

Grade 6 Geography Term 3 Worksheets

Climate around the world

Difference between weather and climate

Date: _____

1. Weather is the combination of:

Temperature, humidity, precipitation, cloud cover and wind on a specific day.

Element	Description	Instrument to measure with...	Measuring unit
1.Precipitation 	Moisture out the air, like _____ _____	_____	Millimetre (mm)
2.Temperature	How _____ or _____ it is		Degrees Celsius (°C)
3.Wind speed 	How _____ the wind blows		Knots or kilometre per hour
4. Wind direction	From which _____ the wind blows		Points of a compass
5.Humidity 	The amount of _____ in the air		Relative humidity (% water vapour which can be kept in the atmosphere)

2. Climate

Climate is the weather over a long period of time that are unique in an area. It is the average weather pattern of a specific place over a long period, normally 30 years

3. Climate in North-West: Climate is between 17°C and 31°C in summer and 3°C to 21°C in winter. Rainfall varies but can be up to 360mm per year usually in the summer months between October and April.

When describing a place's climate, we look at its rainfall and temperature.

FIGURE A: Climate regions of the world

Warm, temperate and cold climate regions of the world

The coldest parts of the world are in the northern and southern **polar regions**. The hottest places are found at the **equator**. The altitude (height) also affects the temperature. The reason for this is that the higher you go the **colder** it gets. Places near the sea have a *temperate or temperate climate*. This is because the sea will cool the land at night and warm the land during the day. Places by the sea will not be too cold or too hot. Warm, dry climates have temperatures that can rise to over 50 °C in summer. It's too **hot** to be outside. Cold climates have temperatures that drop to - 40°C in winter. It's too cold to be outside. Most people in South Africa live in a **temperate** climate. We do not get too hot or too cold.

Wet and dry areas of the world

Moisture from the clouds comes from the **ocean**. The wet parts of the world are found near warm oceans. Hot oceans are found in the areas around the **equator**.

Dry areas are found inland, far away from the oceans. This is because winds that bring rainfall cannot be reached there. Dry areas are also found along cold oceans. Cold oceans do not give the air enough moisture

Use FIGURE A and your own knowledge to answer the following questions:

1. If the degrees are - 40°C, is it in the hot climates or cold climates? _____
2. Where do we get the coldest parts of the world? _____ and _____
3. The higher you keep mountain climbing (colder or warmer) it gets? _____
4. What is a temperate climate? _____
5. In which climatic region do most people in South Africa live? _____

Warm climate regions	• Temperatures are high most of the year. Usually above 25 ° C. • Some hot areas are up to 35 ° C. • The highest recorded temperature in the world was 57 ° C in Libya
Moderate climates	• Temperature is not too high or too low for most of the year. • Usually stays between 10 ° C and 30 ° C
Cold climate regions	• Temperatures are low for most of the year. • Usually below 10 ° C. • In some very cold places the temperature can drop to -20 ° C. • The lowest recorded temperature in the world was -89 ° C in Antarctica.

Seasons

January	Northern Hemisphere WINTER	Southern Hemisphere SUMMER
July	Northern Hemisphere SUMMER	Southern Hemisphere WINTER

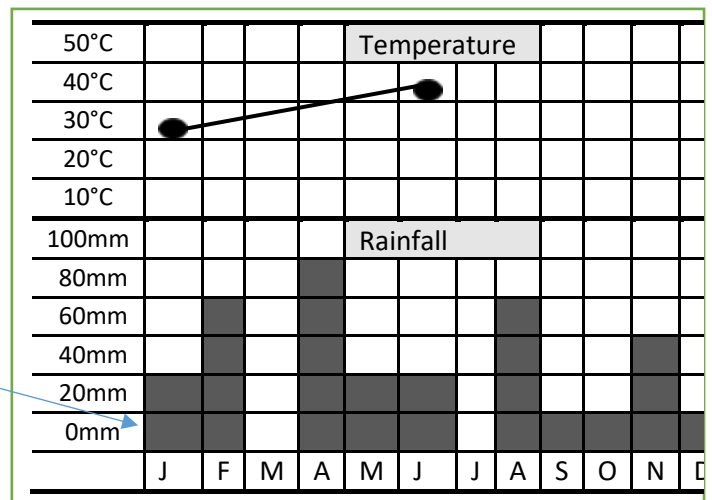
Complete temperature and rainfall on a graph

Tips:

1. Make use of ● to complete graph with temperature
2. The line under the number is the °C
30°C
40°C

2. Colour the graph with rainfall

Table Macmillan SS Gr.

