

Class
3



A Comic Textbook

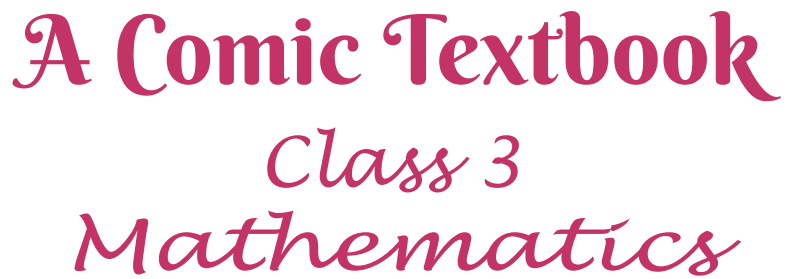
Mathematics



সমগ্র শিখা মনিপুর
SAMAGRA SHIKSHA MANIPUR



©Samagra Shiksha, Manipur 2020. All rights reserved. No part of this publication may be produced without the express consent of Samagra Shiksha, Manipur. Any reproduction, modification, distribution, transmission, republication, display or exploitation in any way of the content(s), in whole or in part, of this publication is strictly prohibited.



COMIC TEXTBOOKS DEVELOPMENT TEAM

MATHS TEAM MEMBERS

- S. Promila Devi, Lecturer, DIET
- Th. Premila Devi, Lecturer, DIET
- Ksh. Jano Devi, Lecturer, DIET
- Lokee Thiyam, Resource Person
- Sanasam Anuradha, Resource Person
- Konjengbam Goutam Singh, Upper Primary Teacher
- Ahanthem Niki Singh, Primary Teacher
- Ramananda Moirangthem, Primary Teacher

Official

- L. Chandrakumar Singh, SC, Samagra Shiksha
- Diana Thangjam, ASC, Samagra Shiksha

Cartoonist

- Laishram Rajiv & Sanasam Basantaraj, NEST
- Comic Illustration by NEST Advertising & Marketing Pvt. Ltd.

Class 3
Mathematics

CONTENTS

CHAPTER	PAGE NO.
1. The watch tower	01
2. Mirror Halves	05
3. Numbers are Fun	07
4. How many are together?	09
5. How Much Larger?	11
6. The fun class of Mr. Shamu	13
7. The Strange Figures	18
8. Let's Carry Over	23
9. Let's Borrow Some	25
10. My Little Talking Clock	27
11. The Talking Calendar	30
12. See-Saw	34
13. Doodoo and his family	38
14. Secret Message and the Birthday Party	40
15. Drinking Competition	44
16. My Comic Books	46
17. A Day with Uncle Ted	49
18. Yaoshang	51

PREFACE

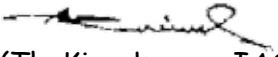
Students of Primary Class love stories, fun and always want to explore. Normal textbooks, many a times, are difficult to read and understand without the help of a teacher or parent. Cartoons and Comics always create the interest amongst students. The main objective for developing Comic Textbooks for Class III, IV and V is to entertain and educate young minds by creating unique illustrated books in comic strips so as to help to them learn easier with fun, retain the characters and stories, arouse curiosity, encourage peer learning, and induce reading habits.

Utmost care has been taken to relate the stories to the cultures and tradition of the State. Effort has also been made to cover the concepts and chapters of the entire textbook (Mathematics Class III) and also the Learning Outcomes.

The objectives would not have been fulfilled without the support and help of a large number of dedicated teachers of the Department, Resource Persons from SCERT, Manipur and Samagra Shiksha, Writers and Cartoonist, NE Brothers Entertainments Pvt. Ltd and NEST Advertising and Marketing Pvt. Ltd. The project would not have been brought to this stage without the support and guidance of Dr. Amarendra Behera, Professor and Head of ICT, NCERT and other Team members of NCERT, New Delhi. The project has also the support of Shri Th. Radheshyam Singh, Hon'ble Minister (Education), Manipur for conceptualization of the concepts.

I would appreciate every member of the Comic Team and other Officials of the Department for their support in this yearlong journey that has led to the development of the 3 Comic Textbooks. As the initiative is done for the first time, shortcomings could have been there. Suggestions from the readers for further improvement are welcome.

Imphal
The 11th April, 2020


(Th. Kirankumar, IAS)
Director, Education (Schools) and
SPD (Samagra Shiksha)
Manipur

The watch tower (Chaper 1: Where to look from)

Rama, Bona, Dipu, Thoi and other friends were playing in a park. Rama and Bona were fond of drawing. They always accompanied with their drawing kits wherever they can.



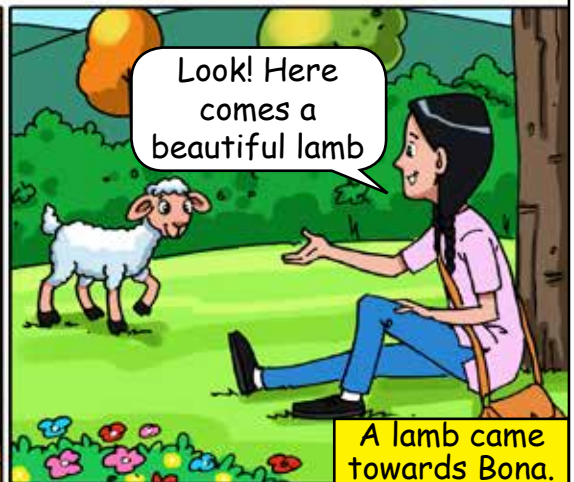
Rama was climbing up a watched tower and Bona was sitting beneath the tower.



I can see the lake beside the park too.

It is so beautiful down here.

She sees the flowers around



Look! Here comes a beautiful lamb

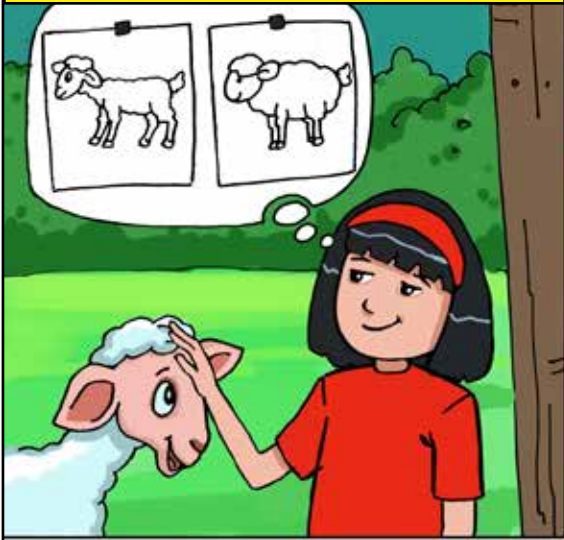
A lamb came towards Bona.



Why don't you and Rama draw this lamb?

Yes, let's see who draws better

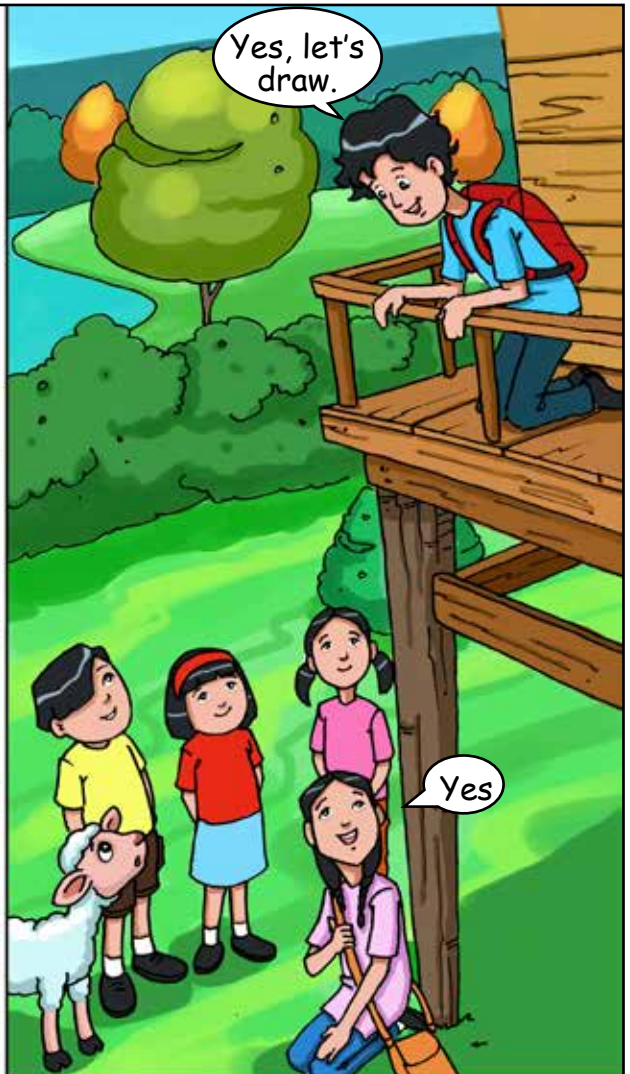
Thoi imagines that one would be beautiful and the other would be less



So, they start drawing, Bona from the foot of the tower and Rama from the top of the tower

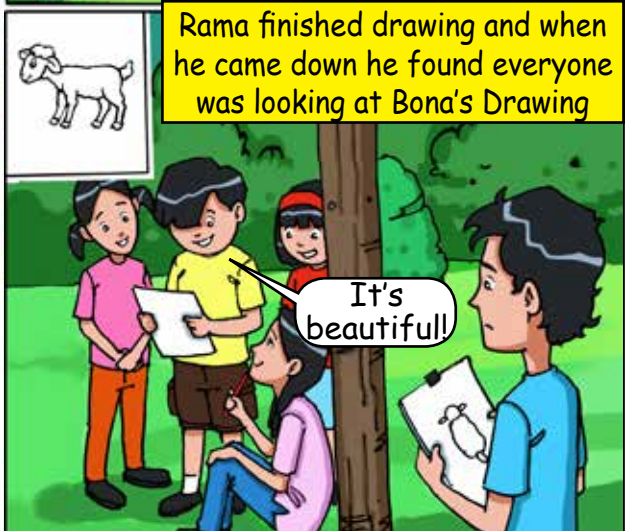
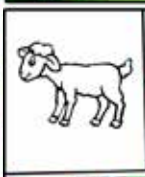


Yes, let's draw.



Yes

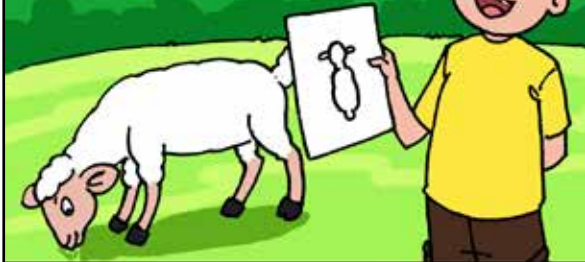
Rama finished drawing and when he came down he found everyone was looking at Bona's Drawing



It's beautiful!

Dipu Placing Rama's drawing near the lamb

Hahaha... Is this the same lamb?

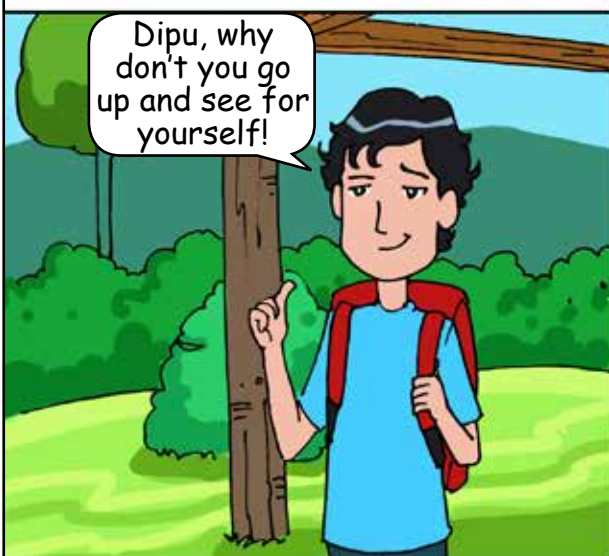


Everyone laughed mockingly

Yes



Dipu, why don't you go up and see for yourself!



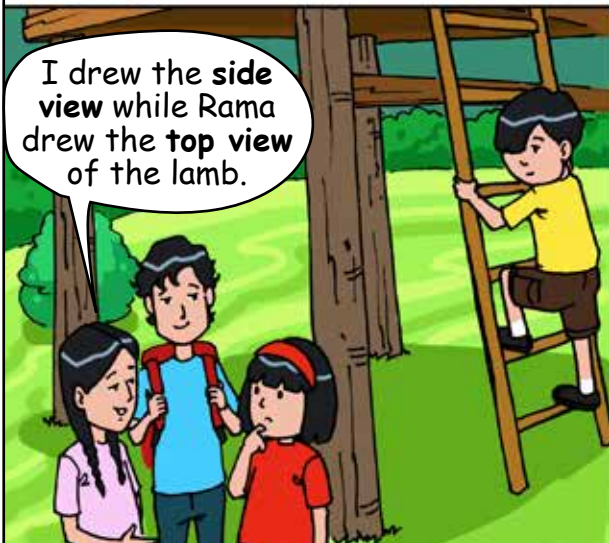
Dipu and Thoi went up the tower and checked Rama's drawing

Oh! It looks the same as Rama's drawing

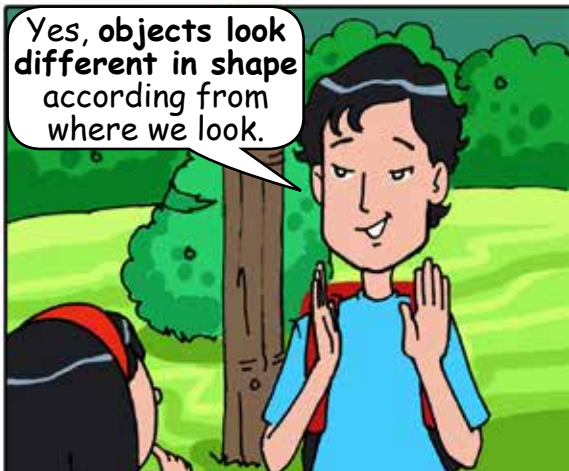
But it looked like Bona's drawing when we were down there.



I drew the **side view** while Rama drew the **top view** of the lamb.

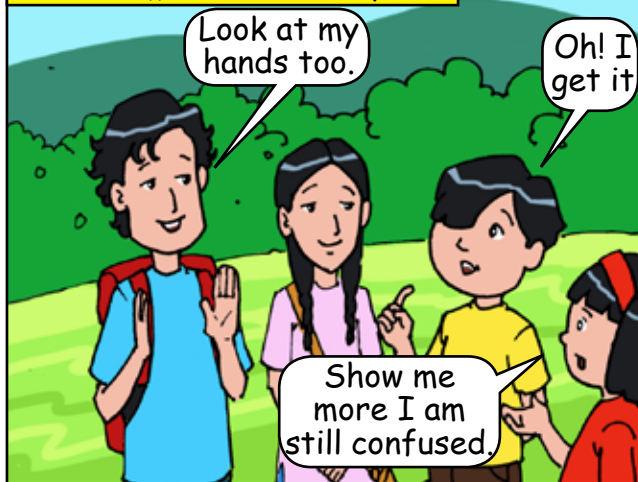


Yes, objects look different in shape according from where we look.



