explainity explains
topic: climate zones
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explainity explains: climate zones

Heat around the equator.
Hot summers in the Mediterranean.
Spring, summer, fall and winter in New York.
Snowstorms in Greenland.
And icy temperatures at the South Pole.

The global climate can be divided into multiple zones. Here a range of factors come into play. Among the most important is the Sun.
Depending on the position of the Earth relative to the Sun, it heats the land and water more in some places and less in others.
In this process, warm air rises while cold air sinks. This results in wind, water vapor and rainclouds. All this contributes to climate distribution.

There is a line around the center of our globe called the "equator". The regions surrounding this line are the **tropics**. Since the Sun's rays hit the Earth almost straight on all year round, days are basically the same length and also just as warm whatever the season. Depending on the altitude, temperatures range between 50 and zero degrees Celsius.
The tropics are home to rainforests with lots of precipitation, where plants grow in abundance, as well as extremely dry regions, such as the savannahs in Africa.

Adjacent to the tropics are the **subtropics**. The summers are very hot. But the average temperature of the coldest month remains below 20 degrees Celsius.
The subtropics include a number of deserts, as well as the Mediterranean region. Here, the summer months are relatively dry, while in winter plenty of rain makes the landscapes flourish. And then there are also regions where every month brings scattered showers. Different plants flourish here at different times of the year.

The **temperate zone**, which includes New York, is defined by the familiar seasons. Winters can be icy cold, with a maximum of 4 daylight hours in some areas. On the other hand, summers are pleasantly warm, with up to 16 hours of sunshine. This zone is primarily home to deciduous, coniferous and mixed forests.

With the **subpolar zone**, we move farther still from the equator. Sunlight hits the Earth at a very shallow angle here, which is why the days in summer can be extremely long. Temperatures are typically just above freezing and there is lots of precipitation. By contrast, winter days are very short, and due to the polar easterly winds, really cold with low precipitation.
In the subpolar regions, coniferous forests can still be found in some areas. The closer you get to the polar caps, the bleaker and colder it becomes.

Now we are left with the **polar zones**, also known as cold deserts. At the North Pole is the Arctic, with lots of lowland. At the South Pole is Antarctica, with lots of mountains. Almost no plants grow in the polar zones, because the conditions are far too poor. In the summer, it stays light throughout the day and night, while in the winter it remains dark for almost half a year. Temperatures rarely exceed zero degrees Celsius.

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These climate zones can be divided further, such as into biomes or vegetation zones.

The boundaries between climate zones are rather blurred.
As a result of global warming, the zones are moving, making all regions warmer and drier.
So, it's possible that New York may eventually look like this in the future.