

## **Read the text about North American climate and do the exercises below.**

There are six climatic zones in North America: arctic, subarctic, temperate, subtropical, tropical, and subequatorial.

The Arctic belt covers almost all of Greenland, the north of the Canadian Arctic Archipelago and the northern edge of the mainland. Cold arctic air masses dominate all year round. In the east of the archipelago and on the coast of Greenland, the arctic marine type of climate is widespread: the air temperature in January is  $-25 \dots -30^{\circ}\text{C}$ , in July – up to  $0 \dots +5^{\circ}\text{C}$ , precipitation is 300–600 mm in the form of snow. The central regions of Greenland and the west of the archipelago are characterized by a severe arctic continental climate.

The subarctic belt covers the south of the island archipelago and Greenland. It is characterized by a seasonal change in air masses. In the central part of the belt, the subarctic continental type of climate prevails with long severe winters ( $-25 \dots -30^{\circ}\text{C}$ ) and short cool (up to  $+5 \dots +10^{\circ}\text{C}$ ) and rainy summers (200–400 mm per year).

The temperate belt occupies the largest area on the mainland. Because of its great latitude, three regions stand out in it: in the east and west – with a maritime climate, in the center – with a continental climate. In the east, under the influence of air masses from the Atlantic and the cold Labrador Current, a temperate marine type of climate is formed.

To the west, the climate becomes moderate continental with cold winters (from  $-25^{\circ}\text{C}$  in the north to  $-5^{\circ}\text{C}$  in the south) and warm summers (from  $+10$  to  $+24^{\circ}\text{C}$ ). Precipitation decreases from east to west from 900 to 300 mm. On the Pacific coast, the type of climate is temperate maritime with relatively warm winters ( $-5 \dots +5^{\circ}\text{C}$ ) and cool summers ( $+10 \dots +18^{\circ}\text{C}$ ). The weather is cloudy, windy and rainy all year round.

In the subtropical zone, humid temperate air masses arrive in winter with a westerly transfer, and dry and hot tropical air masses in summer. Three regions are distinguished in it: with humid, continental and Mediterranean types of climate. A subtropical humid climate (humid subtropics) with relatively warm humid winters ( $+8 \dots +14^{\circ}\text{C}$ ) and hot humid summers ( $+25 \dots +27^{\circ}\text{C}$ ) is widespread on the southeastern outskirts. Abundant precipitation (1500–2000 mm) falls throughout the year. The middle region is characterized by a subtropical continental type of climate with hot dry summers ( $+24 \dots +28^{\circ}\text{C}$ ) and cool winters ( $-5 \dots +10^{\circ}\text{C}$ ), scarce precipitation (up to 400 mm).

In the tropical zone, there are three types of climate: humid, continental and coastal deserts. The West Indies and the coast of the Gulf of Mexico are characterized by a tropical humid type of climate with high temperatures throughout the year ( $+16 \dots +28^{\circ}\text{C}$ ). In the south of the Mexican Highlands, the type of climate is tropical continental – with warm winters ( $+12 \dots +16^{\circ}\text{C}$ ) and hot ( $+20 \dots +28^{\circ}\text{C}$ ) summers. Due to the meeting of the Pacific and Atlantic air, an atmospheric front passes here and 400–500 mm of precipitation falls. On the Pacific coast, under the influence of the trade winds and the cold California Current, the climate of coastal deserts is common. The extreme south of the continent belongs to the subequatorial belt with a subequatorial monsoon type of climate.

### **I. Answer the questions.**

1. How many climatic zones are there in North America?
2. Which belt covers almost all of Greenland, the north of the Canadian Arctic Archipelago and the northern edge of the mainland?

3. What area in North America is covered by the subarctic belt?
4. Which belt occupies the largest area on the mainland?
5. In which zone do humid temperate air masses arrive in winter and dry and hot tropical air masses in summer?
6. In which zone are there three types of climate: humid, continental and coastal deserts?