

## **Grade 7 Weather, Climate and Adaptations of Animals to Climate Worksheets**

### **A. Answer the following questions in short:**

1. Name the elements that determine the weather of a place.
2. When are the maximum and minimum temperatures likely to occur during the day?
3. Indicate the type of climate of the following areas:
  - (i) Jammu and Kashmir
  - (ii) Kerala
  - (iii) Rajasthan
  - (iv) North-East India
4. Which of the two changes frequently, weather or climate?
5. Following are some of the characteristics of animals :
  - (i) diets heavy on fruits,
  - (ii) white fur,
  - (iii) need to migrate,
  - (iv) loud voice,
  - (v) sticky pads on feet,
  - (vi) layer of fat under skin,
  - (vii) wide and large paws,
  - (viii) bright colours
  - (ix) strong tails,
  - (x) long and large beak.

For each characteristic indicate whether it is adaptation for tropical rainforests or polar regions. Do you think that some of these characteristics can be adapted for both regions?

6. The tropical rainforest has a large population of animals. Explain why it is so?
7. Explain with examples, why we find animals of certain kind living in particular climatic conditions.
8. How do elephant living in the tropical rainforest adapt itself?
9. What is migration?
10. Write differences between weather and climate.
11. Why is the colour of polar bear white?
12. A polar bear has to move slowly, otherwise its body will get overheated. Why?
13. From where do the southwest monsoon winds pick up humidity?

### **B. Fill in the blanks:**

1. The average weather taken over a long time is called .....
2. A place receives very little rainfall and the temperature is high throughout the

year, the climate of that place will be ..... and .....

3. The two regions of the earth with extreme climatic conditions are ..... and .....

4. India experiences ..... climate.

5. Penguins have a ..... behaviour.

**C. Tick (✓) the correct option:**

1. A carnivore with stripes on its body moves very fast while catching its prey. It is likely to be found in:

- (a) polar regions
- (b) deserts
- (c) oceans
- (d) tropical rainforests

2. Which features adapt polar bears to live in extremely cold climate?

- (a) A white fur, fat below skin, keen sense of smell
- (b) Thin skin, large eyes, a white fur
- (c) A long tail, strong claws, white large paws
- (d) White body, paws for swimming, gills for respiration

3. Which option best describes a tropical region?

- (a) Hot and humid
- (b) Moderate temperature, heavy rainfall
- (c) Cold and humid
- (d) Hot and dry

4. Polar bears are:

- (a) cold-blooded animals
- (b) warm-blooded animals
- (c) animals with white fur and gills for respiration in water
- (d) none of the above

5. Weather changes are caused by the:

- (a) moon
- (b) sun
- (c) earth
- (d) sky

**D. State 'True' or 'False':**

1. Humidity is the measure of moisture in air. ....

2. Due to their locations around the equator, the tropical regions have hot humid

climate. ....

3. Tropical rainforests are found in the Western Ghats. ....

4. At Mumbai, the maximum and minimum temperatures will show a larger range as compared to Delhi. ....

5. As air rises, it cools. ....

**E. Match the following:**

'A'	'B'
1. Relative humidity	a. millibars
2. Rainfall	b. kilometres per hour
3. Wind speed	c. degree Celsius
4. Temperature	d. per cent
5. Atmospheric pressure	e. centimetres

**F. Give three examples of each of the following:**

1. Regions of tropical rainforest ..... , ..... , .....

2. Countries belonging to polar region. .... , ..... ,  
.....

3. Animals living in tropical rainforests ..... , ..... , .....

4. Animals living in polar regions ..... , ..... , .....

5. Animals which can camouflage ..... , ..... , .....

**G. Collect weather reports of seven successive days in the winter months (preferably December). Collect similar reports for the summer months (preferably June). Now prepare a table for sunrise and sunset times as shown:**

Table:

June			December		
Date	Sunrise	Sunset	Date	Sunrise	Sunset

Try to answer the following questions:

1. Is there any difference in the time of sunrise during summer and winter?

2. When do you find that the sun rises earlier?
3. Do you also find any difference in the time of sunset during the month of June and December?
4. When are the days longer?
5. When are the nights longer?
6. Why are the days sometimes longer and sometimes shorter?
7. Plot the length of the day against the days chosen in June and December.  
(Instructions for plotting graphs are given in Chapter 13 in NCERT textbook)

**H. Collect information about the Indian Meteorological Department. If possible visit its website: <http://www.imd.gov.in>.**

1. Write a brief report about the things this department does.

**I. Given below is a list of climatic conditions and some examples of animals. Read them carefully and place the items in the relevant columns as shown.**

Penguin, Gorilla, Monkey, Reindeer, Assam, Greenland, Sun does not rise for six months, Hot and humid climate, Days and nights are almost equal in length throughout the year, Winter temperature around  $-37^{\circ}\text{C}$ , Western Ghats

<b>Tropical Rainforest</b>	<b>Polar Region</b>
Hot and humid climate	Penguin