

THE UNITED STATES AND CANADA

Climate and Vegetation

All questions require at least
THREE sentences on own paper.

PLACES & TERMS

permafrost permanently frozen ground

prevailing westerlies winds that blow from west to east

Everglades huge swampland in southern Florida

Shared Climates and Vegetation

Where is the mildest shared climate found?

The Arctic coastlines of Alaska and Canada have tundra climate and vegetation. Winters here are long and bitterly cold. Summers are brief and chilly. The land is a huge, treeless plain.

Much of the rest of Canada and Alaska have a subarctic climate. This climate has very cold winters and short, mild summers. A vast forest of needle-leaved evergreens covers the region. In some areas, there is **permafrost**, or permanently frozen ground.

The Rocky Mountains and the Pacific ranges have highland climate and vegetation. Temperature and vegetation vary with *elevation* and latitude. Generally, the temperature is colder and the vegetation is less in the higher, more northerly mountains. The mountains also affect the temperature and the amount of precipitation in nearby lower areas.

The north central and northeastern United States and much of southern Canada have a humid continental climate. Winters are cold and summers

are warm. Climate and soil make this one of the world's most productive agricultural areas. It *yields* an *abundance* of dairy products, grain, and livestock.

In the upper part of this zone, summers are short. There are mixed forests of deciduous and needle-leaved evergreen trees. Most of the population of Canada is located here. The lower part of the zone is in the United States. Here, summers are longer. Generally, deciduous forests are found east of the Mississippi River. Temperate grasslands are found to the west.

The Pacific coast from northern California to southern Alaska has a climate described as marine west coast. Here, climate is affected by three factors. They are Pacific Ocean currents, the coastal mountains, and the **prevailing westerlies**. These are winds that blow from west to east. Summers are warm. Winters are long and mild but rainy and foggy. Vegetation includes dense forests of broad-leaved deciduous trees, needle-leaved evergreens, and giant California redwoods. The Washington coast even has a rain forest.

1. What climate do the prevailing westerlies create?

Answer in at least THREE SENTENCES on own paper.

Differences in Climate and Vegetation

What are the Everglades?

The milder, dry, and tropical climates of North America are found south of 40° N latitude. Much of the United States is located in these climate zones.

The southern states have a humid subtropical climate. This means that summers are hot and *muggy*. Winters are usually mild and cool. Moist air from the Gulf of Mexico brings rain during the winter. The combination of mild temperatures and enough rain provides a long growing season. A variety of crops are grown. Broad-leafed deciduous trees and needle-leafed evergreen trees are found here.

The central and southern coasts of California have a Mediterranean climate. Summers are dry, sunny, and warm. Winters are mild and somewhat rainy. A long growing season and irrigation make this a rich farming areas for fruits and vegetables.

The Great Plains and the dry northern parts of the Great Basin have a semiarid climate. The weather is dry. There are only about 15 inches of rain annually. Vegetation is mainly short grasses and shrubs.

The southwestern states have a desert climate. Here the weather is usually hot and dry. Less than ten inches of rain falls each year. Some cactus plants *thrive*, but much of the area is *barren* rock or sand.

In the United States, only Hawaii and southern Florida have tropical climates. The islands of Hawaii have a tropical wet climate that produces lush rain forests.

Southern Florida has a tropical wet and dry climate. It is always warm, but there are wet and dry seasons. Vegetation is mainly tall grasses and scattered trees, such as in the Everglades. The Everglades a huge swampland that covers some 4,000 square miles.

2. Which climates provide the longest growing seasons?

Answer in at least THREE SENTENCES on own paper.

Effects of Extreme Weather

How does weather hurt some areas?

Weather can be harsh and sometimes deadly. In both cold and mild climates, severe storms can trigger widespread devastation.

Warm air from the Gulf of Mexico and cold Canadian air masses sometimes clash over the plains region. The result are violent thunderstorms, tornadoes, and blizzards. Tornadoes strike so often in one area of the Great Plains that it is called "Tornado Alley." In summer and fall, hurricanes sweep along the Atlantic and Gulf coasts. They can cause great damage. Winter snowstorms may bring normal life to a temporary halt in many cities.

Disasters can also result from too much water or not enough. Heavy rainfall can touch off flooding. Lands along major rivers, such as the Mississippi, are especially at risk. Too little rain or too much heat may bring on droughts and dust storms or cause forest fires.

3. What creates storms over the Great Plains?

Answer in at least THREE SENTENCES on own paper.