

3 A Trip to Bhopal

Today Sugandha is very excited. All the children of her school are going on a trip to Bhopal with their teachers. Ms. Meenakshi and Mr. Rakesh are talking about the number of buses needed.

Ms. Meenakshi — We will need 4 buses.

Mr. Rakesh — I think we need at least 5.

Ms. Meenakshi — Each bus has 50 seats.

Mr. Rakesh — Let us see how many children are going.

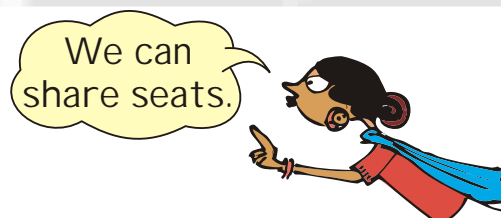
Class	Number of children
I	33
II	32
III	42
IV	50
V	53
Total	_____



Do we need 4 buses?
One bus can take 50
children, 4 buses
can take $50 \times 4 \dots$?



- ❖ So there are a total of _____ children going.
- ❖ If they get 4 buses, how many children will get seats? _____
- ❖ Will there be any children left without seats?



Children should be encouraged to estimate first and then find out the answer using any method they want. It is important to discuss the methods children use to solve a problem.

Waiting for the Buses

Sahiba jumps out of the line to see if the buses are coming. She shouts loudly — Hey! I can see them. Run! Grab the window seats.

Many children start jumping in excitement. But

Stop!
What is this? These
buses are so small!

Now there is an argument.

We told you to
bring big buses!

We did not have
enough big buses.
So we got many
mini buses.



Each mini bus can take 35 students.
How many mini buses are needed?



The Journey Begins

As the buses start moving, children sing at the top of their voices. Some look outside to enjoy the view of the green fields and the hills.

Indra — When will we reach Bhopal?

Ms. Asha — If we don't stop anywhere, we should reach there in 2 hours, that is around _____ o' clock.

Manjeet — Is it very far?

Mr. Bhimsen — It is about 70 km.

Ruby — Are we going to stop anywhere?

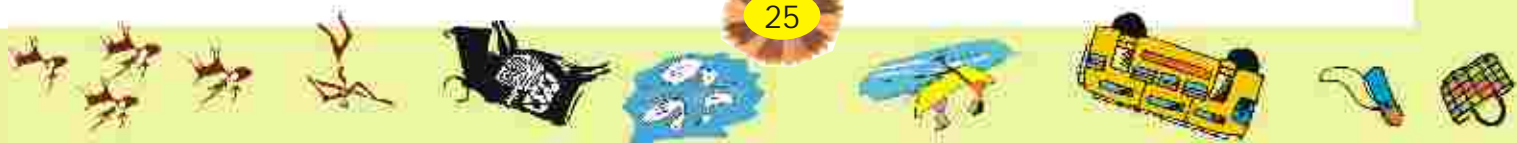
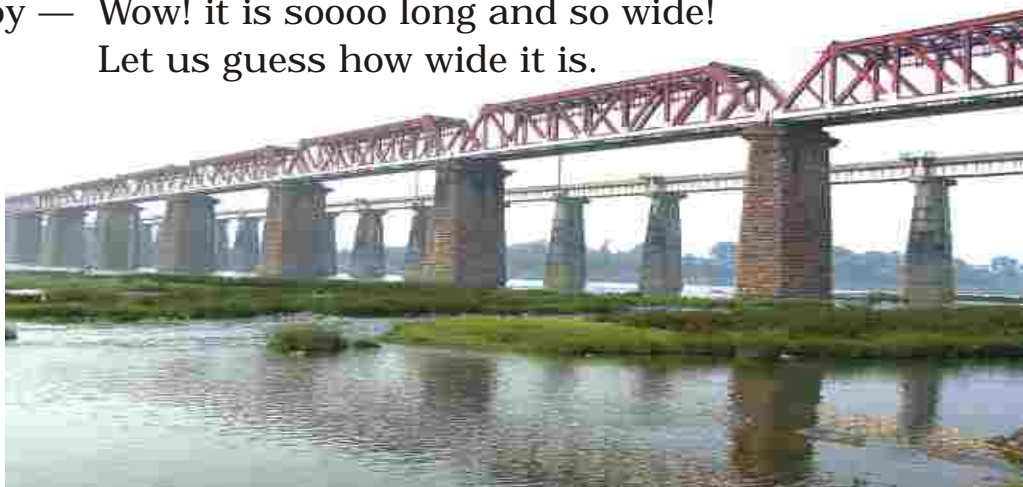
Mr. Rakesh — May be at Bhimbetka, about 50 km from here.

❁ If they go to Bhimbetka, they will reach there

- Before 10 o'clock
- Between 10 o'clock and 11 o' clock
- After 11 o' clock

As they are talking, Bahadur shouts — Hey! look at the Narmada. Everyone looks out of the windows.