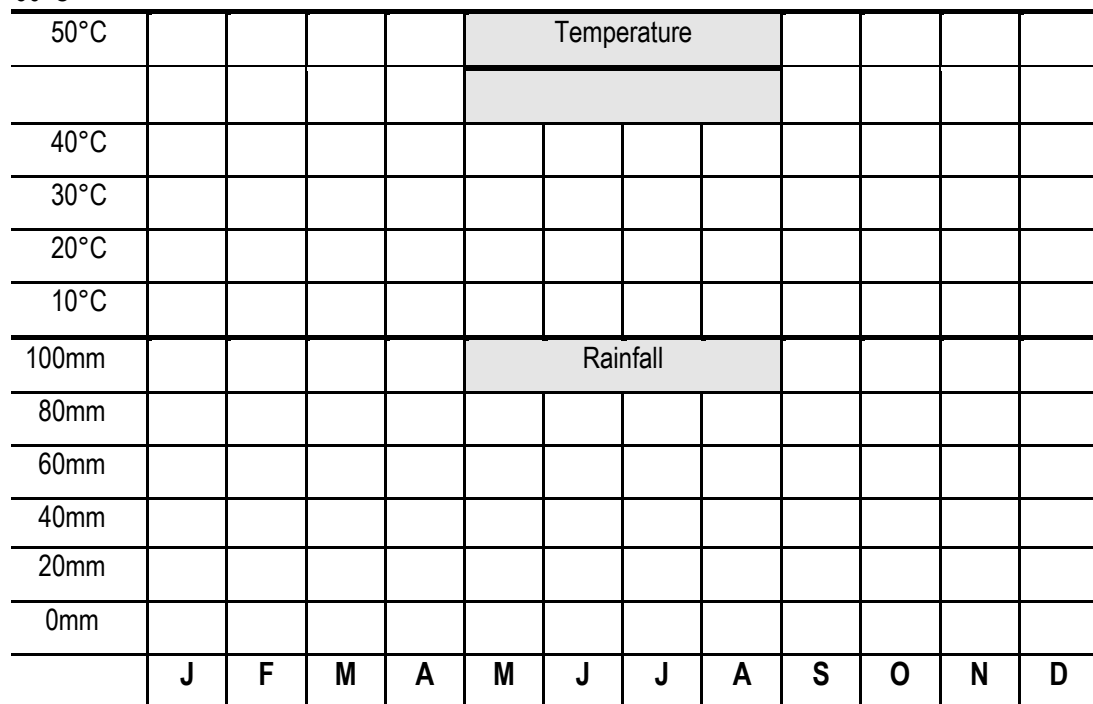


1. Make use of FIGURE A to complete the graph on FIGURE B:

FIGURE A: Table with temperature and rainfall

	J	F	M	A	M	J	J	A	S	O	N	D
°C	10	30	50	40	10	10	20	30	20	50	40	30
mm	40	20	0	60	40	80	60	80	40	100	0	20

FIGURE B: 60°C



2. Make use of FIGURE C to complete the graph on FIGURE D:

FIGURE C : Table with temperature and rainfall

	J	F	M	A	M	J	J	A	S	O	N	D
°C	15	35	25	45	10	10	20	30	20	50	40	30
mm	45	25	0	15	40	80	60	80	40	100	0	20

FIGURE D:

60°C												
50°C						Temperature						
40°C												
30°C												
20°C												
10°C												
100mm						Rainfall						
80mm												
60mm												
40mm												
20mm												
0mm												
	J	F	M	A	M	J	J	A	S	O	N	D

3. Make use of FIGURE E to complete the graph on FIGURE F:

FIGURE E: Table with temperature and rainfall

	J	F	M	A	M	J	J	A	S	O	N	D
°C	20	35	40	50	15	10	25	40	20	50	35	25
mm	45	25	0	15	40	80	60	80	40	100	0	20

FIGURE F:

60°C												
50°C						Temperature						
40°C												
30°C												
20°C												
10°C												
100mm						Rainfall						
80mm												
60mm												
40mm												
20mm												
0mm												
	J	F	M	A	M	J	J	A	S	O	N	D

We are going to concentrate on the following climate regions in the world

- Rainforest
- Warm deserts
- Coniferous forests

Word bank

Tropical rainforest: A forest that grows in an area that is warm and wet most of the year.

