

Ecosystems Independent Revision Booklet



PLEASE ADD YOUR NAME BELOW IF YOU CONTRIBUTE

Contributions by:

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Multiple Choice Questions:

1. Which of the following is an abiotic component of an ecosystem?
 - a. Birds
 - b. Trees
 - c. Soil
 - d. Flowers

2. Which of the following are decomposers?
 - a. Birds
 - b. Fungi
 - c. Trees
 - d. Soil
 - e. Bacteria
 - f. Flowers

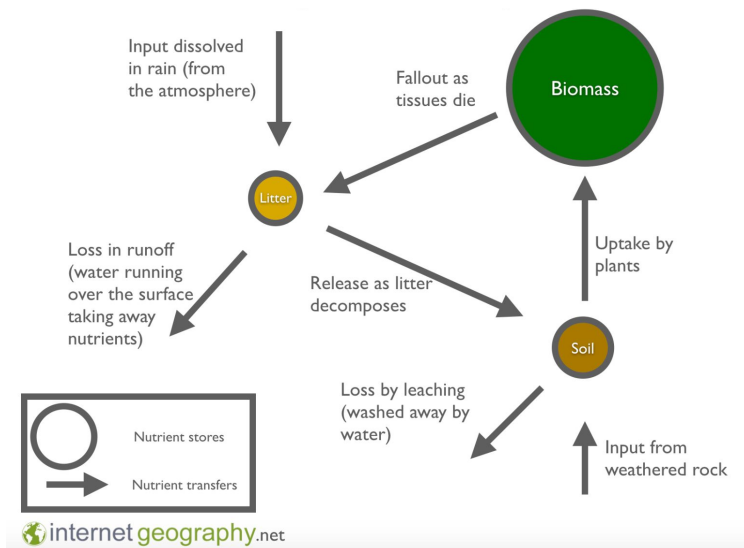
3. Which of the following would be most likely to happen in the tropical rainforest ecosystems if the input of precipitation into the rainforest was reduced?
 - a. Increase in the uptake of nutrients by plants
 - b. Increased leaching
 - c. Reduced leaf fall
 - d. Reduced surface runoff

4. Which description describes the tropical rainforest climate?
 - a. Cold and windy all year round
 - b. Mild winters and warm summers
 - c. Hot and wet all year round
 - d. A clear wet and dry season
 - e. Hot and dry all year round

5. Which type of organism gets its energy from the sun?
 - a. Producer
 - b. Consumer
 - c. Decomposer

6. Which type of organism gets its energy from consuming producers?
 - a. Carnivor
 - b. Herbivore
 - c. Secondary consumer

7. Look at the diagram below showing the nutrient cycle in a biome. In which biome would you find a nutrient cycle like this?



- Tropical rainforest
- Hot desert
- Cold Desert
- Temperate deciduous forest

8. Identify the statement about tropical rainforests which is false

- Tropical rainforests are found along the equator
- Tropical rainforests are found in areas of high pressure
- Tropical rainforests have a large biodiversity
- Tropical rainforests experience high temperatures and rainfall throughout the year

9. Which of the following is not a cause of deforestation in the tropical rainforest?

- Commercial farming
- Subsistence farming
- Rubber tapping
- Logging
- Mining

10. What is a community of plants and animals (biotic) sharing an environment with non-living (abiotic) things such as rock, air soil and water?

