



What does the word
CLIMATE mean?

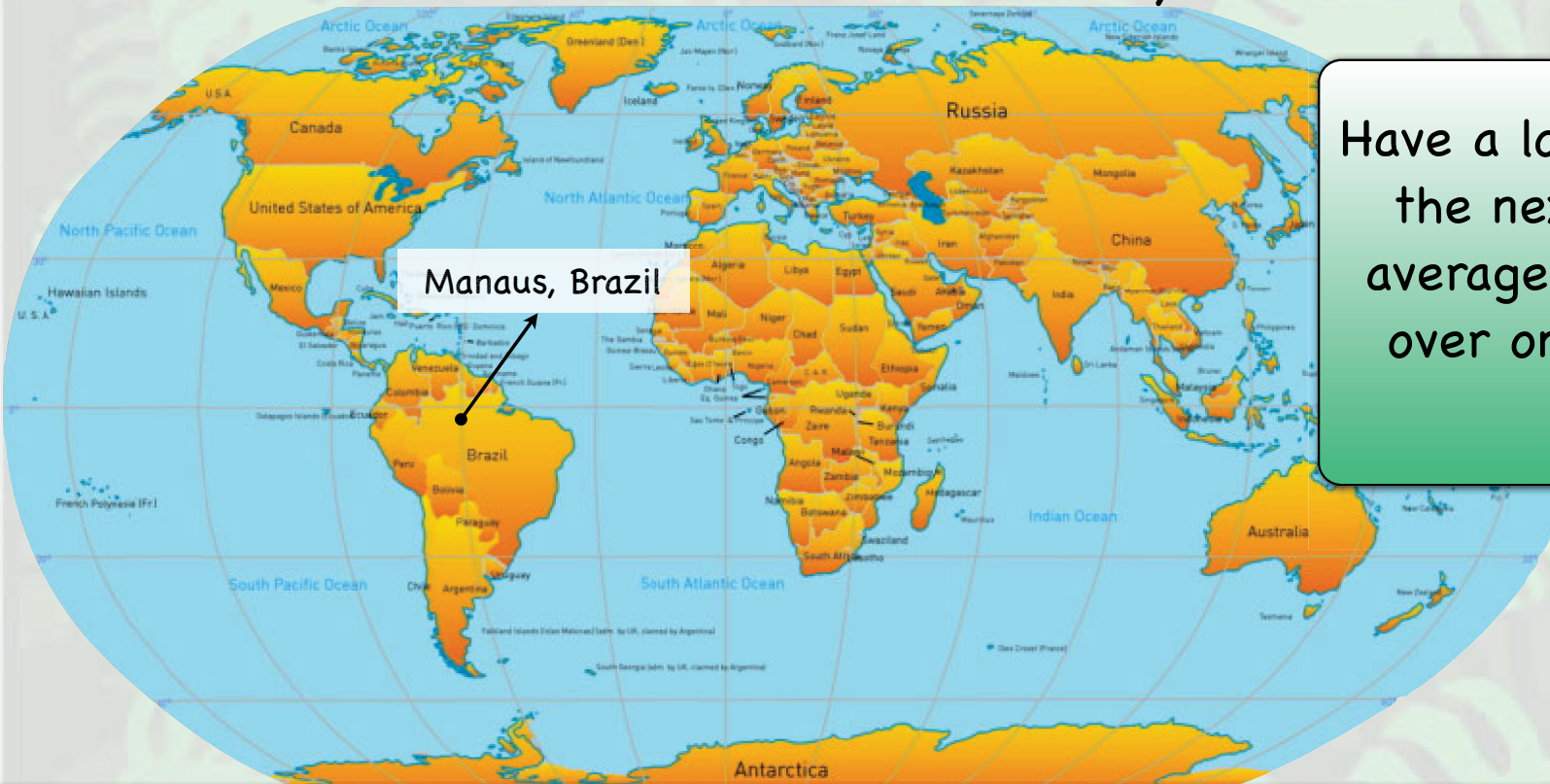
Use a dictionary to find out what this means and explain it to someone at home.

Climate is the word that describes what an area's weather is like and includes measurements such as temperature, rainfall, wind, sunshine, cloudiness and other factors. Climate is measured over a long period of time to show what a region's average weather conditions are.