Humid: When the air in an area feels hot and wet.

Vegetation: The plants, bushes and trees that grow in an area.

Wildlife: Animals and plants that occur in nature.

Deforestation: The felling, removal and destruction of forest areas.

Woodcutting: The felling of trees to use their wood.

Rainforests

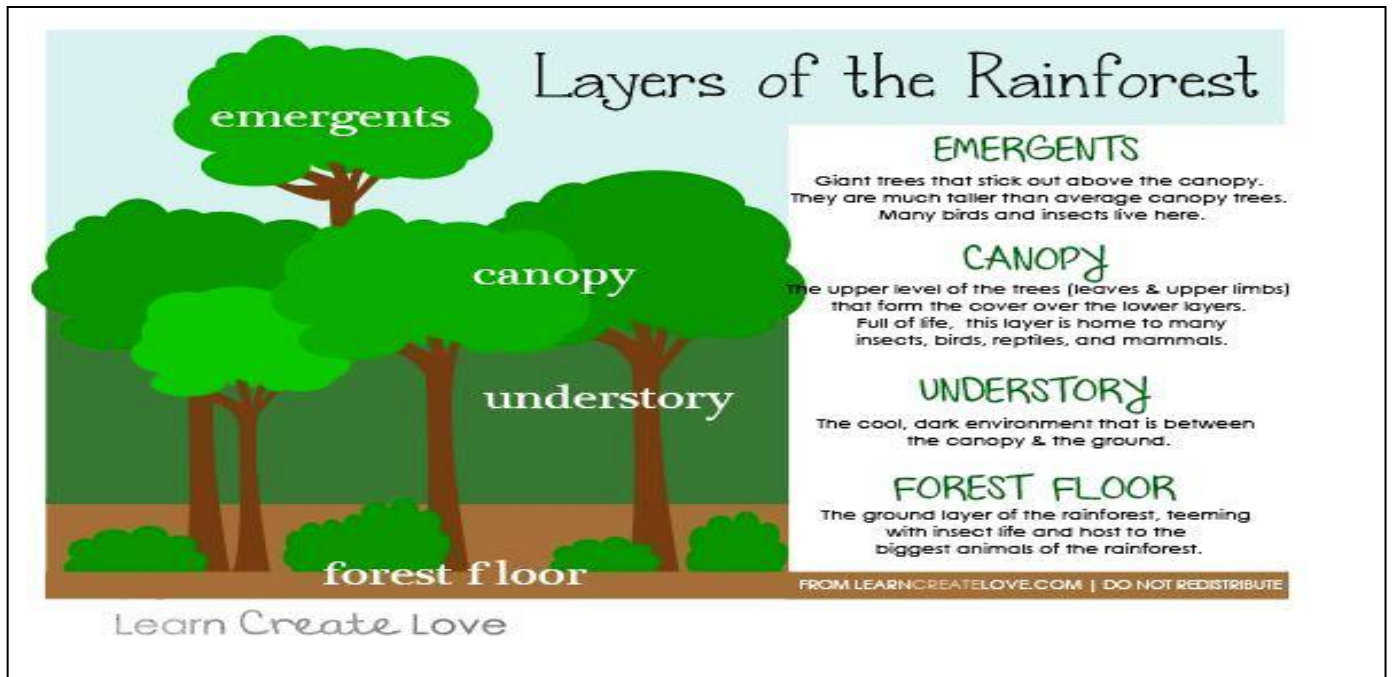
Date: _____



1. On which continents are the rain forests? _____

- In a rainforest there is a large variety of vegetation.
- There are plants that grow low on the ground.
- There are very tall trees.
- There are plants that climb up against others and grow on top of others.

