Joyful Mathematics

Class 1



Prepared & Published by
Directorate of State Council of Educational Research and Training
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Government of Mizoram

Prescribed for use as a textbook in Mathematics for Class I by the State Council of Educational Research and Training (SCERT), Mizoram, Aizawl

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THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a [1]**[SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC]** and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the [2][unity and integrity of the Nation];

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949 do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

---

1. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)
2. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Unity of the Nation" (w.e.f. 3.1.1977)

FOREWORD

Education is a dynamic process that continually evolves to meet the changing needs of society and learners. In keeping this view, the National Council of Educational Research and Training (NCERT) developed high-quality textbooks that uphold the principles of the National Curriculum Framework (NCF) 2023 and promote competency-based learning.

The State Council of Educational Research and Training (SCERT), Mizoram which is the Academic Authority for Elementary Education in the state, contextualized and adapted these textbooks to suit local needs, culture, and environment of our state. This adaptation seeks to make the content more relatable and meaningful for students in Mizoram while maintaining the academic rigour and pedagogical integrity of the NCF 2023. I express my sincere gratitude to NCERT, New Delhi for sharing the copyrights for adaptation and translation of these textbooks.

I extend my sincere appreciation to teacher educators, subject experts, teachers and all other stakeholders involved in development of the textbooks. Their collective efforts have ensured that these textbooks truly represent the spirit of *education for all* while nurturing curiosity, creativity, and critical thinking among learners.

It is my hope that these textbooks will serve as effective tools for both teachers and students in enhancing teaching-learning process and in realizing the broader goals of the National Education Policy (NEP) 2020.

Aizawl
7th November, 2025

CAROLINE ZORAMTHANGI
Director, SCERT
School Education Department
Government of Mizoram

About the Book

The *National Policy on Education 2020* has recognised the importance of developing a strong foundation of learning during the early developmental age (3–8 years) of children emphasising on foundational literacy and numeracy. In view of policy's perspective of holistic development of children, the *National Curriculum Framework for Foundational Stage (NCF-FS)* has recommended curricular goals, competencies and learning outcomes aligned to the developmental domains such as physical, socio-emotional-ethical, cognitive, language and literacy, aesthetic and cultural and positive learning habits. As a follow-up of this, syllabus for foundational stage developed by the NCERT includes mathematics and numeracy under the cognitive domain, also emphasising upon integration of all other domains while developing learning-teaching materials for Mathematics including textbooks.

The present textbook of Mathematics for Class 1, i.e., 'Joyful Mathematics' has been designed keeping in view the recommendations of *NEP 2020*, *NCF-FS* and Syllabus for the Foundational Stage. Though it may be assumed that a child entering Class 1 has three years intervention in the form of *Balvatika* 1 to 3 (age 3–6 years), yet in view of diversity in our country, there may be children who are for the first-time getting exposure of numeracy in the institutional setup at the age of 6 years. This textbook takes care of such situations.

Children at this stage enjoy free play, toys and games. Therefore, plenty of opportunities are included for play and games within activities while developing various mathematical ideas like spatial understanding, handling numbers, mathematical and computational thinking, etc. This helps the child in smooth transition from concrete to pictorial and to abstract reasoning for every new concept or competence being introduced.

The *Joyful Mathematics* for Class 1 has a lot of activities which are expected to be conducted within and outside the classroom, keeping in view the objective of experiential learning for holistic development. In all the chapters, mathematical understanding is built through play-based activities. The textbook tries to provide children a feeling that they are playing, and mathematics is being learnt, rather than forcing them to learn mathematics without any joy.

The learning of languages and age-appropriate physical and mental development have been integrated with the book as learning of mathematics does not take place in isolation. The book provides suggestions to parents, teachers or other concerned like elder siblings, on having a healthy discussion with children through thought provoking questions, stories, poems, etc.

Various mathematical ideas have been presented through self-explanatory and contextual illustrations keeping in view the differential abilities among children to read words at this stage. Moreover, such pictures/illustrations also help the children in enhancing their visual and reading comprehension.

The book is designed as text-cum-workbook including opportunities for children to draw pictures, colour them and write appropriately. The oral discussions with children have been included in all the chapters to help them verbalise or express their thinking process. This will also help teachers to continuously assess the learning in a non-threatening atmosphere. The thought provoking practice tasks in the form of questions and activities have been given. It is also expected that the teachers or parents will develop similar questions for the children to have more targeted skill practice. The innovative use of the textbook lies with the parents and teachers that will ensure the joyful learning of mathematics among children of Class 1.

A beginning has been made to inculcate logical thinking, analytical skills, mathematical communication and 21st century skills through activities, open ended questions, exploration and discussion in the book. The chapters are framed as a beginning towards mathematical proficiency by adding conceptual understanding, procedural fluency, adaptive reasoning, and a positive attitude towards mathematics.

The *Joyful Mathematics* for Class 1 is based on the four blocks mentioned in the *NCF-FS 2022*. These are— Oral Math Talk, Skills Teaching, Skill Practice and Math Games, they have been included in all the chapters. Most of them have been presented in an integrated manner. However, one can find the following chapters not only aligned to the curricular goal (CG-8) of developing mathematical understanding and abilities to recognise the world through quantities, shapes and measures but also to all other curricular goals as given in the *NCF-FS* 2022 and syllabus leading to holistic development:

- **Oral Math Talk:** Maths poems like 'Finding the Furry Cat!' and 'Chhuk Chhuk goes our Train' in Chapter 1 and 'Five Little Children in Chapter 5 and picture stories for introduction of concepts, practice and assessment have been included like, 'Wise Grandmother' in Chapter 2, 'Eating Mango' in Chapter 3, 'Vanishing Buttons' in Chapter 4, 'Going out with Grandfather'

in Chapter 5, '*Utsav*' in Chapter 9, 'How Do I Spend My Day' in Chapter 10, etc.

- **Skills Teaching:** All chapters have activities that can be done by the child all alone, in groups, or with the help of some elders (parents, teachers, and siblings). This helps the child in the development of various skills with the guided support of others.
- **Skill Practice:** Opportunities for skill practice have been included in all the chapters in the form of Let us Do, Projects, and Practice Questions.
- **Math Games:** Math games and activities have been interwoven in all the chapters throughout the book.

The above chapters have been developed keeping in view the need for developing sensitivity towards environment, values, positive habits, cultural rootedness, and inclusive perspectives in children. Multilingual perspective is also reflected in the textbook. Engaging activities also focusing on language development are included in the entire textbook which will trigger interest in children to learn joyfully.

Teachers need to understand the objective of each of the chapters and activities given, their alignment with curricular goals and competencies as included in the syllabus for the foundational stage, and accordingly make a learning plan for children including variety of activities addressing the diverse needs of children. In this learning plan, teachers need to be the active observants of learning outcomes achieved by the children and their flow towards development of identified competencies under all the curricular goals. Mapping with learning outcomes and activities given in different chapters is required on the part of teachers if we want to make our education competency-based in true letter and spirit.

Activities given in this textbook are suggestive. Teachers can develop their own activities and supplement the same with local toys, games or toys created by them and other materials available in the child's immediate environment for hands on learning with concrete material. Teachers are free to adapt, adopt and modify the activities as per their contexts and circumstances without losing the sight and aim of development of identified competencies in children at this stage.

Mental challenge and engagement in thought provoking task lead to the better mathematical learning and criticality. Solving brain teasers, puzzles and riddle provide opportunities to children in addition to their routine learning. Many age appropriate puzzles have been given in the book. The child must be engaged for at least a week in finding solutions of a puzzle. There may be more than one right answer for some of the problems. Also these puzzles are given to provide joyful experiences to a child. Thus, child should not be assessed on solving these puzzles.

The chapters of the book need to be supplemented by audio-video aids, e-content, material available in QR codes embedded in the book and other learning-teaching material like kits developed by the NCERT.

This textbook is not the only source of learning. Children learn much more while observing environment, talking to peers and elders including grandparents, making things of their interest, watching TV, playing with mobile, toys and games, listening stories, poems, doing projects, visiting places of cultural importance and traveling. Therefore, we as teachers or parents need to value this learning by going beyond the textbook and try to map it with the competencies and curricular goals identified for this stage. The education of our children is seen as our collective responsibility.

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CONSTITUTION OF INDIA

Part IV A (Article 51 A)

Fundamental Duties

Fundamental Duties – It shall be the duty of every citizen of India —

(a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;

(b) to cherish and follow the noble ideals which inspired our national struggle for freedom;

(c) to uphold and protect the sovereignty, unity and integrity of India;

(d) to defend the country and render national service when called upon to do so;

(e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;

(f) to value and preserve the rich heritage of our composite culture;

(g) to protect and improve the natural environment including forests, lakes, rivers, wildlife and to have compassion for living creatures;

(h) to develop the scientific temper, humanism and the spirit of inquiry and reform;

(i) to safeguard public property and to abjure violence;

(j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement;

(k) who is a parent or guardian, to provide opportunities for education to his child or, as the case may be, ward between the age of six and fourteen years.

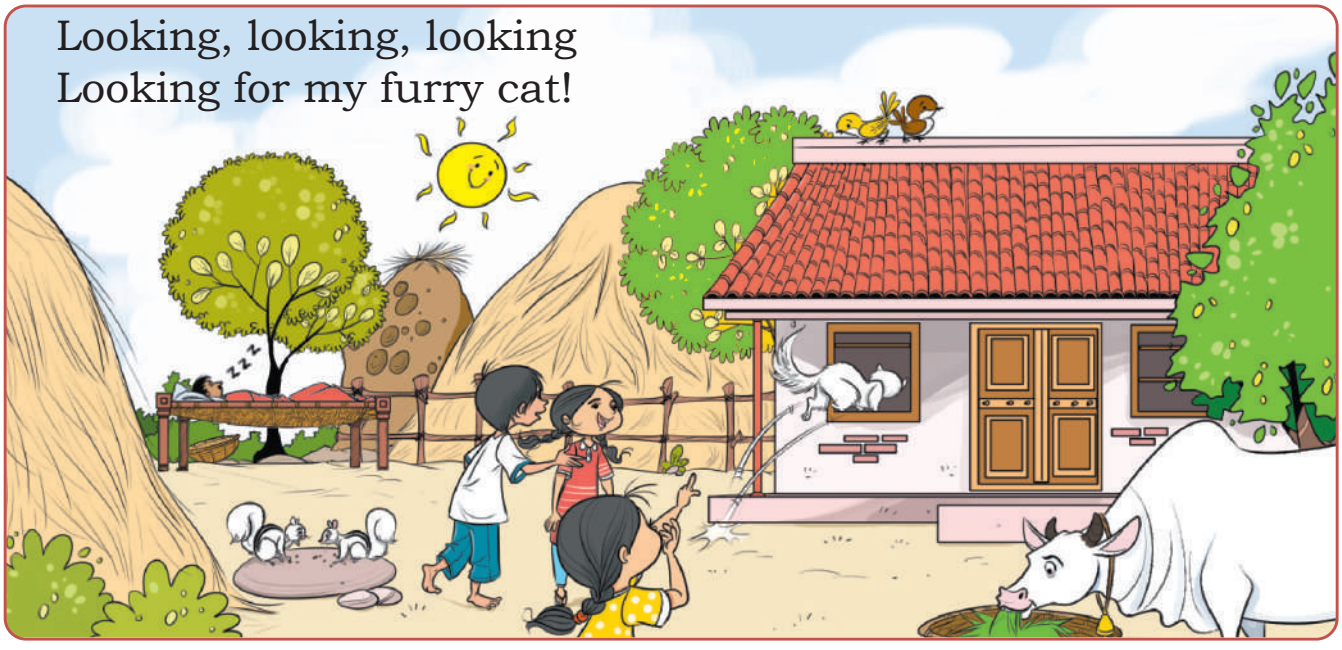
1 Finding the Furry Cat!

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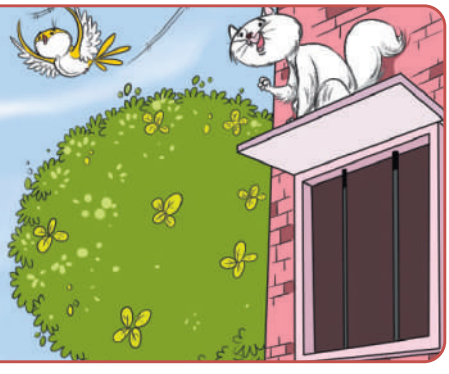


Let us Sing

Looking, looking, looking
Looking for my furry cat!

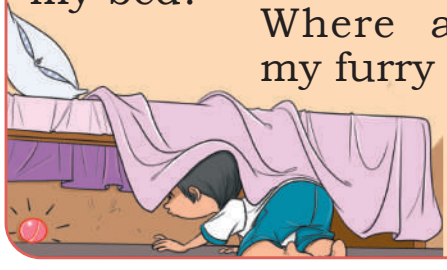


Are you sitting **on** the window shed?



Are you sleeping **under** my bed?

Where are you my furry cat?



Looking, looking, looking
Looking for my furry cat!
Are you **inside** the backpack?



Are you **outside** the red rack?

Where are you my furry cat?



Come, come, come

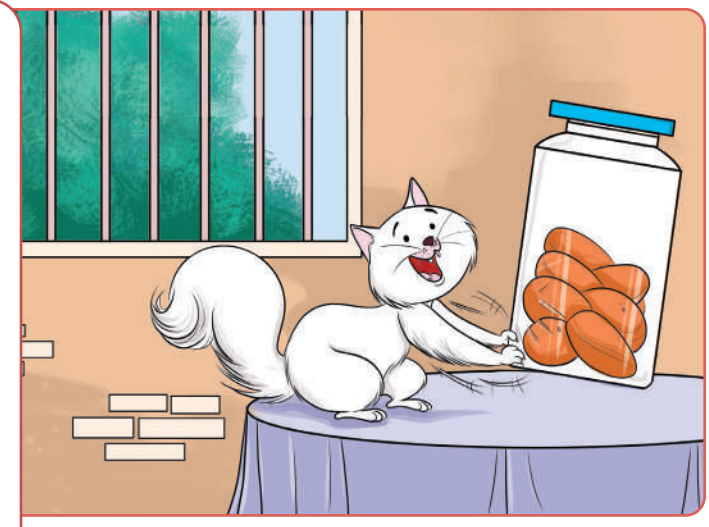
Come to me, my furry cat!

