4. Mangoes Round the Year Hey, today Nitu has brought potato sabzi I have got Wow! Aman's Don't eat that. You bhindi. lunch box has may fall sick. Here, sweet puries you take some Oh! Nitu, I think bhindi. your potato sabzi is spoilt. Preeti Nitu Aman Preeti Nitu Discuss Aman How did Aman know that the potato sabzi had got spoilt?

- Have you ever seen some food that has got spoilt? How did you know that it was spoiled?
- Preeti told Nitu not to eat the potato *sabzi*. What would have happened if she had eaten it?

Teacher's Note : Let children give examples of food spoilage based on their own experiences. It is important to explain the difference between food spoilage and wastage of food. The experiment with bread can be started when you begin the lesson, because it will need to continue over six days at least.

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Write

- Look in your kitchen and write down names of food items that
 - can get spoilt in 2-3 days _____ ____
 - can be kept for a week
 - would not spoil till one month _____ ____
- Look at your friend's list and discuss in the class.
- Will your list be the same in all seasons? What would change?
- When food gets spoilt in your house, what do you do with it?

Biji returned the bread

Aman's Biji went to the market to buy bread. The shop was very crowded. The shopkeeper picked up a packet of bread and gave it to Biji. She looked at it and returned it immediately.

- Look at the picture of the bread packet here and guess why Biji returned it?
- How did she find that the bread had got spoilt?



Find out

Look carefully at two-three packets of food items:

- What can we know from what is written on the packet?
- When you buy anything from the market, what do you look for on the packet?

Teacher's Note : Help children to read and note the information on the packets regarding weight, date of packing etc. While doing the experiment precautions need to be taken depending on the weather conditions – e.g. the bread should not be allowed to dry up, there should be some ventilation in the room. Do put up the chart in the classroom and remind the children to fill it in every day.



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How does food get spoilt?

The whole class can do this experiment together. Take a piece of bread or *roti*. Sprinkle a few drops of water on it, and put it in a box. Close the box. See the bread or *roti* everyday until you find some changes on it.

Make this table on a chart paper and put it up in the classroom. Fill up the chart every day after discussing the changes seen.

Day	Changes in the bread or <i>roti</i>			
	By touch	By smell	By looking through hand lens	By colour
1.				
2.				
3.	G			
4.	C) 0,		
5.				
6.				

- Find out the reason for these changes. From where did the fungus come on the bread?
- Different kinds of food items spoil due to different reasons. Some foods spoil soon, some stay good for long. List some seasons and conditions in which food spoils quickly.

Teacher's Note : Whenever children do this experiment, they should wash their hands after the experiment.

Mangoes Round the Year

• Given below are some food items and some simple methods by which these could be kept fresh for 1-2 days. Match the correct pairs:

Food items	Methods		
Milk	Put in a bowl and keep the bowl in a container with some water.		
Cooked rice	Wrap in a damp cloth.		
Green coriander (Dhania)	Boil it.		
Onion, garlic	Keep it in a dry open place.		

Summer treat – Mamidi tandra

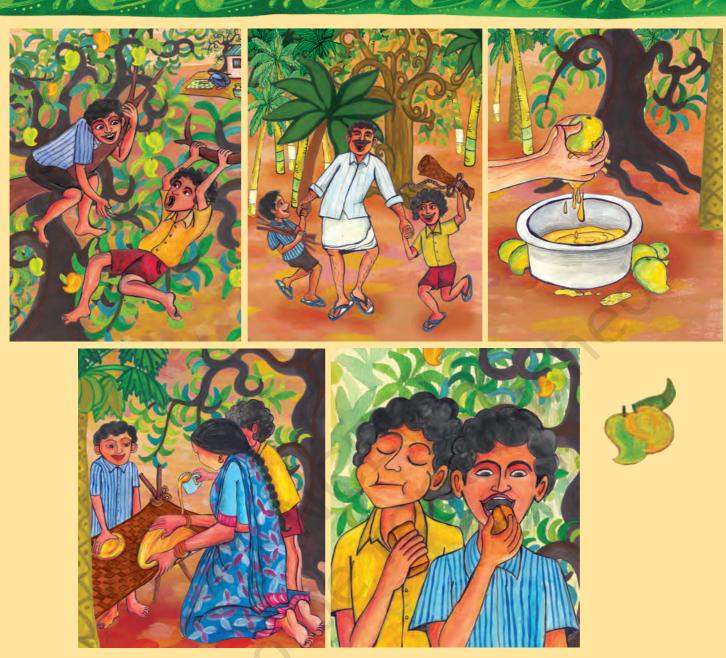
Chittibabu and Chinnababu live in Atreyapuram town in Andhra Pradesh. The brothers spend the summer holidays playing in the mango garden, when the trees are full of fruits. They also like to eat unripe mangoes with salt and chilly powder.