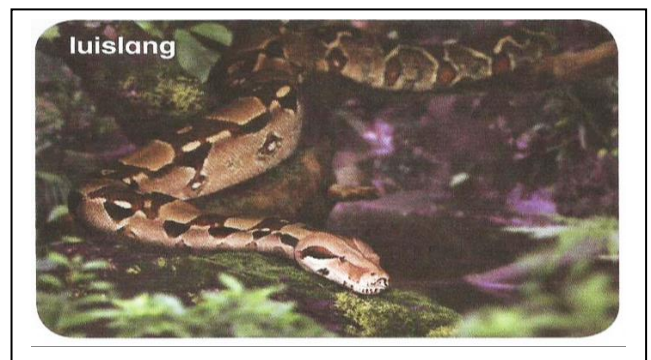
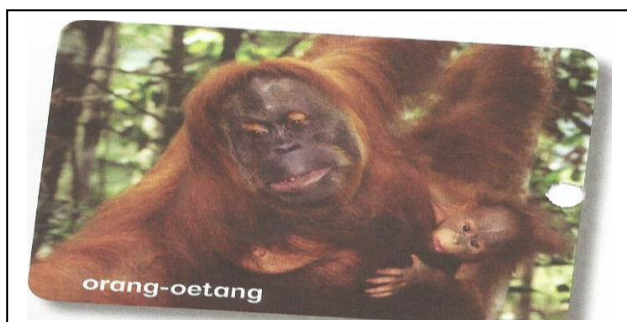
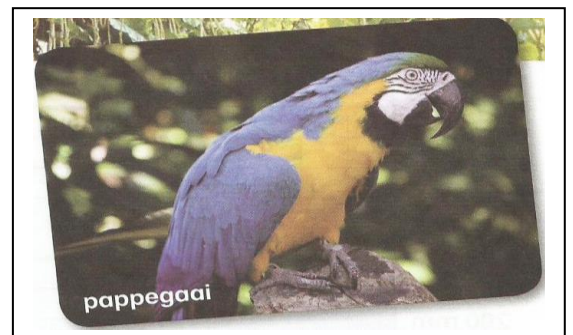
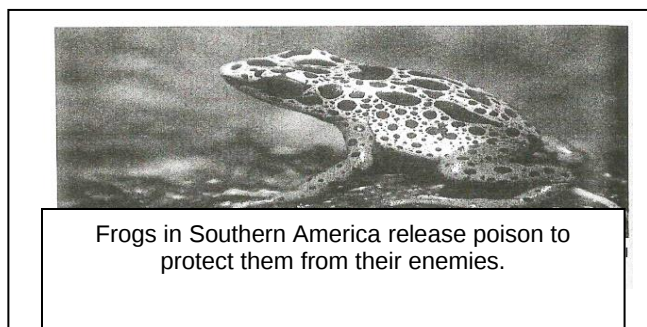
FIGURE A: Plants and animals in the rainforest



Make use of FIGURE A to answer the following questions:

2. Name the four plant layers in the rainforest _____

FIGURE B: Animals in the rainforest



Make use of FIGURE B to answer the following questions:

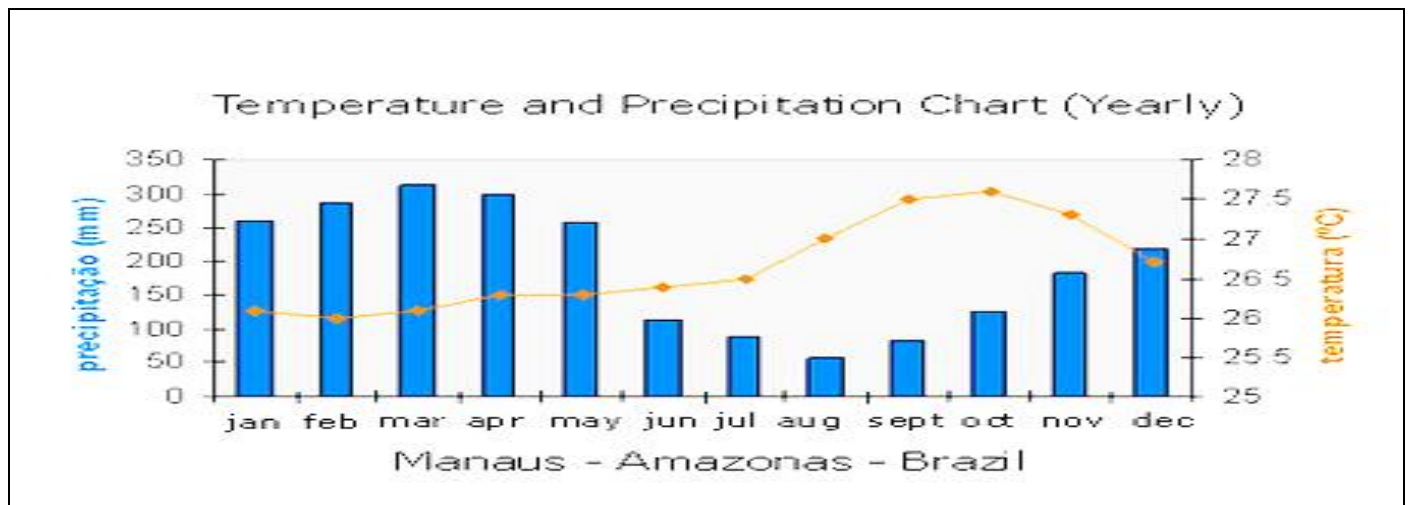
3a. On which continent does the frog appear? _____