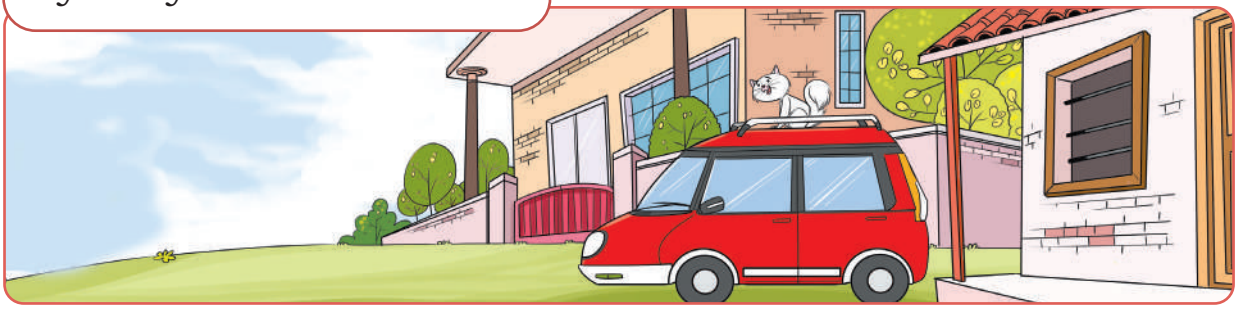
Saw you scratching the **bottom** of my jar.

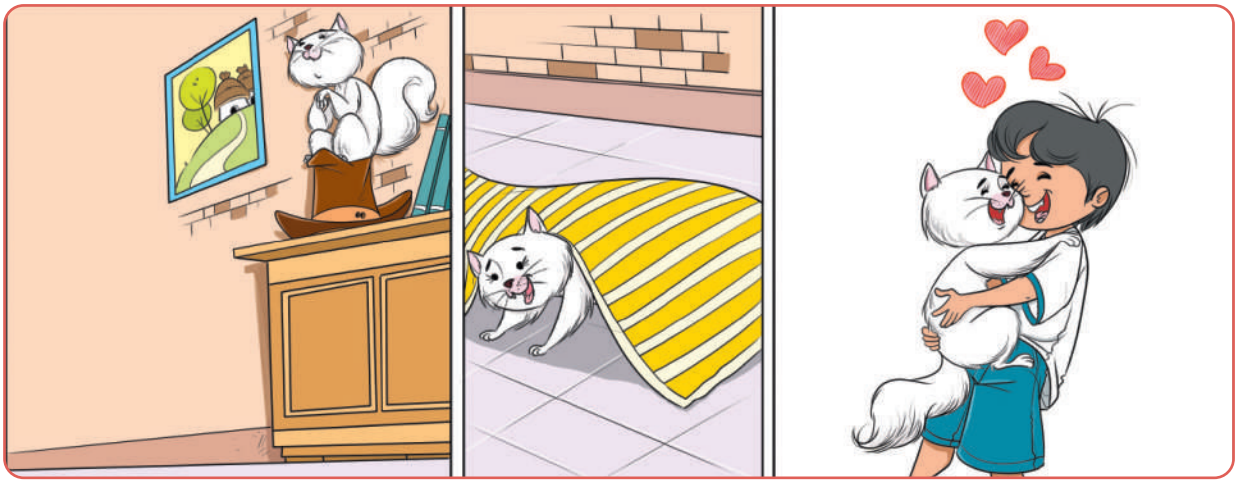
Saw you playing at the **top** of my car.

Come to me,

my furry cat!







Come, come, come
Come to me my furry cat!
Saw you hopping **above** the hat.

Saw you hiding **below** the mat
Here comes my furry cat!

Read aloud the poem. Ask children to recite and enact it. Children can look at the pictures and tell what all they see and discuss the things which are above, below, on, under, and so on with the class. Encourage them to talk about the animals that they see around them, like cats, dogs, cows, etc.



Look at the pictures of the poem and encircle the correct word.

A. The red ball is **above/ under /on** the bed.

B. The cat is **inside/under/on** the car.

C. The man is lying **under/top of/on** the tree.

D. The cow is **inside/top of/outside** the house.



Think and Answer

A. Where do you put your shoes? Inside/Outside the room.

B. Where do you throw the garbage? Inside/Outside the dustbin.

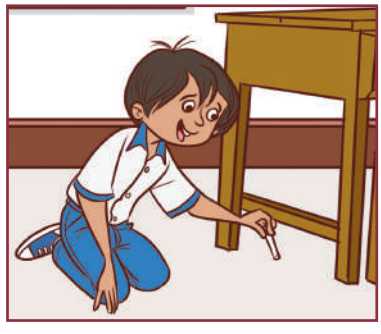


Let us Play – Find the Things

Children can divide themselves into 2 teams. One team will hide a few things like white chalk, red ball and other items and ask the other team to find them. Children can give verbal instructions to find the things using positional words like inside/outside, far/near, above/below, etc.

For example:

- Look for a white thing which is hidden **near** the board and **under** the table.
- Look for a red thing which is **outside** the classroom and **under** the tree.



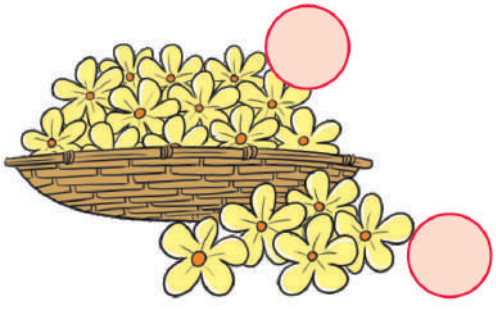
Let us Play – Throw the Ball!

Each child aims and throws the ball inside the basket. When the ball goes inside, other children will say **IN** and when it goes outside the basket, they say **OUT.**



Let us Do

A. Tick ✓ the things which are inside.



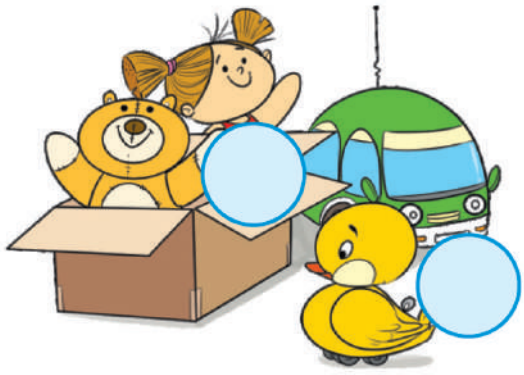


Activity should be conducted in a manner so that all the children are engaged, irrespective of their differential abilities.



B. Tick ✓ the things which are outside.

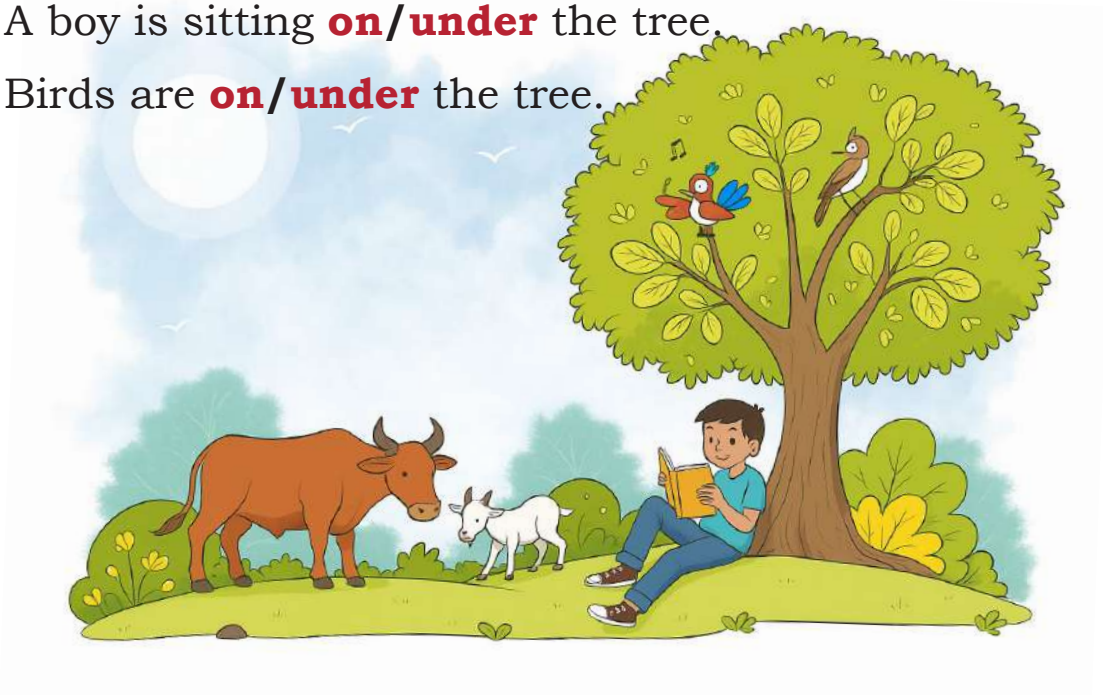




C. Look at the picture and tick ✓ the correct words.

i. A boy is sitting **on**/**under** the tree.

ii. Birds are **on**/**under** the tree.



D. Draw a smile below the nose and eyebrows above the eyes.



E. Look at our National Flag which is also known as *tiranga*. How many colours are there?

Tick ✓ the correct option.

i. Which colour is at the **top** of the *tiranga*?
white/saffron/green

ii. Which colour is **below** the white colour on the *tiranga*?
pink/saffron/green

iii. Which colour is **above** the green colour on the *tiranga*?
white/blue/yellow

iv. Where is the *ashoka chakra* on the *tiranga*?
on a corner/in the middle/on a side

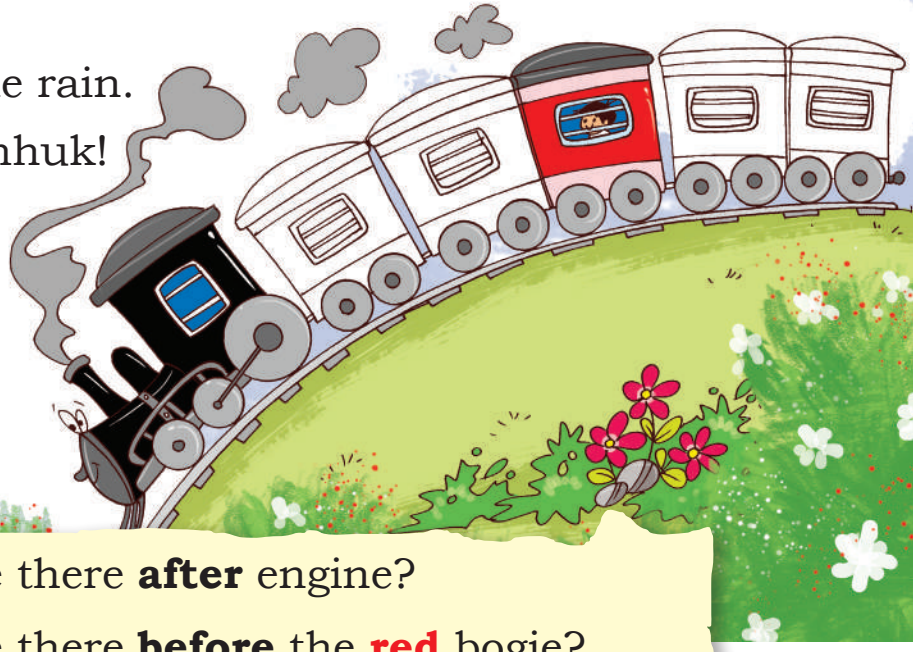


Discuss with children when, where and why do we hoist the National Flag. Let the children express their feelings about the National celebrations. Ask children to make their own *tiranga* and sing the National Anthem in standing position facing the *tiranga*.



Chhuk Chhuk goes our Train!

Chhuk chhuk! Chhuk chhuk!
Goes our train.
Over the hills and down to the plains.
Chhuk chhuk! Chhuk chhuk!
Goes our train.
Bogies **before** my bogie,
Bogies **after** my bogie,
Make a chain,
Over the rivers and in the rain.
Chhuk chhuk! Chhuk chhuk!
Goes our train.



A. How many bogies are there **after** engine?

B. How many bogies are there **before** the **red** bogie?

C. Fill the colour in the bogies after the **red** bogie with **orange** colour.

D. Fill the colour in the bogies after the **red** bogies with **blue** colour

Ask children to share experiences of their train journey. Children who have never travelled by train may ask questions about the journey. Let there be a discussion on 'what a train is'. Ask them to draw a train on the paper or they can make a train by using waste materials like used boxes or cans.





Let us Play

Children will sing the rhyme and play a game where they all will form a train by holding each other's shoulders. Everyone will tell who is before and after each child in the train.

Here goes our train,
Here goes our train
No one is before me
and Muani is after me

Sawmi and Rova are making some groups of objects.

I have put all the pebbles together.

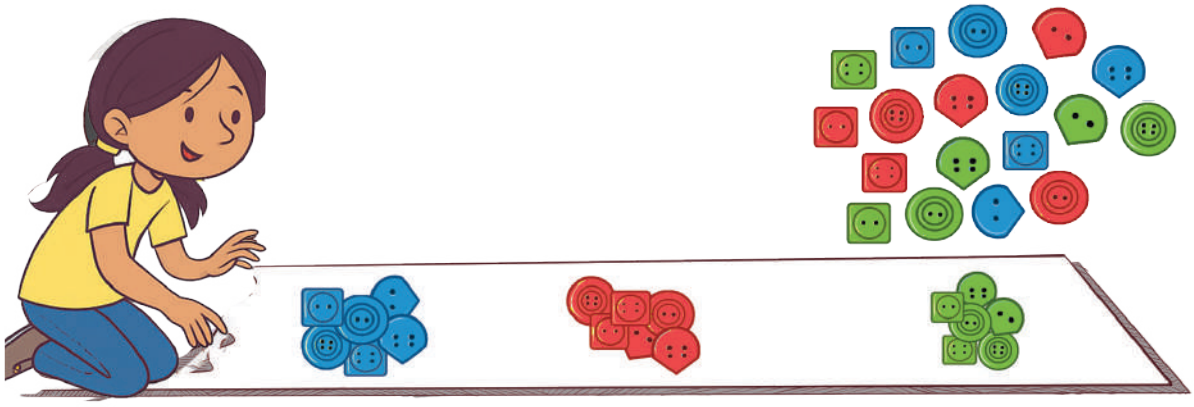
I have put all the leaves in one group and sticks in another group.