- An ecosystem
- A producer
- A biome
- The nutrient cycle
- A food web

11. Which of the following is the correct definition of a desert in terms of rainfall (precipitation)

- <250 mm

- b. >250 mm
- c. <30 mm
- d. >25 mm

12. Which of the following would not be considered a small scale ecosystem?

- a. Hedgerow
- b. Pond
- c. Desert
- d. Woodland

13. Interrelationships in an ecosystem relates to which of the following?

- a. The links between different parts of an ecosystem
- b. The stores in an ecosystem
- c. The layers in an ecosystem
- d. The water cycle in the tropical rainforest

14. Which of the following does not cause deforestation in the rainforest?

- a. Mining
- b. Logging
- c. Agriculture
- d. Soil erosion

15. Which of the following is not an effect of deforestation?

- a. Soil erosion
- b. Loss of habitat
- c. Increased biodiversity
- d. Reduction in carbon store
- e. Rising sea levels as the result of global warming

16. To calculate the range in temperature you need to:

- a. Take away the highest temperature from the lowest
- b. Take away the lower temperature from the highest
- c. Add the temperature for each month and divide by 12

17. Which of the following is a sustainable way of using the rainforest?

- a. Selective logging
- b. Mining
- c. Cattle ranching
- d. Pastoral farming

18. Desertification is...

- a. The reduction in the size of a hot desert.
- b. The process whereby fertile land becomes a hot desert as the result of drought.
- c. A term used to describe the location of deserts.
- d. A term used to describe the production of puddings in a factory.

Questions:

1. Why are tropical rainforests located along the equator?
2. Explain one difference between a producer and a consumer in an ecosystem
3. Outline the 3 stores of the nutrient cycle.
4. Outline sustainable management strategies used within TRF
5. Describe the layers in the tropical rainforest ecosystem
6. Explain the climate in the tropical rainforest ecosystems
7. Explain how plants and animals have adapted to the rainforest climate
8. Explain one difference between a producer and a consumer in an ecosystem
9. Explain how tropical rainforests can be managed sustainably managed
10. With reference to an indigenous group describe how they use the rainforest sustainably. (3 marks)
11. Discuss the link between deforestation in the tropical rainforest and increased soil erosion.
12. Identify two causes of deforestation in the tropical rainforest that you have studied. Explain how they lead to deforestation
13. What is the link between deforestation of the tropical rainforest and climate change?
14. For a tropical rainforest you have studied explain how deforestation may have an impact of the country's economic development
15. Describe and explain the value of tropical rainforests for both humans and the environment.
16. Identify three sustainable ways rainforests can be managed. Explain how they are sustainable.
17. Explain why hot deserts are located along the tropics.
18. Explain why deserts have a large diurnal range (temperatures are very high during the day, but very cold during the night).
19. Using a named example explore the development opportunities that exist in desert ecosystem
20. Examine the challenges humans face in desert environments
21. What is desertification?
22. Human activity is the main cause of desertification. Discuss this view
23. How can humans manage the impact and challenges desertification causes?

24. Explain how tropical rainforests are considered the lungs of the planet

Skills Questions (e.g. using a photograph / diagram / data):

