Geography
Climate zones

Learning objectives
- The students learn about the impact of different climate systems around the world.
- In the project stage, students write a Geography report about a city, including a climate chart similar to the one from the reading section.

Warmer
1 Put students into pairs. Tell them to write the letters A–Z down one side of a piece of paper.

2 Tell students they have two minutes to think of a country for as many of the letters as possible, e.g. *Australia*, *Belgium*, *Canada*.

3 After two minutes, find out how many items students have, and get the pair with the most to read theirs out. Ask other groups if they have any items for any letters this group didn't have.

4 Tell students to put the countries into groups. Allow them to group them however they want, e.g. by continent, English-speaking countries, places they would or would not like to visit. Elicit some of the groupings in whole-class feedback.

1 Tell students to look at the map and to read the text to find out about the climate zones. Explain that the alpine climate is also known as a mountainous climate and that the arid climate is also known as a desert climate. Ask students to list places they might find alpine or arid zones in. As an alternative, divide the class into two groups. Set a one-minute time limit for one group to list the alpine zones and the other to list the arid zones. Feed back as a class. If you did the Warmer, you could use your list on the board to elicit some examples.

Possible answers
Alpine zones: the Alps, the Andes, the Himalayas
Arid zones: the Sahara Desert, Australia, northern Mexico

2 Ask students to do the matching exercise individually before comparing their ideas in pairs. Check answers.

Answers
1 tropical **2** polar; alpine **3** arid **4** temperate

3 Put students into pairs to describe what they can see in the photos. Find out if they already know anything about Tivoli, Nuuk or Belém and discuss what they know as a class. Then ask them to match the texts to the photos in pairs. Check answers.

Extension activity
Ask students to underline all of the vocabulary associated with temperature and weather in the text. Tell them to think of a country and to write two sentences describing its weather and two sentences giving other facts about the country. Put students into small groups and tell them to read their sentences out loud. The rest of their group should try to guess the country. Each group should choose one of their countries to test the whole class on.

Answers
a Nuuk **b** Belém **c** Tivoli

4 Ask students to read the texts again and to answer questions 1 to 3 individually. Nominate individuals to give answers and check the rest of the class agrees before confirming. Put students into same-ability pairs to discuss questions 4 and 5. Monitor and join in, helping with vocabulary as necessary. Give positive feedback for interesting ideas, and share ideas as a class.

Answers
1 Nuuk. The climate means that agriculture is limited, so the economy depends on fishing, mining and transport.
2 Tivoli. The climate is excellent for many crops.
3 Belém. Vegetation is thick and fast-growing.
4 and **5** Students' own answers.

5 Elicit what students already know about Edinburgh (it is the capital of Scotland, famous for its historic buildings and the Edinburgh Festival). Ask them if they know what the weather is like there. Elicit ideas and then ask them to complete the sentences with the words in the box. If they need help, tell them that the first four sentences are each completed with the name of a month, the second four with a comparative adjective.

Fast finishers

Ask fast finishers to use the words in the box to write three sentences about their own country's climate. They can share these after checking answers to exercise 5.

Answers

1 July **2** September **3** February and December
4 April **5** higher **6** wetter **7** lower **8** drier

6 **1.15** Tell students that they are going to find out more about Edinburgh and its geography. Give them a couple of minutes to read the questions. You may need to explain *record* /ˈrek.ɔːd/ – here, the lowest temperature ever recorded. Play the recording. Allow students to compare their answers with a partner before checking as a class.

Answers

1 It's near the sea so it has a temperate climate.
2 14.6 degrees below zero
3 1400 annually
4 July and August
5 in the morning
6 warm clothing and an umbrella

Audioscript

The city of Edinburgh is on the River Forth, in the Scottish Lowlands, not far from the North Sea. Because of its location near the sea, Edinburgh has a temperate climate. The weather is milder than in other cities at the same latitude, such as Moscow, which has much colder temperatures.

The average annual temperature in Edinburgh is nine degrees. In summer, it's usually about eighteen to twenty degrees, although the record high is thirty one point four. In winter, the temperature usually stays above freezing, or zero degrees, although the record low is fourteen point six degrees below zero. Edinburgh receives a good amount of precipitation – about seven hundred millimetres per year – and it rains every month of the year. However, the city does get quite a bit of sunshine – about one thousand four hundred hours annually. The sunniest and warmest months are July and August, when Edinburgh's most famous festivals take place: the Edinburgh International Festival, and the Edinburgh Fringe.

Edinburgh is also known for its windy weather, and it can be quite foggy as well, especially in the morning, although the fog often disappears by midday. That's another interesting characteristic of Edinburgh's weather – it's quite changeable. People say that you can experience all four seasons of the year in a single day. As a result, people there often carry warm clothing and an umbrella with them, in case the weather suddenly turns cold or wet.

Cooler

Put students into small teams and tell them to write five geography questions, e.g. *What's the capital city of Estonia?* (*Tallinn*) Remind them that they need to know the answers to their questions. Once groups have written their questions, each team should ask their questions to the class. The other teams should write down the answers. Check answers after each group has read out their questions. The winning team is the one with the most correct answers.

Mixed ability

Challenge stronger students to research, write and present their projects individually.

Project

This project can be done in class if you have internet access or set as homework. Put students into small groups to complete the research. Then tell them to write a report to present in the following class. This could be done as a PowerPoint presentation. Encourage the rest of the class to ask questions after each group has finished.