

Tomorrow is the birthday of Nitoo's sister, Nita. Nitoo, Nita and her friends are planning for tomorrow's party.

We will have a fancy dress party.

Okay didi, all three of us will play 'seasons'.



Okay

Next day. Nitoo's turn is first.

Hi, I am Mister Summer.



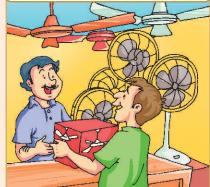
When I come, I bring the king of the fruits, the mango.



Children love me because they enjoy playing in water parks.



The people who sell fans and air conditioners wait for my arrival.

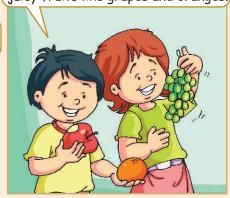


Then, it is the turn of Simmi.

Hi, everybody! I am Miss Winter.



When I come, I bring tasty and juicy fruits like grapes and oranges.



Children love me because they enjoy playing with snow.



People wear beautiful and colourful clothes.



Finally, Payal comes.

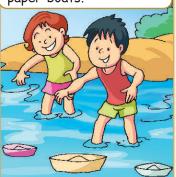
Hello, I am Miss Monsoon.



When I come, people love to have hot tea or soup with snacks.



Children love me because they enjoy playing with paper boats.



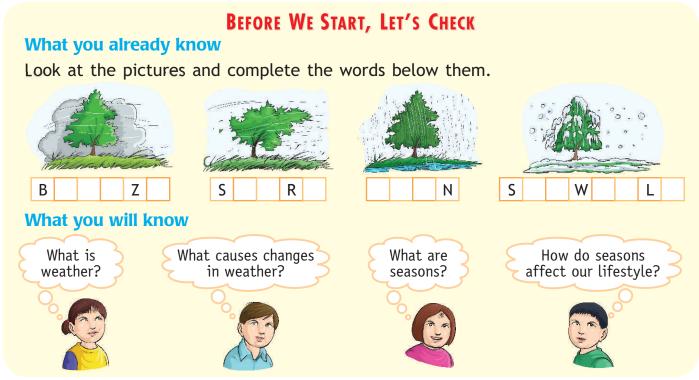
People say I am the most beautiful since I bring colourful rainbows with me.



Now, Nita is confused to choose one the best among them.



# **Weather and Seasons**



## **WEATHER**

Weather is the condition of the atmosphere at a particular place and time. Weather does not remain the same but changes from day to day.



Some days are sunny. The sun shines brightly in the sky.



Some days are cloudy. The sun hides behind clouds.



Some days are rainy. The air becomes humid.



Some days are windy. Plants and trees sway.



Some days are hot. We sweat a lot.



Some days are cold. We shiver with cold.

## **FACTORS AFFECTING WEATHER**

Weather is affected by four factors: the sun, wind, clouds and rain.

## Sun

Days are warmer and nights are cooler. Do you know why? Because during the daytime, the sun's rays hit the surface of the earth and make it hot.

Among the parts of the day, the afternoon is warmer than the morning and evening. It is because at noon the sun is directly over our heads. Sunrays fall straight on us. In the morning and evening, sunrays are slanting. They have to cover more distance to reach us.



## Wind

Moving air is called wind. Wind also affects weather.



A gentle wind is called a **breeze**.

It is very pleasant when a breeze blows.



Sometimes, winds blow hard. They are called a **storm**. Storms can cause a lot of damage.

On a bright sunny day, sunrays hit the ground and make it hot. The air near the ground also gets very hot. Hot air is very light. So it rises up. The cool air from the nearby areas rushes in to fill this vacant space. These fast and strong winds are called storm.



When strong winds blow with a lot of dust with them, they are called a **dust storm**.

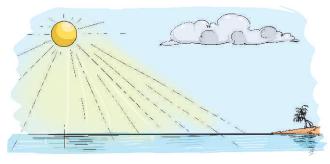


When a storm is accompanied by lightning and thunder, it is called a **thunderstorm**.

Weather and Seasons

## **Clouds**

You must have seen clouds floating in the sky. Do you know how they are formed? Let us see.



The sun's rays fall on seas, rivers, lakes, etc and heat the water in them. The hot water changes into water vapour and rises into the sky.

After reaching a great height, the water vapour cools down to form tiny droplets of water. These droplets join together to form clouds.

Clouds also affect weather. On a cloudy day, clouds block sunrays making the weather cool. So, cloudy days are cooler than clear days.

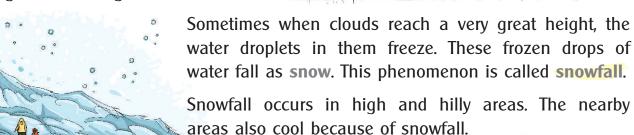
But cloudy nights are warmer than clear nights. Why? It is because the sun's rays fall on the earth all day and make it hot. On a clear night, this heat from the earth rises up and escapes into space. But on a cloudy night, clouds block this heat from escaping and the earth remains warm.