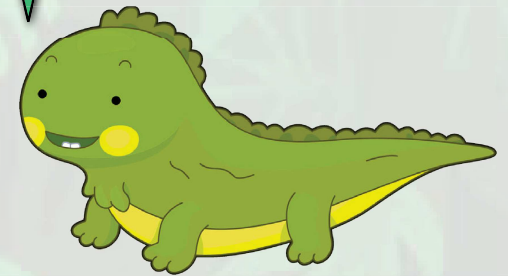
What is the climate like
where you live?



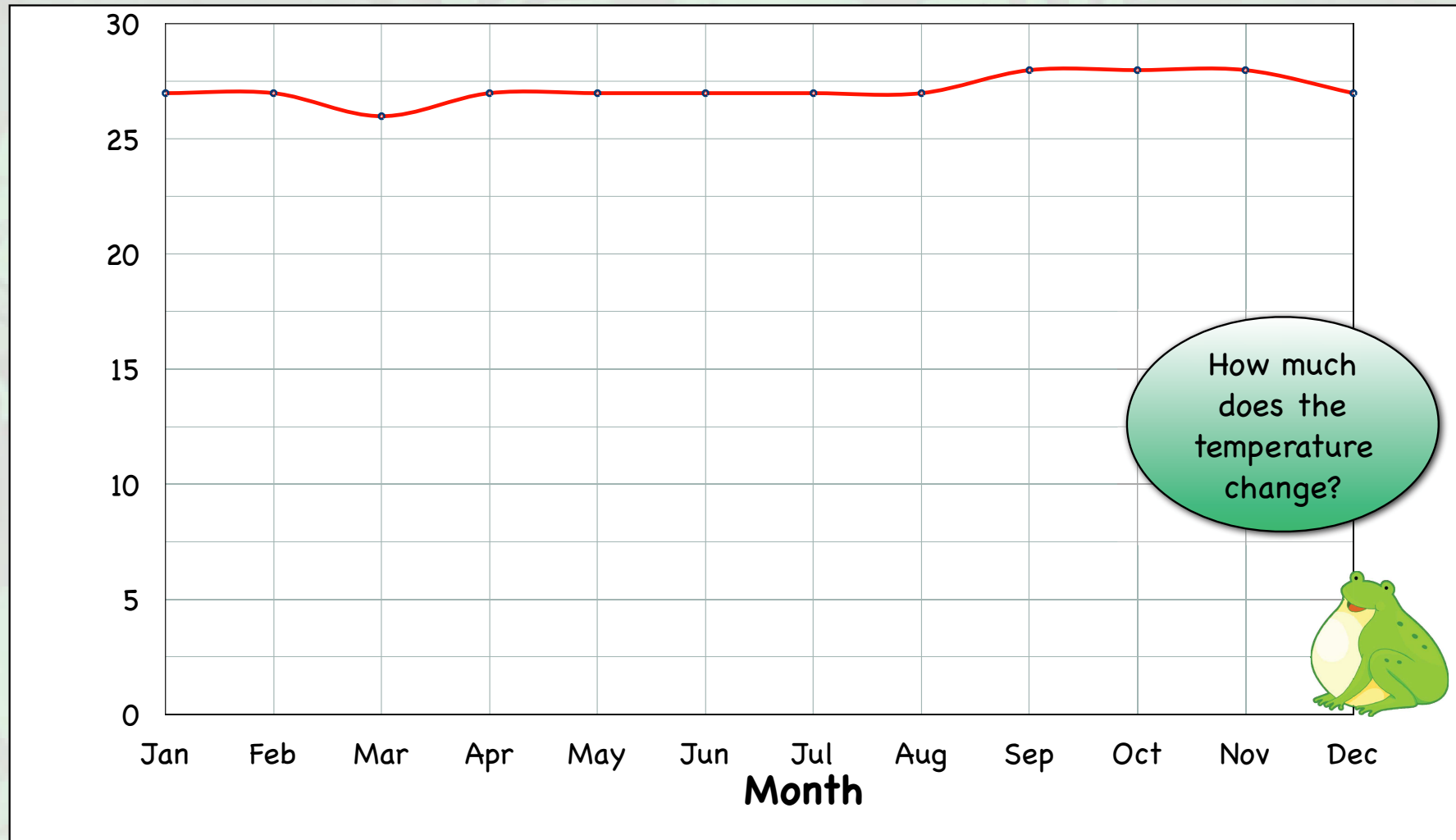
The climate in tropical rainforests is hot and humid. Although there are seasons, they are different from ours as the temperature does not change very much across the year. Seasons are defined by rain – there is a wet season and a dry season.



