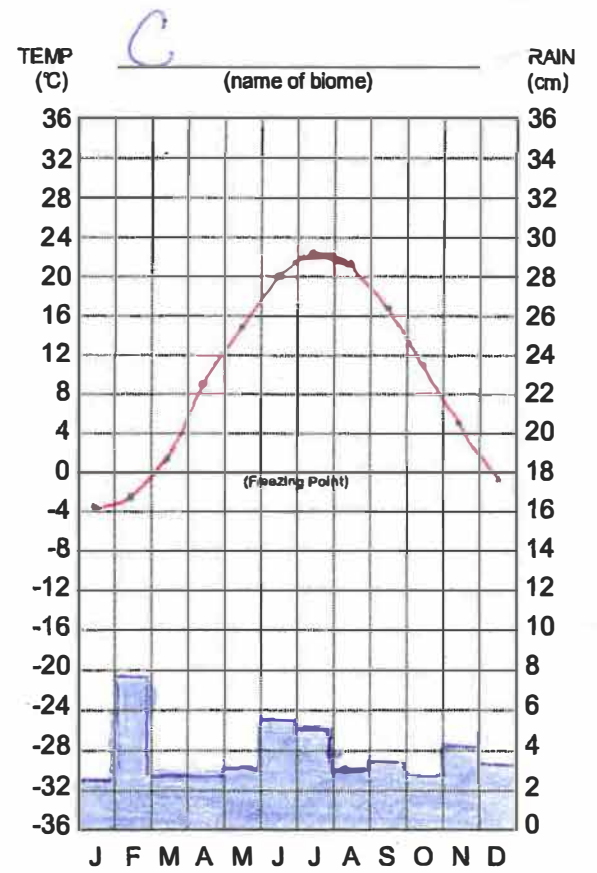
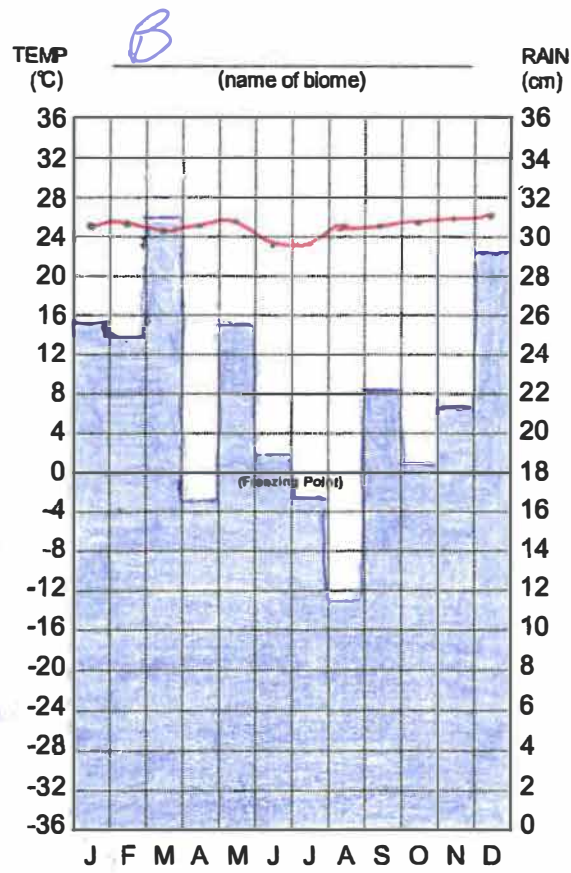
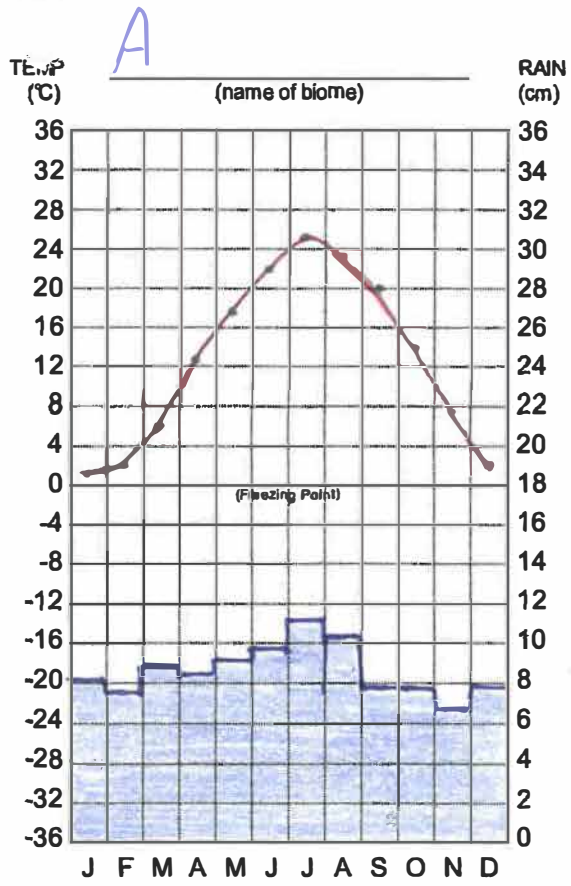
DIRECTIONS