Ruby — Wow! it is soooo long and so wide!
Let us guess how wide it is.





Gopi — Uhm---m, 100 metres? No, it is much more.
Can't say.

Victoria — It must be more than half a kilometre.

Ms. Asha — Look, it is written – 'This bridge is 756.82 metres long'. So we can guess that the Narmada must be about 500 metres wide at this place.

❖ Was Victoria right ?

Sadaf — I just can't imagine 500 metres.

Ms. Asha — See, our bus is about 5 metres long. Imagine how many buses can stand in a line on this bridge.

❖ Have you ever crossed a long bridge? About how many metres long was it? _____

Everyone looks down at the river.

Mr. Rakesh — The water level now is quite low. It must be about 40 metres below the bridge.

Ms. Asha — But in the rainy season, the water had risen. Then it was just about 15 metres below the bridge.

❖ What is the difference between the water level of the Narmada in the rainy season and now? _____ metres.

The children discuss about the river for some time.

Suddenly, the bus stops with a jerk.

Oh! The petrol pump. Two buses need to be refilled.

The buses stand in a line. Children are sticking their necks out to see how diesel is filled in the bus. Some children have got down to look more closely.

❖ Each bus takes about 15 minutes to refill and there are two buses to be refilled. So they stop there for about _____ minutes, which means they are late by about _____ minutes.



❖ Look in the picture and find the price of 1 litre of diesel. _____

As the buses are being refilled, some children go to the toilet near the petrol pump.

How much time did Aman take to come out of the toilet? _____

Aman has taken as
much time to empty
himself as one bus is
taking to refill!



To Bhimbetka

After the buses are refilled, the journey starts again. Now the children are told that they are stopping at Bhimbetka.

Anjan — What is Bhimbetka?

Ms. Raina — It's a place with lots of caves and cave-paintings made by people ten thousand years ago.

Sumonto — Ten tho....uu....saa....nd years! I cannot even think of one thousand years back!

Gopi — Oh! one thousand years is a big thing, I can't even think of one hundred years.

Gauri — I can think of 100 years because my father's grandmother is 100 years old.

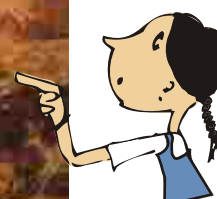
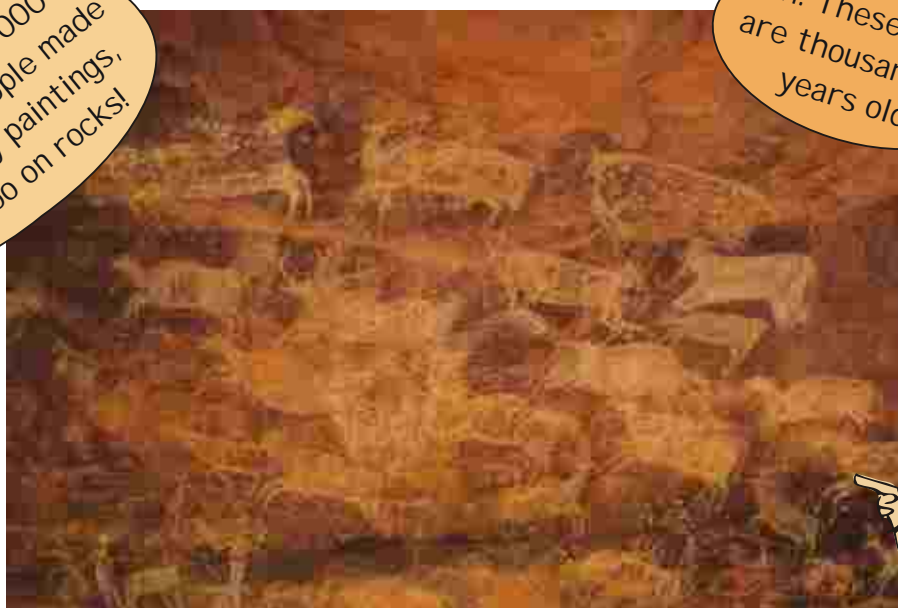
Manjeet — That means those caves are almost hundred great grandmothers old!!

Everybody bursts into laughter – Ha! Ha! Ha!

Now the children are really excited to see the cave-paintings. It is about 11 o'clock when they reach Bhimbetka.

Wow! Even 10000 years ago, people made such lovely paintings, that too on rocks!

Oh! These rocks are thousands of years old!





Shankar — This painting also has very big bisons. Hey, I got an idea. I will count the bisons and you count the deer in the paintings.

Bonomala — I will count people. Let us see which are the most — bisons, deer or people.



❖ How many more deer are there than bisons? _____

But Bonomala is the happiest because the number of people is even more than the number of deer and bisons together. Her count is less than 200.

❖ How many people must Bonomala have counted?