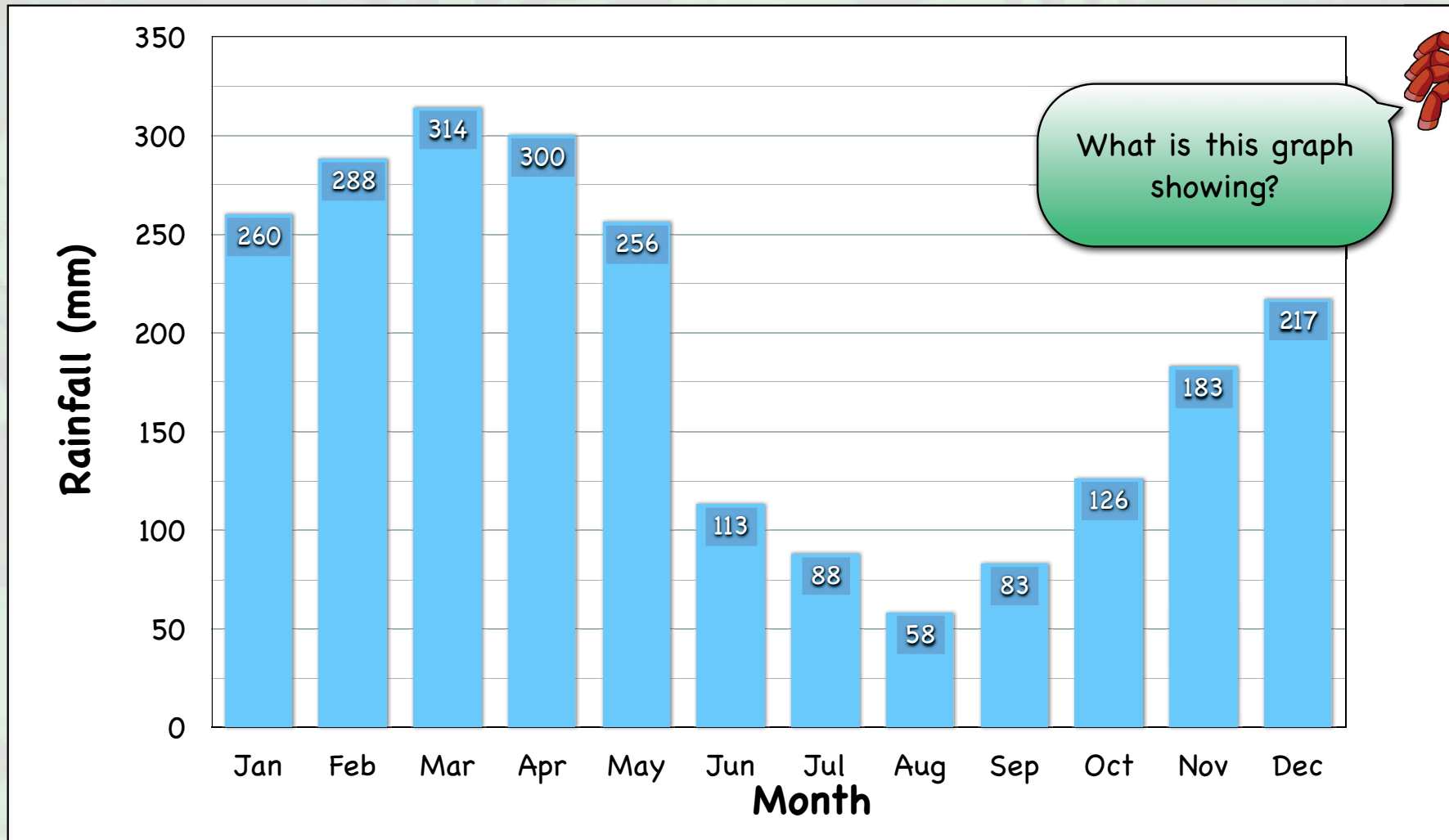
Have a look at the line graph on the next slide. It shows the average monthly temperatures over one year for Manaus in Brazil.