Rama shows his two palm, one from front while the other from the side.

Thoi seemed a little confused



Bona starts drawing and other children were around her



Mirror Halves

They were all happily enjoying after making fun of each other. Accidentally Dipu folds the paper at the centre and was holding unaware

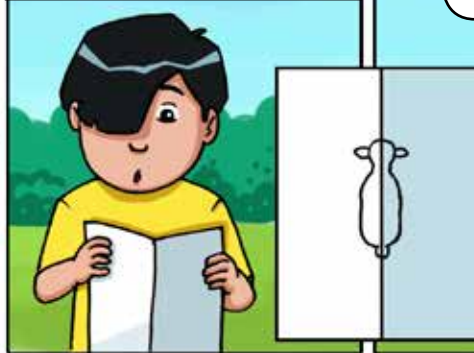
Dipu!
What have you done to our drawings?



Hehehe...
sorry,
I was
unaware.



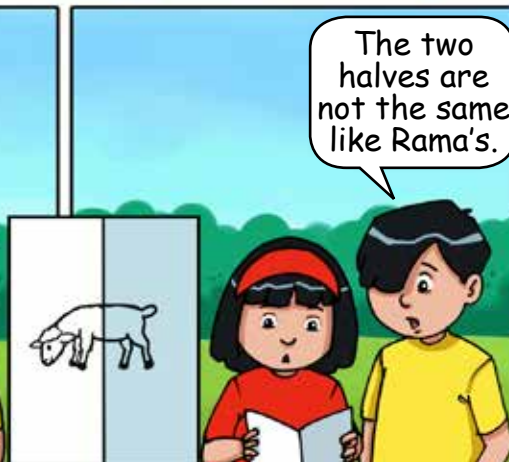
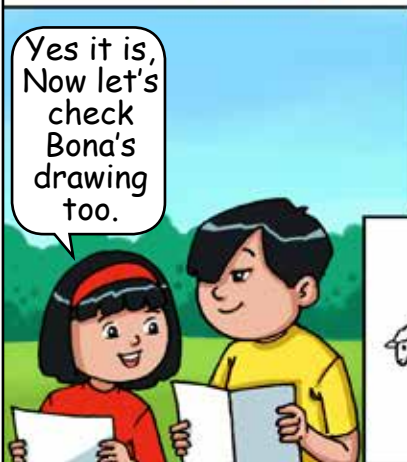
Dipu opened the paper
and to his surprise
he saw something
remarkable



Look! The two
halves of this
drawing looks
the same.



Yes it is,
Now let's
check
Bona's
drawing
too.



The two
halves are
not the same
like Rama's.

I cannot get
two equal halves
no matter which
direction I fold.



My mother told me such objects with equal halves are called **mirror halves**.



She remembers her mother showing the mirror halves of a paper semicircle on a mirror to make it look like a full circle



Bona immediately draws the diagram on a piece of paper



Bona take the drawing to a side mirror of a car nearby, others were following



I will show you something interesting!

Bona placed the diagram along the mirror. Surface and it looks like H.



See!
Mirror
halves



Everybody laughed with joy

Numbers are Fun (Chapter 2: Fun with numbers)

In the toy store toys were getting bored because no one had come to buy them... so they thought of playing with numbers

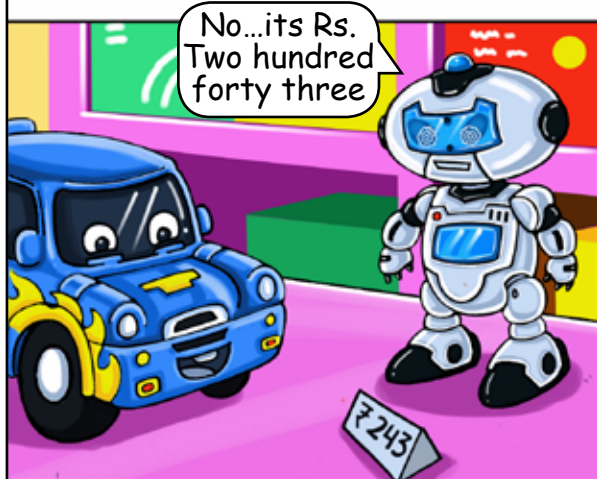


Yes! I can... it is Rs...two... four....three

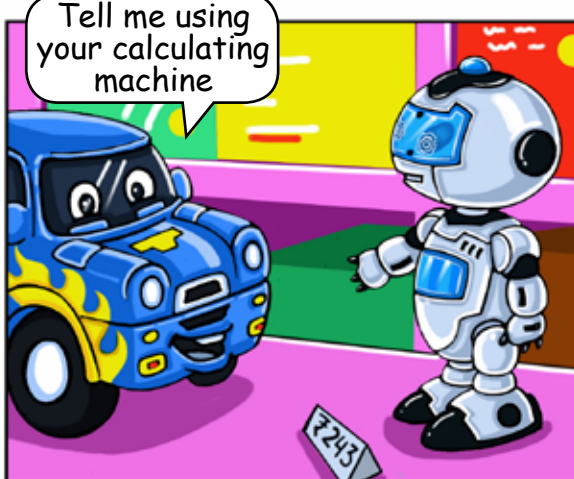


Hey car! Can you read my price?

No...its Rs. Two hundred forty three

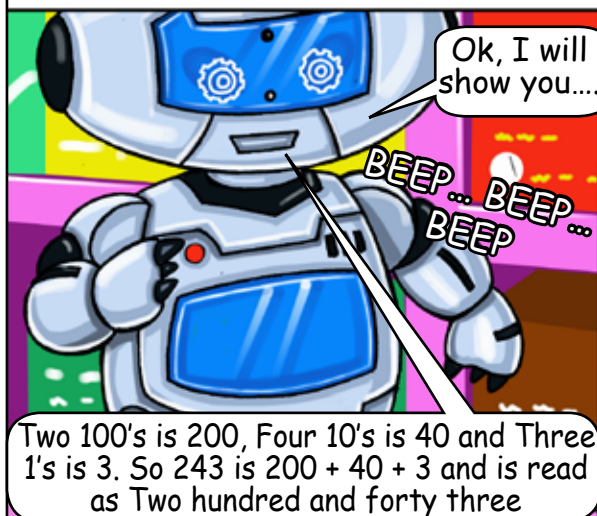


Tell me using your calculating machine

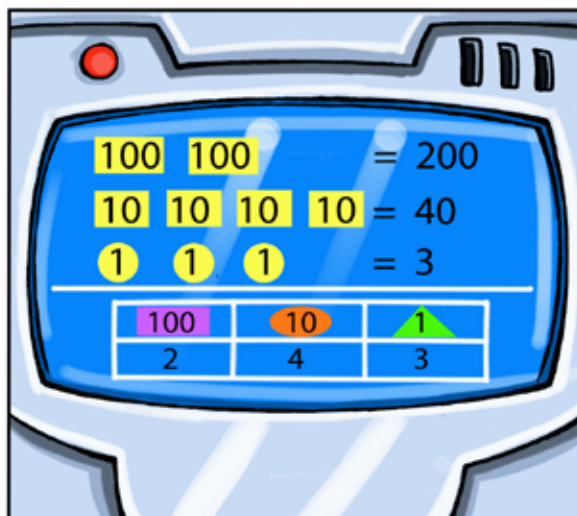


Ok, I will show you....

BEEP... BEEP... BEEP



Two 100's is 200, Four 10's is 40 and Three 1's is 3. So 243 is $200 + 40 + 3$ and is read as Two hundred and forty three





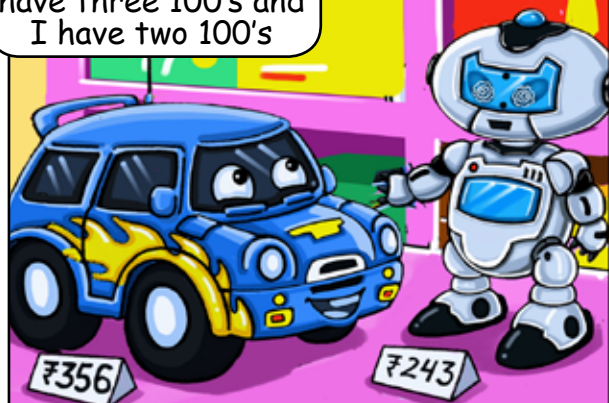
Wow! It's so easy and my price is... Three 100's is 300, Five 10's is 50 and Six 1's is 6... 356 is $300 + 50 + \dots$ so my price is Rs. Three hundred and fifty six.



Can you tell me whose price is greater?



Your price is greater than mine because you have more number of 100's. You have three 100's and I have two 100's



Now I will compare with the price of the Truck



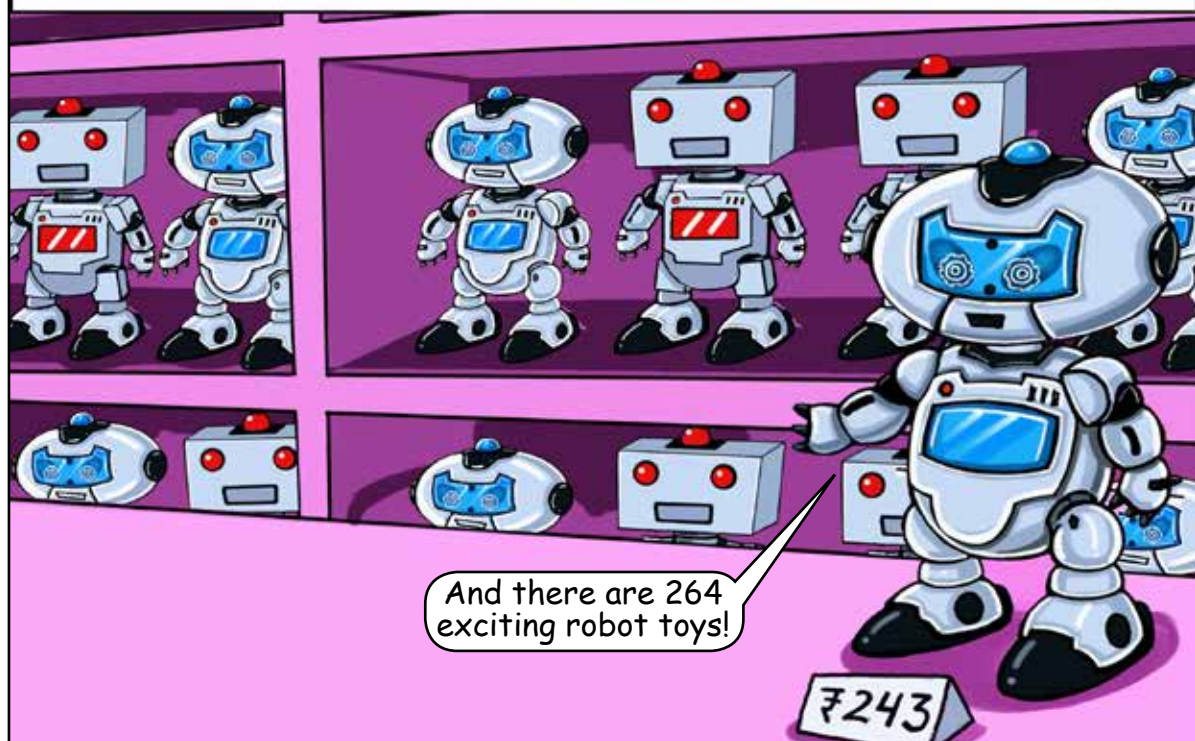
It's so much fun playing with numbers!



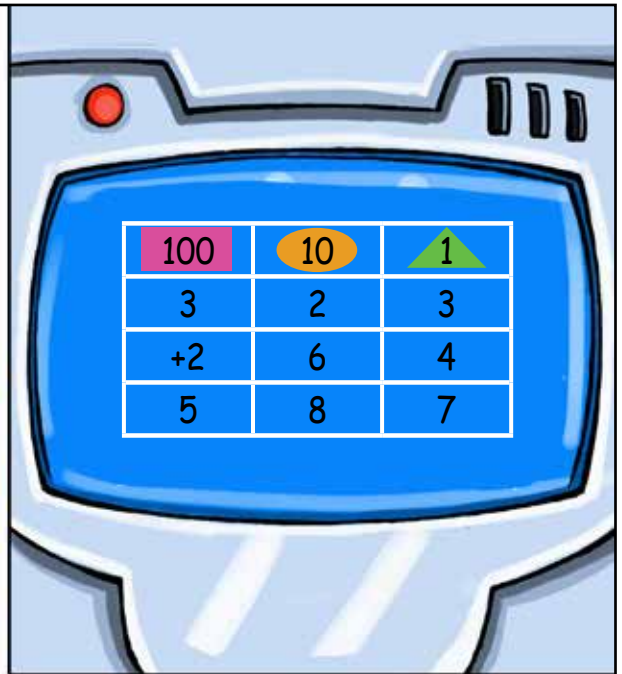
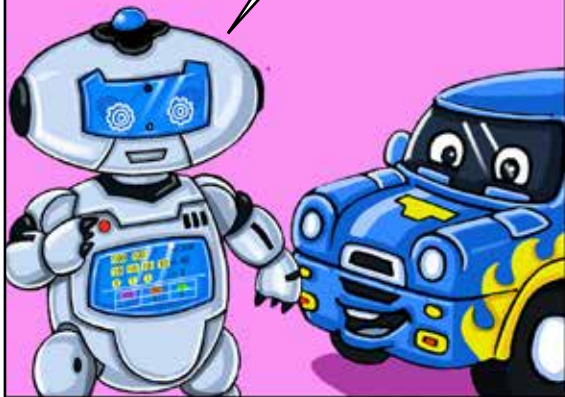
My price is more than yours. We have same number of 100's. But I have more number of 10's than yours. I have seven 10's and you have five 10's....



How many are together? (Chapter 3 : Give and Take)



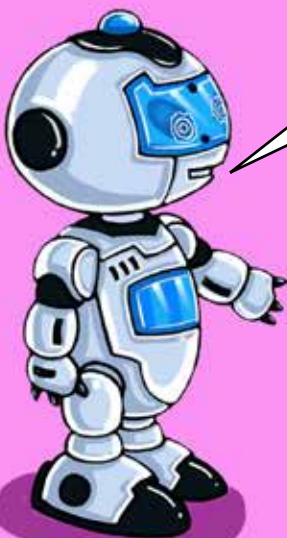
Now, let's find out how many cars and robots are all together in the store using my calculating machine...



Three 1's and four 1's putting together gives seven 1's...