1. Using the image below describe the characteristics of vegetation in the tropical rainforest.



2. Explain how this emergent tree has adapted to living in the rainforest.



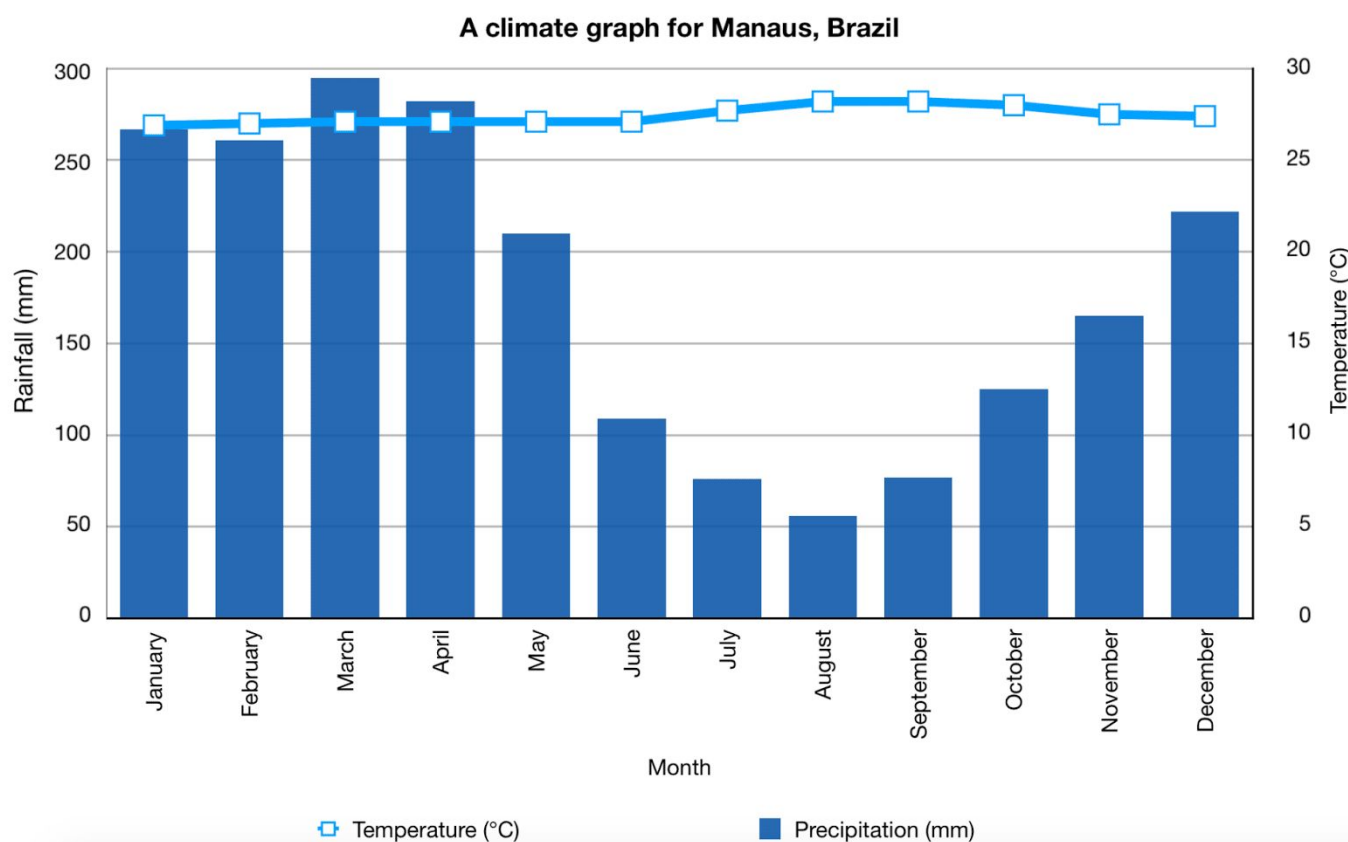
3. Why are decomposers so important in the tropical rainforest ecosystem?



4. Using the image below and your own knowledge outline the way animals adapt to the unique conditions of a tropical rainforest.