Let the children do similar activities of sorting the objects like seeds, leaves, beads, etc.



Let us Do

Sawmi has placed all the buttons in three groups.



Why did Sawmi make such groups?

Help Sawmi to sort these buttons in other ways by drawing them.

Project Work

Ask children to arrange the cupboard of the classroom. Ask them to put objects using positional vocabulary like put two objects in the bottom rack, one object in the top rack, etc.

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2 What is Long? What is Round?



Look Around!

Miss Mawii asked all the children to sit in a circle.

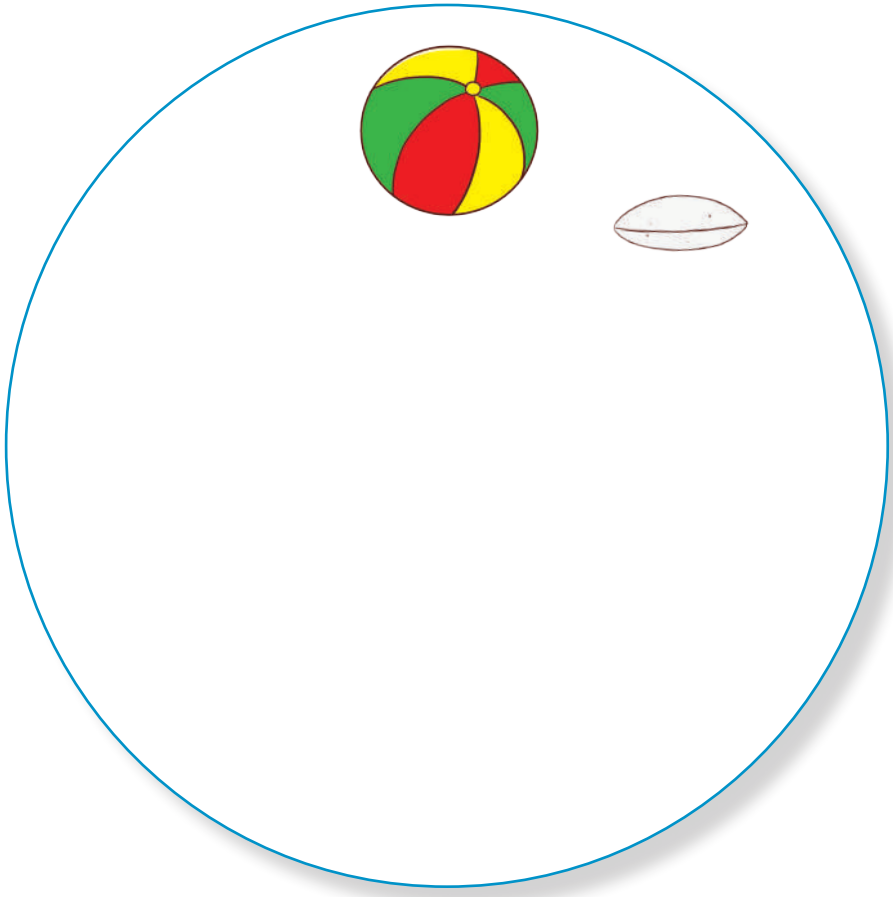


Ask children to play this game in the class. Let the children name two things—one long and one round. Every time, they can take the name of a new thing and avoid repetition. For long objects, children may focus on one dimension like tall, wide, etc. For example, some may say a tumbler is long whereas for some others, it may be round. Both views need to be considered. Let children explain their logic of saying so.



Think and Do

A. Draw round objects in ◯ and long objects in ▭.

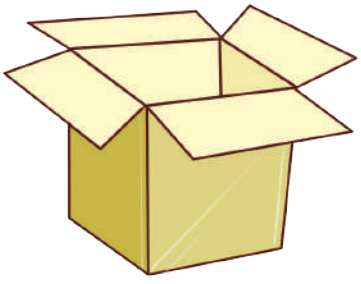




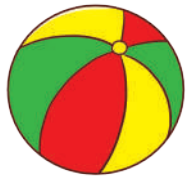
B. Match the objects which are similar in shape.



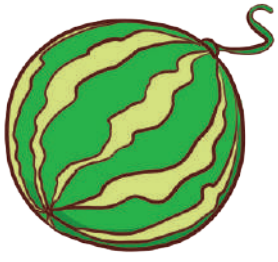






C. Tick ✓ the shape which is similar to ball  .

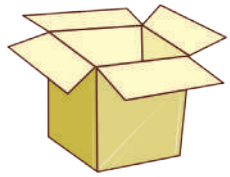







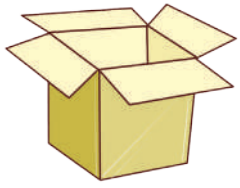
D. Tick ✓ the shape which is similar to cap  .



E. Tick ✓ the shape which is similar to glass  .






F. Tick ✓ the shape which is similar to matchbox  .









Let us Do

Make a house, toy, tower, robot, bus or anything you like using different objects in your surroundings. You can also use notebooks, books, pencil box, water bottle, waste or old boxes, birthday caps, funnels, etc.

Divide the children in four groups. Give one shape to each group and ask children to bring two different used or waste objects similar to that shape. Display all the collected things in the classroom and let children share their things and the reason why they choose those particular things.





Wise Grandmother

Once there was a little lamb who was going to meet her grandmother.

The wolf saw the lamb and wanted to catch her.

Please don't eat me now. Let me first go to my grandmother's place and grow big.

Okay, you may go.

The lamb told everything about the wolf to her grandmother.

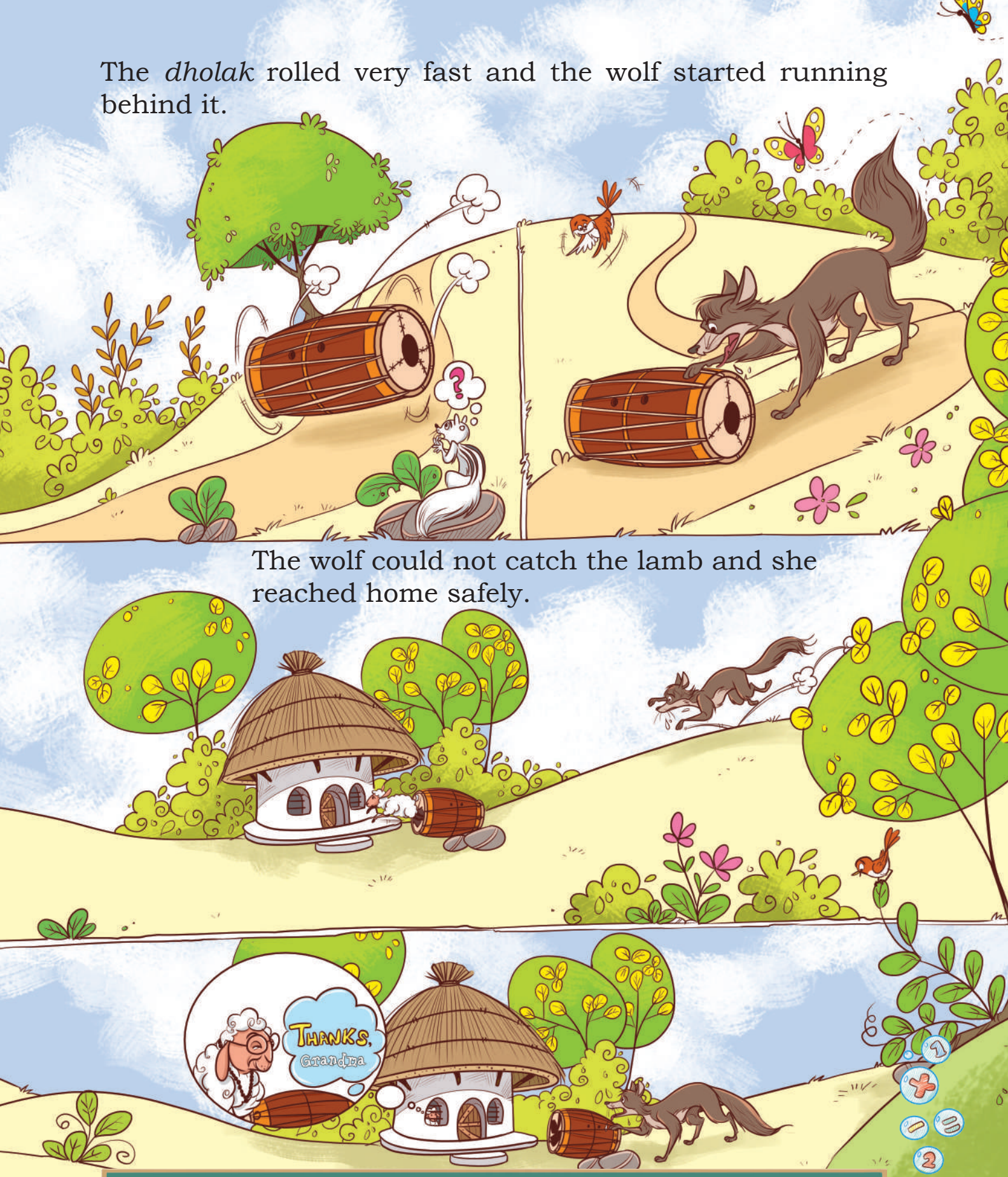
The grandmother got an idea and put the lamb into a *dholak* and rolled it back to her house.

Read aloud the story and ask children to enact it.



The *dholak* rolled very fast and the wolf started running behind it.

The wolf could not catch the lamb and she reached home safely.



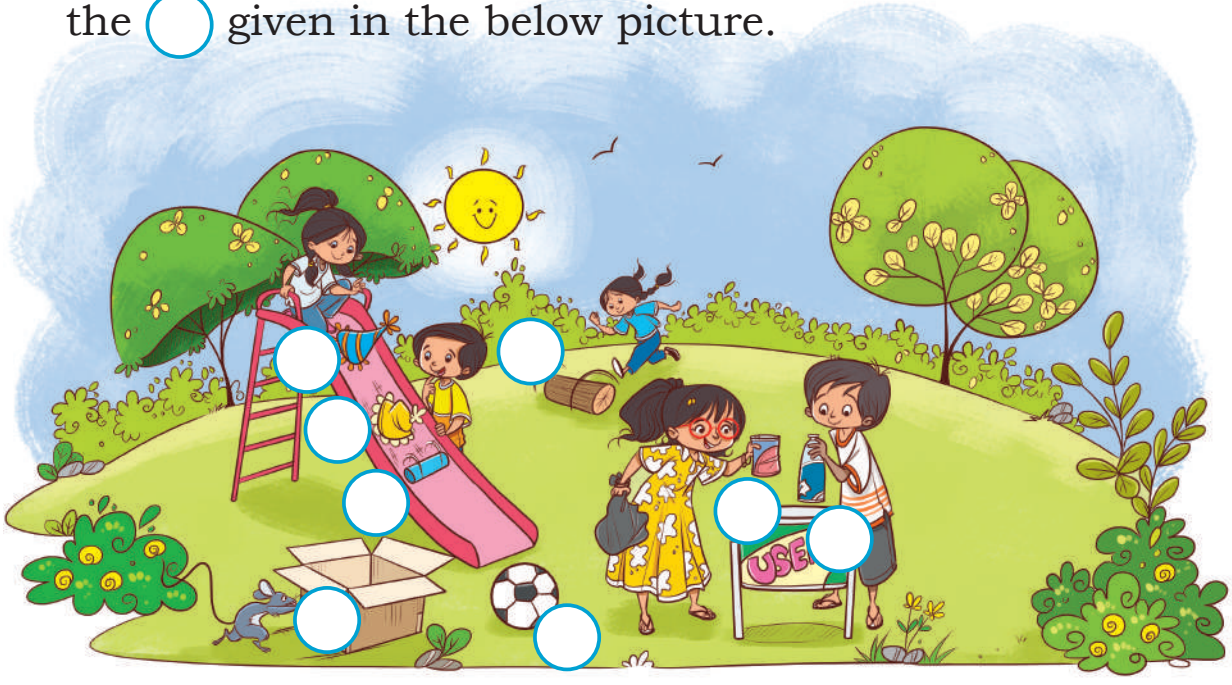
Let children reason out why the *dholak* rolled. Arrange a discussion about its shape and the sloppy/inclined surface from the jungle to the lamb's house.

Let us Slide

Children are playing carrom as shown below. You can also play and see how a striker slides to reach the corner.



A. Write **'R'** for rolling objects and **'S'** for sliding objects in the ◯ given in the below picture.



B. Collect different objects from your surroundings and see if they roll or slide.

C. Do you see things which can do both, roll and slide? If yes, discuss in the class.

Ask children to tell about different objects in their house or school which roll as well as slide. Also discuss which features of the objects help them to roll or slide on a plain surface.





Think and Do

Find whether the following objects roll, slide or do both.
Put ✓ or X

Object	Rolls	Slides	Rolls as well as slides
			
			
			
			
			
			
			
			



Project Work

A. Collect cardboard boxes like shoe boxes, empty food boxes, fruit boxes, etc. Make a slit on front of the box and draw eyes, mouth and nose, make a puppet with help of your parent or teacher and play with it. Make puppets from your favourite stories and do a puppet show in your classroom.

B. Make towers with different objects. Find which shape of objects make taller and stable towers.

C. Create different shapes and objects by using clay.



QRickit

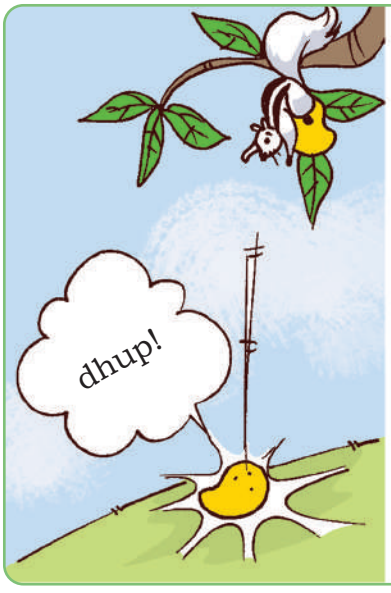
0124CH03

3 Mango Treat

Let us Read

The birds are watching a squirrel eating a mango.







One bird joins.



Now **2** of them are eating the mango.

One more bird joins.



Now **3** of them are eating the mango.



One more bird joins.

Now 4 of them are eating the mango.

One more bird joins.



Now **5** of them are eating the mango.