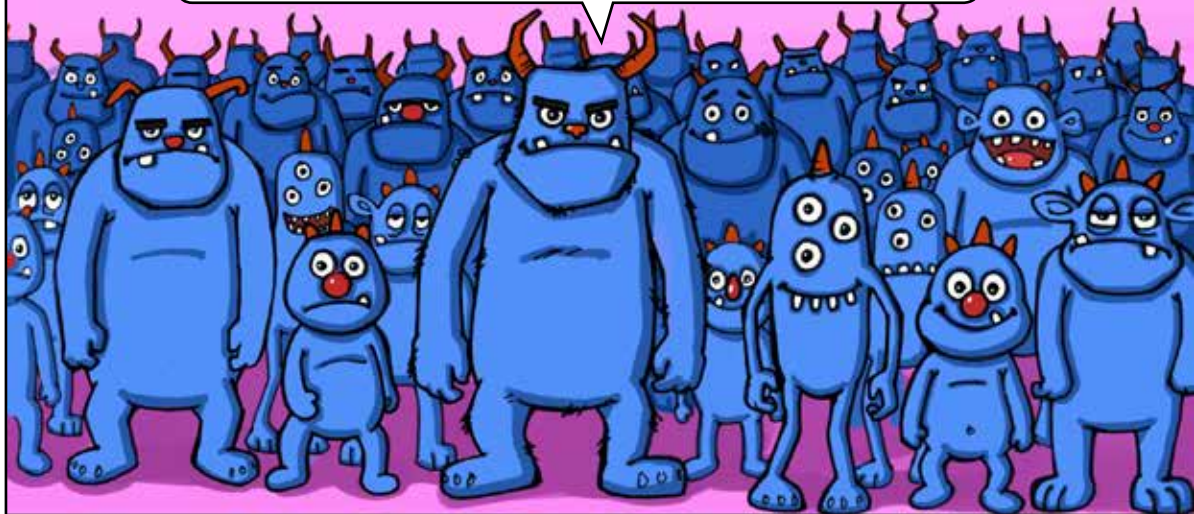
Two 10's and six 10's together gives eight 10's....

Three 100's and two 100's together gives five 100's. Together we are 587.... isn't so easy and fun?

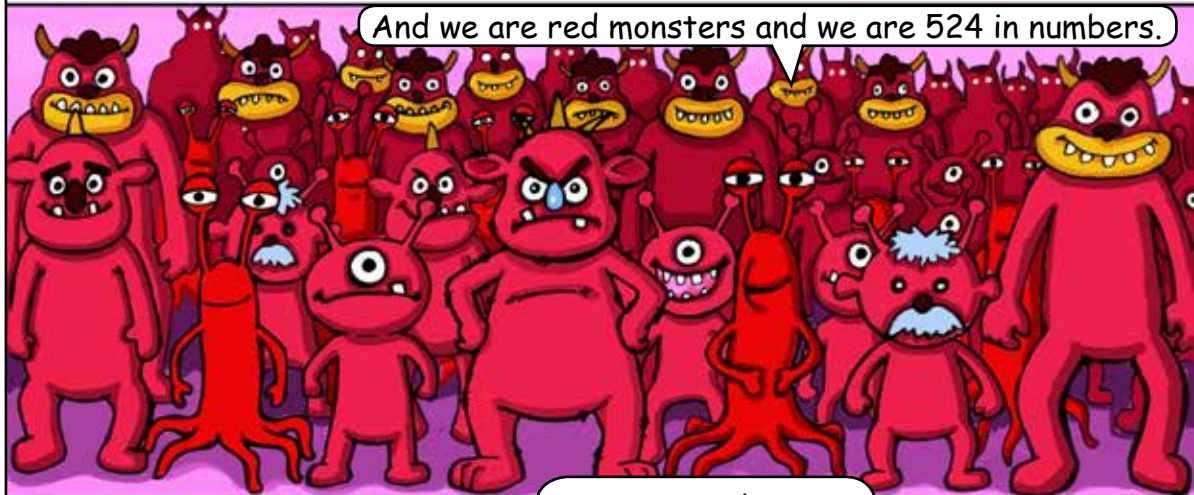


How Much Larger? (Chapter 3 : Give and Take)

Hi! We are blue monsters and we are 789 in numbers



And we are red monsters and we are 524 in numbers.



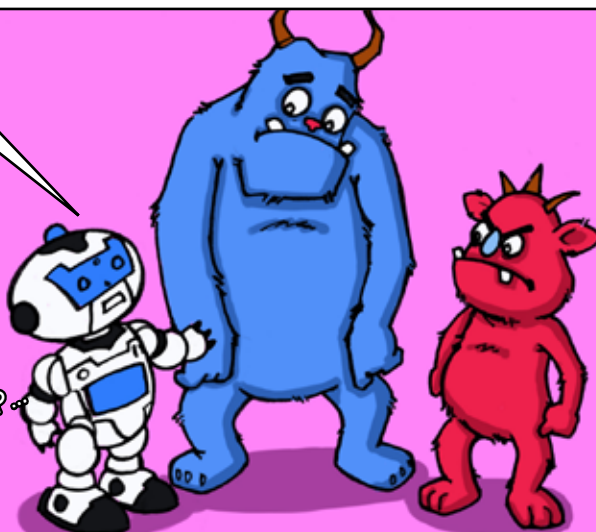
My army is larger than the army of red monsters and we are stronger....yeah



Let's find out how much your army is larger than my army. Let's ask our friend Robot

To know that we have to subtract the smaller number from the greater number... let's find out using my calculating machine....

BEEP...BEEP...
BEEP



100	10	1
7	8	9
-5	2	4
2	6	5

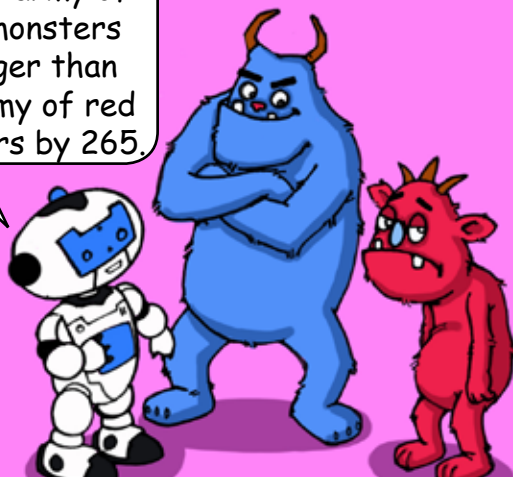
Take away four 1's from nine 1's we are left with five 1's. Take away two 10's from eight 10's we are left with six 10's.

And if we take away five 100's from seven 100's we are left with two 100's.

Two 100's, six 10's and five 1's is $200 + 60 + 5$, which is 265.



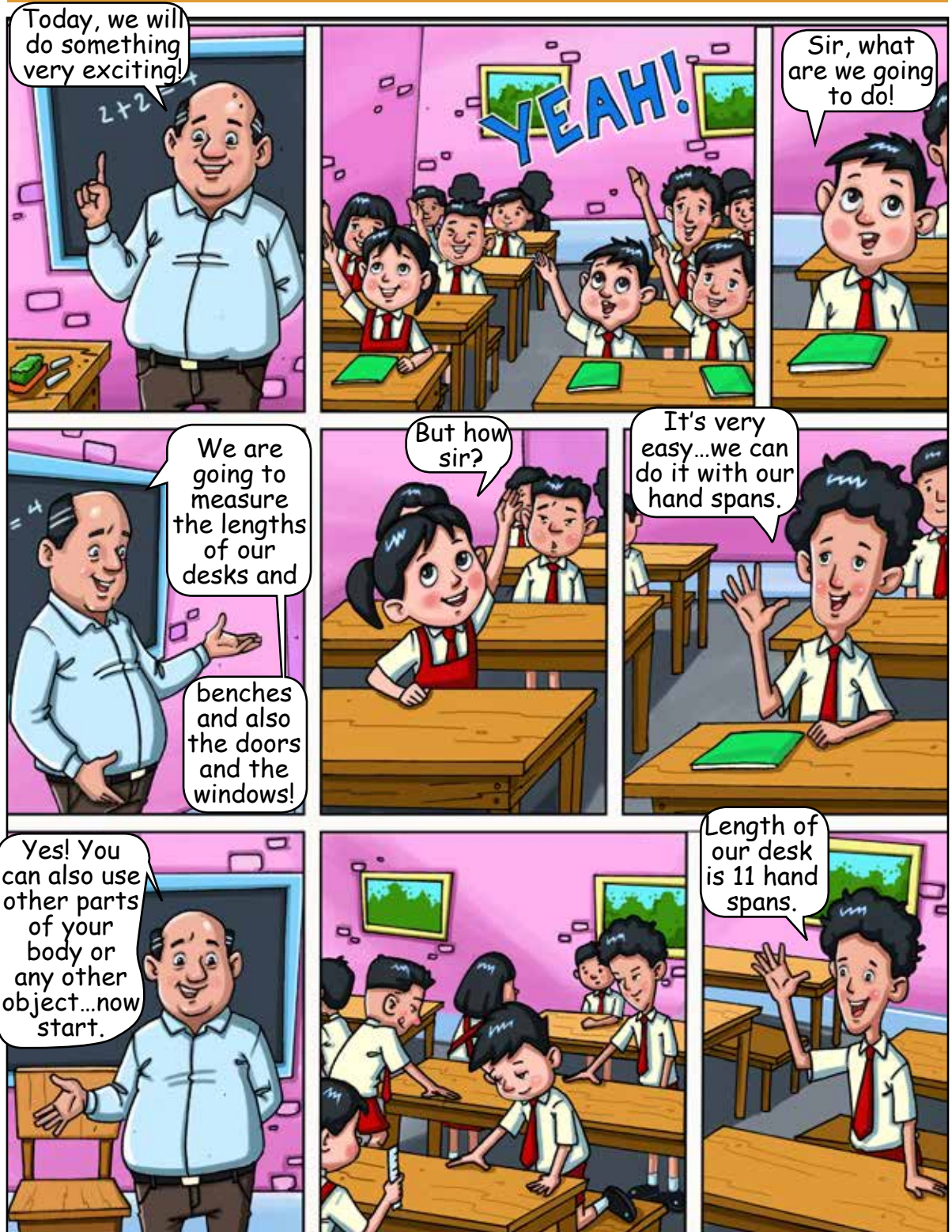
So the army of blue monsters is larger than the army of red monsters by 265.

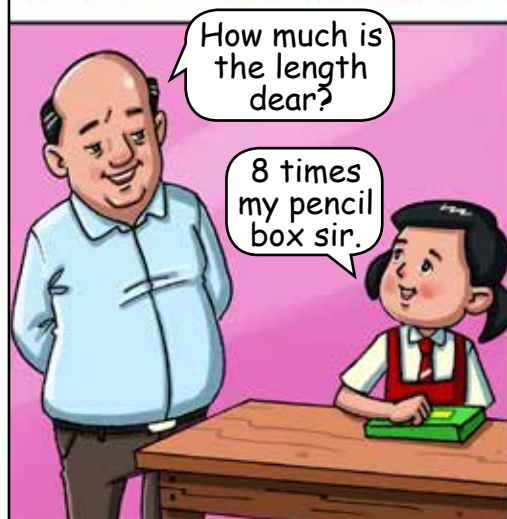
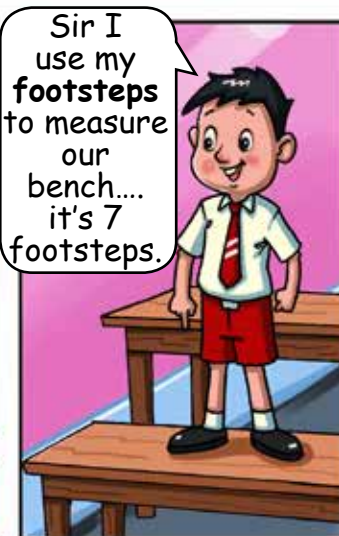
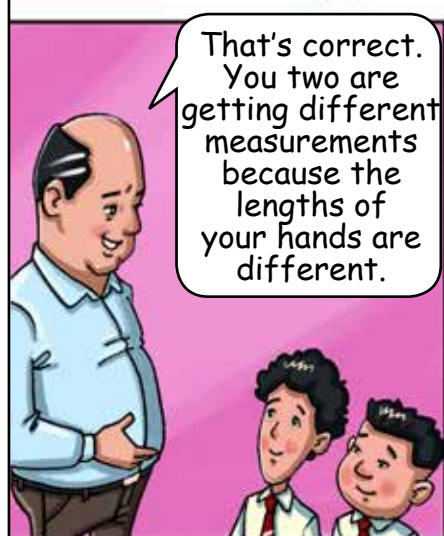


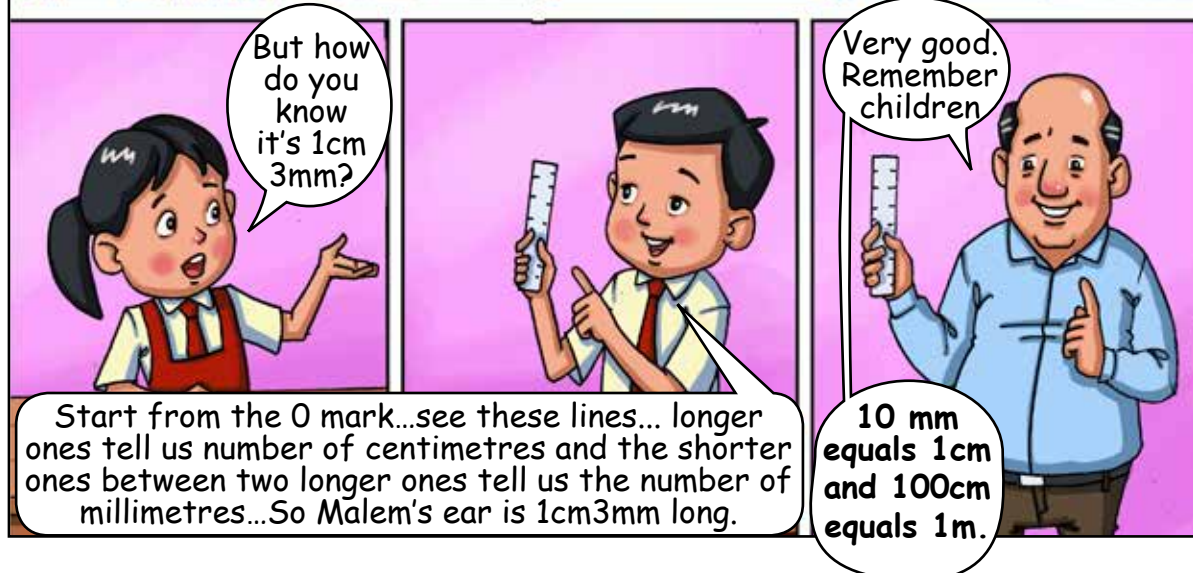
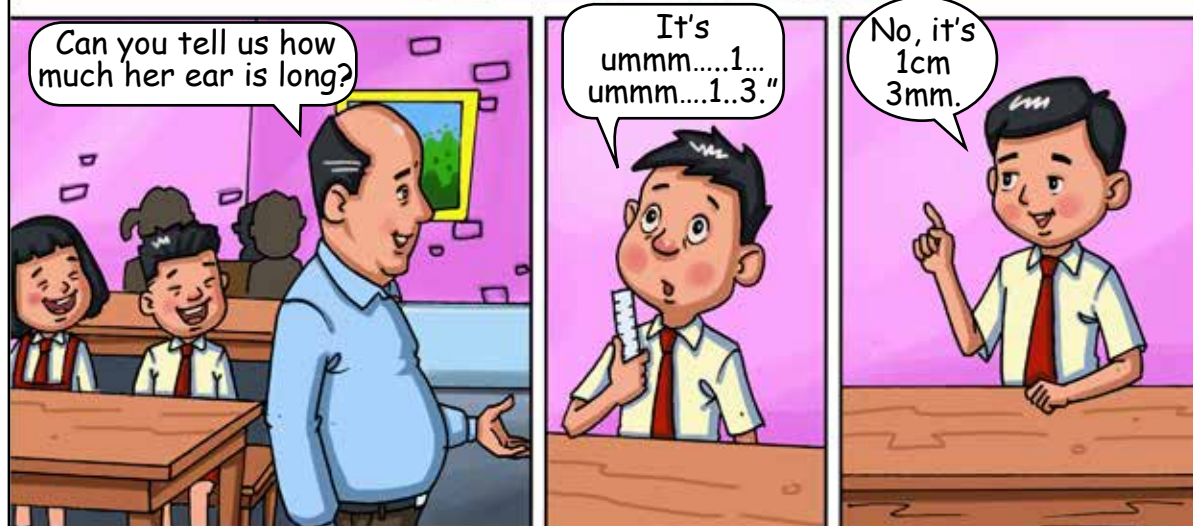
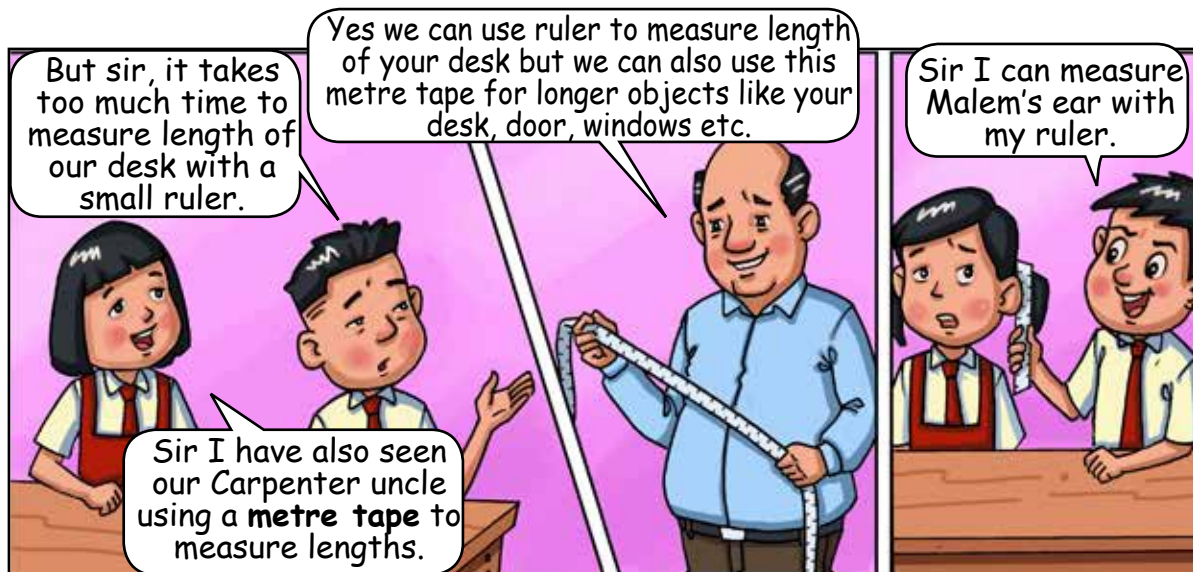
Let's join together to form the strongest army of monsters.