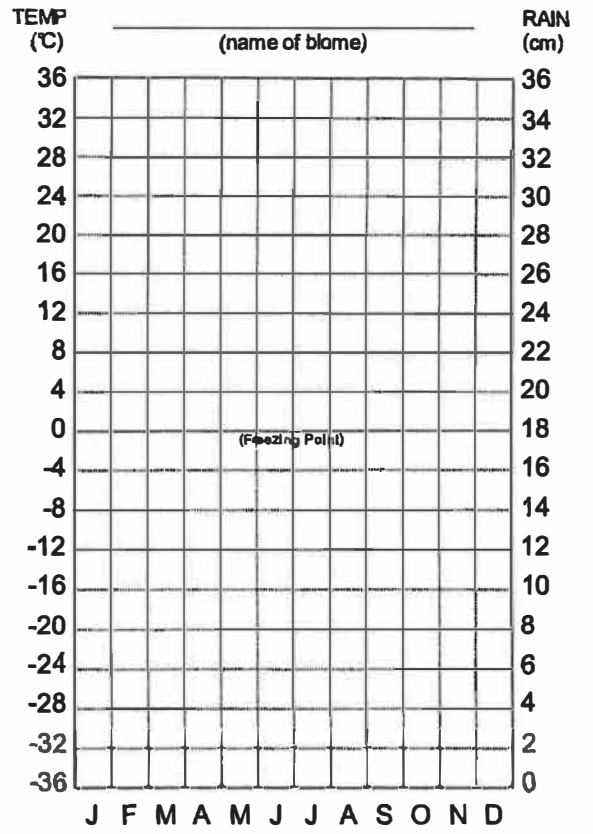
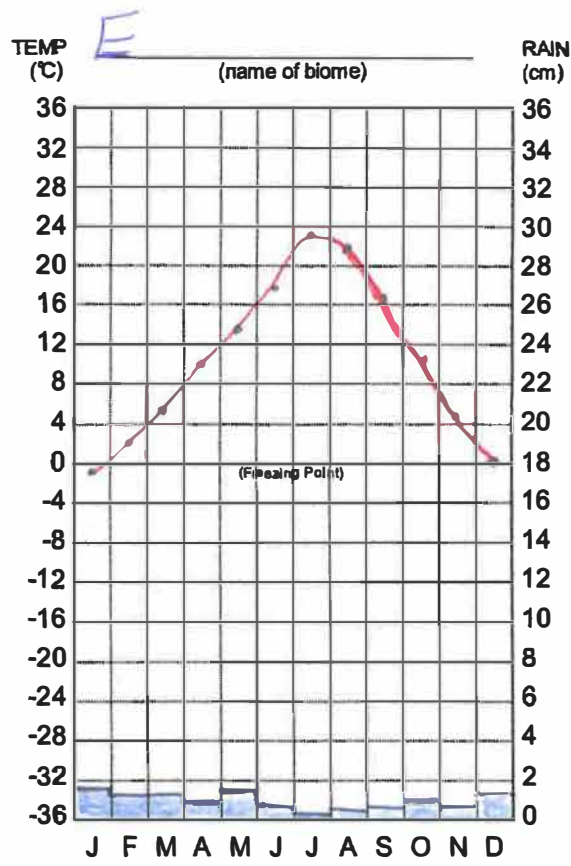
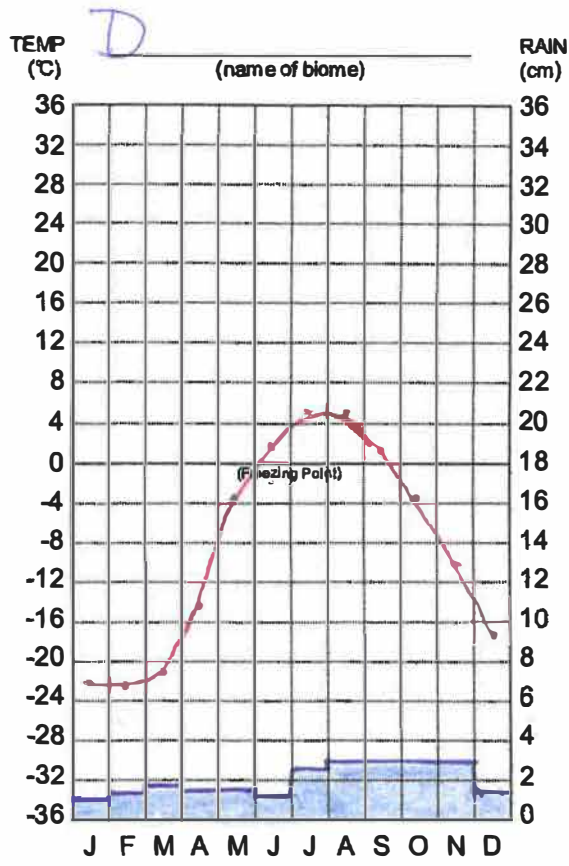
Below is information gathered from 5 mystery biomes. This data has been used to create the 5 Climatographs on the following pages. Use the information in these Climatographs to answer the questions that follow.