Let us Talk

A. Identify the birds in the picture.

B. How many animals or birds were eating the mango in the beginning?

C. How many more animals or birds joined every time?

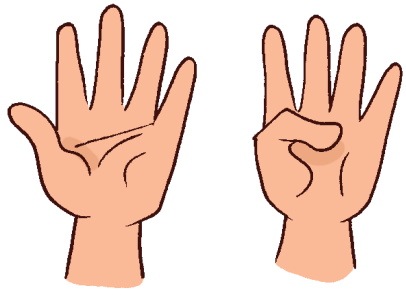
D. What is 1 more than 1, 1 more than 2... up to 9?

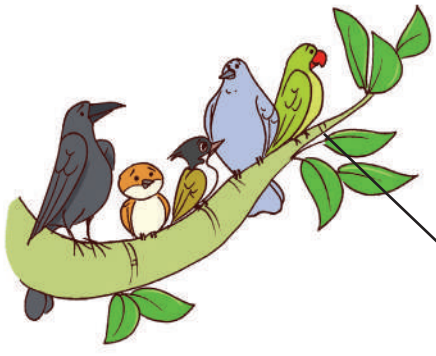
E. How many animals and birds ate the mango at the end?

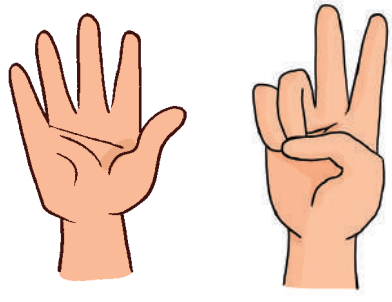
Talk about counting numbers as the animals join. Enact the story where all children play the role of different animals or birds and make their respective sounds. Talk about different birds or animals, their sounds and their habitats.

Match the number of birds with the number of fingers (one has been done for you).

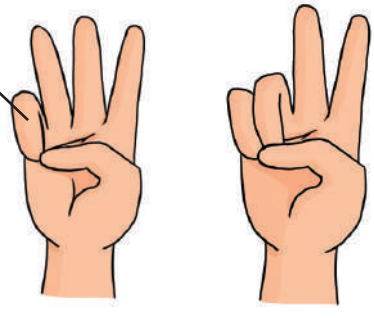


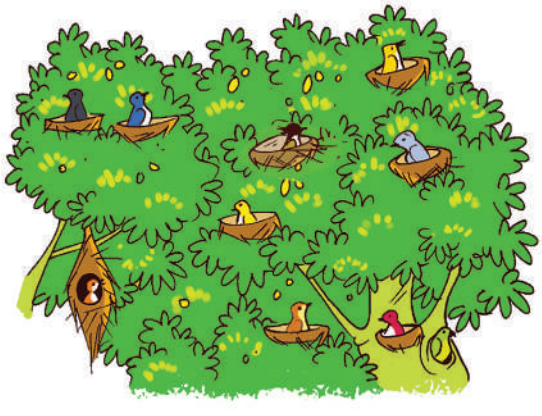






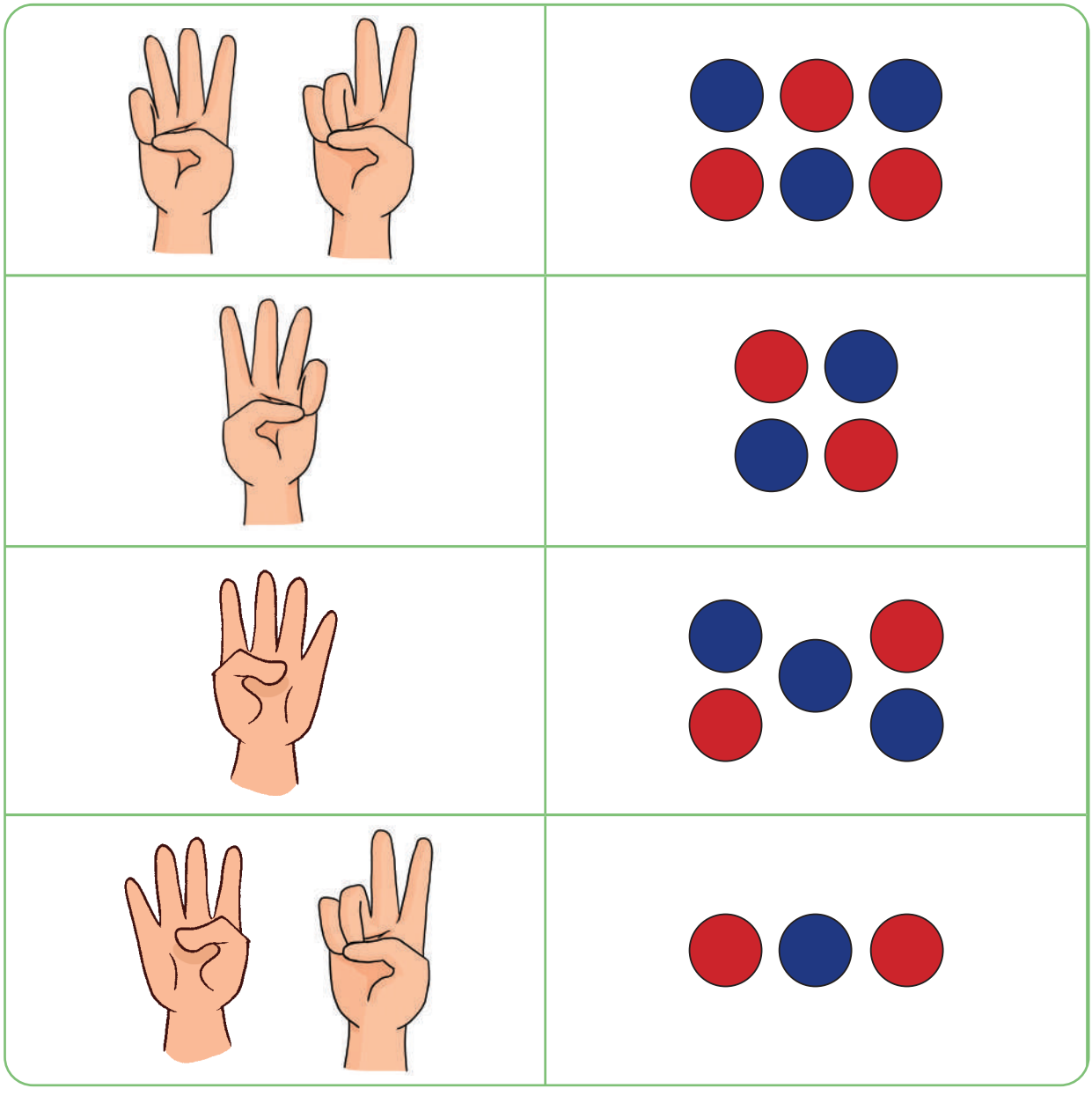








Match the fingers with correct number of dots.





Let us Play – Mime with Fingers



Show 3 fingers to your friend. Your friend has to show 3 fingers but in a different way. Similarly, you can play for other numbers.

What are the different ways of showing 4 fingers using one hand?



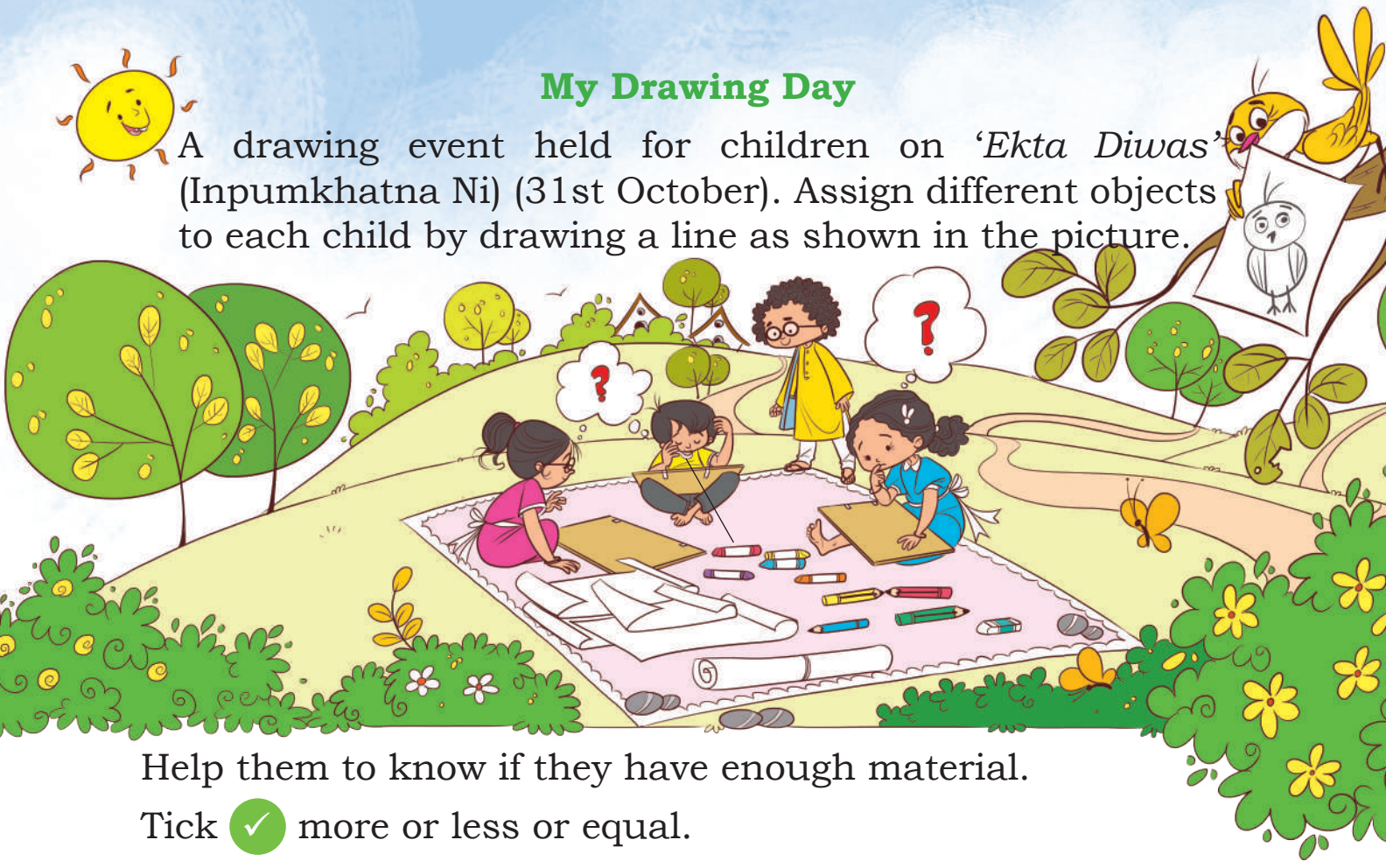
Let us Play Outside



Children can move in a circle by holding hands and singing songs. A child claps and says four. All children can make groups of four by holding hands. The left out children can count the number of children in each group. Similarly, children continue this game by saying different numbers up to ९.

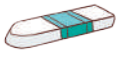
My Drawing Day

A drawing event held for children on *'Ekta Diwas'* (Inpumkhatna Ni) (31st October). Assign different objects to each child by drawing a line as shown in the picture.



Help them to know if they have enough material.

Tick ✓ more or less or equal.

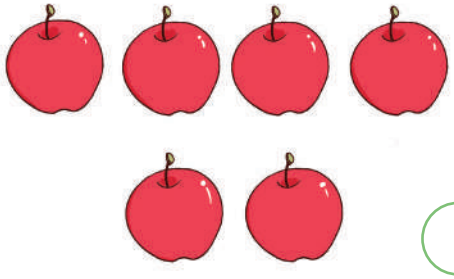
Objects	More than the number of children	Less than the number of children	Same as the number of children
			
			
			
			
			

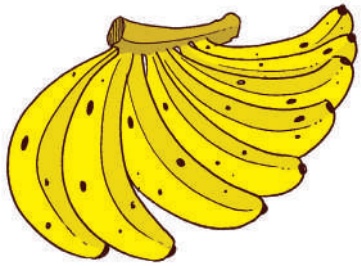
Discuss with children how did they find out which items are more or less or equal. Also discuss the habit of sharing objects among the group when children are more than the items or objects. Also discuss the importance of *Ekta Diwas*.



Let us Do

A. Tick ✓ the one which is more in number.





B. Tick ✓ the one which is less in number.





C. Tick ✓ the one which is less in number.





Let us Play — Finger Game

A. Play this finger game with your friend. Show some fingers for example, four fingers. Your friend has to show less fingers than four.

B. Ask your friend to show more than that number, more number in some other way, and less number in some other way.



Numbers 1, 2, 3... Go!

Look at the pictures and follow the instructions.

A. Draw a △ around the objects which are one in number in the above picture and write down 1 below.

1 One

B. Draw a ○ around the objects which are two in number in the above picture and write down 2 below.

2 Two

C. Draw a □ around the objects which are three in number in the above picture and write down 3 below.

3 Three



D. Draw a △ around the objects which are four in number in the above picture and write down 4 below.

4 Four

E. Draw a ○ around the objects which are five in number in the above picture and write down 5 below.

5 Five

F. Draw a ▭ around the objects which are six in number in the above picture and write down 6 below.

6 Six



G. Draw a △ around the objects which are seven in number in the above picture and write down 7 below.

7 Seven

H. Draw a ◯ around the objects which are eight in number in the above picture and write down 8 below.

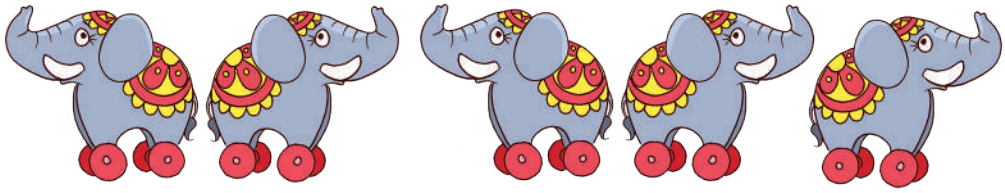
8 Eight

I. Draw a ▭ around the objects which are nine in number in the above picture and write down ९ below.

९ Nine

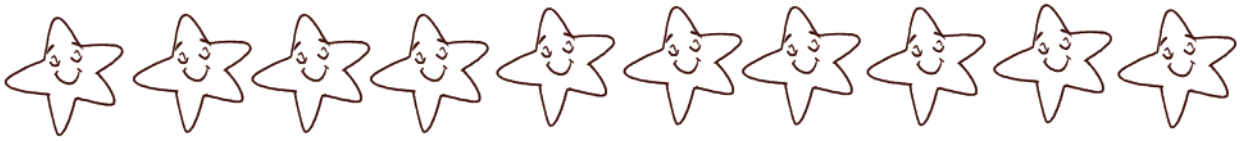
Encourage counting objects and writing numerals on sand. Ask a child to scribble numeral on the back of another child. Let the child guess which number is written. Tell the children that the group of seven stars in the above picture which can be seen in the sky every night is known as *Saptarshi* or Big Dipper.