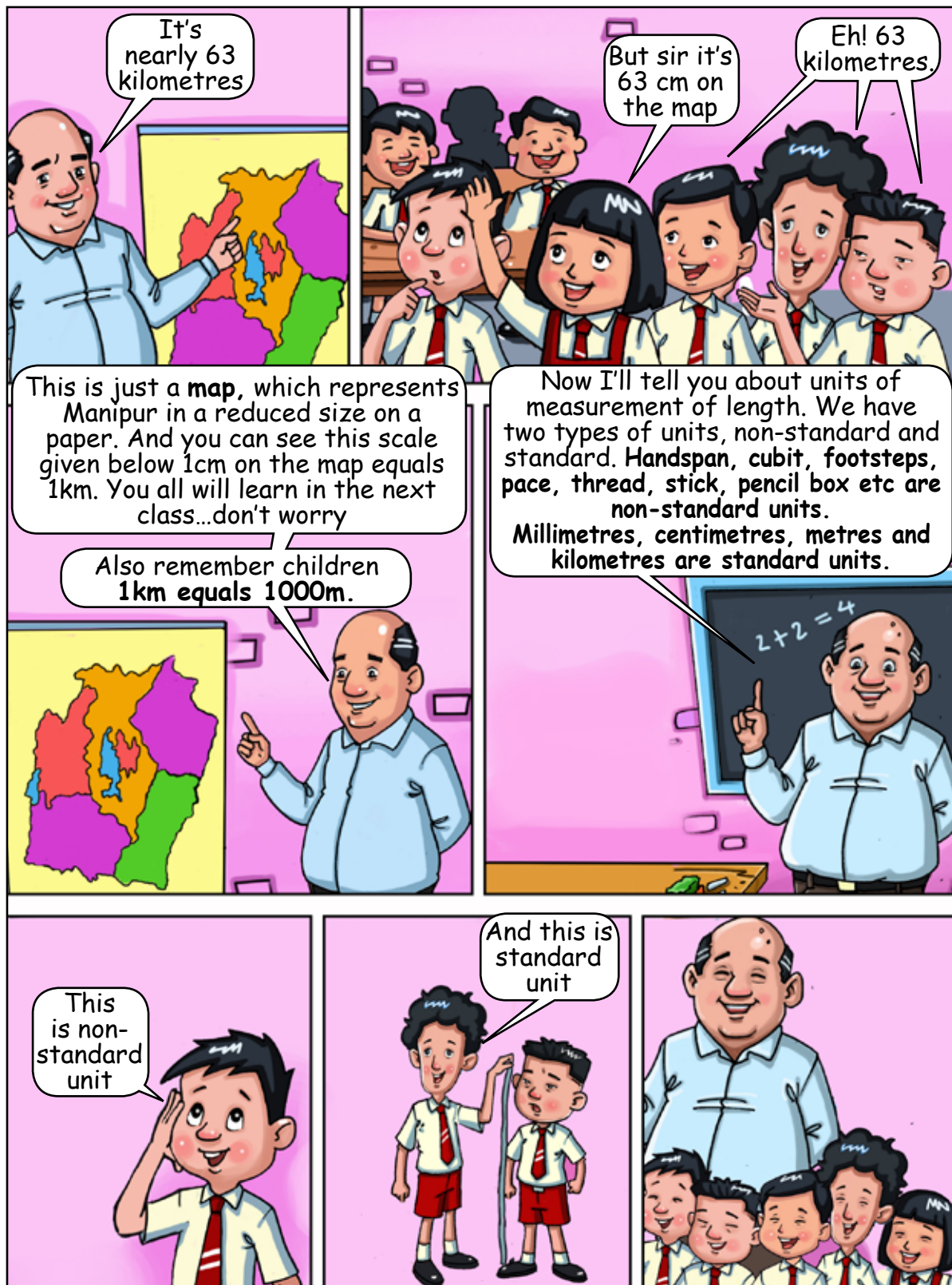
The fun class of Mr. Shamu (Chapter 4 : Long and Short)









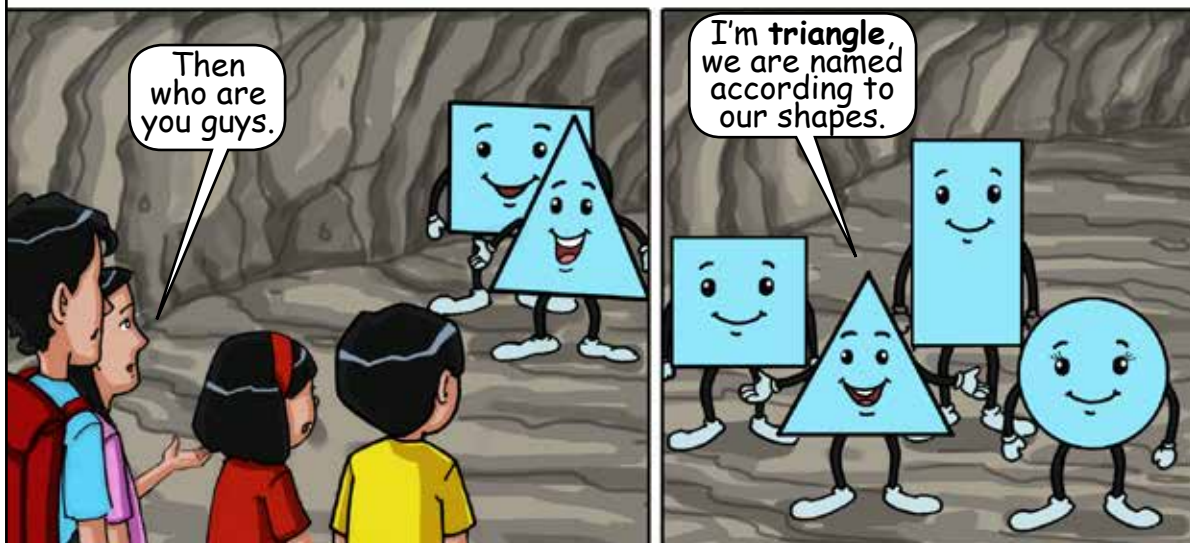


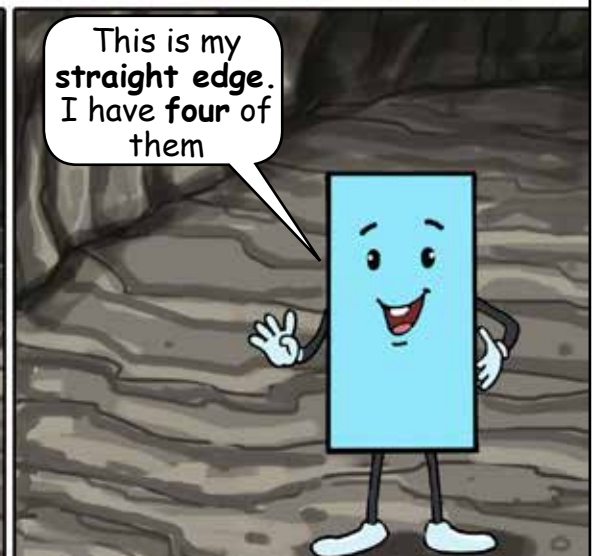
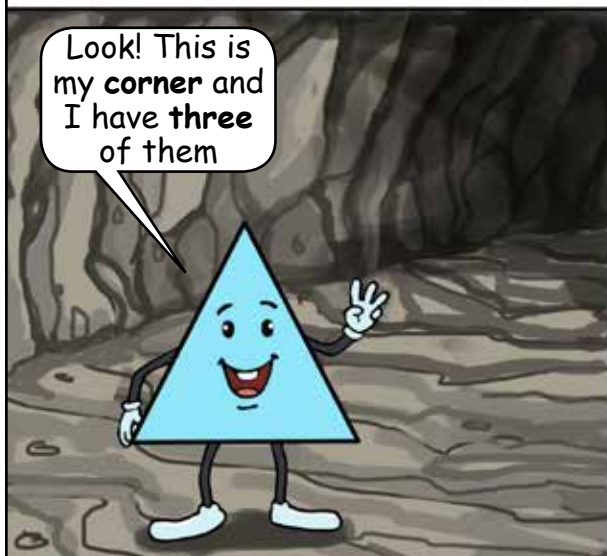
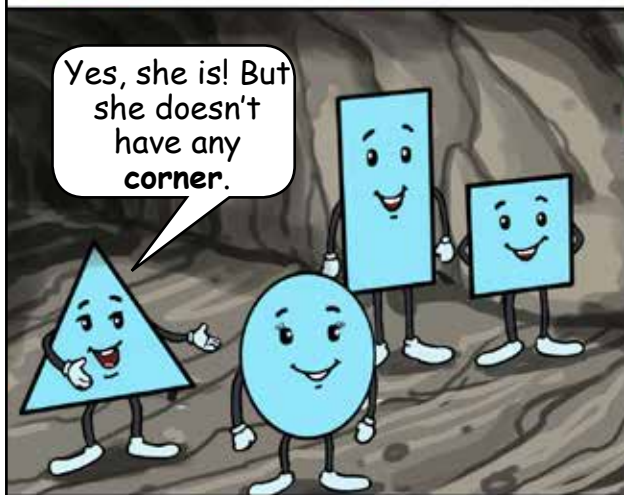
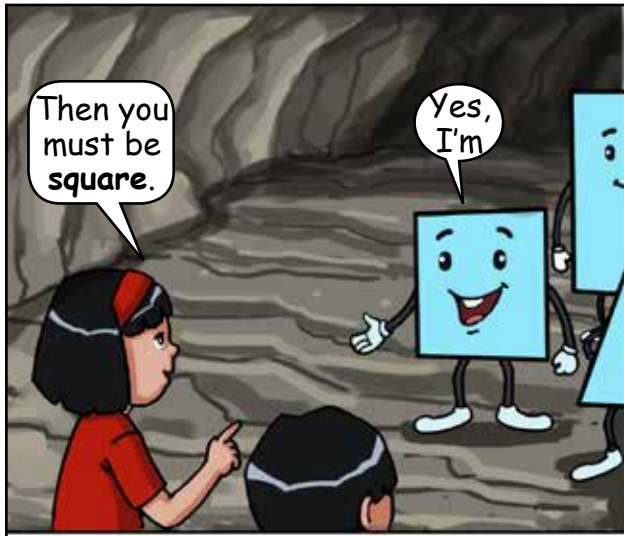
The Strange Figures (Chapter 5 : Shapes and Design)

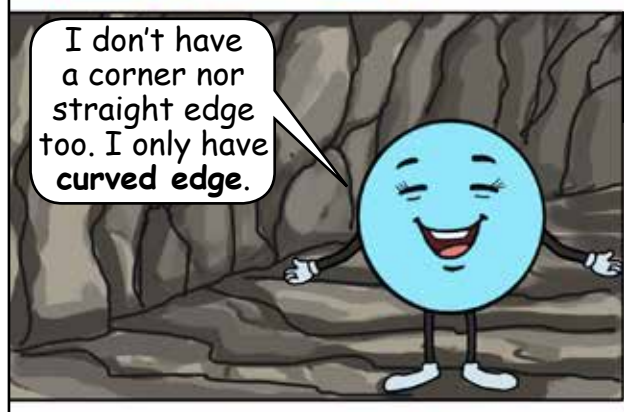
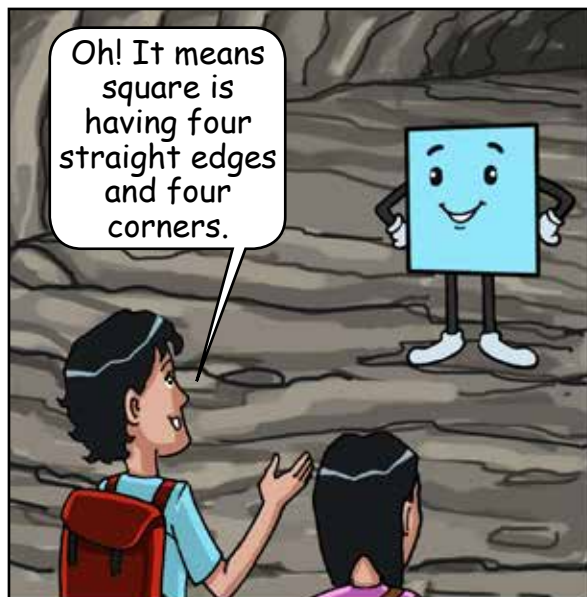
It was afternoon. Dipu was sleeping under a tree.