3b. In what rainforest does he appear? _____

3c. Name two ways in which the frog protects itself against enemies?

3d. Name two other kinds of animals that occur in the rainforests:

FIGURE C : Temperature and rainfall graph of the Amazon



4. Use FIGURE C of the Amazon to answer the following questions:

4.1. Name the wettest month: _____

4.2. How much rain did fall in July? _____

4.3. Name the driest month: _____

4.3. What was the rainfall during February? _____

4.5. How many mm of rain fallen from July to October?

4.6 What is the average rainfall from July to October?

Make use of FIGURE C to complete the following table:

<u>Month</u>	<u>Temperature</u>	<u>Rainfall</u>
January		
April		
July		
October		

Deforestation

Date: _____

FIGURE D : Case Study - Logging in Gabon



Rainforest timber is sold to overseas countries

Gabon is a country in West Africa. Logging in the rainforest provided jobs and money for many people. However, most of Gabon's forests have now been destroyed.

Logging has led to more roads being built through forests. More roads made it possible for people to move more easily in and through forests. It disturbed areas that are more natural.

Roads have also made it easier for people to hunt animals illegally. Animals like the gorilla are now in danger of disappearing from the earth forever.

The government has stopped logging in certain areas to protect the remaining rainforests in Gabon. However, people are breaking the law and still cutting down trees in these areas.

Use FIGURE D to answer the following questions:

1. Why do people cut down fewer trees in Gabon? _____

2. Name two other activities that people do that cause deforestation?

3. Write down 4 effects of deforestation?

5. Name five uses of wood

Hot deserts

Date: _____

Word bank

Warm desert: Land area where very little rain falls and temperatures are very high.

Lifestyle: Way of life.

Nomadic: People who move from place to place in search of water and grazing for their livestock.

Oasis: A place in the desert where you can find water and rest.

FIGURE A: Deserts in the world



The world's largest hot desert is the Sahara in North Africa

Study FIGURE A to answer the following questions.

1. Name the desert and indicate where it is situated.

Desert	Continent or Country

2. What is a hot desert? _____

3. What is an oasis? _____

4. Approximately how much rain does a desert get annually? _____

FIGURE B: Temperature in desert area

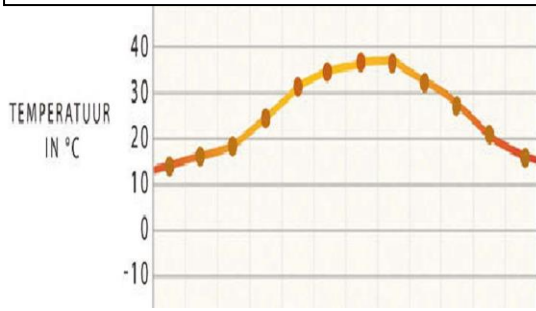


FIGURE C: Rainfall in desert area

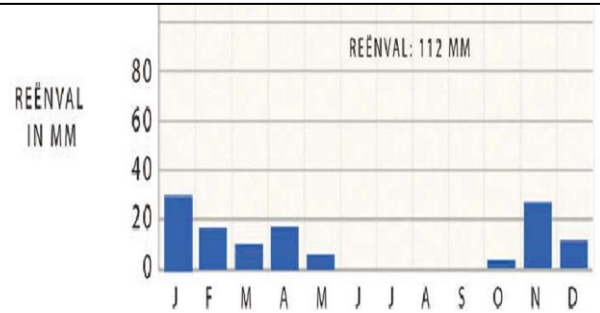


FIGURE D: Succulents

The succulent is a flowering cactus that is found in the North American deserts.

The indigenous Americans drank the water which was stored in the plant. Fish hooks were made from the sharp thorns of the plant.