Count and Match

	3
	7
	5

Count and Colour

A. Colour 8 stars.



B. Colour 5 flowers.



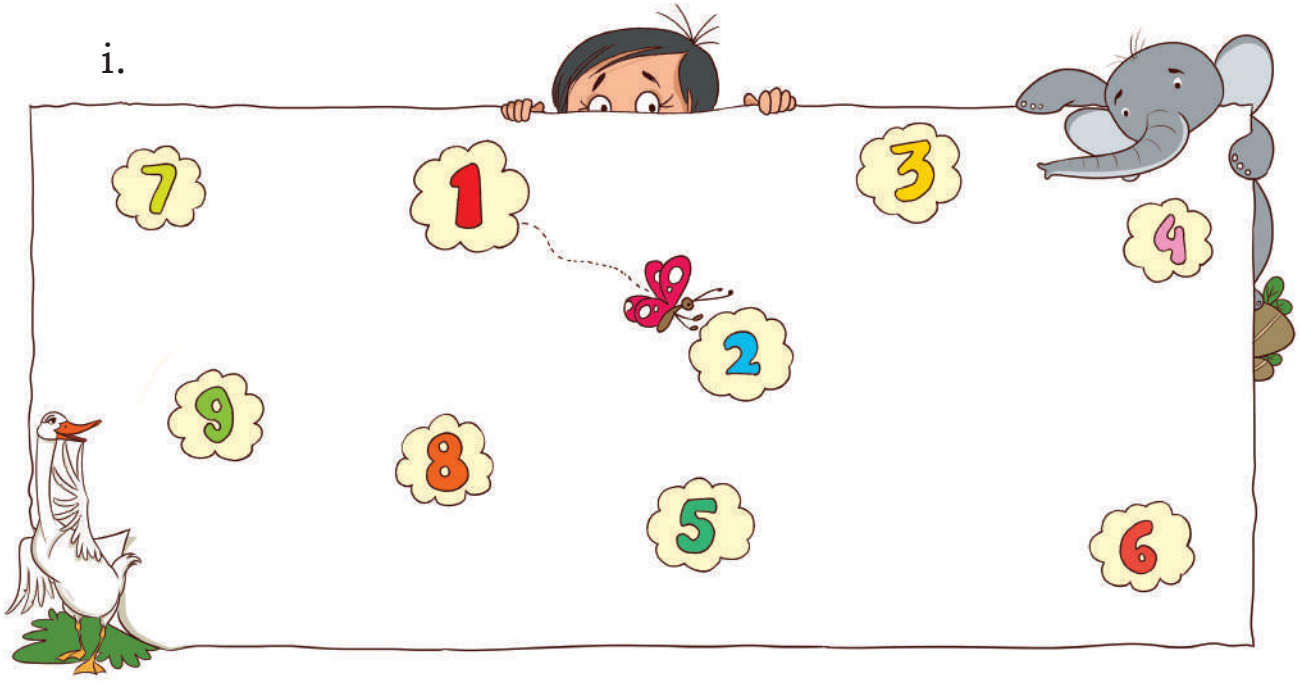
C. Colour 6 balls.



Join the Numbers in a Order

A. Draw a path from numbers 1 to 9 in the correct order. The lines should not cross each other.

i.



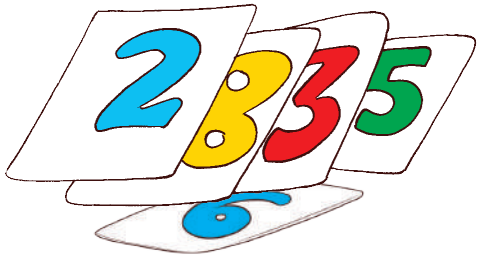
ii.

1	3	4
9	2	5
8	7	6

iii.

5	6	7
4	3	8
1	2	9

B. A naughty monkey shuffled the number cards. Write them in a correct order from the smallest to the largest.







C. The cat has walked all over the floor. Write down the missing numbers.

 , 5, 6,  , 8

 , 2,  , 4, 5



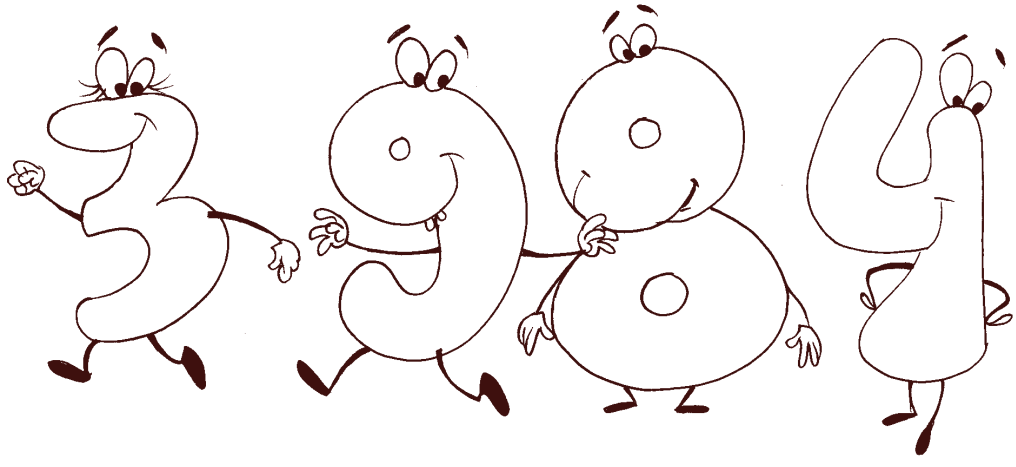
5,  ,  ,  , 9

3,  ,  , 6, 

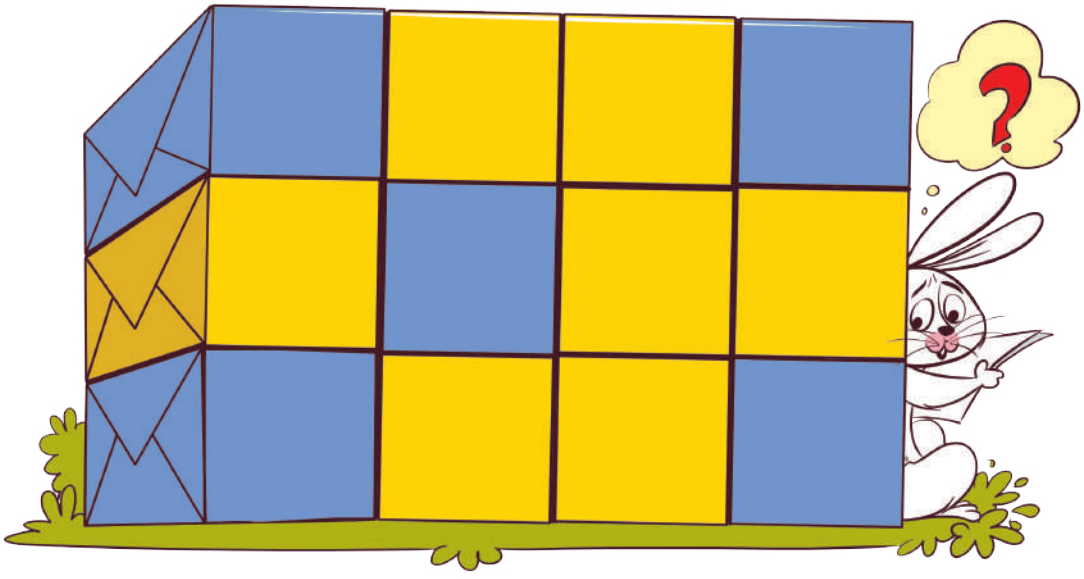


Colour the Biggest Number

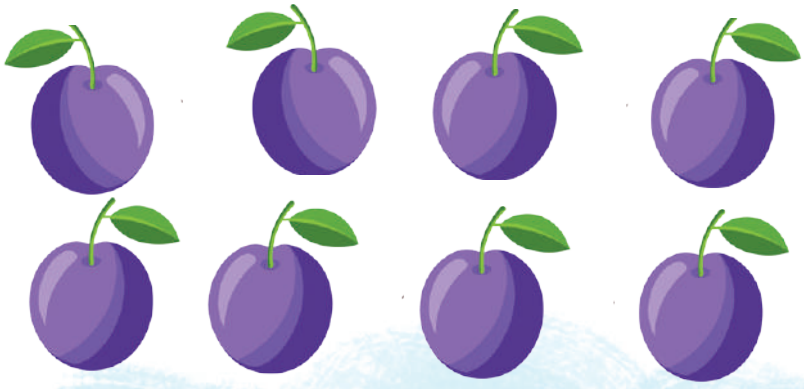




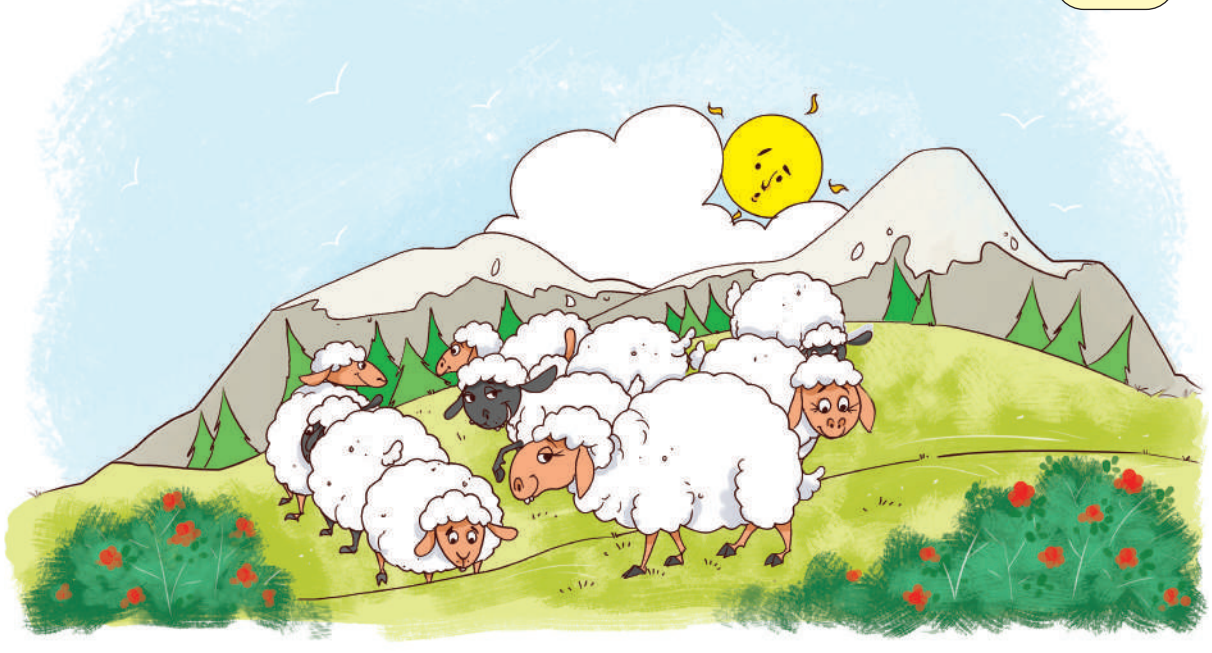
A. How many **yellow** are there? Count and write the number.



B. How many plums are there in the given picture?

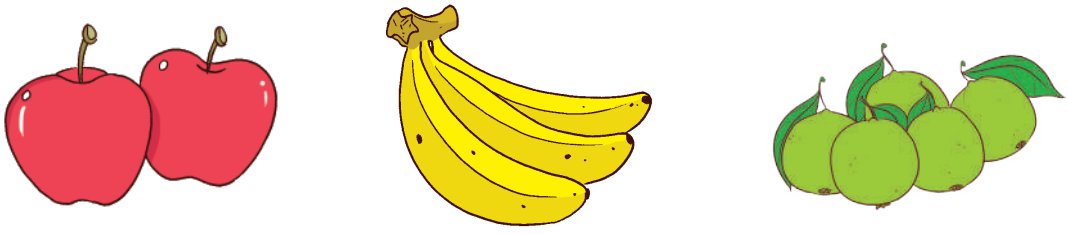


C. Write the number of sheep seen in the picture.



D. Draw any 4 fruits.

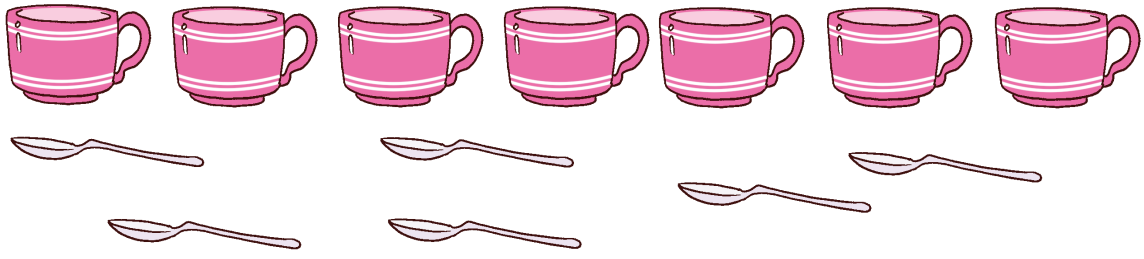
E. Which two groups together have 8 fruits? Encircle them.



F. Which two groups together have 7 umbrellas? Encircle them.



G. Which are less in number? Cups or Spoons? Encircle them.





Project Work

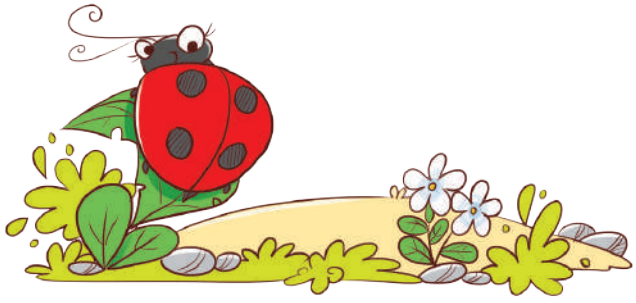
Ask children to make their own number cards 1 to 9. They can use different colour papers. They can stick or draw equal number of objects on the number card.