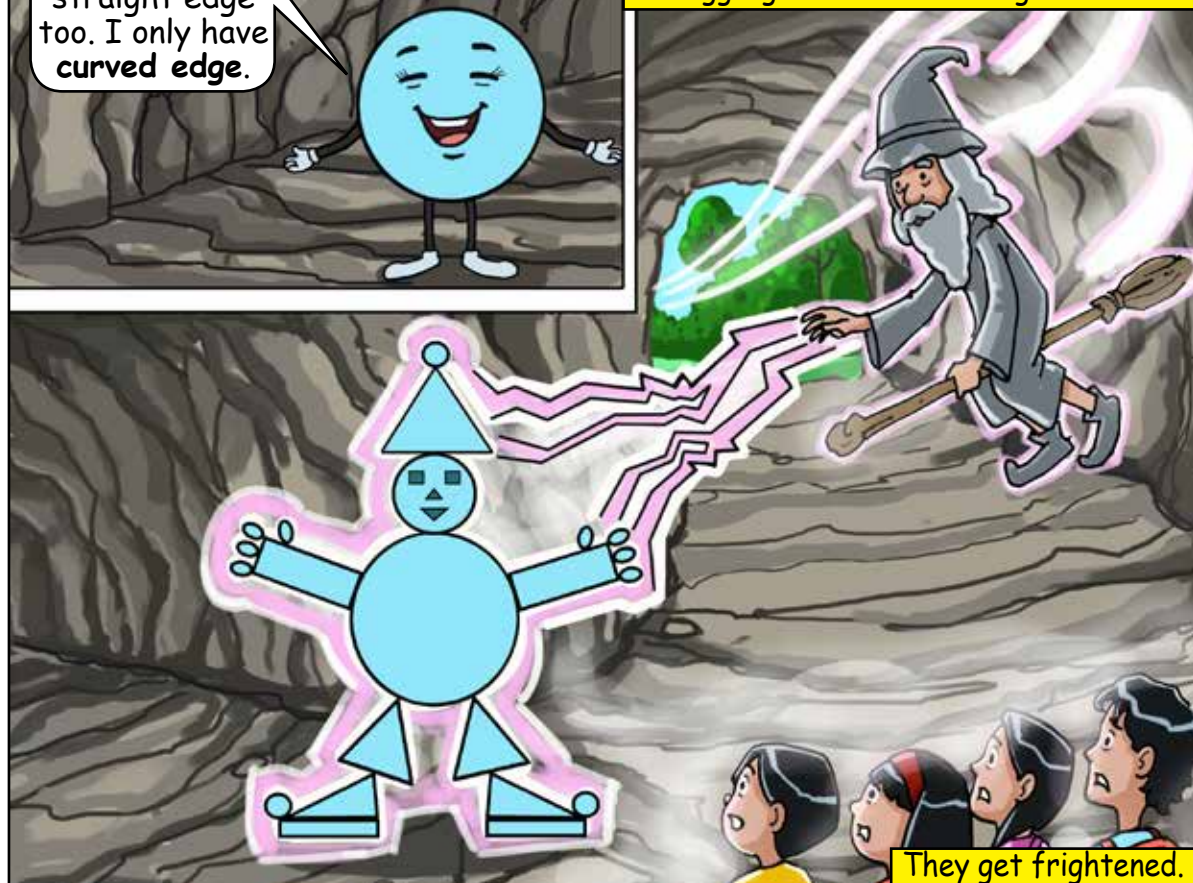
They found some strange creatures inside a cave. They are personified geometrical shapes







At the moment, a wizard came flying in a broom and cast a spell at the shapes. They aggregate and form a huge clown.



At the moment, Dipu was awoken by Rama and Thoi. Dipu wakes up with fright.



What happen Dipu?

The clown ooooohhh!



There is no clown, must be your dream.

Yes, a dream....



Clowns are friendly. Let's go and call Bona to play.



They are walking to Bona's house and found her sitting on the front Veranda of her house

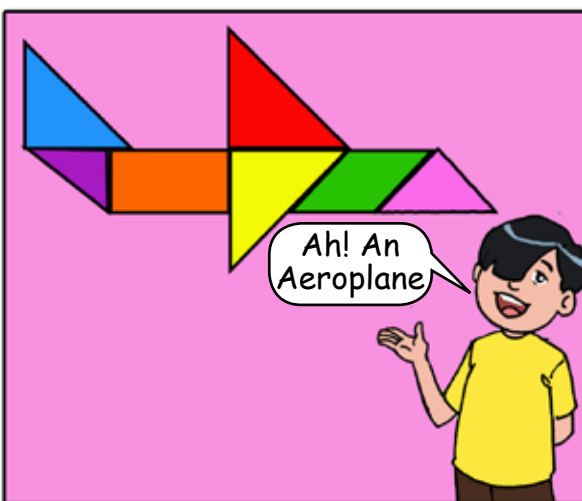


They see the patterns of the tiles





(A Tangram)



Let's Carry Over (Chapter 6 : Fun with give and take)

Hi! We are cutie baby dolls. You will find us in packets of 100's, 10's and 1's in the store. There are 378 baby dolls in all.



We are lovely teddy bears! You can also find us in boxes of 100's, 10's and 1's. We are 356 in all.

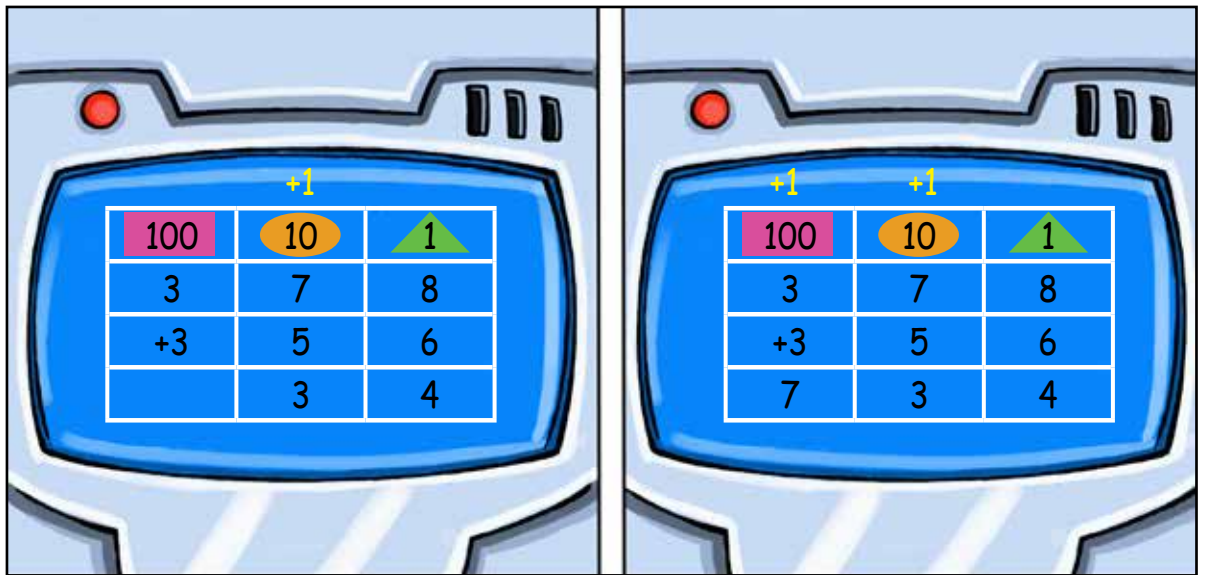


Let's ask our friend, Robot how many baby dolls and Teddy bears are there altogether in the store.

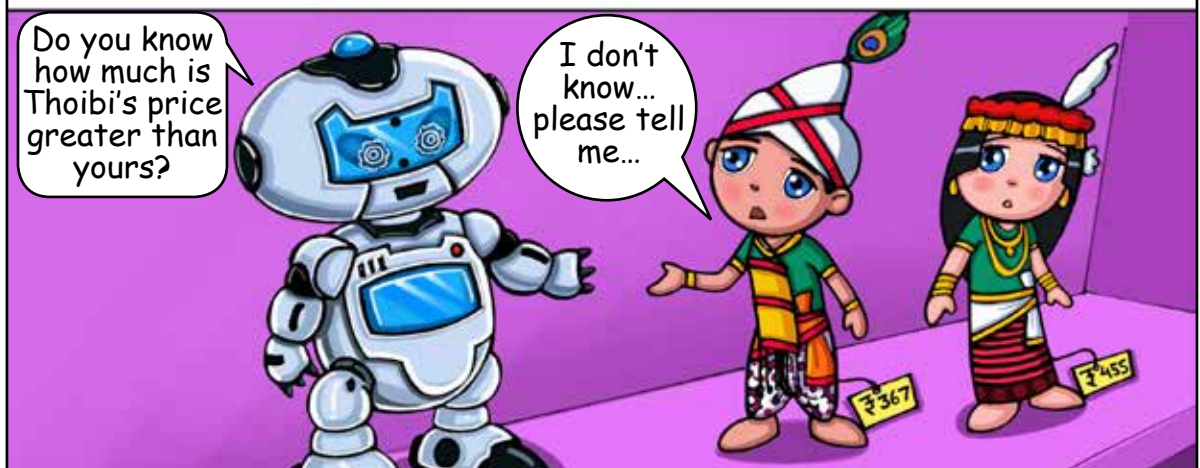
Sure

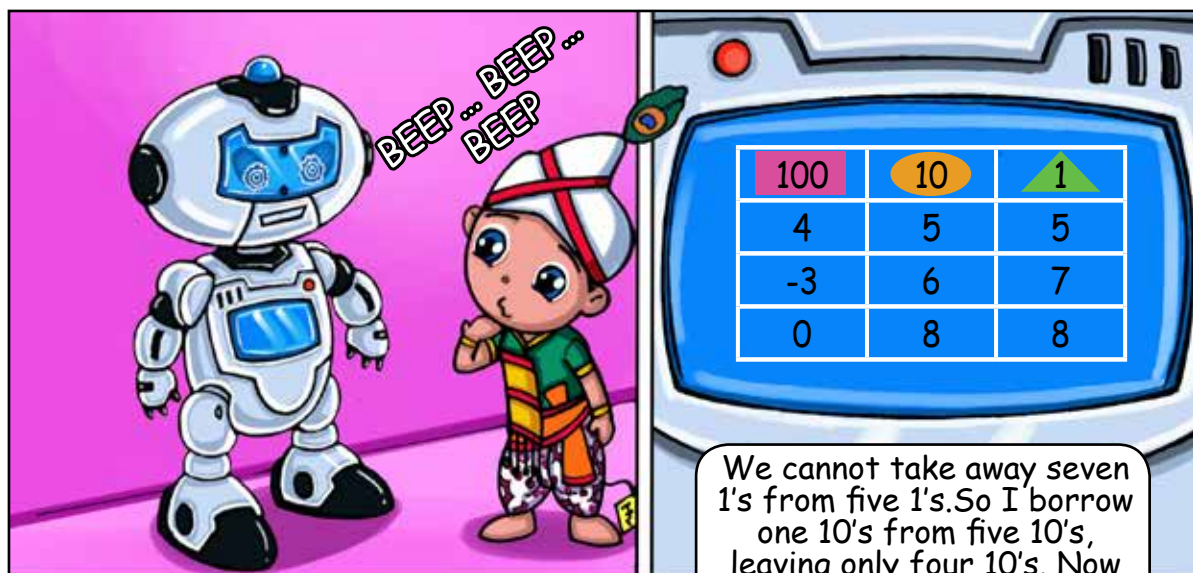


100	10	1
3	7	8
+3	5	6
		4



Let's Borrow Some (Chapter 6 : Fun with give and take)



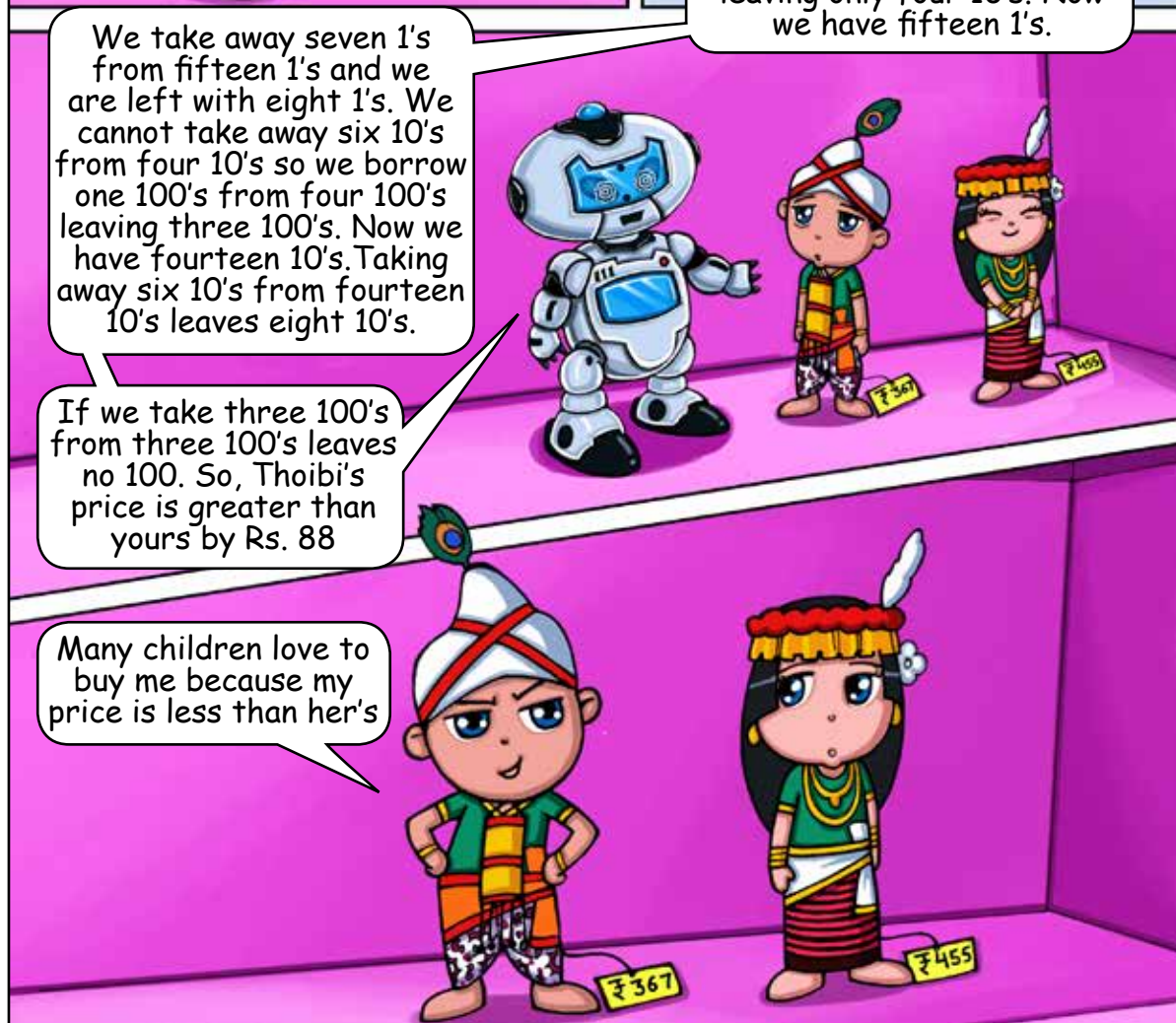


We cannot take away seven 1's from five 1's. So I borrow one 10's from five 10's, leaving only four 10's. Now we have fifteen 1's.