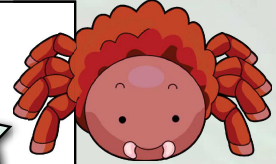
A line graph to show the average monthly temperature for Manaus, Brazil



This bar graph shows the average amount of rainfall each month for Manaus.

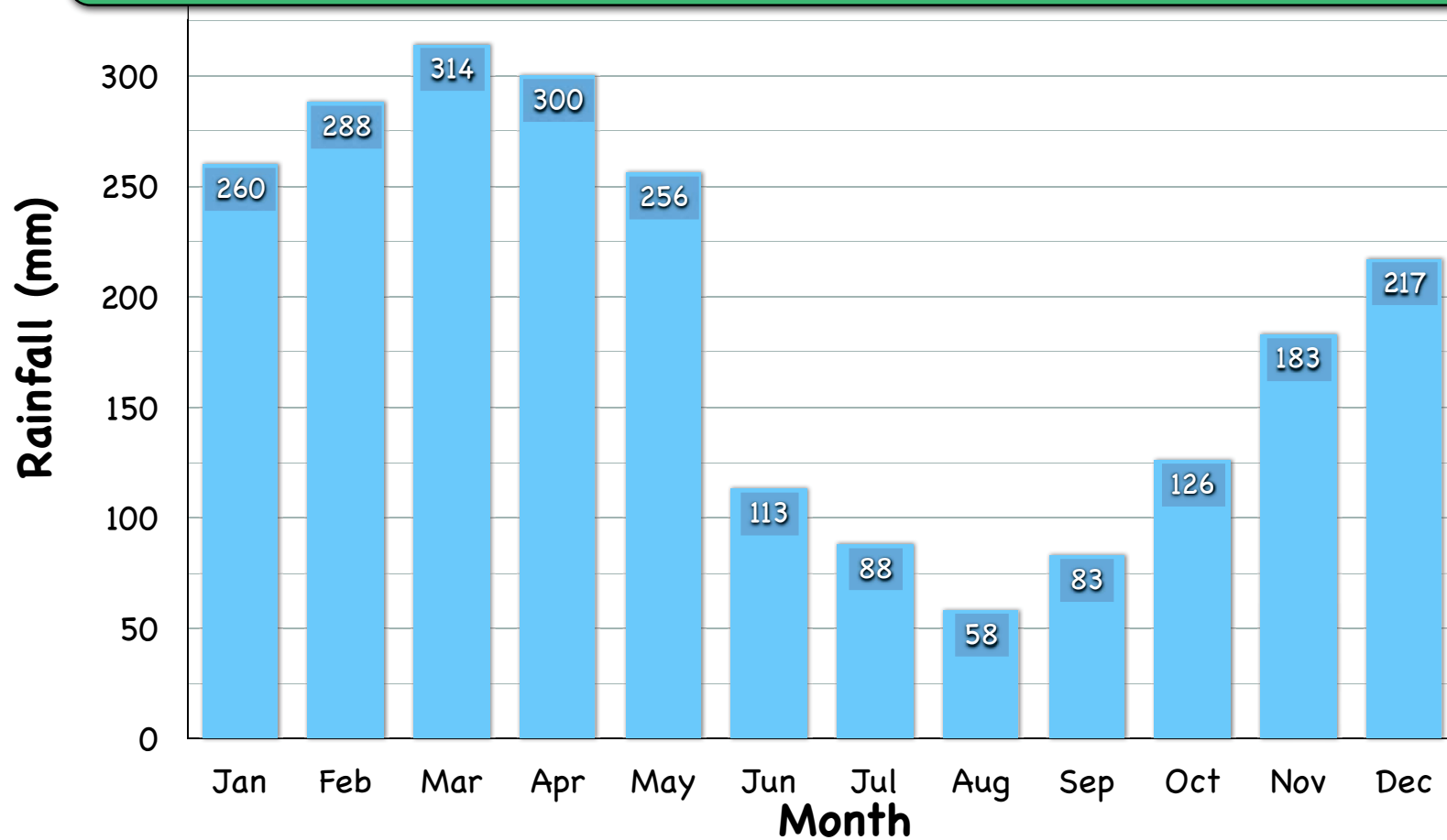


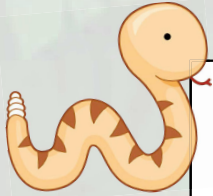
What is this graph showing?