### Rain

When many tiny droplets join together in clouds, they become big and heavy. These drops of water fall as rain.

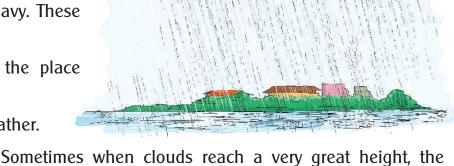
Rain cools the temperature of the place where it falls.

Rain brings relief during hot weather.



Sometimes, water vapour cools near the ground and water bodies and forms tiny droplets of water. Thus, a cloud is formed near the surface of the earth. It is called fog.

The fog makes the weather of a place cool and wet.





## **SEASONS**

When same type of weather continues for many days, it is called a **season**. A season generally lasts for two to three months. There are three main seasons in India: summer, winter and the rainy season.

#### **Summer**

Summer is the hottest season. The days are longer and the nights are shorter.

Sometimes, a very hot wind called the 'loo' blows in summer. It is very harmful to our health. When the loo blows, we should remain indoors.



## Rainy season

The rainy season is also called the **monsoon**. Rainfall cools weather after the hot summer.

Farmers welcome rain when it falls at the right time. However, sometimes too much rain causes floods. Floods cause a lot of damage.

## Winter

Winter is the coldest season of the year. The days are shorter and the nights are longer.

Sometimes a very cold wind, called a **cold wave**, blows. There is a snowfall in the mountains. Some people travel to the mountains just to enjoy snowfall.

Besides these main seasons, we have two more seasons.



**Autumn** is the season when trees shed their leaves. This season comes before the onset of winter.



**Spring** is the most beautiful season. The weather is pleasant. Trees grow new leaves and flowers bloom in spring.

Weather and Seasons

## EFFECTS OF SEASONS ON OUR LIFESTYLE

Seasons affect our lifestyle in many ways.

#### **Clothes**

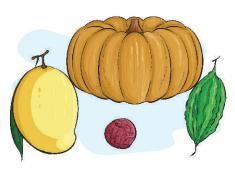
- In summer, we like to wear light cotton clothes.
- In winter, we wear warm woollen clothes.
- In the rainy season, we use raincoats, qumboots and umbrellas.



#### Food



- In summer, we like to have ice creams, lassi, cold drink, etc.
- Vegetables like bitter gourds, ladies' fingers, pumpkins, and fruits like mangoes, lychees and watermelons are easily available in summer.



In winter, we like to have hot tea, coffee, soup, samosa, etc.

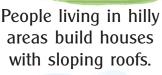


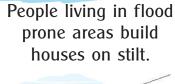
Vegetables like cauliflowers, carrots and peas, and fruits like apples, grapes and oranges are easily available in winter.

#### Houses



People living in hot areas build houses with high roofs.









Heavy rains affect outdoor sports competitions.



Fog makes driving difficult and dangerous.



Storms knock down electric poles which affects power supply.

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#### Words to Remember

weather conditions of environment at a particular place and time

cloud a grey or white mass made of tiny droplets of water in the sky

warm and damp humid

drops of water falling from the sky rain

a slow and gentle wind breeze hard-blowing winds storm a storm with a lot of dust dust storm

thunderstorm – a storm accompanied by lightning and thunder snowfall frozen droplets of water falling from the sky

a cloud near the surface of the earth foq

the same type of weather continuing for many days season

a type of very hot wind loo

another name for the rainy season monsoon

#### Points to Recall

- Weather changes from day to day and even from hour to hour.
- Weather is affected by the sun, wind, clouds and rain.
- Sunrays fall on us straight at noon but are slanting in the morning and evening.
- A breeze is pleasant but a storm causes damage.
- A storm is sometimes accompanied by dust, lightning and thunder.
- Cloudy days are cooler than clear days but it is the opposite for nights.
- Rain and snow cool the temperature of not only the place where they fall but also of the nearby areas.
- Sometimes a cloud forms near the surface of the earth. It is called fog.
- \* One type of weather continuing for many days is called a season.
- A year is divided into summer, winter, the rainy, autumn and spring seasons.
- Seasons affect our lifestyle in many ways



## A. Tick $(\checkmark)$ the correct option.

- 1. A day can be
  - (a) sunny
- (b) windy
- (c) cloudy
- (d) any of these

- 2. Sunrays are slanting in the
  - (a) morning
- (b) afternoon
- (c) evening
- (d) both (a) and (c)

- 3. Which of the following is pleasant?
  - (a) storm
- (b) thunderstorm
- (c) breeze
- (d) dust storm
- 4. Which of the following does not fall from the sky?
  - (a) fog
- (b) rain
- (c) snow
- (d) all of these

- 5. Which of the following causes floods?
  - (a) cold wind
- (b) hot wind
- (c) heavy rain
- (d) none of these
- 6. Which of the following is not usually available in summer?
  - (a) bitter gourd
- (b) cauliflower
- (c) lychee
- (d) watermelon

### B. Write 'T' for true statements and 'F' for false ones.

- 1. Hot air is lighter than cold air.
- 2. Cloudy nights are cooler than clear nights.
- 3. When the *loo* blows, we should remain outdoors.
- 4. Spring is the season when trees shed their leaves.
- 5. People living in hot areas build houses with high roofs.