214 / 154 / 134 / 177

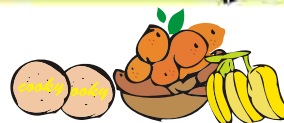
The guide tells them that there are 600 cave-paintings in all.

It is time to leave Bhimbetka.

❖ They have spent 1 hour there. What time is it? _____

They are now moving towards Bhopal. They should reach there in less than 1 hour, at about _____ o' clock.

Lunch Time



The children are hungry by this time so they take out their lunch-packs. Biscuits, oranges and bananas are also distributed in all the buses.



Each child is to be given 1 orange, 1 banana and 5 biscuits.



All the children take oranges and biscuits but 38 children do not take bananas.



❖ How many oranges, biscuits and bananas are distributed?

Manjeet and Bhanu quickly finish their lunch and start asking puzzles to pass the time.

Manjeet — Tell me the number which is exactly between 100 and 150.

Bhanu — 120 ... no, 130 ... no it is 125.

Manjeet — Right. OK! You ask now.



Other children join in. Everyone is asking puzzling questions.

A I gave four toffees each to four of my friends and three toffees are left with me. How many toffees did I have?

B What numbers can you make using 3, 5 and 7? You can make 357 and 537. What others?

C A number becomes double if it is increased by 8. What is the number?



Children can be asked to solve many more similar questions or puzzles, both orally and in writing. They should also be encouraged to explain the strategies they use.



D Think of a number which can be divided by 2, 3 and 5 and comes between 25 and 50.

E A small ant climbs 3 cm in 1 minute but slips down 2 cm. How much time will it take to climb to 2 cm?

Can you solve these? Try them out.

Which Boat do We Take?

They are so lost in puzzles that they do not notice they have reached the lake. It is a very big lake with a small island in it.

The lake looks very beautiful at this time. There are a lot of ducks making a loud noise. Some children give them popcorn.



Now comes the exciting part! It is time to go for boating. They have to choose which boat to take. But that is not easy.

There are different kinds of boats. Each has a different ticket price, and also different trip times.

	Name of the Boat	Ticket-price	Trip-time
1.	Double-decker	Rs 30	45 minutes
2.	Paddle-boat	Rs 15	30 minutes
3.	Motor-boat	Rs 25	20 minutes
4.	Boat with oars	Rs 15	45 minutes

Four of us will take a paddle boat and race with Gauri and her group.

We will take the motor-boat. It is costly but fun — Zooo...m!



Based on the table showing ticket rates, trip time etc. some questions are given in the book. Children should be motivated to make many more questions themselves.

Let us take the oar-boat. It is not costly and we get more time for a peaceful ride.



Hey! We are going on the double-decker. It also has music. It costs a lot but we get more time.



❖ Indra and Bhanu first went in the motor-boat, and then took the oar-boat.

How much did they pay for both the boats? Rs _____

How much time did they get for both rides? _____

❖ One group of children went for the double-decker trip. They paid Rs 450 in total. How many children went for the double-decker trip? _____

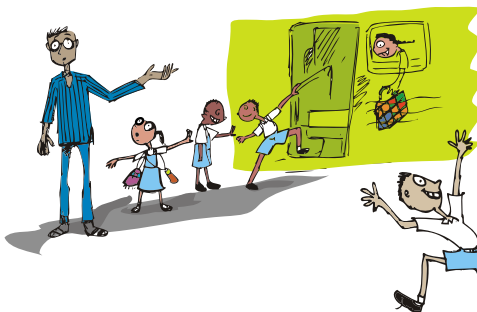
❖ Which boat makes two trips in 1 hour?

❖ Which boat takes less than half an hour to complete a trip?

❖ Which boat gives them the most time taking the least money?

❖ Javed went twice for boating. He paid a total of Rs 40. and boated for 50 minutes. Which two boats did he take? _____

Time to Return



Children enjoy different boat rides till 4 o'clock. It is time to return. Now they will not stop anywhere and reach back in two hours.

So, they should reach Hoshangabad by _____ o'clock.



Find out

Have you ever been on a school trip? How many children were there in all? How did you go and how far? How much time did it take? Try to find out the cost of travel for each child.



Practice Time

- There are four very old cave-paintings. Mark the oldest.
 - 4200 years old
 - 1000 years old
 - 8500 years old
 - 1300 years old
- One bus can carry 48 children. How many children can three buses carry? About —
 - 100
 - 200
 - 150
- Which pair of numbers add to make more than 500?
 - 152 and 241
 - 321 and 192
 - 99 and 299
 - 401 and 91
- What happened at what time? Draw lines to match.

☞ Crossed the Narmada bridge	3:00 p.m.
☞ Looked at Bhimbetka paintings	6:00 p.m.
☞ At the petrol pump	9:10 a.m.
☞ Boating in the lake	12:30 p.m.
☞ Had lunch	11:30 a.m.
☞ Returned to Hoshangabad	9:30 a.m.