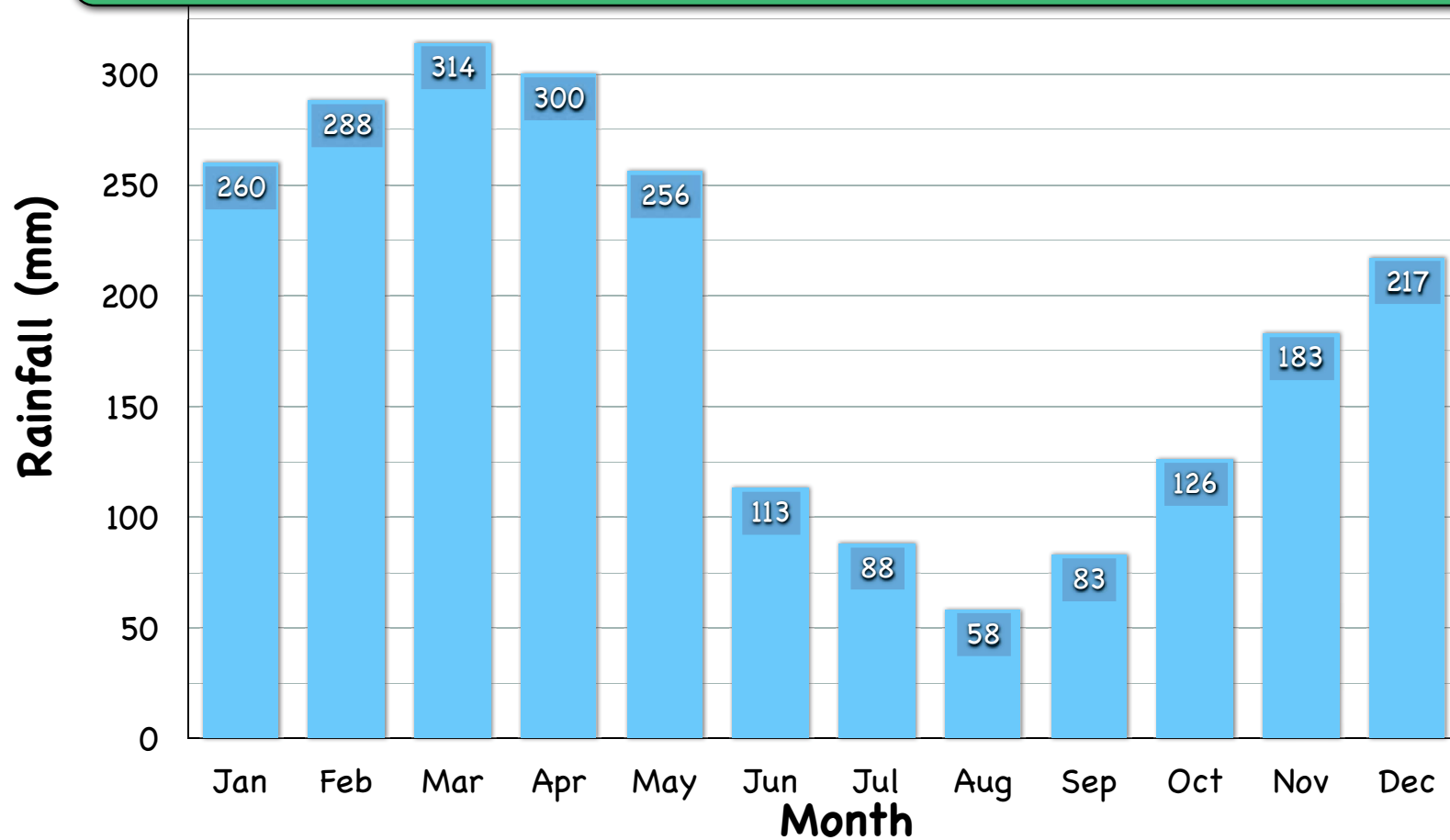


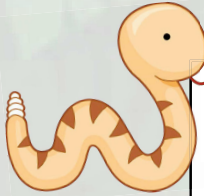
Which month has the most rainfall?