4 Making 10

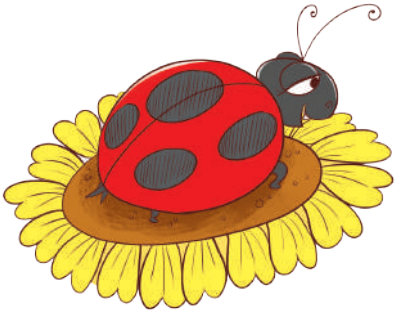
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Dotty Bug and her Designs

Have you seen a ladybug?
She has dots on her body.
Have you ever noticed the number of dots?



A. Write the number of dots on each bug.

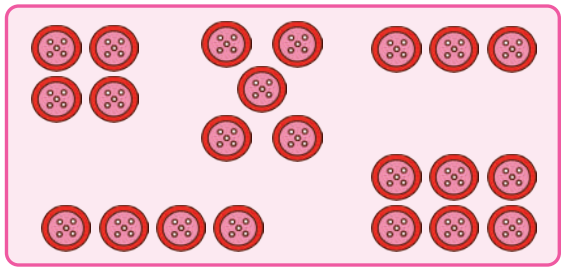




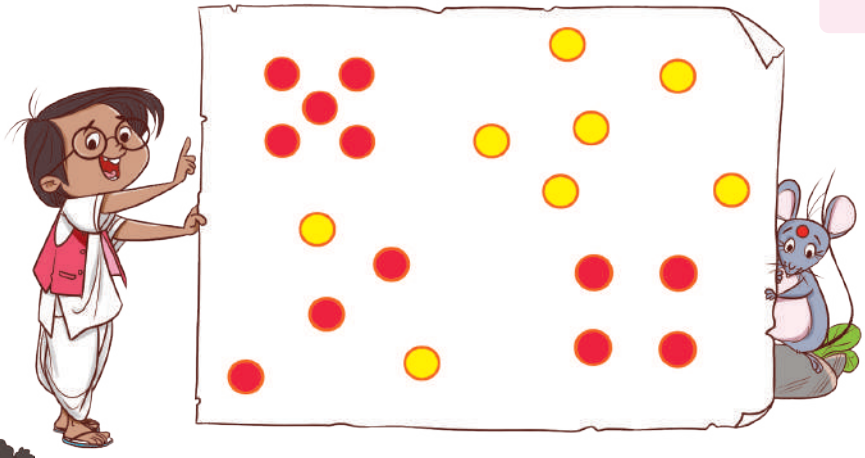




B. Make some dot designs with objects like tamarind seeds, pebbles, buttons, *bindis*, etc., and identify the number of dots in each arrangement.



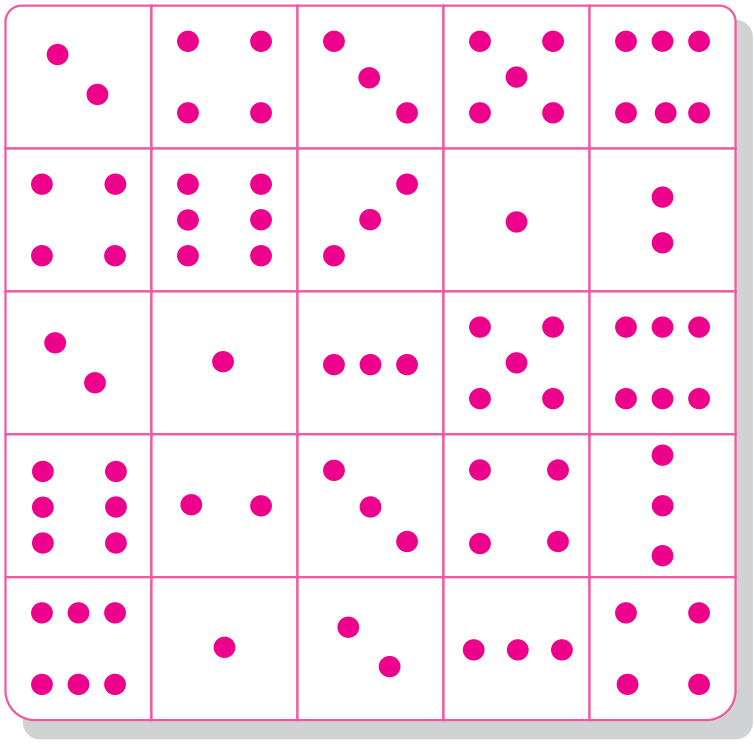
C. Identify and write the numbers formed by the arrangement of the red *bindis*.





Let us Play

D. Play with your friend. Roll the dice and colour a box with the same number of dots as on the dice. Take turns with your friend and roll again.



Choose the colour and fill it in the below boxes.

My colour ☐

Friend's colour ☐



The child with more number of coloured boxes will win.

Use the dot and colour flash cards to help children gain instant recognition of numbers without counting. This is called subitization. Make more cards with dot patterns of numbers 1 to ९ in different designs and sizes as required.



Vanishing Buttons

Gola monkey wears his favourite shirt with four buttons. He went to the garden and ate too many bananas as he was fond of them. What do you think happened then?

One of the buttons popped out and rolled away. But he cannot dream of giving up bananas and he keeps on losing all the buttons one by one.



Four



☐ Buttons



Three



☐ Buttons



Two



☐ Buttons



One



☐ Button



Zero

0 Buttons

Discuss the number of buttons left on the shirt at the end. Ask children to name objects, things around them whose number is zero. Let children understand that zero is also a number like one, two and other numbers. Discuss with children about the benefits of balanced diet and ill-effects of overeating.





Write the number of birds sitting on the branch of the tree.



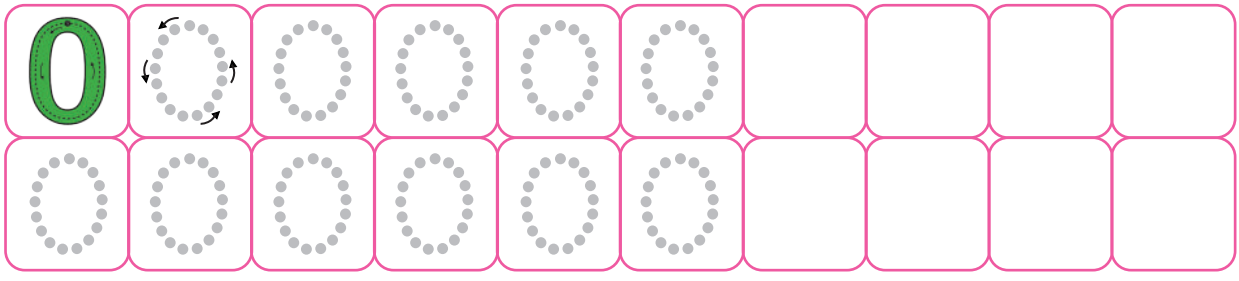








Write '0'





Think and Tell

A. How many suns do you see in the night?

B. How many moons do you see at noon?

Use concrete objects to demonstrate the idea of zero by reducing one object each time. Discuss the situations where something is absent and its number is called as 'zero' like there are 0 buses in the classroom. Also encourage children to count backwards from 5 to 0 initially and later from 9 to 0.





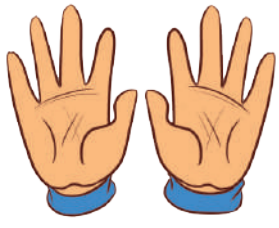
Tenth Birthday

It is Amawii's tenth birthday. Her father prepared cake for her. She is celebrating the birthday with her friends.





I was ९ years old and after 1 more year,
I am now 10 years old.
So, ९ and 1 more makes 10.



She has lighted ____ candle on her birthday.

Count and write the number of objects.



Beads ____



Laddoos ____



Crayons ____



Bananas ____

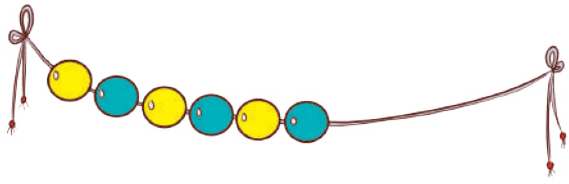


Leaves ____

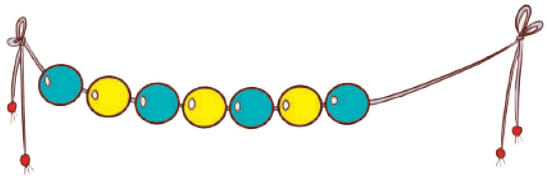
Let us Do

A. Count and draw beads to make a string of 10 beads.

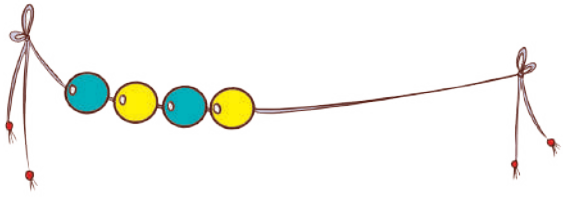
i.



ii.



iii.

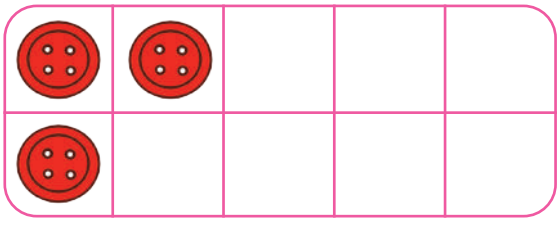


iv.

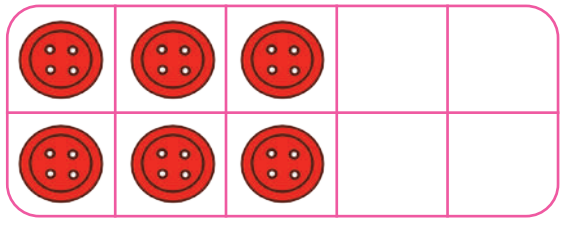


B. Draw buttons to make a ten frame of buttons.

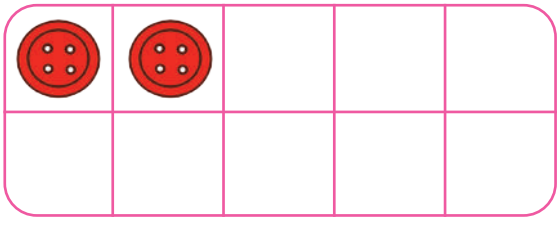
i.



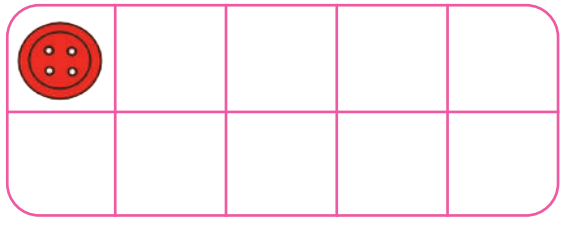
ii.



iii.

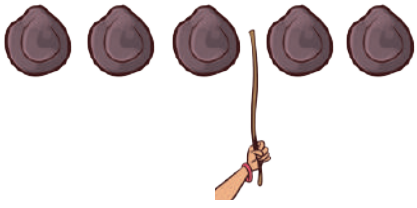
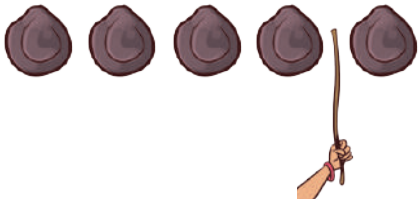


iv.



Number Pairs of Five

Follow the pattern and write the number pairs separated by the stick.

	1 and 4
	__ and __
	__ and __
	__ and __
	__ and __



Let us Play

Show 3 fingers. Your friend has to show some fingers to make it 5.

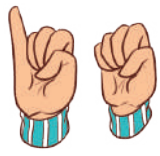
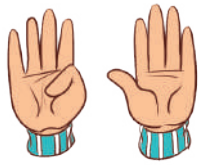
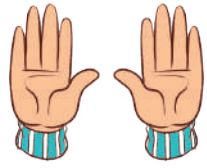
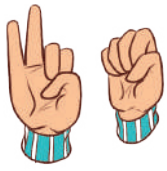
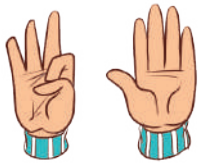
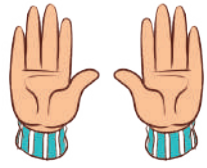
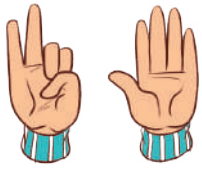
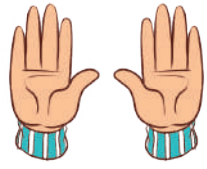
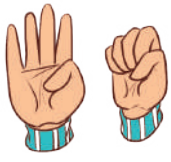
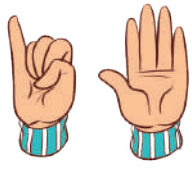
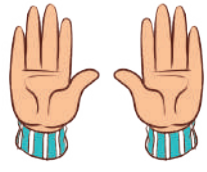
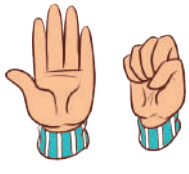
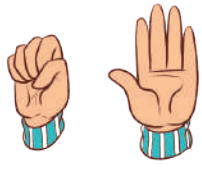
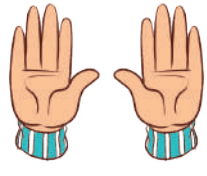




Number Pairs of 10

Let us play the finger game with our both hands. A child will show some fingers. The other child has to show the other fingers that are folded.

Follow the pattern and write the number pairs in the given table.

