Tropical rainforests are located between Tropic of Cancer and the Tropic of Capricorn and are shown in green on the map below:


A 'typical' rainforest climate

|  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TEMPERATURE <br> ${ }^{\circ} \mathrm{C}$ | 27 | 27 | 27 | 28 | 28 | 27 | 27 | 26 | 27 | 28 | 27 | 27 |
| RAINFALL mm | 225 | 175 | 180 | 200 | 165 | 175 | 185 | 200 | 185 | 210 | 230 | 230 |

A 'typical' rainforest climate graph:


## Description of the tropical rainforest climate

The climate graph of the tropical rainforest shows that it is [hot and wet/warm and dry] all year. The maximum temperature is [ $26^{\circ} \mathrm{C} / 28^{\circ} \mathrm{C}$ ] and occurs in [March/October]. The minimum temperature occurs in [August/December] and is [ $21^{\circ} \mathrm{C} / 26^{\circ} \mathrm{C}$ ]. The range of temperature is only [ $2{ }^{\circ} \mathrm{C} / 8^{\circ} \mathrm{C}$ ]. Temperatures average about [ $20^{\circ} \mathrm{C} / 27^{\circ} \mathrm{C}$ ] throughout the year.
Most months have at least [ $50 \mathrm{~mm} / \mathbf{1 7 0} \mathrm{mm}$ ] of rain. The amount of rainfall remains more or less the same throughout the year. The annual rainfall total is over [ $2000 \mathrm{~mm} / 5000 \mathrm{~mm}$ ]. The rain normally falls in the afternoon in the form of heavy [downpours/light drizzle]. The graph shows that the climate hardly varies at all throughout the year and there are [four seasons/no seasons], as we know them.

## Student tasks

1. Copy the 'typical' rainforest climate table into your folder.

Remember to use a ruler.
2. Copy the 'typical' rainforest climate graph into your folder.

Remember to use a ruler and pencil.
3. The typical rainforest graph is not finished...

Use the information from the rainforest climate table to complete your graph.
Remember - temperature is always shown with a line and rainfall is always shown by columns.
4. Copy the 'description of the tropical rainforest climate' inserting the correct 'heads or tails' into your paragraph.

## Extension tasks

1. Using the climate table, calculate the total annual rainfall i.e. how much rain falls in a year.

Answer mm
2. Research climate graphs for three additional locations in the tropical rainforest. List these three locations. How do they compare to the typical rainforest climate?

## Teaching notes

A 'typical’ rainforest climate graph:


## Description of the tropical rainforest climate

The climate graph of the tropical rainforest shows that it is hot and wet all year. The maximum temperature is $28^{\circ} \mathrm{C}$ and occurs in March. The minimum temperature occurs in August and is $26^{\circ} \mathrm{C}$. The range of temperature is only $2^{\circ} \mathrm{C}$. Temperatures average about $27^{\circ} \mathrm{C}$ throughout the year.
Most months have at least 170 mm of rain. The amount of rainfall remains more or less the same throughout the year. The annual rainfall total is over 2,000 mm.

The rain normally falls in the afternoon in the form of heavy downpours. The graph shows that the climate hardly varies at all throughout the year and there are no seasons, as we know them.

## Extension tasks

1. The total annual rainfall i.e. how much rain falls in a year is $2,360 \mathrm{~mm}$.
2. Climate graphs:
a. A web search for images provides many examples or
b. The website, www.weatherbase.com/weather/weather.php3?s=26719\&refer=\&units=m etric allows students the opportunity to select a location within the tropical rainforest climate zone and research its climate.

## Suggested homework exercise

Provide the students with a copy of the climate statistics for London or your own locality.

| London |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |  |  |  |  |  |
| TEMPERATURE <br> ${ }^{\circ} \mathrm{C}$ | 7 | 7 | 9 | 11 | 14 | 16 | 19 | 19 | 17 | 13 | 10 | 7 |  |  |  |  |  |
| PRECIPITATION <br> mm | 55 | 41 | 42 | 44 | 50 | 45 | 44 | 50 | 49 | 69 | 59 | 55 |  |  |  |  |  |

1. Ask them to draw a climate graph of the temperatures and precipitation for London or the alternative location.
2. Ask them to compare \& contrast the typical rainforest climate graph with that of London or the alternative location in the UK.
