1 Read the following story. Use the information to answer questions 1-3.

Zachary stood with his pet dog on the green lawn outside his house. He said out loud: "Thank God for all the things around that keep me alive."

Immediately, the air spoke: "Why did he say 'all the things'? I am the most important thing that he needs. Without me, he and his dog couldn't breathe. And, he couldn't fly his kite if I didn't move about!"

Rainwater, which had settled in puddles on the paved driveway, said to the air: "He and his entire family, the plants in this garden, and all other living things would dry up and die if I were not around."

The mango tree, hearing the conversation, turned to the tomato plant and said: "We're very important too. We give his family food to keep healthy."

The soil, who had been quiet all this time, said: "Mango and Tomato, if it weren't for me, you couldn't grow!"

From up in the sky, the sun looked at the clouds, then at everything else, and asked: "If I didn't shine anymore, what do you suppose would happen to Zachary, his family, and all of you, without my light and heat energy?"

a) List six things which make up Zachary's surroundings.

b) Fill in this flow chart to classify the things in Zachary's surroundings. Write each of the words in red in the rectangles as the heading for a group or sub-group. In the ovals, write examples for each group or sub-group.
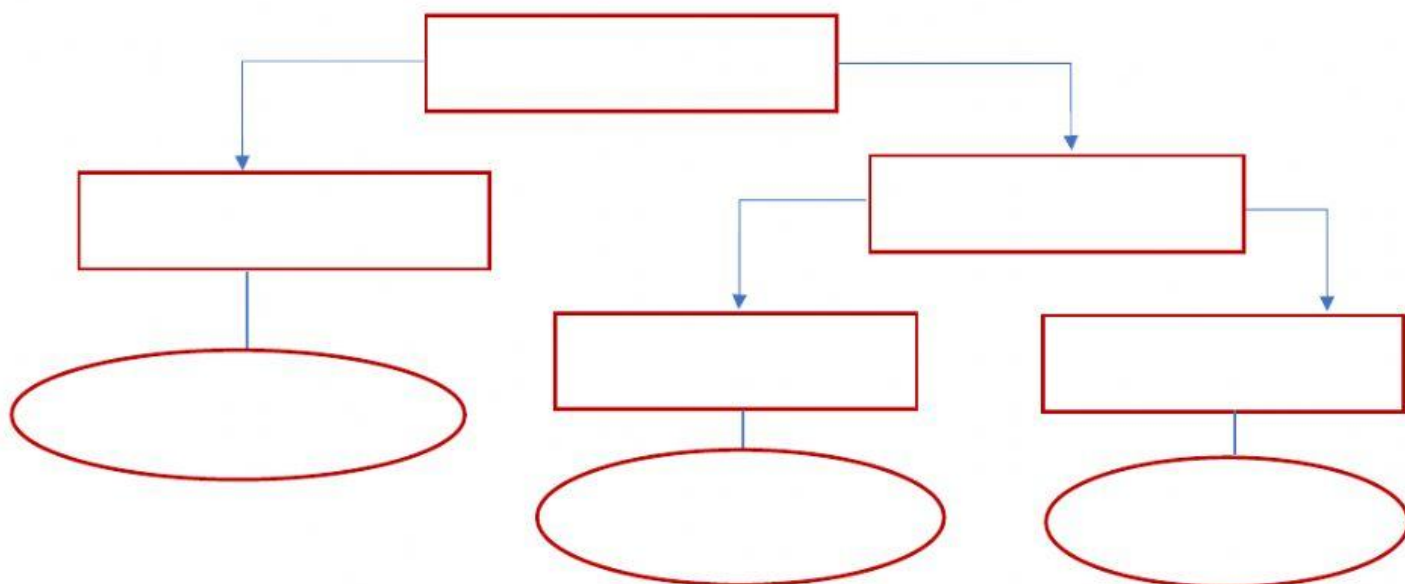
*Built   *Environment   *Living   *Natural   *Non-living

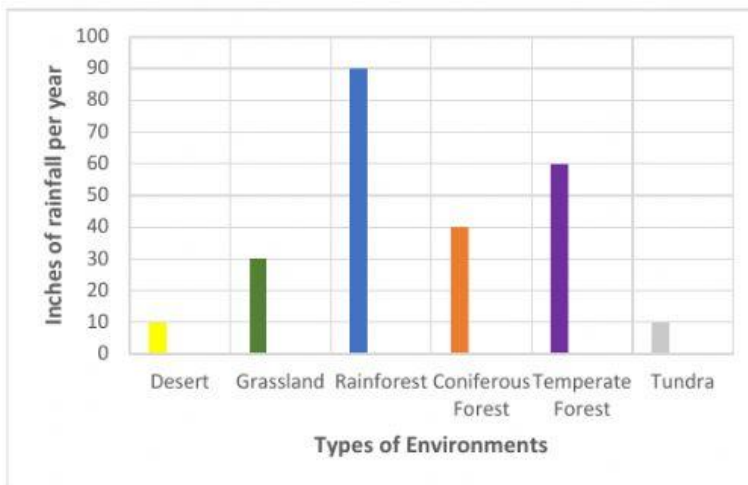**2** What is the definition of 'environment'?