5. Using the graph below describe the characteristics of the rainforest climate



6. Study the graph below which shows deforestation in Brazil between 1999 and 2009.



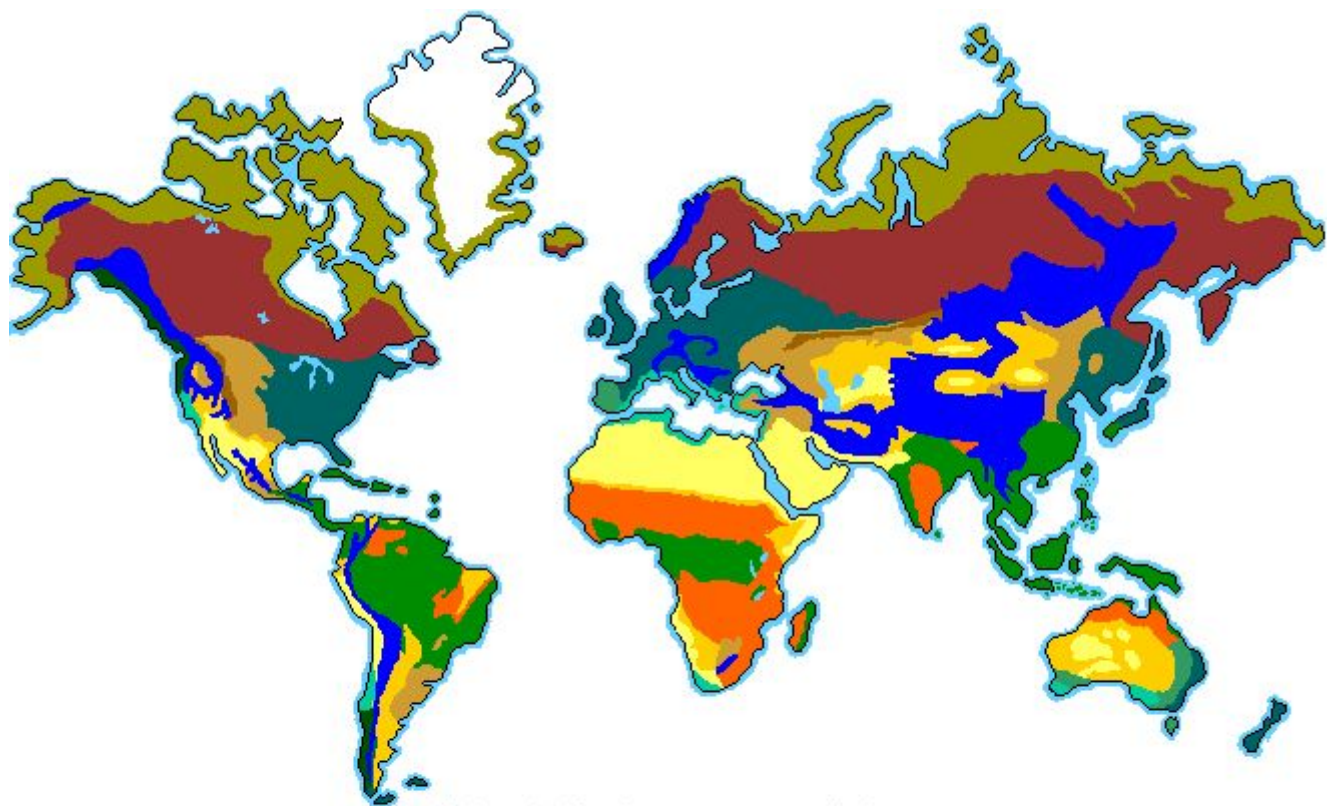
i. Use Figure 4 to describe the trend of deforestation in Brazil.

[2 marks]

ii. Explain **two** reasons for deforestation in the rainforests.




[4 marks]

7. Describe the global distribution of tropical rainforests



Click underlined ecosystems to find out more!

 [Tropical Rainforest](#)
 [Grasslands](#)
 [Desert](#)

 [Deciduous](#)
 [Tundra](#)
 [Coniferous Forest \(Taiga\)](#)

 [Chaparral](#)
 [Savanna](#)
 [Alpine](#)