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A	Temp	1.1	1.7	6.1	12.2	17.8	22.2	25.0	23.3	20.0	13.9	7.8	2.2
	Precip	8.1	7.6	8.9	8.4	9.2	9.9	11.2	10.2	7.9	7.9	6.4	7.9
B	Temp	25.6	25.6	24.4	25.0	24.4	23.3	23.3	24.4	24.4	25.0	25.6	25.6
	Precip	25.8	24.9	31.0	16.5	25.4	18.8	16.8	11.7	22.1	18.3	21.3	29.2
C	Temp	-3.9	-2.2	1.7	8.9	15.0	20.0	22.8	21.7	16.7	11.1	5.0	-0.6
	Precip	2.3	7.8	2.8	2.8	3.2	5.8	5.3	3.0	3.6	2.8	4.1	3.3
D	Temp	-22.2	-22.8	-21.1	-14.4	-3.9	1.7	5.0	5.0	1.1	-3.9	-10.0	-17.2
	Precip	1.0	1.3	1.8	1.5	1.5	1.3	2.3	2.8	2.8	2.8	2.8	1.3
E	Temp	-0.6	2.2	5.0	10.0	13.3	18.3	23.3	22.2	16.1	10.6	4.4	0.0
	Precip	1.5	1.3	1.3	1.0	1.5	0.8	0.3	0.5	0.8	1.0	0.8	1.5

Temperature (°C)

Precipitation (cm)





DISCUSSION QUESTIONS:

1. What are the factors which determine the climate of a biome?
2. What is a climatograph?
3. Using your climatographs and the information provided below, match your climatograph with the correct biome:
 - Biome A = _____
 - Biome B = _____
 - Biome C = _____
 - Biome D = _____
 - Biome E = _____

GENERIC DESCRIPTIONS OF VARIOUS BIOMES

Temperate Deciduous Forest

Precipitation tends to be distributed fairly evenly throughout the year, although this biome can experience large changes in temperature depending on the season.

Taiga

Located usually in the north, the taiga are large conifer (evergreen) forests. Seasons in the taiga are divided into a shorter, wetter, warmer summer; and a longer, colder, drier winter.

Savanna

The warm cousin of a [temperate] grassland, the savannas are also known for low lying vegetation and grasses. Warm to hot year around, the savanna experiences a concentrated period of rain followed by a long period of drought.

Tropical Rain Forest

Usually experiences two distinct seasons – a rainy and a dry season – while remaining warm throughout the year.

Grassland

A biome composed of mostly grasses and low-lying vegetation, the grasslands are known for their large swings in temperature (very hot in the summer, cold in the winter), along with moderate precipitation.

Temperate Rain Forest

The cooler (temperature-wise) cousin of the tropical rain forest. The temperate rain forest experiences lower temperatures, while experiencing higher levels of precipitation.

Desert

Annual precipitation is low and scattered unevenly throughout year. Most are considered "hot deserts" although a few different "cold deserts" exist around the world.