We take away seven 1's from fifteen 1's and we are left with eight 1's. We cannot take away six 10's from four 10's so we borrow one 100's from four 100's leaving three 100's. Now we have fourteen 10's. Taking away six 10's from fourteen 10's leaves eight 10's.

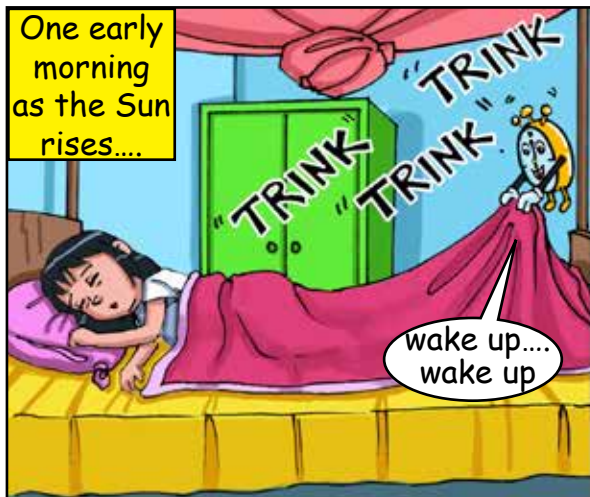
If we take three 100's from three 100's leaves no 100. So, Thoibi's price is greater than yours by Rs. 88

Many children love to buy me because my price is less than her's



My Little Talking Clock (Chapter 7 : Time goes on)

One early morning as the Sun rises...



Stop it please....I want to sleep some more time.



Do you know what time is it now?"

It's 6 o' clock in the morning.

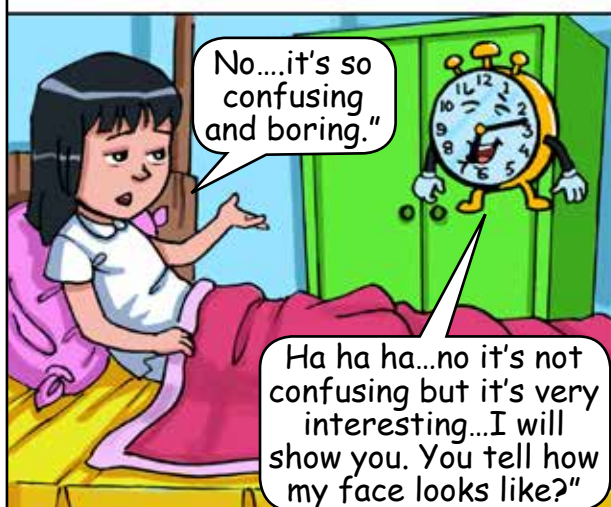


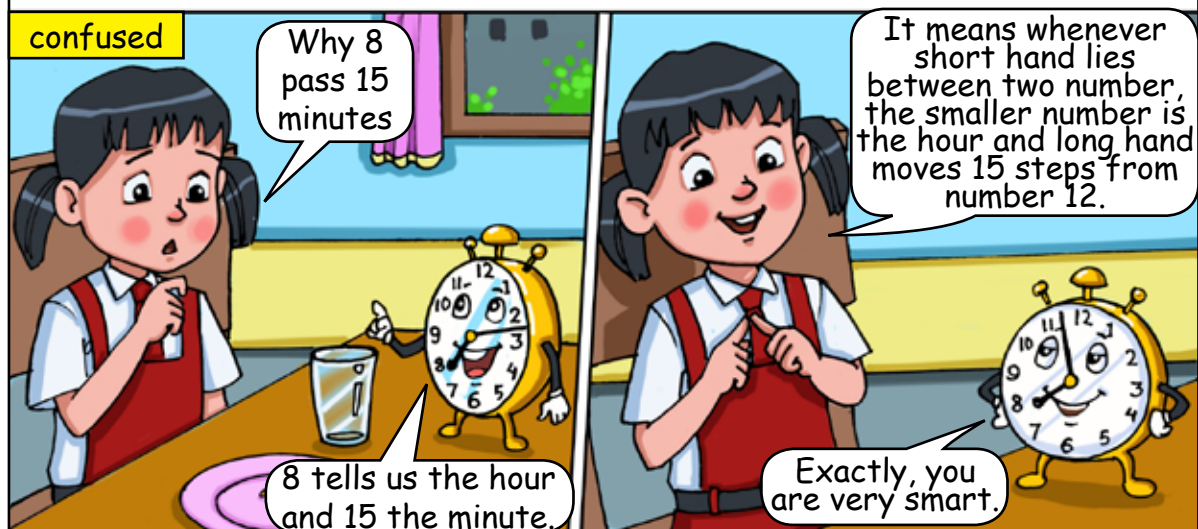
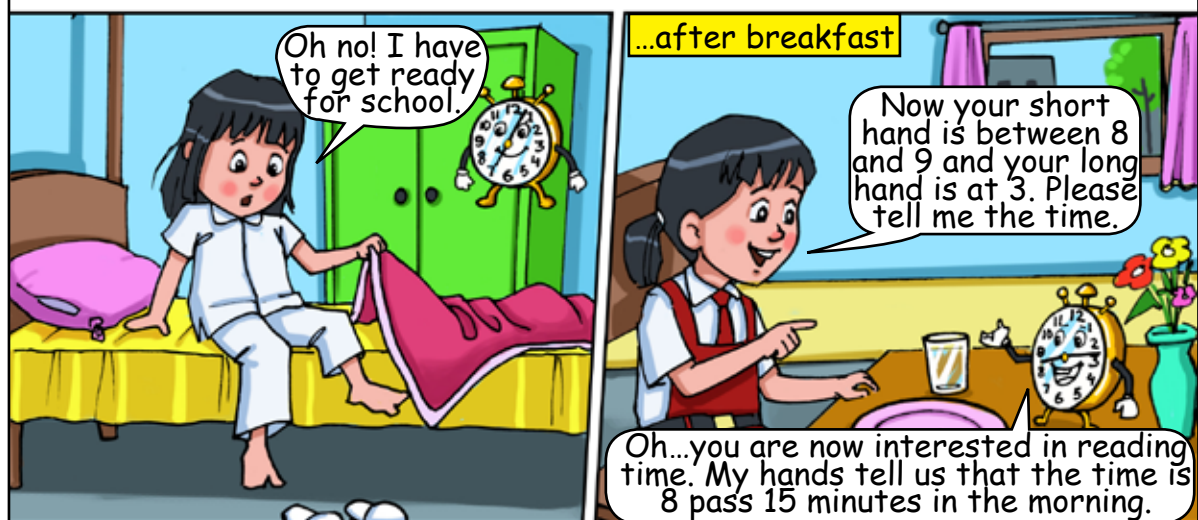
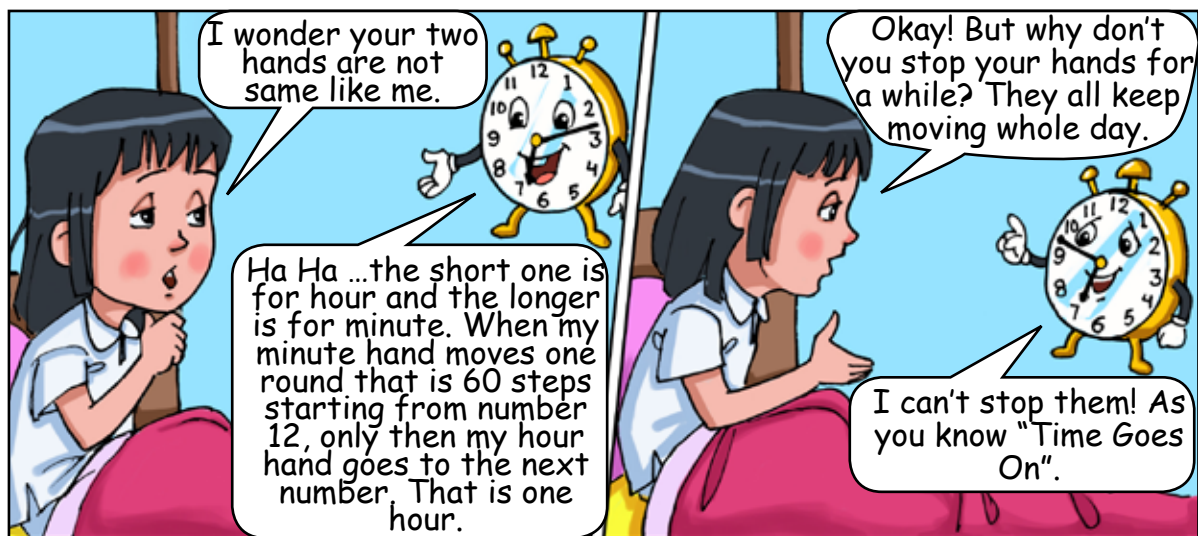
Wow! How do you know?

I know because mama always put alarm at 6.



Oh I see! But can you read time?



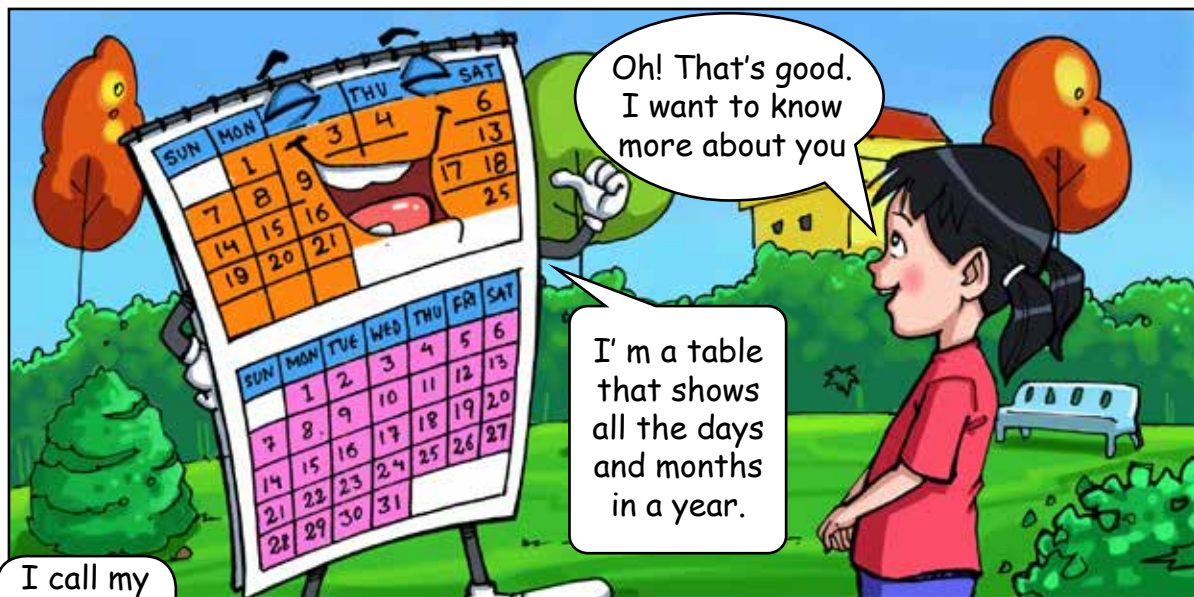


After some time.....



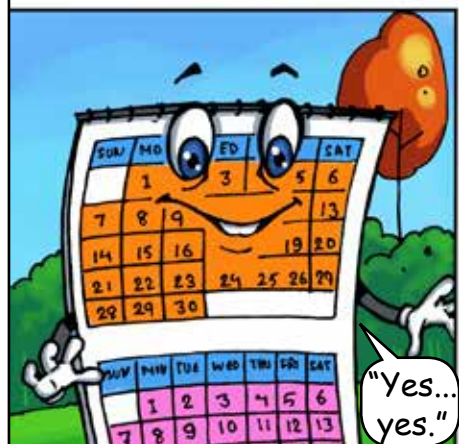
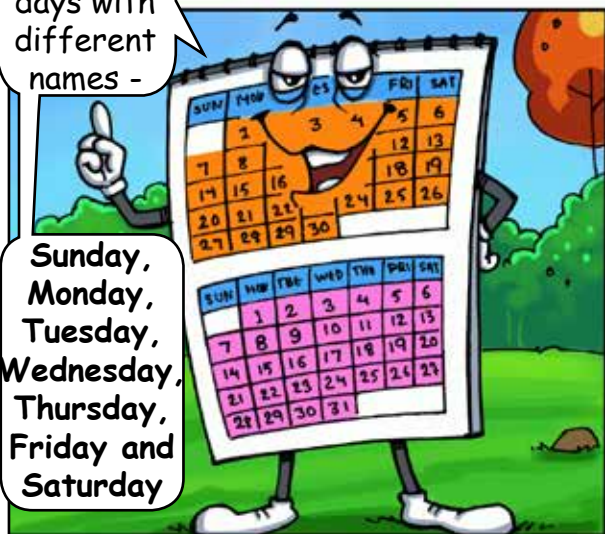
The Talking Calendar

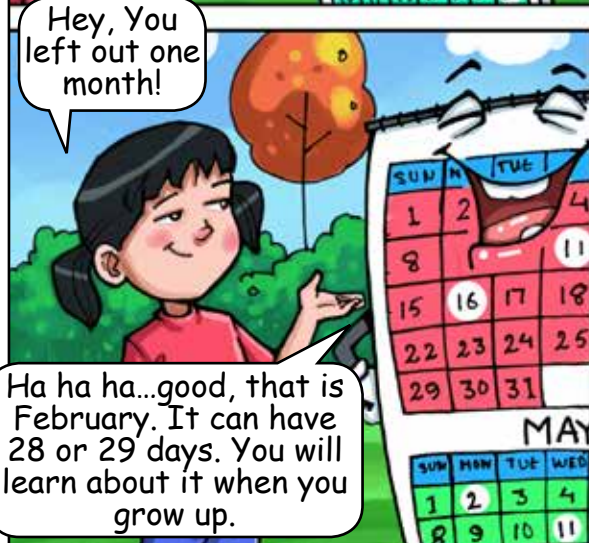
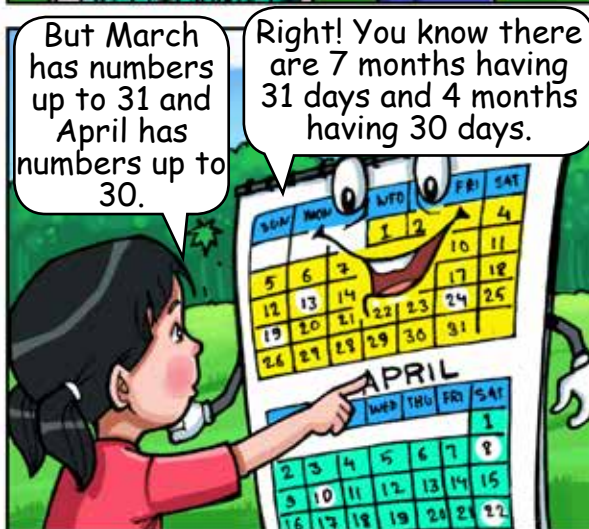
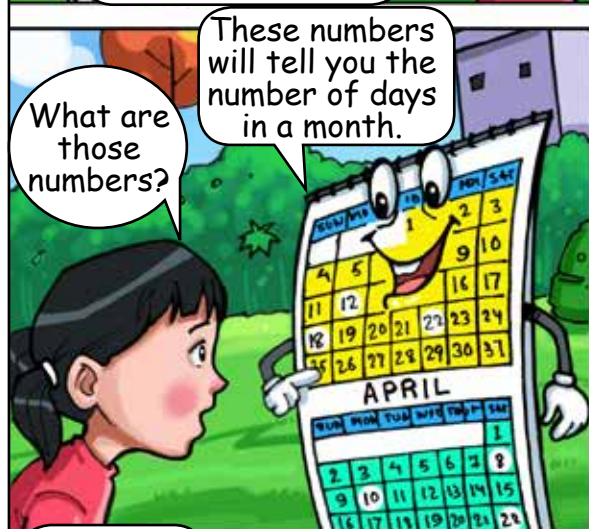
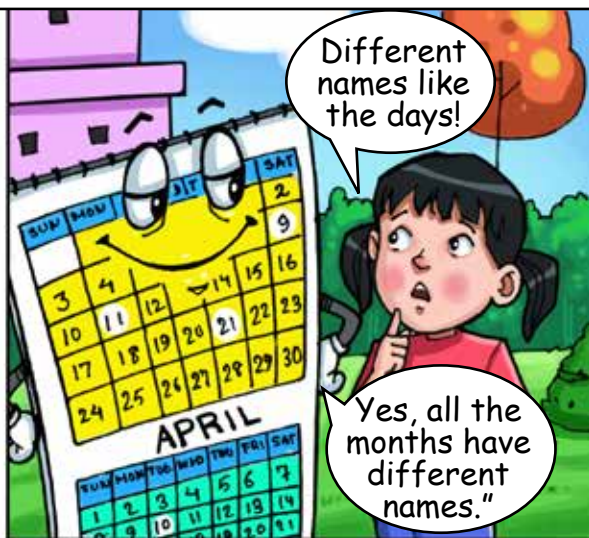