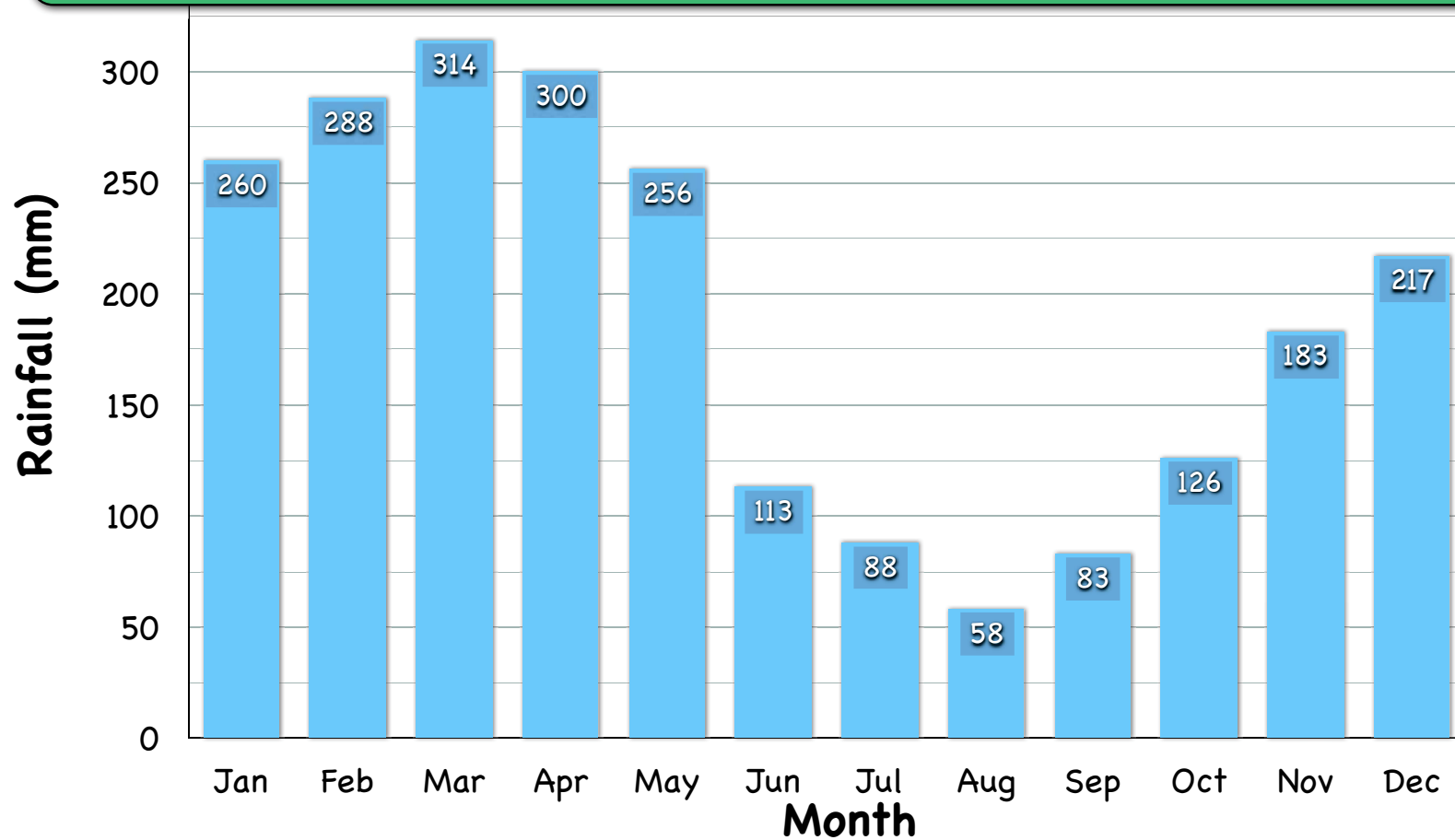


Which month has the least rainfall?





What is the difference between the rainfall in March and August?