FIGURE E: Dromedaris camel

The Dromedaris camel is a camel with one hump and is found in the Arabic desert. This camel stores fat in its hump and can go without water for 4 days.

The hard mouth of this camel allows it to eat thorny desert plants. It has long eye lashes to keep the sand out of its eyes during sand storms.



Let's look how the camel's body is adapt to life in the desert.

Body of camel

1. Thick fur
2. Leathery pads
3. Long eyelashes
4. Large nostrils
5. Hump
6. Bushy eyebrows
7. Thick lips



How do body part help camel in the desert?

1. Protect them from the sun and eliminates the loss of water from the body.
2. This stops the foot from sliding and sinking into the sand
3. Protects their eyes during sandstorms and from dust.
4. Nostrils can open and close and this traps water vapour which returns to their bodies.
5. Stores fat to use as food when there is no food
6. Protects their eyes during sandstorms and from dust
7. Allows them to eat thorny plants

Study FIGURES B,C,D , E and your own knowledge to answer the following questions.

1. What is the highest temperature? _____
2. How much is the annual rainfall? _____

3. What do you notice about the rainfall when the temperature is at its highest?

4. Where do we find succulents? _____

5. What did the indigenous Americans use the plant for? _____

6. Where do we find the Dromedaris camel? _____

7. Name 3 adaptations of the camel necessary to survive in the desert. - Paragraph

8. Describe the climate of hot deserts.

9. Name 3 ways that desert plants are adapted so as to survive the desert.

10. Explain how desert plants adapt to survive the desert.



11. When do the animals that live in the desert come out to hunt or eat. During the day or at night? _____

Lifestyle in the desert

FIGURE F :

People living in the traditional lifestyle of the desert have adapted to these extremely dry and barren conditions. Their nomadic lifestyle means that they do not settle in one area for long. Instead, they regularly go to other places to prevent some of the resources in the specific area from being depleted. They have herds of animals adapted to live in desert conditions, such as camels

The Tuareg

- Lives in the Sahara Desert.
- Keep herds of sheep, cattle and camels.
- Nomadic
- Eat the meat and drink the milk of their animals
- Use animal skins to make tents and other goods



Complete the following questions:

1. What is a lifestyle? _____
2. What does nomadic mean? _____
3. What tribe is found in the Sahara Desert? _____
4. What did they use the animals for? _____

5. In which country is the Sahara Desert situated? _____
6. How did the inhabitants of the desert find ways to find underground water many years ago? _____

7. Where in the deserts did people usually build settlements? _____

Oasis

- A place in the desert where water is permanently present.
- People build settlements near oases and even plant crops such as olives, figs and date palms.
- Date palm is a very useful plant - fruit can be eaten, the stem provides wood and some of the leaves can be made into rope.
- Many years ago, desert dwellers found ways to bring groundwater to the surface.
- Wells were dug or water canals built to divert water from the source to their crops.



Coniferous forests

Date : _____

Word bank

Coniferous forest: A forest that has seeds in cones rather than in flowers.

Survive: To keep living.

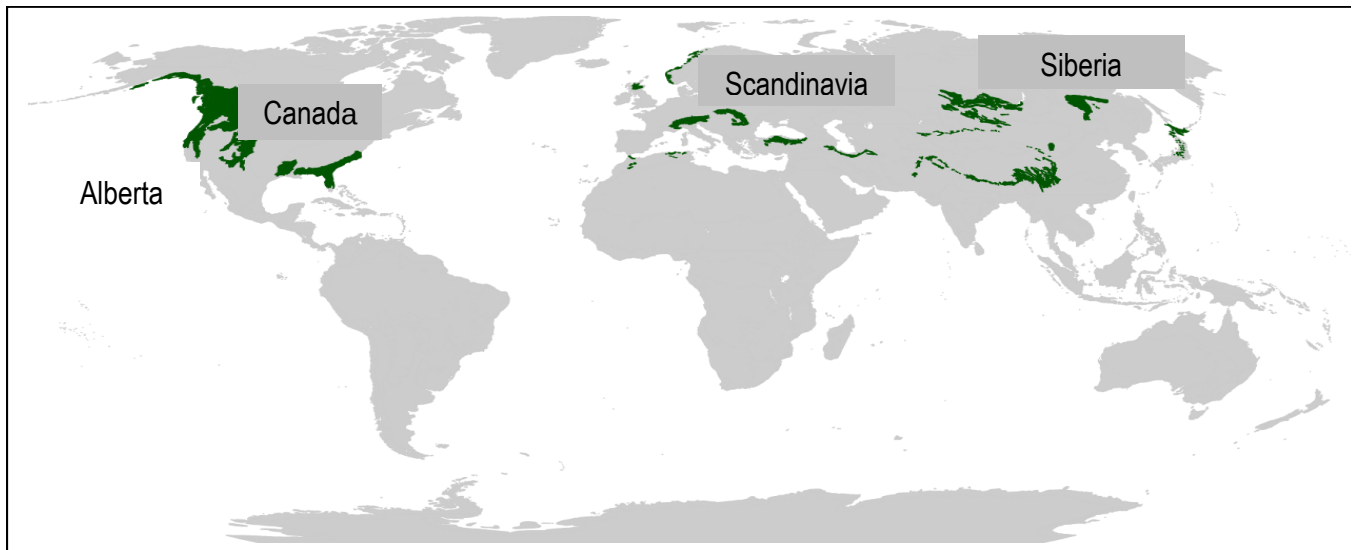
Hibernate: Sleep or rest all winter long.