3 If Zachary's home surroundings did not have any plants, give one reason how it would affect him?

4 Which names the correct components of soil?

    a) Organic matter, air, root hairs, dirt, water

    b) Air, manure, rocks, living worms, water

    c) Dirt, organic matter, air, minerals, water

    d) Air, mineral matter, organic matter, water

5 What is humus?

6 Use the graph to answer **question 6**

    a) Which environments appear to get similar amounts of rainfall?

b) Would you expect a rainforest, a coniferous forest and a temperate forest to have similar vegetation? Explain your answer

7 Which option correctly completes the sentence below?
To live in a hot desert in a hot desert environment, organisms have to be adapted to _____

a)live in underground habitats

b)migrate at nights

c) store water in various ways

d) grow a hairy body covering

8 Examine these pictures. Read each statement below about their adaptation for getting food.

Hawk   Woodpecker   Hummingbird   Chicken   Parrot

Write the name of the bird that the description of the beak adaptation matches.

Statement	Bird
Has a long, tube-like beak, used as a straw to reach down into flowers and get nectar.	
Has a small, hard, pointed beak for digging for seeds in the dirt.	
Has a strong, curved bill for cracking seeds, nuts, fruits and other plant material.	
Has a pointed beak for drilling holes to get to insects.	
Has a sharp beak for tearing 'flesh' and holding it for eating.	

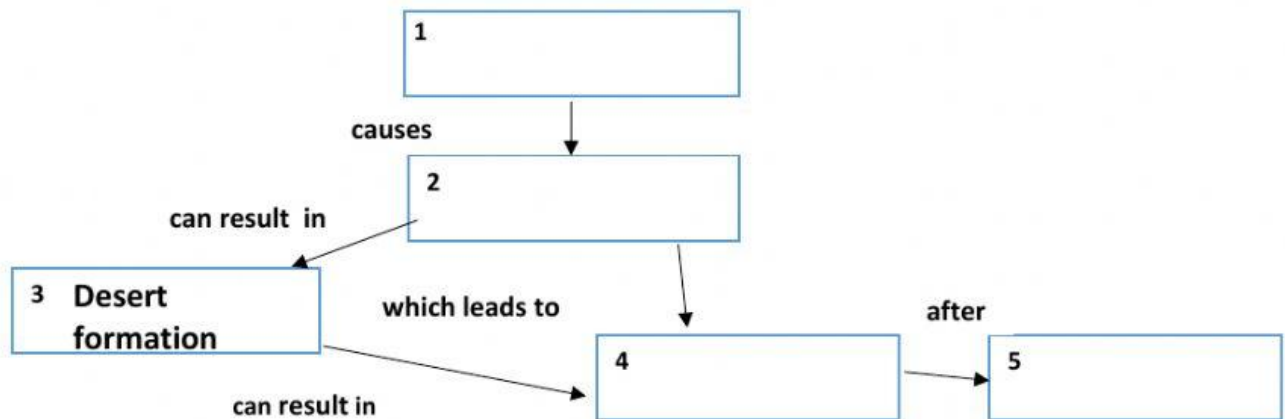**9** Which two statements are NOT adaptations that a camel has?

a) Wide feet help them to sink into the ground when walking.
b) They drink the water that they store in their hump.
c) They can last for several months without food.
d) They close their slit-like nostrils against sand.

10 Mr. Mack is a hillside farmer. Each year he uses the 'slash and burn' method to clear the hillside. You know that is a wrong method to use. Select the statements that you could use to support your argument in your discussions with Mr. Mack about why the 'slash and burn' method leads to soil degradation.

Statement	Supported	Not supported
Plants are cleared and left to form compost.	⭕	⭕
Afterwards, small 'cash crops' are grown over and over on the same land.	⭕	⭕
Burning the entire forest can get rid of the young trees.	⭕	⭕
There are no roots to bind soil to prevent soil erosion.	⭕	⭕
The trees are first burned and then cut into small logs.	⭕	⭕

11 Use the phrases below to complete the flow chart.

*compaction of soil   * soil erosion   * slash and burn*
** deforestation   * increased carbon dioxide   * farming*

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12 Jayce and his older cousin were visiting his grandfather in Long Bay. They saw a 'No Fishing Allowed' sign on the beach. His cousin asked his grandfather the following questions. Write what you think his grandfather's answer was to each question.

    a)   What does overfishing mean?

    b)   Does a fish sanctuary harm or help the environment?

c) Why are fish sanctuaries needed in Caribbean waters?

d) How do we make sure that fisher-folk obey the 'No fishing' rule?

13 When coral reefs are destroyed, all of the following could result, EXCEPT
_____

a) loss of income from agriculture
b) loss of a tourist attraction
c) destruction of fish nurseries
d) damage to our coastlines

14 The following statements describe either Climate or Weather. Select which each statement describes.

Statement	Weather	Climate
Can be reported as a daily forecast	◯	◯
Looks at measurements for 30 years or more	◯	◯
The state of the atmosphere at a certain place	◯	◯
Reported as averages obtained from measurements	◯	◯
The state of the atmosphere in a region of the earth	◯	◯
Is always changing	◯	◯

15 Select which statement tells an effect of climate change and which a cause of global warming.

Statement	Effect of climate change	Causes of global warming
Changes in coastlines from rising oceans and	O	O
A gradual rise in the Earth's surface temperature.	O	O
A build-up of greenhouse gases in the atmosphere.	O	O
Burning fossil fuels and forest fires.	O	O
Changes in seasonal rainfall.	O	O
Greenhouse gases prevent the Sun's heat from escaping from the earth.	O	O
Desertification of lands	O	O

16 Write two way in which you can help to reduce the causes and effects of climate change.