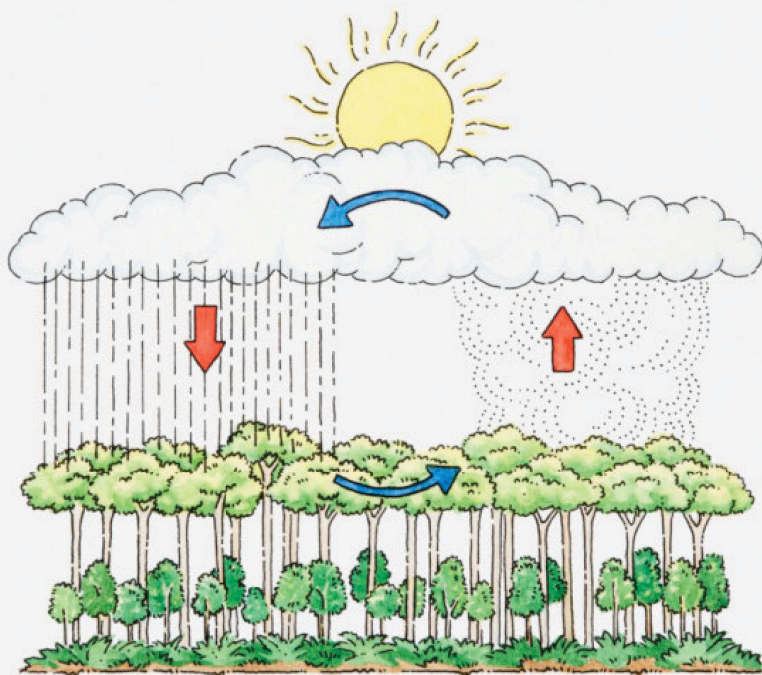


Even though the amount of rain changes throughout the year, there is usually rain everyday in the tropical rainforests, especially in rainforests closest to the equator. The terms 'wet season' and 'dry season' could better be described as 'the very wet season' and 'the not so wet season'!



Why do you think it rains so much in the rainforest?

A lot of the rainfall in tropical rainforests is known as **convective rainfall**. This means that the water that falls from the clouds heats up and evaporates very quickly, creating rainfall again. This is known part of the **water cycle**.



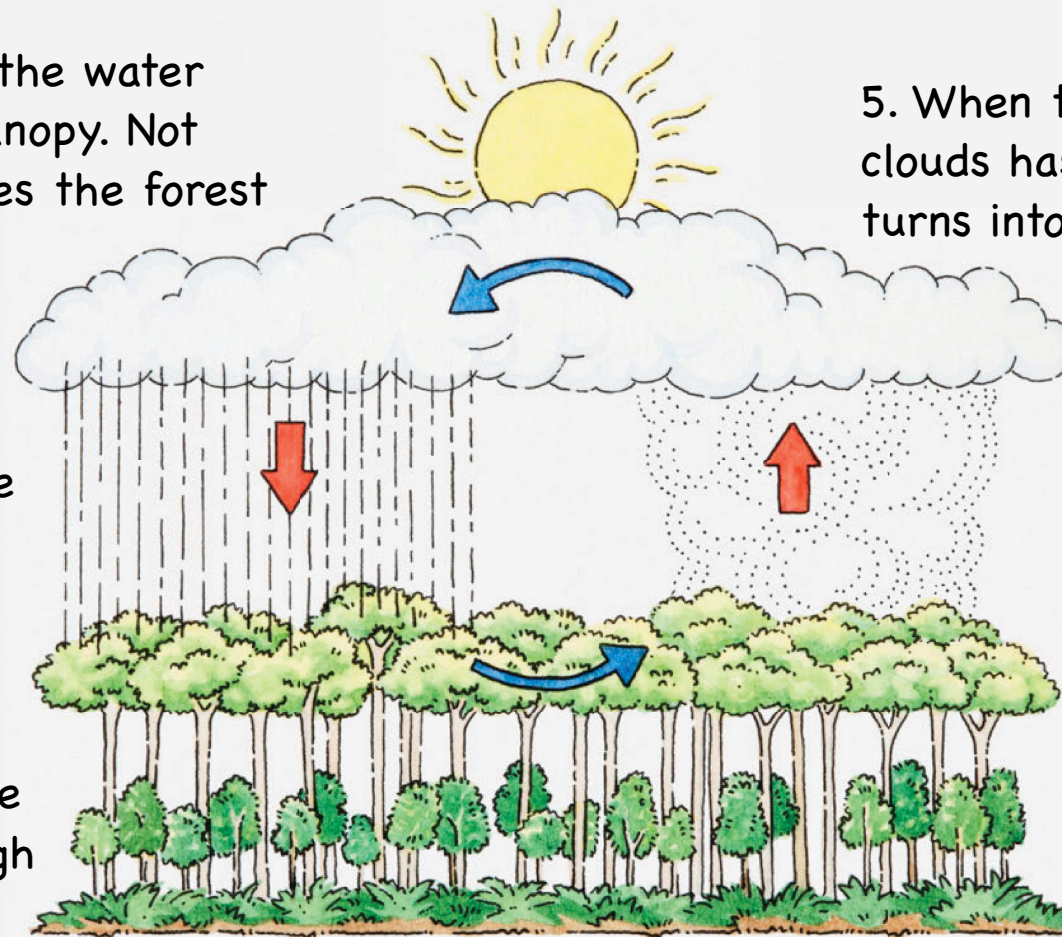
Can you explain what is happening in this diagram?