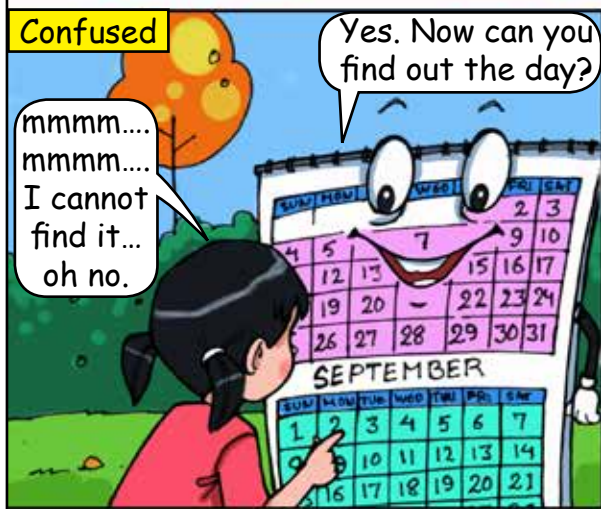
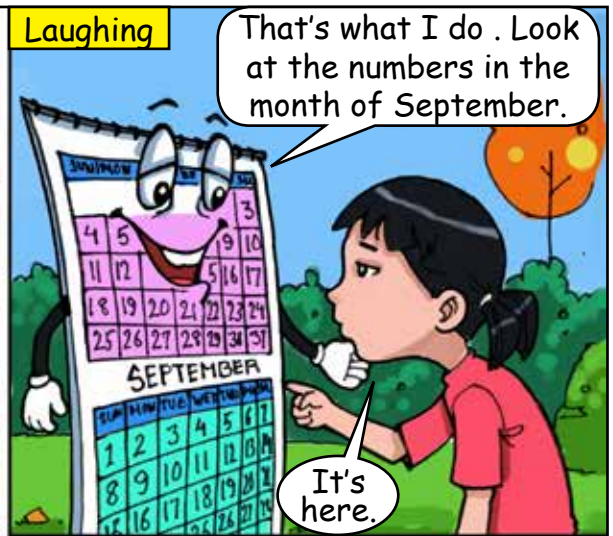
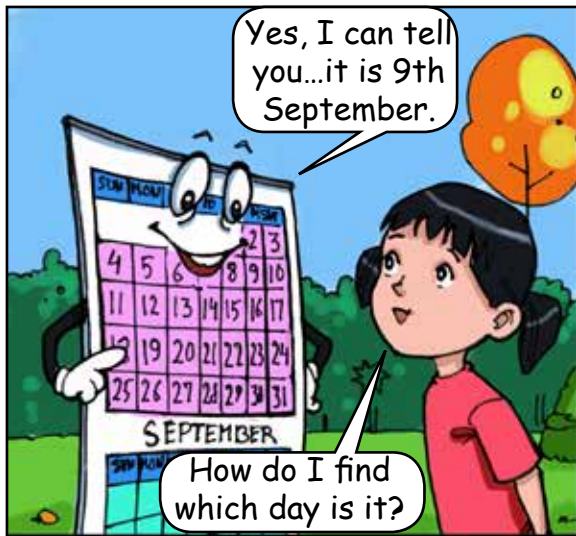


I call my days with different names -

Sunday,
Monday,
Tuesday,
Wednesday,
Thursday,
Friday and
Saturday







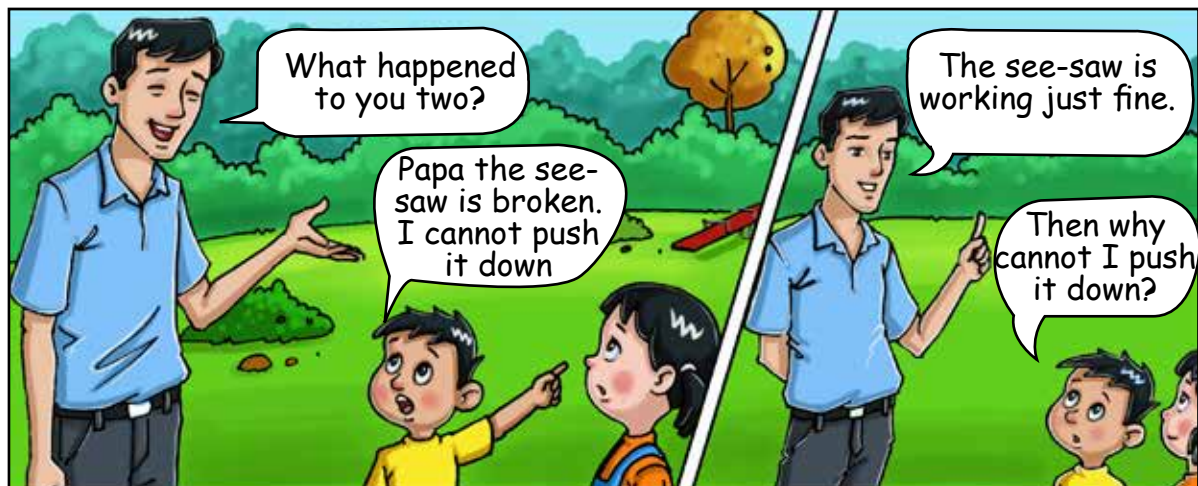
See-Saw (Chapter 8 : Who is heavier?)

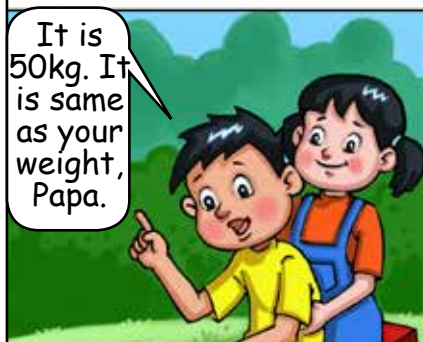
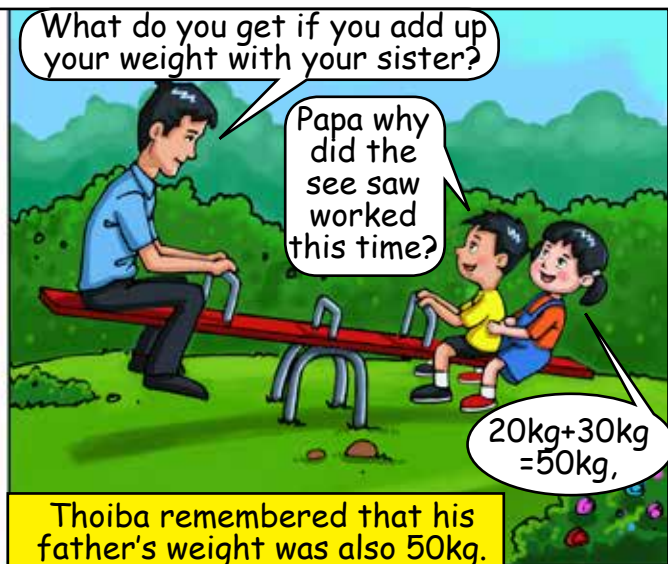
It was Saturday afternoon. Thoiba in his school uniform came running excitedly inside the living room where his mother and his father Rajen were watching TV.



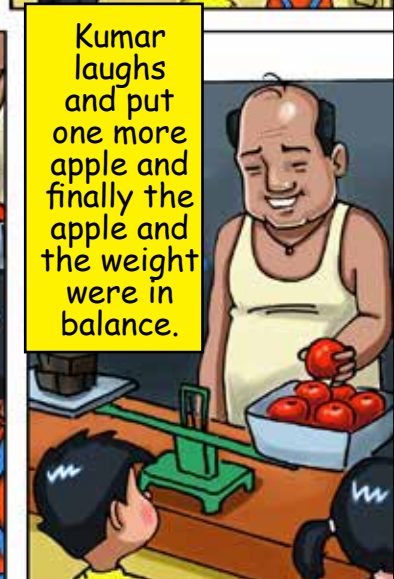
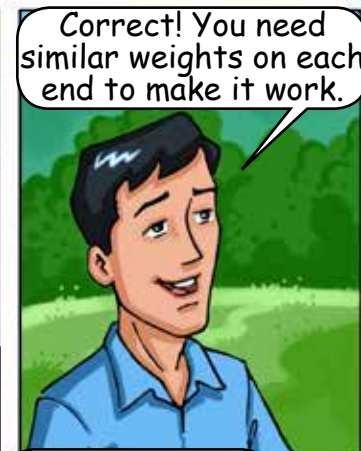
The next day, Thoiba with his father Rajen and elder sister Leima arrived at the park. The father paid for their tickets and they head into the park. Leima and Thoiba ran toward an empty see-saw.





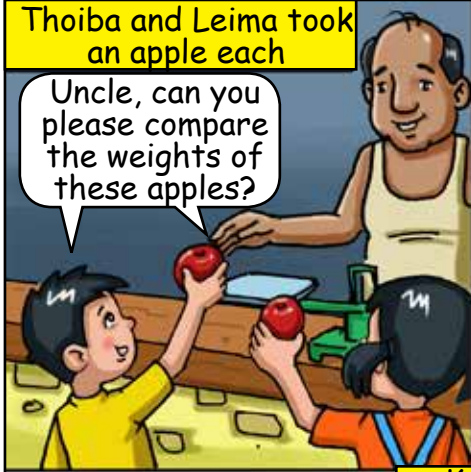


Kumar puts two 500g weights on one of the balance plate and put 6 apples on the other plate. The plate with the apples was raised.



Thoiba and Leima took
an apple each

Uncle, can you
please compare
the weights of
these apples?



Thoiba exclaimed with
Joy



Yes! My
apple is
heavier.

Kumar placed the two
apples one on each plate.
The plate with Thoiba's
apple lowered down.

Doodoo and his family (Chapter 9 : How many times)

Hi! I'm Doodoo, the rooster and this is my lovely family...Cookoo, my hen and our eight chicks.

Cookoo, our little chicks have two tiny feet...but how do I know how many feet they have together.

It's so easy dear ...look at the footprints on the ground...

Oh, it's so easy! But Cookoo it's too long to count. Can you do it shorter?

Yes dear...we can do it this way 8×2 feet = 16 feet because we have 8 chicks and each of our chicks has 2 tiny feet

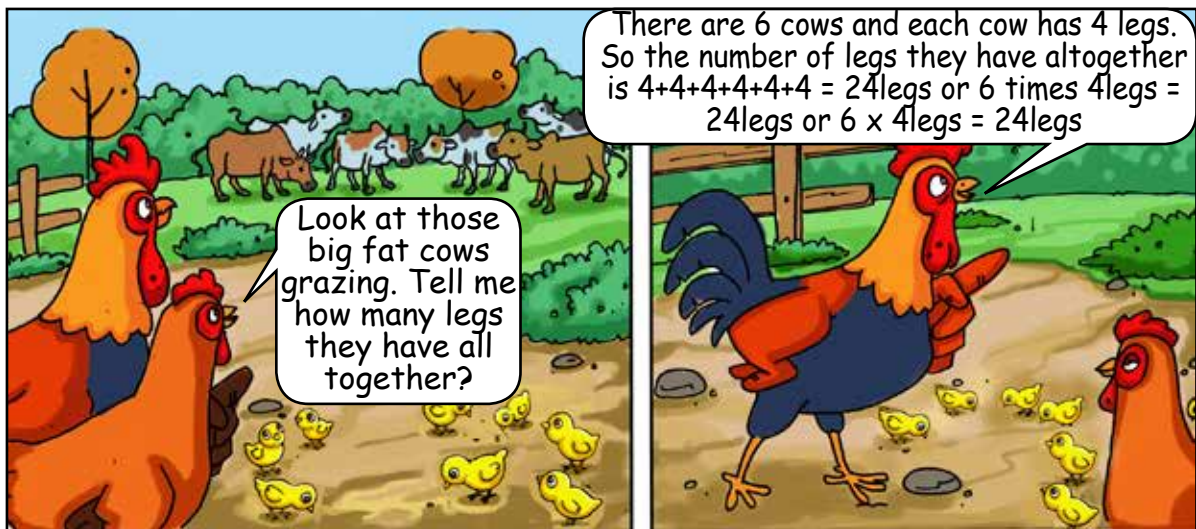
$$8 \times 2 = 16$$

It's great fun. Now I understand multiplication is repeated addition.

That's very interesting!

$$\begin{aligned} 2+2+2+2+2+2+2+2 &= 16 \\ 2+2+2+2+2+2+2+2 &= 16 \\ 8 \text{ times } 2 &= 16 \\ 8 \times 2 &= 16 \end{aligned}$$

We can also write like this, 8 times 2 = 16



Secret Message and the Birthday Party

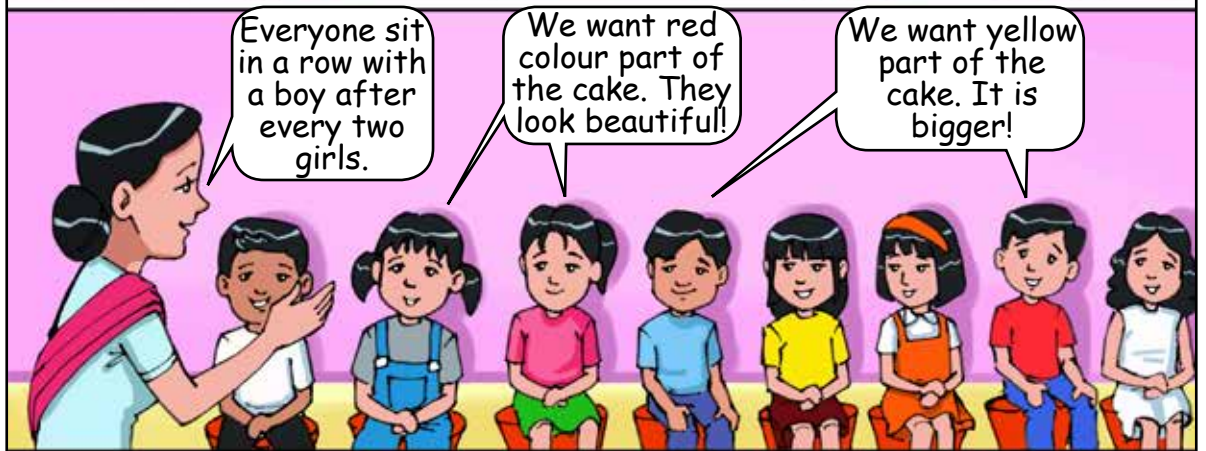
(Chapter 10 : Play with Patterns)







The birthday cake was being cut and everyone were singing Happy Birthday to you!!!