At home, their mother cooks unripe mangoes in different ways. She also makes many kinds of mango pickles. The pickles last through the year until the next mango season.

One evening, while having food Chinnababu asked, "*Amma*, we have so many mangoes. Make some *mamidi tandra* (*aam papad*) from them."

Their father said, "Making *mamidi tandra* needs four weeks of hardwork. If you both promise to help us everyday for the next four weeks, we can together make the *mamidi tandra*."

Both the brothers quickly agreed to help. The next day both the children went to the market with their father. They bought a mat woven from the leaves of a palm tree, poles of casuarina tree, string made of coconut husk, some jaggery and sugar.



Amma found a sunny place in the backyard. Both the brothers made a high platform by using poles. They spread out and tied the mat on that platform.

The next day, *Appa* chose the most ripe mangoes. They took out the mango pulp into a large pot. Then they strained the pulp through a fine muslin cloth, to remove the fibres from the pulp. Then Chittibabu crushed the *gur* (jaggery) till there were no lumps. They added the jaggery and sugar in equal amounts to the pulp. Chinnababu mixed the jaggery and sugar well with a big spoon. *Amma* then spread this pulp into a thin layer over the mat. The thin layer was left to dry in the sun. In the evening, they covered the mat with a clean saree to avoid any dust.

The next day they again took out some mango pulp. They added jaggery and sugar into the pulp. Then they spread the pulp over the previous day's layer. This work was given to both the brothers. Both of them together spread many layers over it. For the next four weeks they hoped that it would not rain.

For four weeks, they added layer after layer until the jelly grew four centimetres thick and looked like a golden cake. After some days *Amma* said, "The *mamidi tandra* is ready, we can take it out and cut it into pieces tomorrow."

The next day, the mat was brought down from the platform. *Mamidi tandra* was cut into smaller pieces. The brothers tasted it. It was tasty. Chhinnababu said, "Wow, how tasty! After all we have also helped in making it."



Write

- Why was sugar and jaggery mixed into the mango pulp and dried in the sun?
- Why did *Appa* first choose the most ripe mangoes to be used for making the *mamidi tandra*?
- How did the brothers make the *mamidi tandra*? Write down step-by-step what they did for this.
- What things are made in your house from ripe and unripe mangoes?



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Looking Around

• Make a list of all the different types of pickles that you know about, and share with your friends.



Find out and discuss

- Is there any kind of pickle made in your house? What kind of pickle is it? Who makes it? From whom did they learn to make the pickle?
- What all things are needed to make any one type of pickle in your house? How is the pickle made? Find out the recipe and write.





- How are these things made in your house.
 - Papad Chutney Badiyan Sauce
- It is a two-day journey by train from Pune to Kolkata. If you were to go on this trip, what food items would you carry with you? How would you pack them? Make a list on the blackboard of all the packed food. What food would you eat first?



What we have learnt

- Glass jars and bottles are dried well in the sun before filling them with pickles. Why is this done? Do you remember what happened to the bread in the experiment?
- To eat mangoes round the year we make different items like pickle, *aam papad*, *chutney*, *chikky*, etc. List some other food with which we make different things, so that we can enjoy it throughout the year.



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Mangoes Round the Year