1. When it rains, the water collects in the canopy. Not much of it reaches the forest floor.

2. The heat from the sun heats the rain and makes it **evaporate**.

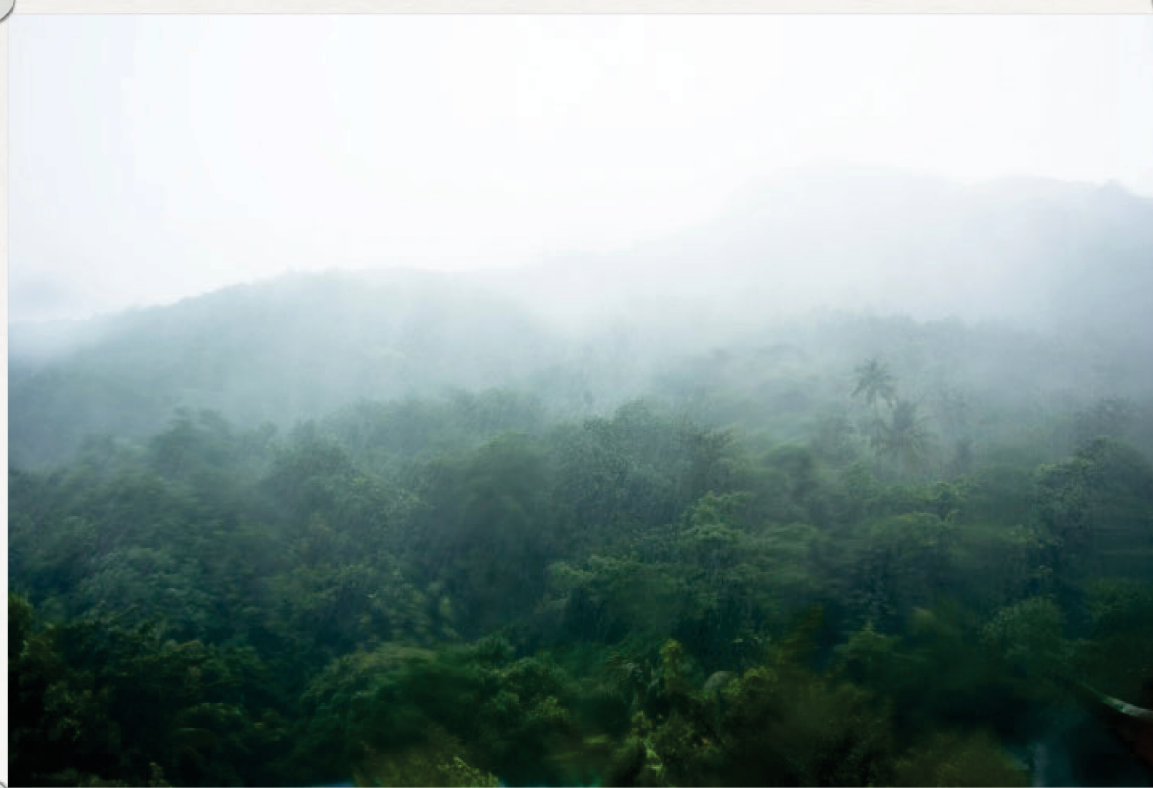
3. Plants also release water vapour through **transpiration**.



5. When the water vapour in the clouds has cooled enough, it turns into rain again.

4. The water vapour from rain water and plant vapour then **condenses** into clouds as it cools.

Because the rainforest is so hot, the water evaporates and condenses quickly, which makes it rain everyday. The rain that falls one day is heated into water vapour and cooled into clouds ready for the next day's rainfall.



Rainforests are very important to the water cycle. The water vapour that plants give off create clouds which in turn give rain. Without the plants of the rainforest, water levels can drop leading to drought in the surrounding areas.



This can especially happen in areas where large areas of trees have been chopped down for wood.