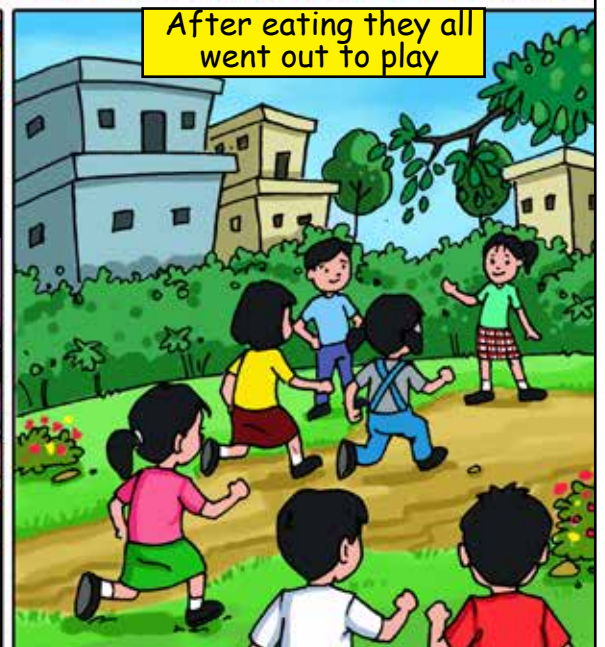
Everyone sit in a row with a boy after every two girls.

We want red colour part of the cake. They look beautiful!

We want yellow part of the cake. It is bigger!



Meena's Mother distribute the piece of cakes accordingly



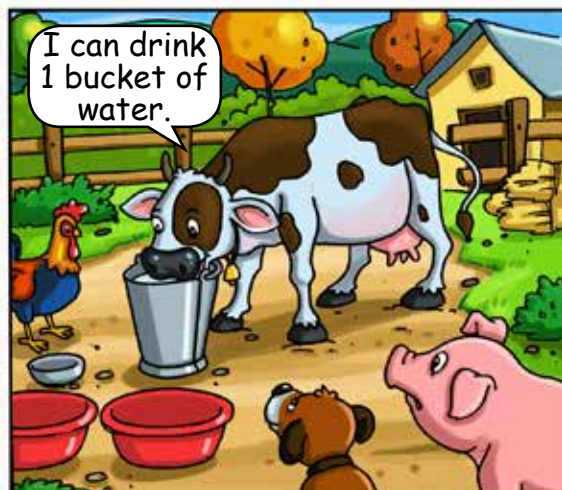
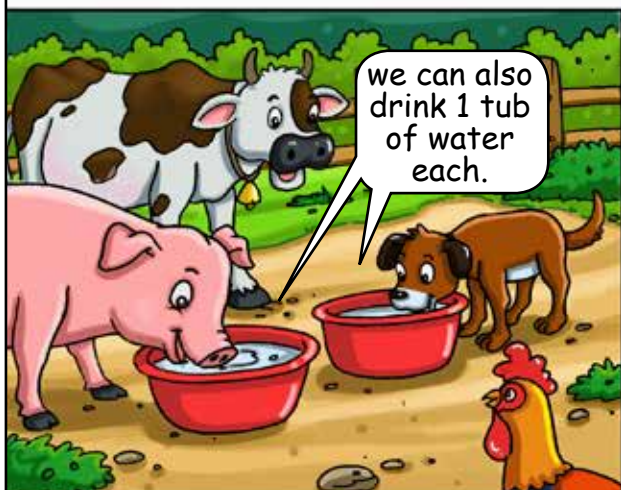
After eating they all went out to play

A boy should stand on 1 and start jumping to the next number by skipping one number and a girl should start from 2 and start jumping skipping the next number.

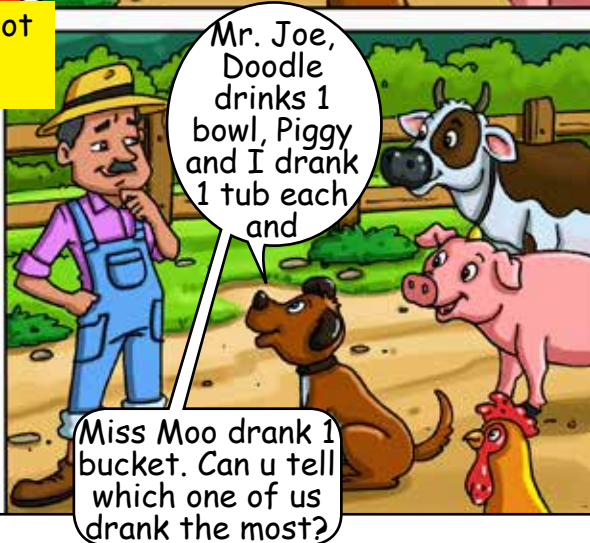


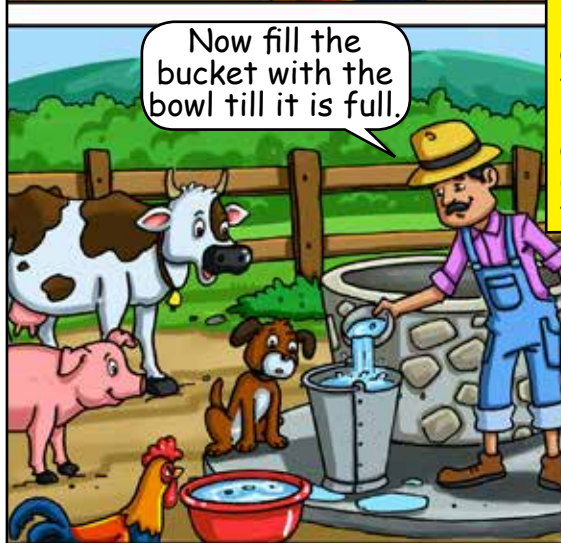
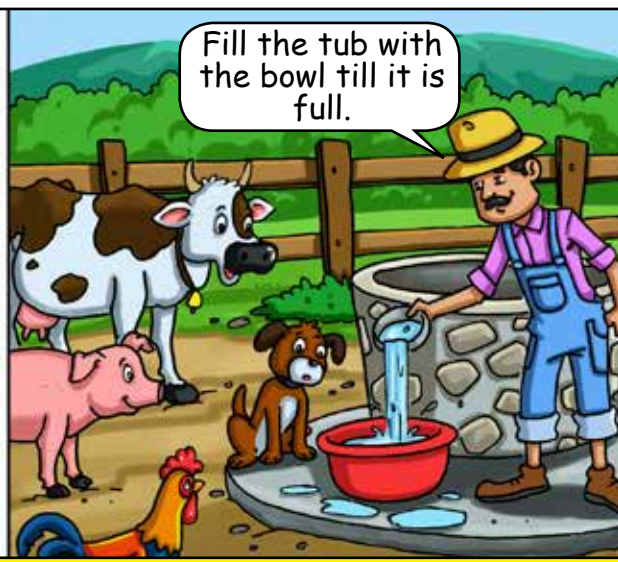
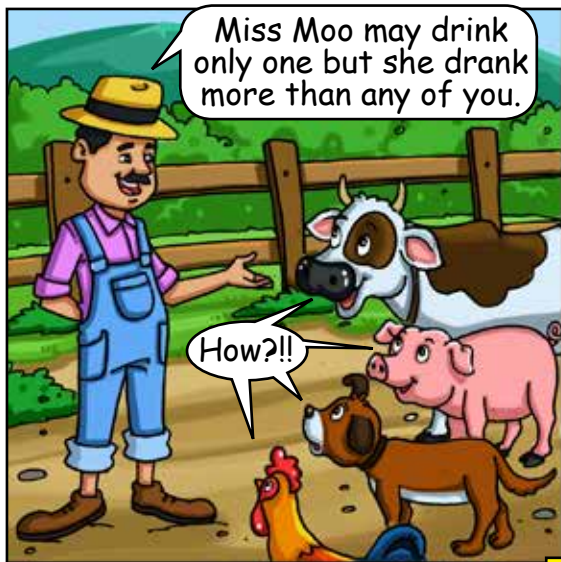
Drinking Competition (Chapter 11 : Jugs and Mugs)

Once there was a sport competition in farmer Joe's farm and all the farm animals were very excited.



Everyone was now confused as to who got first, second and third in the contest. They went to Farmer Joe for help

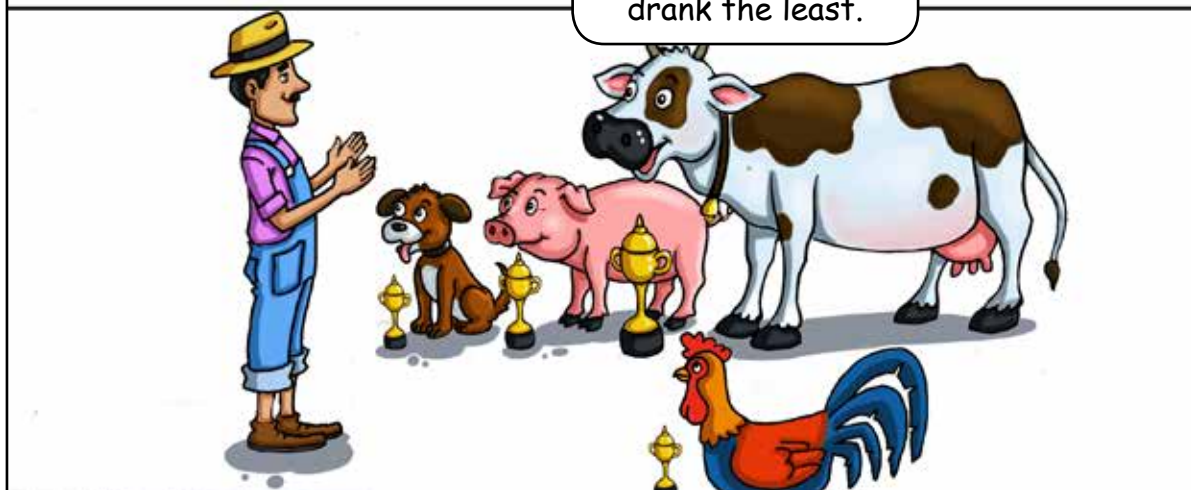




Now I understand. Drinking water from one tub is same as drinking water from the bowl 5 times. And drinking from one bucket is same as drinking water from the bowl 9 times.



That means Miss Moo drank the most, Piggy and I drank same amount while Doddle drank the least.



My Comic Books (Chapter 12 : Can we Share?)

Rajen came back home from work



came running from the other room

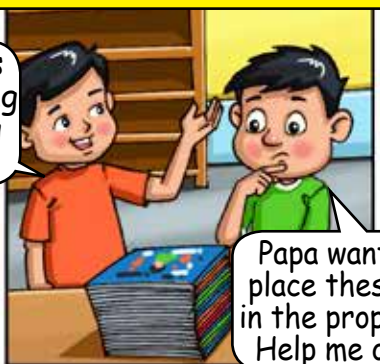
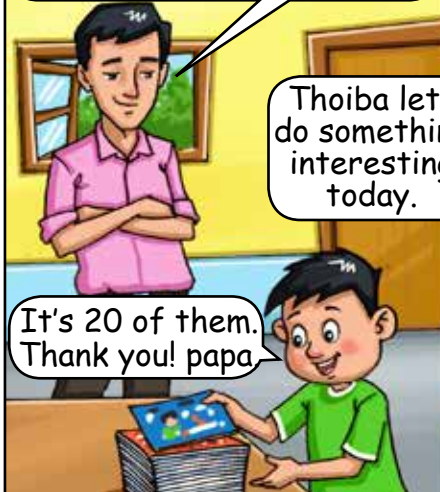
Rajen showed some comic books



Now don't make a mess in the room and keep those comics in proper place.

Thoiba decided to put the comics in the shelves. Meanwhile his friend Raju came to his house

How do you want me to help?



Thoiba counts the books

Let's keep one comic book in each shelf.

Thoiba was holding the 20 comic books and Raju take one comics at a time and place one each in each shelf







A Day with Uncle Ted (Chapter 13 : Smart Charts)

Ted was a great neighbour who loves children. Children also liked to hang around him and he entertained them in many ways. One day Leima and four of her friends came to his house.



How nice of you all to come here. Should I make Mango juice or Orange juice?

Instead of making mango juice or orange juice, let's do something exciting.



Ted laughed and went into his room and came out with a piece of paper.



Put a small line beside the word that says mango juice if you like mango juice or beside the word orange juice if you like orange juice. I have put my mark.



After passing around, the paper was handed back to Ted



Uncle how did you find out?

So it is 4 Mango juices and 2 Orange juices.

ITEM	I LIKE
MANGO JUICE	
ORANGE JUICE	

ITEM	I LIKE
MANGO JUICE	
ORANGE JUICE	

Me and Three of you drew the lines beside the Mango juice while two of you drew the line beside the Orange juice.



Ted laughed and told them a story.

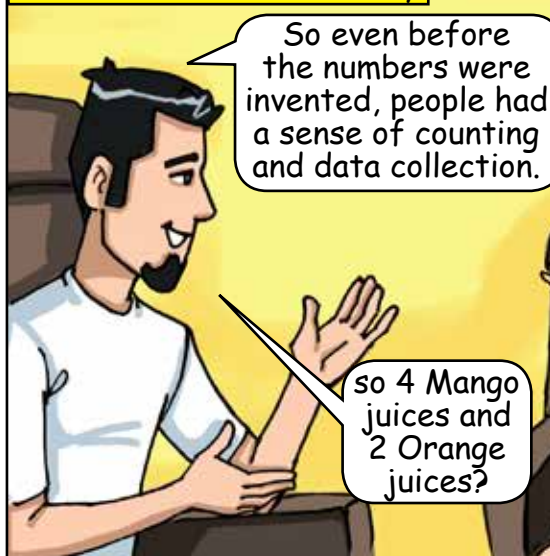
Around 10000 BC, when early men were hunters, they used to draw pictures of the animals after each hunt on the walls of their caves. That would make them realise what types of animals and how many animals they have hunted so far.



It is a relief that we are living today. Imagine people living many years ago, they will have no sense of numbers and probably had hard time counting.



After the end of the story



So even before the numbers were invented, people had a sense of counting and data collection.

so 4 Mango juices and 2 Orange juices?

Now I wish I lived many years ago, hunt animals and draw on caves.



Yaoshang (Chapter 14 : Rupees and Paise)

It was Yaoshang festival. In the evening, like all the other kids in the neighbourhood, Thoiba and Raju went from one house to another in the neighbourhood for small donations (trick or treat).