8. Look at the food chain below. Identify one example for each of the following parts of the ecosystem.



A Producer: _____

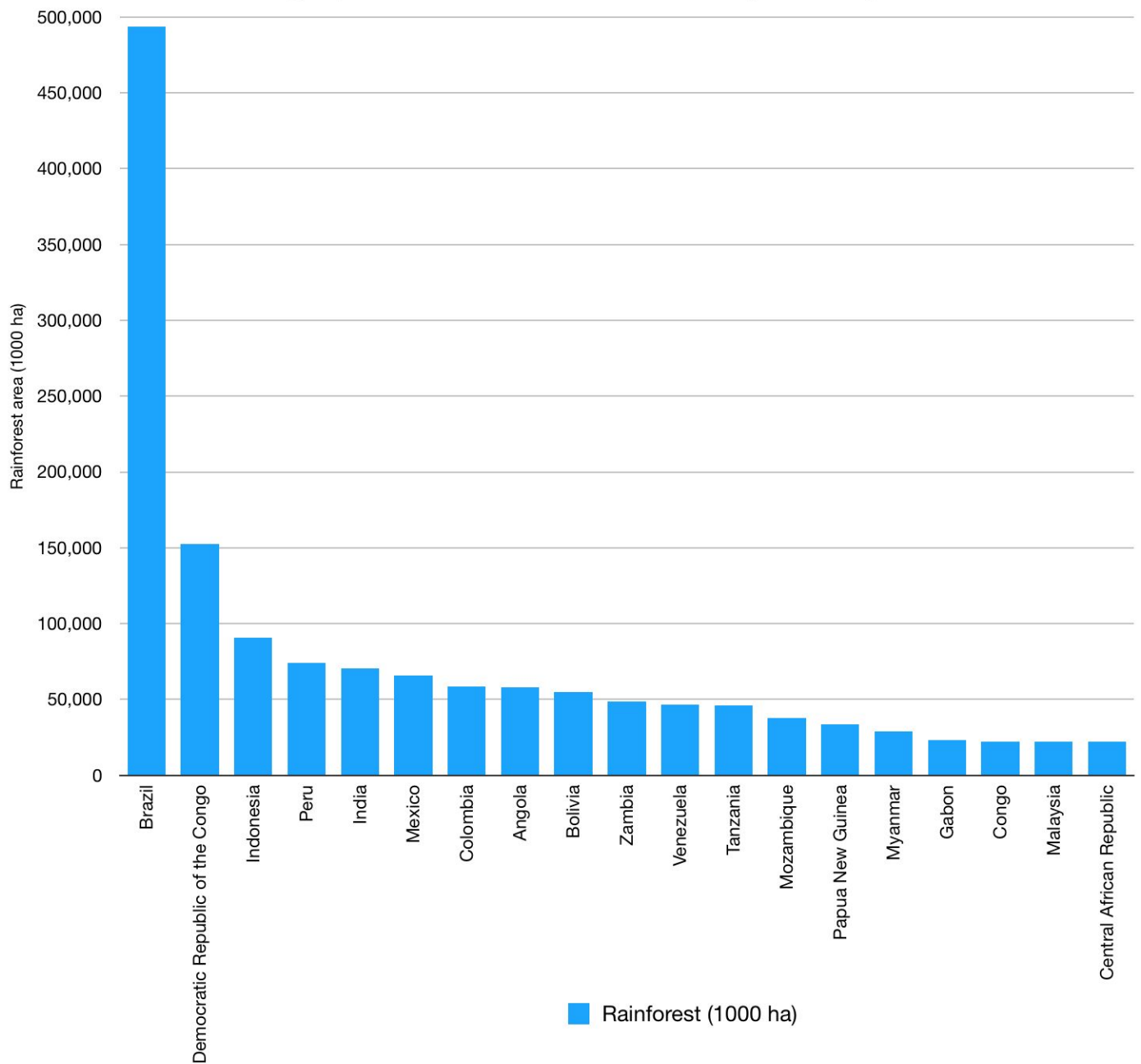
A Primary Consumer: _____

A Secondary Consumer: _____

A Tertiary Consumer: _____

9. Using the graph below describe the size and distribution of tropical rainforests.

A graph to show rainforest area by country in 2015

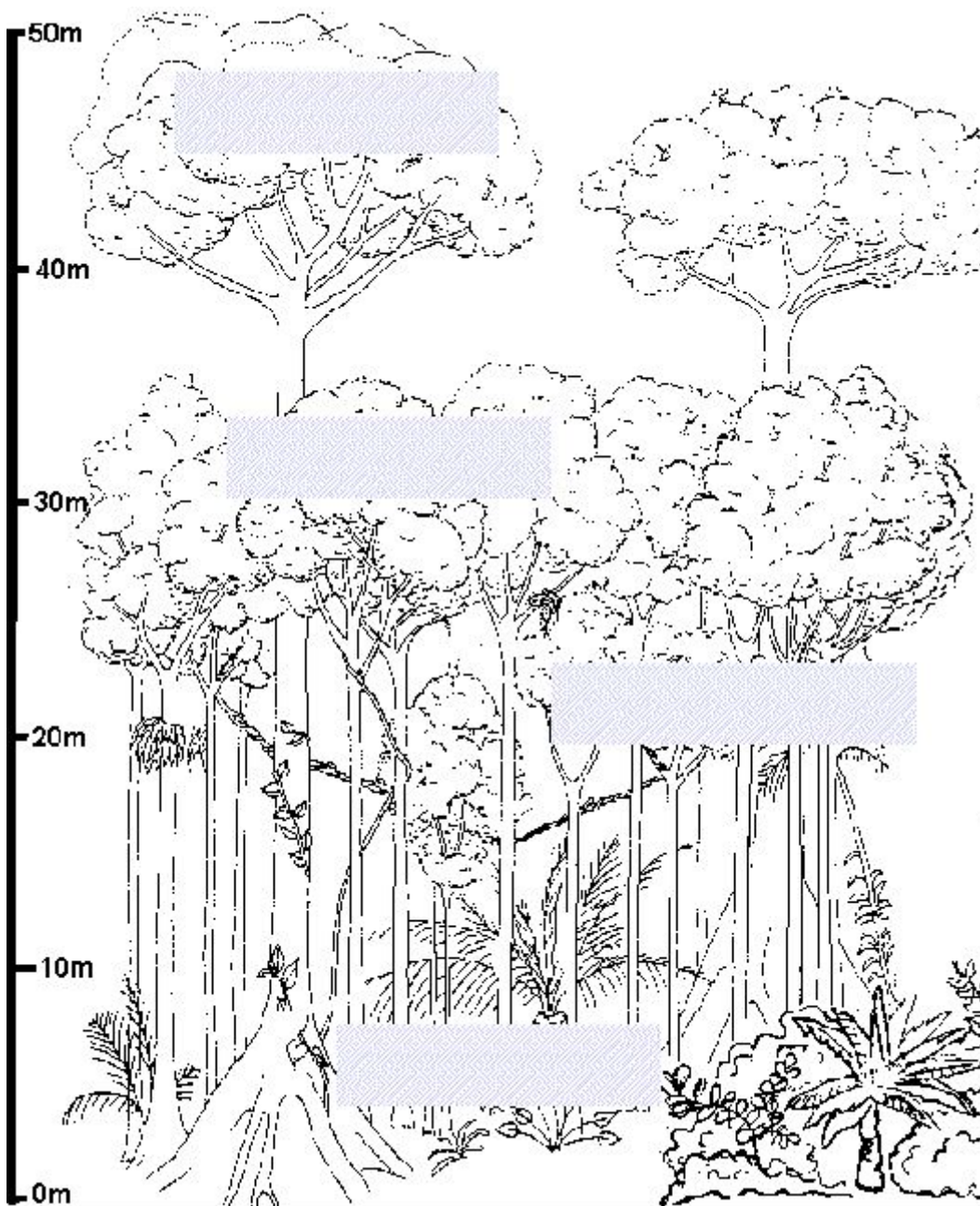


10. Using the image below and what you know about hot desert ecosystems explain two plant adaptations that help plants survive.



Skills

1. Annotate the cross section of the layers in the rainforest below



2. Using the data below create a climate graph for Manaus in Brazil

	January	February	March	April	May	June	July	August	Sept	October	November	December
Temperature (°C)	26.9	27	27.1	27.1	27.1	27.1	27.7	28.2	28.2	28	27.5	27.4
Precipitation (mm)	267	261	295	282	210	109	76	56	77	125	165	222

A climate graph for Manaus, Brazil