Migrate: Move to another area in a certain season.

Prey: An animal that is hunted or killed by other animals for food.

Coniferous forests cover 15% of the earth's land surface. Coniferous forests form part of the largest forests in the needle forests are often found where there are lakes.

FIGURE A: Coniferous forests on earth



Study FIGURE A and answer the questions that follow:

Colour only the coniferous forests dark green so that you can see them clearly.

1. What is a coniferous forest? _____
2. Name 4 areas where coniferous forests are situated: _____
3. Do the deserts appear north or south of the equator? _____
4. Coniferous forest usually appear where there are **lakes**.
5. Why are there fewer plants and animals in coniferous forests? _____

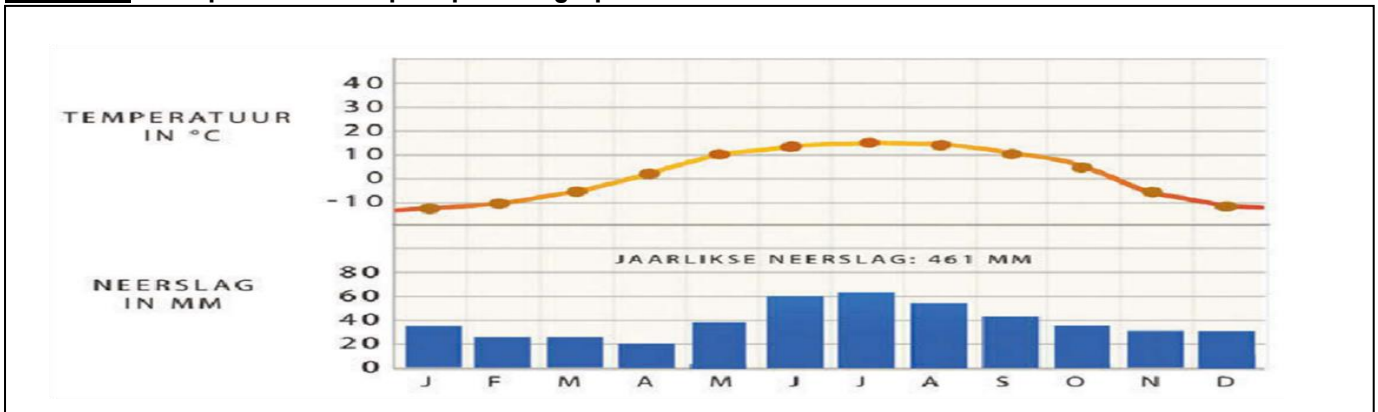
Complete the table.

How are plants and animals adapted to survive the cold climate of the coniferous forest?

Tree or animal	Adaptation for cold climate
Pine trees	
Owl	
Elk	



FIGURE B : Temperatures and precipitation graphs for Alberta in Canada



1. Write a paragraph about the climate and precipitation graphs of Alberta in Canada (6x1) (6)

(FIGURE B) and use following points as your guideline:

- Highest and lowest temperatures
- Months when the temperatures are at its lowest and highest
- Highest and lowest rainfall
- Months when the rainfall are at its lowest and highest