		=	
1	९	=	10
		=	
		=	
		=	
		=	
		=	
		=	
		=	
		=	



Let us Play a Card Game

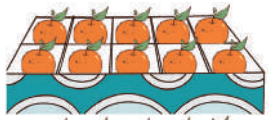
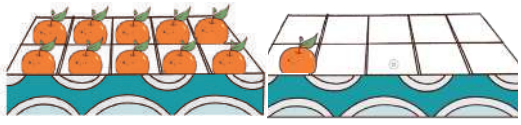
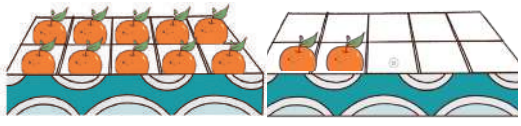
Number Cards (Sets of 0 to 10)

Make 5 sets of (1 to 10) cards. Keep all 50 cards face down. One child picks up a card and keeps it face up. The other child picks up another card and keeps it face up. If the pair of cards make 10 then the second student takes both the cards. And the turn goes back to the first student who will pick up another card. In the end the child with more number of cards will be the winner.



Counting up to 20

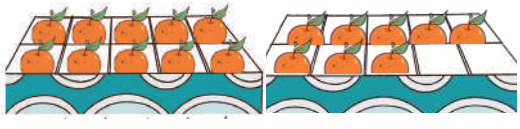
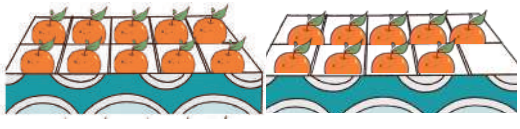
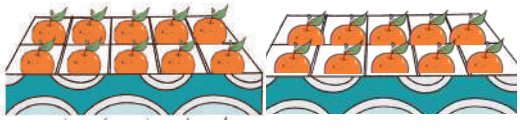
Simran lives in Nagpur. She is helping her father in packing oranges. A box can hold 10 oranges. Let us count the number of oranges.

	10	10 Ten
	10 and 1 is	11 Eleven
	10 and 2 is	12 Twelve

Have a discussion to help children to understand and remember the number partitions of 5 and 10. For example, if the teacher says 2, the child should respond 3, when doing partitions of 5. Similarly, if the teacher says 4, the child should respond 6, when doing partitions of 10. This is the time when children start counting beyond 10. Draw attention towards the fact that there is always a number one more than the previous number.





	10 and 3 is	13 Thirteen
	10 and 4 is	14 Fourteen
	10 and 5 is	15 Fifteen
	10 and 6 is	16 Sixteen
	10 and 7 is	17 Seventeen
	10 and 8 is	18 Eighteen
	10 and 9 is	19 Nineteen
	10 and 10 is	20 Twenty

Write the numbers 11–20.

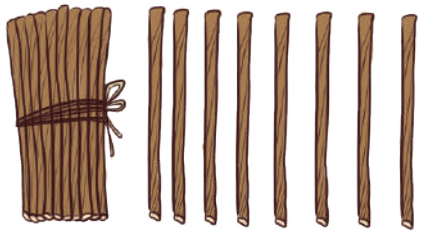
11	12	13	14	15	16	17	18	19	20
			14					19	
						17			
11									20
		13					18		
				15					
	12							19	

Help the children to count concrete objects up to 20 using groups of ten and units. Give them a handful of seeds or buttons not more than 20. Ask them to guess the number first, then group and count. How close was the guess? Let children reason out the basis for their guesses.



Count and Write

A. Count and write the answers.





B. Colour the tens frames to show the number.

14

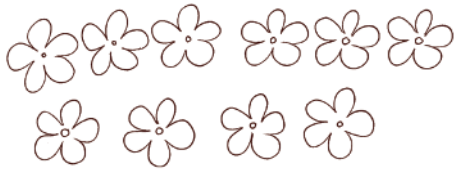
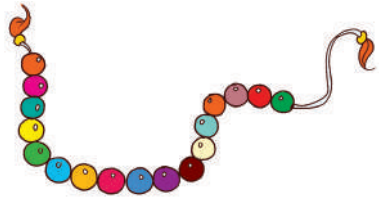
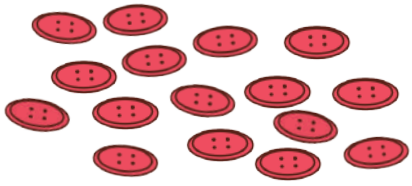
19

16

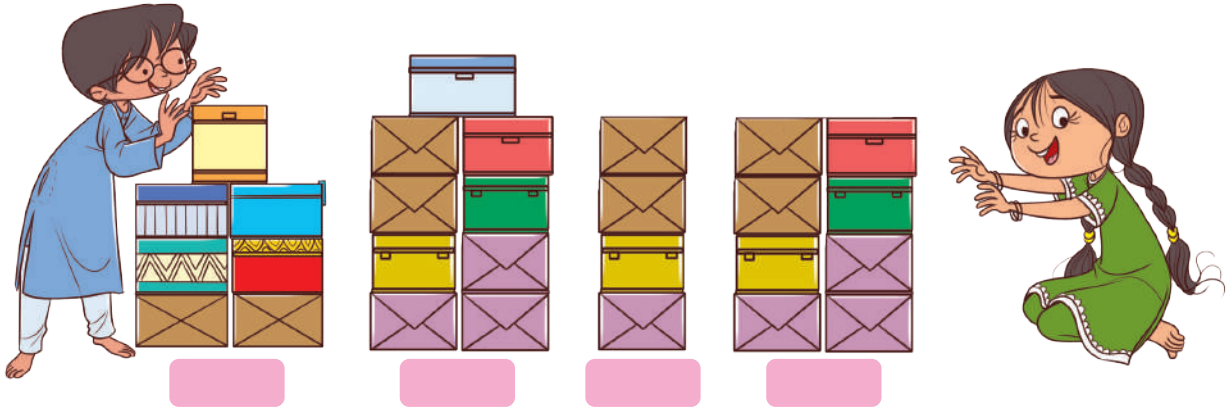
C. Write down the numbers in sequence.

1		3	
8		6	
9			12
	15		
			20

D. Encircle a group of ten in the pictures and match with the number.

	17
	16
	20
	10

E. A group of friends while playing built some towers.



i. Tick ✓ the tallest tower.

ii. Which tower used the most number of blocks? Write the number of blocks used in it. _____

iii. Which tower used the least number of blocks? Write the number of blocks used in it. _____

Let us Do

A. Circle the smallest number.

i. 8, 12, 6 ii. 14, 11, 19

B. Circle the biggest number.

i. 16, 19, 11 ii. 11, 17, 9

C. Find the numbers hidden under the paw.

i.	, 15, 16, , 18
ii.	, 12, , 14, 15
iii.	15, , , , 19
iv.	13, , 15, ,

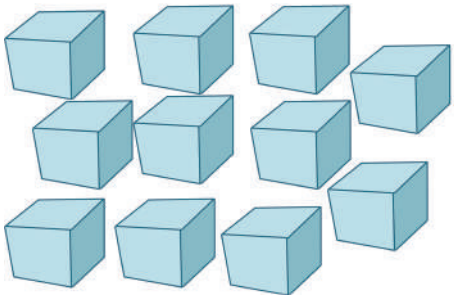


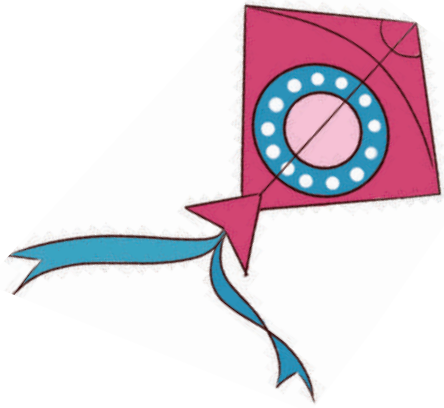
D. Write the numbers from the biggest to the smallest.
11, 3, 16, 20, 13, 9

Let children find out their ways to decide which number is bigger. Ask them why have they decided so. The children must understand that 15 is bigger than 11 because it is 4 more than 11 and similarly for other numbers up to 20.



E. Let us count and write.

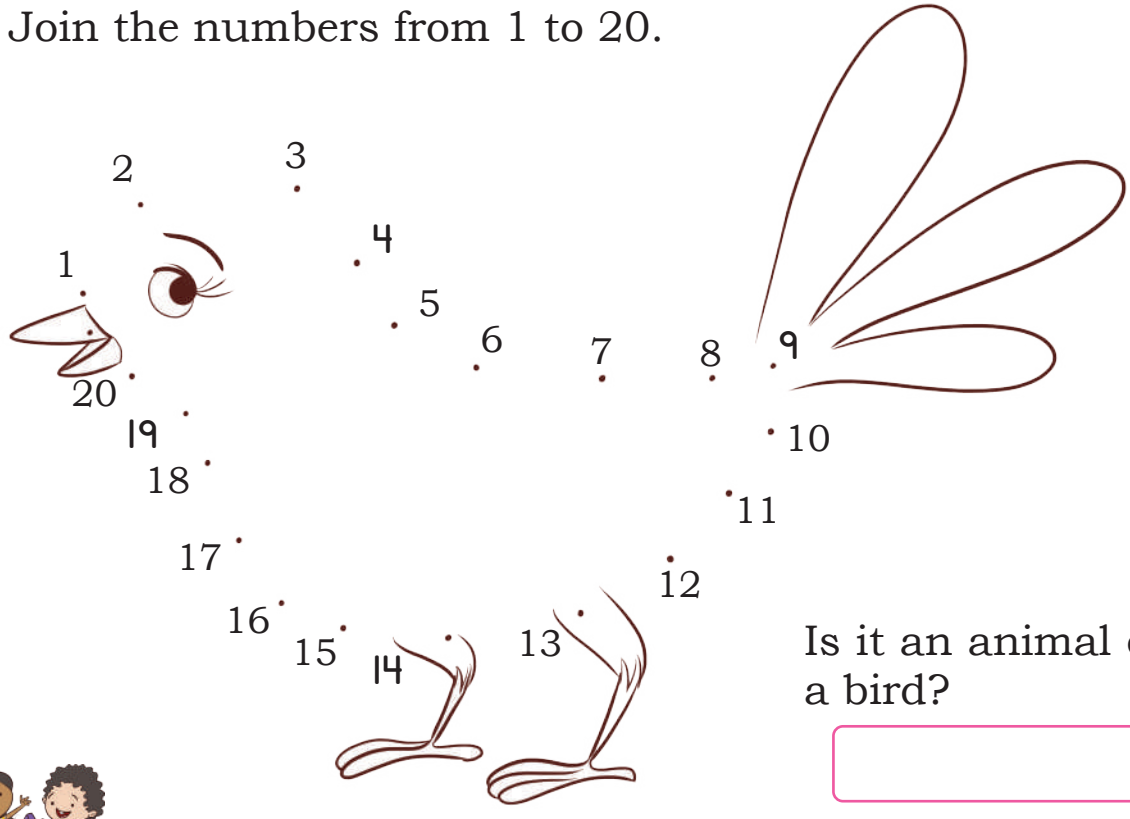




i. Number of blocks

ii. Number of white dots

F. Join the numbers from 1 to 20.



Is it an animal or a bird?



Project Work

A. Find out the things from your surroundings that are in the group of 10. For example, a tablet strips having tablets in the groups of 10.

B. Ask children to make their own number cards 10 to 20. They can use old cardboards, waste materials, etc.

Encourage children to recognise the group of 10, while counting the objects beyond 10.



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5 How Many?



Let children look at the picture and share what activities they do in the park. They may also discuss the number of people joining in the park, for example, how many children are playing in the first picture and how many joined them? Let children discuss or share the importance of spending time with grandparents and discuss ways of showing respect to them.



Tell How many Altogether? Fill in the Blanks.



4 children and 2 children altogether make ___ children.

4 + 2 = ☐



3 tops and 1 top altogether make _____ tops.

3 + 1 = ☐



3 ants and 2 ants altogether make _____ ants.

3 + 2 = ☐



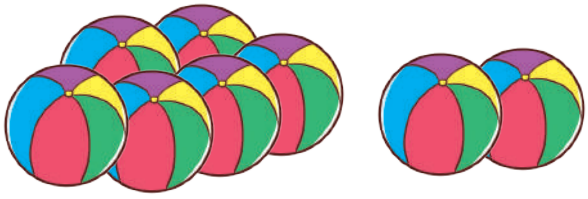
4 pencils and 3 pencils altogether make ____ pencils.

4 + 3 = ☐

Provide children enough opportunity to do addition with lots of concrete objects. Encourage children to find the total number of objects by combining two groups (aggregation) and also by adding more objects to an existing group of objects (augmentation). Practice work should be done with the children on both types of addition problems.



Add and Draw



_____

6 balls and 2 balls altogether make ____ balls.

6 + 2 = ☐



7 + 1 = ☐



Let us Count

A. How many brothers and sisters do your parents have altogether?

B. How many family members do you and your friend have altogether?

C. How many fingers do you have in both your hands and feet?

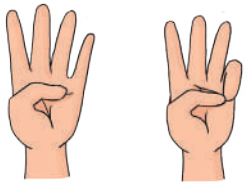
D. How many numbers can you count on your fingers?



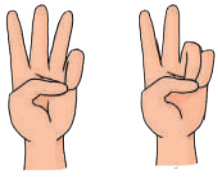
Encourage children to understand and say the addition sentences aloud. For example, 4 children and 2 children altogether make 6 children and connect the word 'make' with the symbol of addition (+) and 'altogether' with the symbol of equal to (=). Children should be provided opportunities to work with concrete material in developing the vocabulary like 'total', 'sum', 'altogether', etc., before progressing towards symbolic representation or addition of numbers.



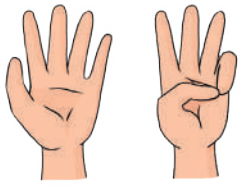
Count and write the total number of fingers.



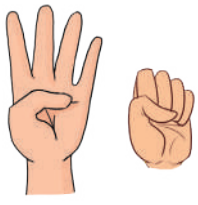
4 + 3 =



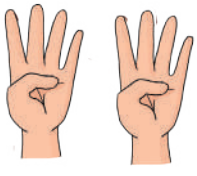
3 + 2 =



5 + 3 =



4 + 0 =

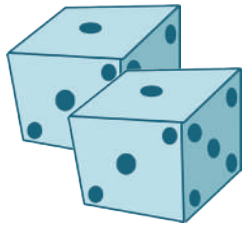


4 + 4 =



Let us Play— Addition with Dice!

Take turns and roll two dice together and find the total number of dots on both the dice. Now ask your friend to roll the dice and find the total number of dots. Find out who scores more.