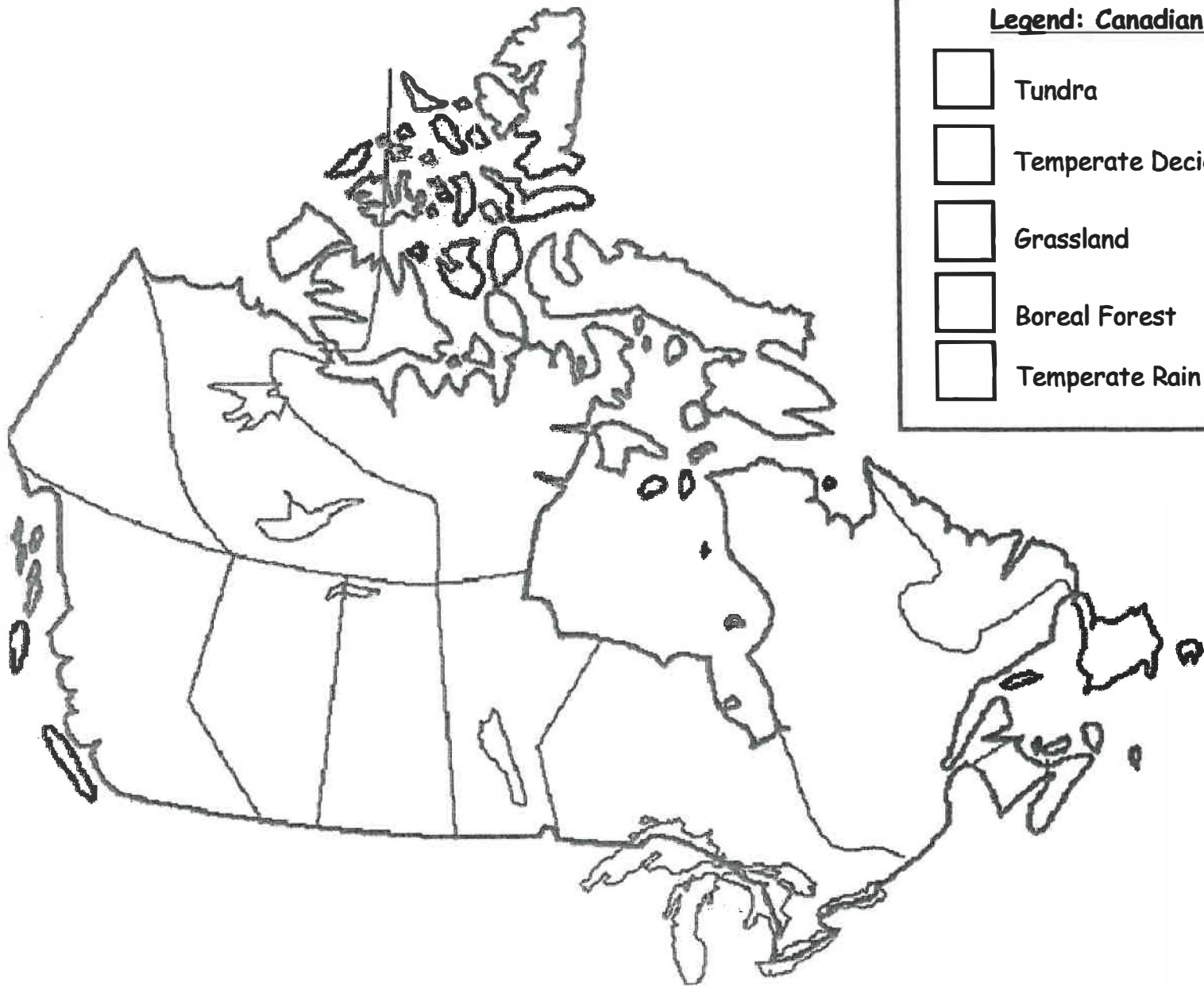
Tundra

Cold year-around, the soil of the tundra rarely thaws to a great extent. Winters are bitterly cold, and summers are cool. Precipitation is low year-around.

Chaparral

Often referred to as "scrub land," the chaparral is usually a dry place to live. While summers can be very hot (leading to fires and droughts), winters are usually milder, although still dry.

4. Using the power point notes as a guide, color the following map of Canada's biomes.



Legend: Canadian Biomes

- Tundra
- Temperate Deciduous Forest
- Grassland
- Boreal Forest
- Temperate Rain Forest