## C. Complete the table with the choices given in brackets.

		Rainy season	Winter	Summer
1.	Weather (hot / cold / pleasant)			
2.	Feature (flood / loo / cold wave)			
3.	Clothes (woollen / cotton / waterproof)			
4.	Common drink (lassi / coffee / tea)			
5.	Vegetable available (pumpkin / carrot)	_		
6.	Fruits available (mango / apple)	_		

#### D. Answer in one or two words.

- 1. Which season has shorter nights and longer days?
- 2. What is the other name for the rainy season?
- 3. Which is the most beautiful season?
- 4. What weather condition often affects outdoor sports competitions?
- 5. What weather condition makes driving difficult?

#### E. Answer in one sentence only.

- 1. What is the *loo*?
- 2. When does autumn come?
- 3. Name some fruits and vegetables easily available in winter.
- 4. Where do people build houses on stilts?
- 5. Why does power supply often get affected after storms?

#### F. Answer in two or three sentences.

- 1. Why is the afternoon hotter than the morning?
- 2. How does a storm occur?
- 3. How is a cloud formed?

- 4. Why are cloudy nights warmer than clear nights?
- 5. How does snowfall occur?





## **BRAINSTORM**

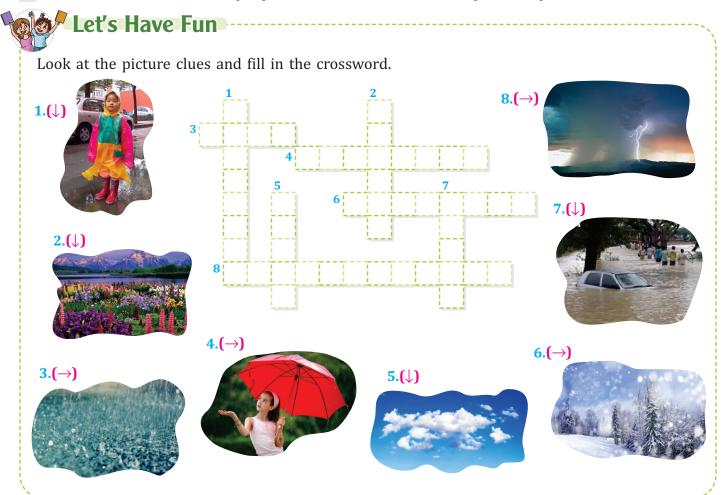
- 1. Different fruits and vegetables are grown in different seasons. Then how are almost all fruits and vegetables available to us throughout the year?
  - (Hint: Different seasons at different places, transportation, storage.)
- 2. Why do we have to drink a lot of water on a hot summer day?



## TELL YOUR TEACHER

Read the following activities. Tell your teacher what right or wrong thing each child is doing and why.

- It is very cold today. A cold wave is blowing. Pulkit is very fond of ice creams. He has taken out some money from his piggy bank. Now he is going to the nearby shop to buy an ice cream to eat.
- Shashi and his sister Sunanda have just come back from school. While they were on the way, a dust storm came. Sunanda is going to take a bath. Shashi is insisting on having food first.



Weather and Seasons





On a chilly morning, why does it seem as if steam is coming out of our mouths when we breathe out?



The rainiest place in the world is in India. Find its name and the name of the state where it is located.

## Project .....

Make a 'weather bulletin' for one week.

Take a sheet of chart paper and make a table on it as shown below.

Day and date	Max. Temp.	Min. Temp.	Time of Sunrise	Time of Sunset

Now read the weather column in a newspaper daily. Fill in the table with the information given in the column. After seven days, when the table is complete, submit it to your teacher.



### Activity Time

#### Making a wind vane

What you need:



two square pieces of cards



one

straw

one paper cup



pin

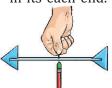
a pencil with an eraser



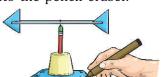
marker



1. Take the straw and cut a slot in its each end.



3. Stick the pin through the straw into the pencil eraser.

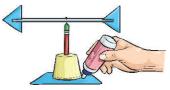


5. Now write 'N', 'E', 'S' and 'W' on the card, for North, East, South and West respectively.





2. Cut out two triangles from one of the cards and insert them into the slots as shown.



4. Fix the pencil to the bottom of the paper cup. Then fix the cup rim to the other card with glue.



6. Take the wind vane outside and find out which way the wind is blowing.

## Virtual Tour

For more information visit:

http://www.bbc.co.uk/schools/whatisweather/