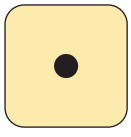
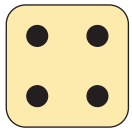
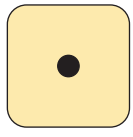
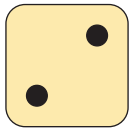
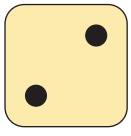
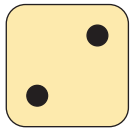
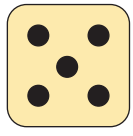
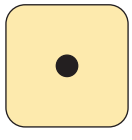
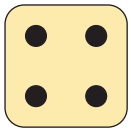
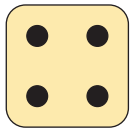
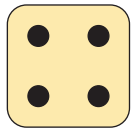
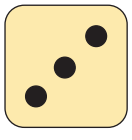
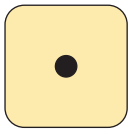
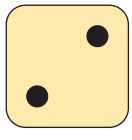
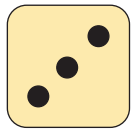
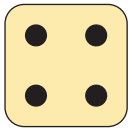
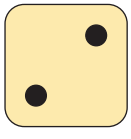
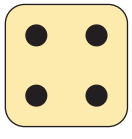
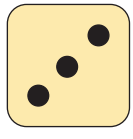
Let us Do

Khuma and Mawii also played the same game and here are their dots on the dice. Find out how many times Khuma won and how many times Mawii won by putting the (✓) on their score board.

	Khuma	Mawii
A.	✓	
B.		
C.		
D.		
E.		





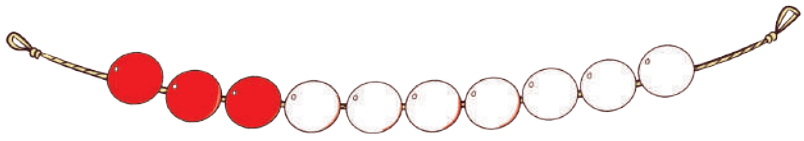
	Khuma				Mawii			
A.		and		= 6		and		= 5
B.		and		=		and		=
C.		and		=		and		=
D.		and		=		and		=
E.		and		=		and		=



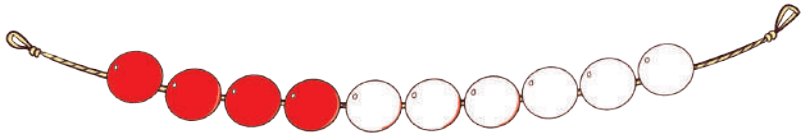
Beads and String

Colour the beads in the string as per the numbers given below and find the total number of coloured beads.

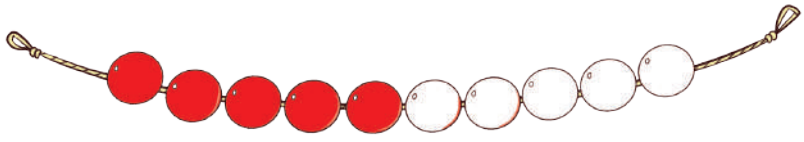
A. 3 + 4 =



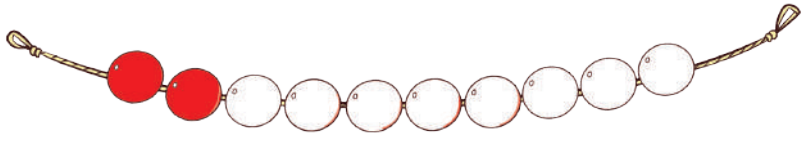
B. 4 + 2 =



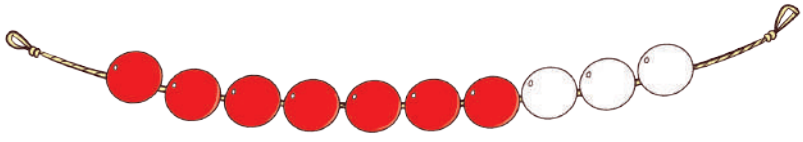
C. 5 + 4 =



D. 2 + 7 =



E. 7 + 3 =



Encourage children to play with beads' strings. Focus on the process of addition and discuss the strategies they are using.





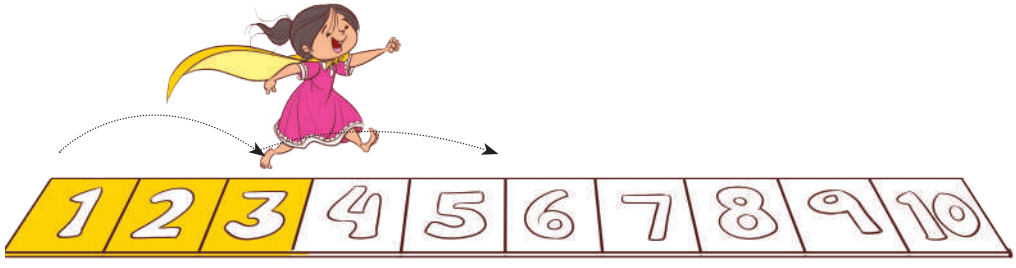
Hop and Find the Sum

Hop and colour the strip and write the sum in the given space.

4 + 2 = ☐



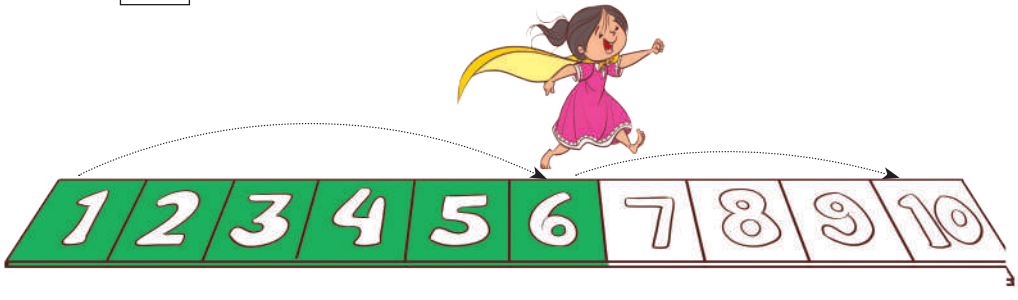
3 + 2 = ☐



5 + 3 = ☐



6 + 3 = ☐



Add in Your Own Way

Abel and Ruati are adding numbers in two different ways. Help them to find the sum.



$$\begin{array}{r} 2 \\ +\ 3 \\ \hline \end{array}$$

$2 + 3 =$ ☐

$$\begin{array}{r} 5 \\ +\ 1 \\ \hline \end{array}$$

$5 + 1 =$ ☐

$$\begin{array}{r} 3 \\ +\ 3 \\ \hline \end{array}$$

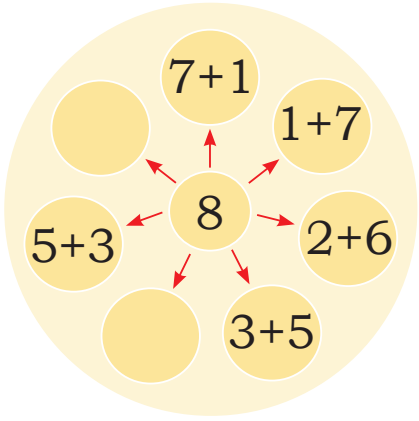
$3 + 3 =$ ☐

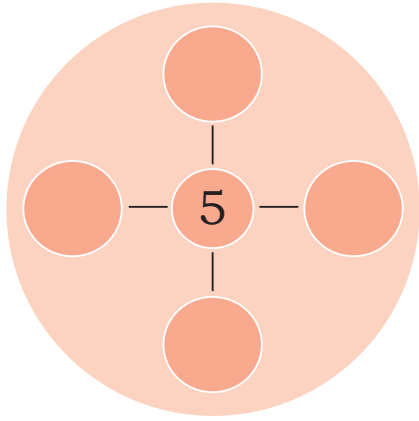
$$\begin{array}{r} 9 \\ +\ 1 \\ \hline \end{array}$$

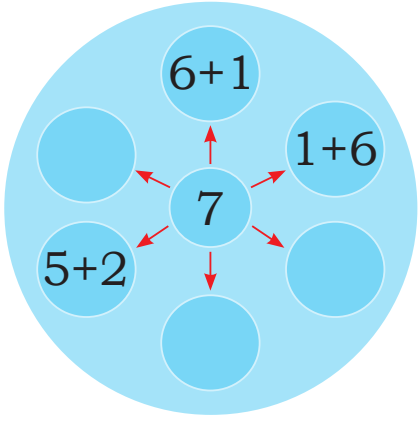
$9 + 1 =$ ☐

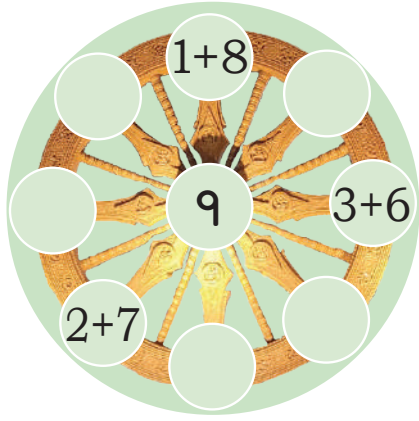
Let us Do

A. Fill up the number pairs.









Wheel in Konark Sun Chariot

B. Add and match the following.

1 + 4	5	4 + 2
6 + 3	6	3 + 4
5 + 2	7	3 + 2
0 + 6	9	5 + 4



Project Work

Take ten cards 0 to 9.

Arrange the cards in such a manner that their sum must be 9.

There are many ways to do it. In how many ways can you do it?

$\square + \square = 9$

$\square + \square + \square = 9$

$\square + \square = 9$

Addition Story

A. Rova  has 4 shells  and Sawmi  has 5 shells  . How many shells do they have altogether? ____

B. Remruata has 3 marbles  and Kimi has 6 marbles  . How many marbles do they have in total? ____

C. There are 3 coconuts  in one bag. There are 4 coconuts  in another bag. How many coconuts are there in all? ____

Let us see what we have in our bags.

Do it with your friend and write down the answers below.

A. I have ____ books in my bag  and my friend has ____ books. We both have _____ books in all.

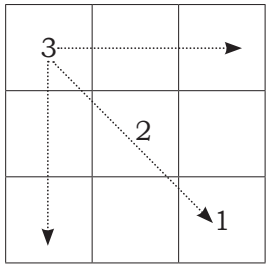
B. I have ____ pencils and my friend has ____ pencils. We have _____ pencils altogether.

C. I have ____ notebooks and my friend has ____ notebooks. We have _____ notebooks in total.



Think and Do

Write the numbers 1, 2 and 3 in the given table in a way as shown by the dotted lines so that each way adds up to 6.



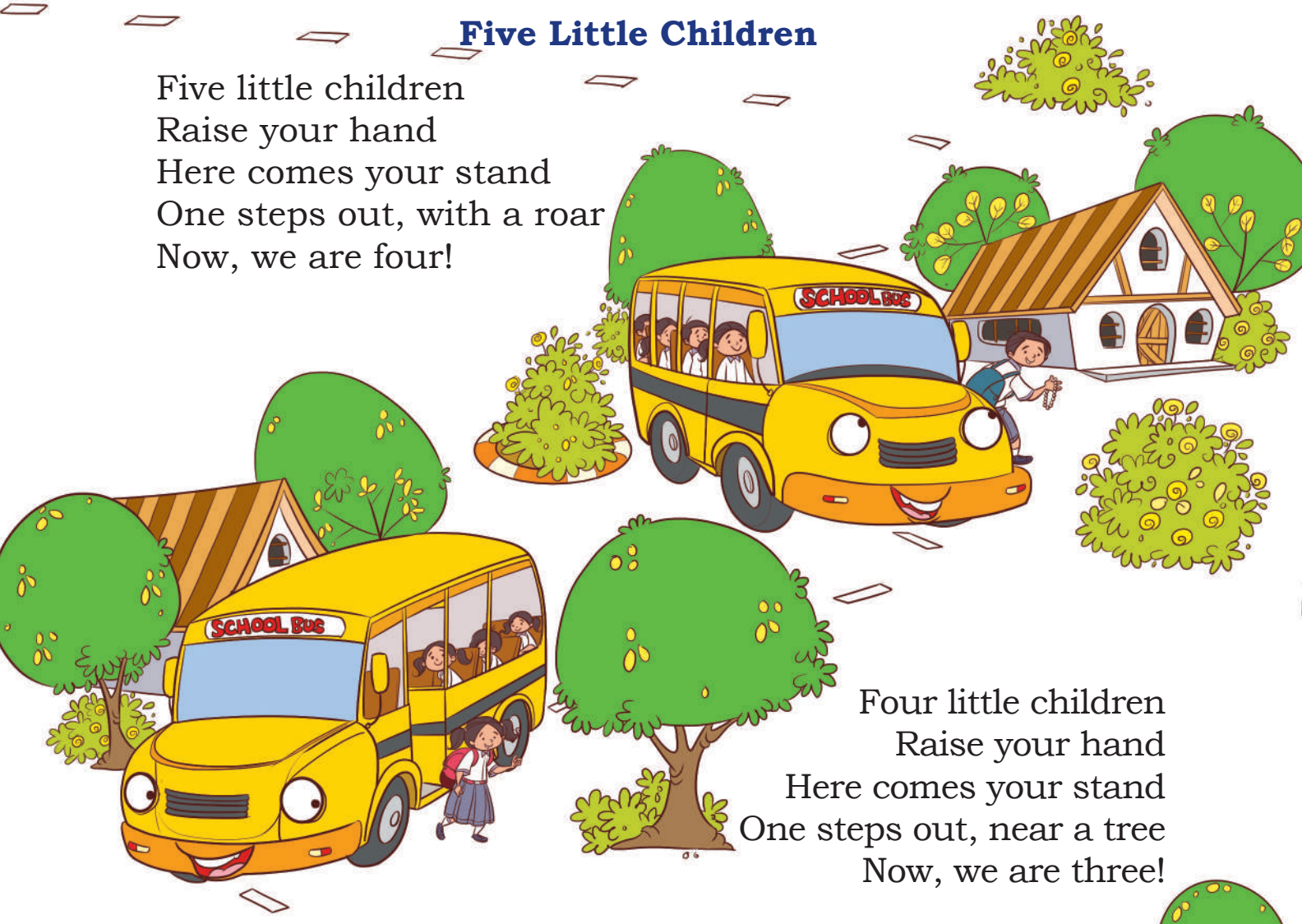
This activity can be conducted in pairs. Encourage children to create their own problems and questions. Also discuss in class about the world's oldest Sun Temple, Konark, Odisha refer to the image (Page 56) of wheel in Konark Sun Chariot.



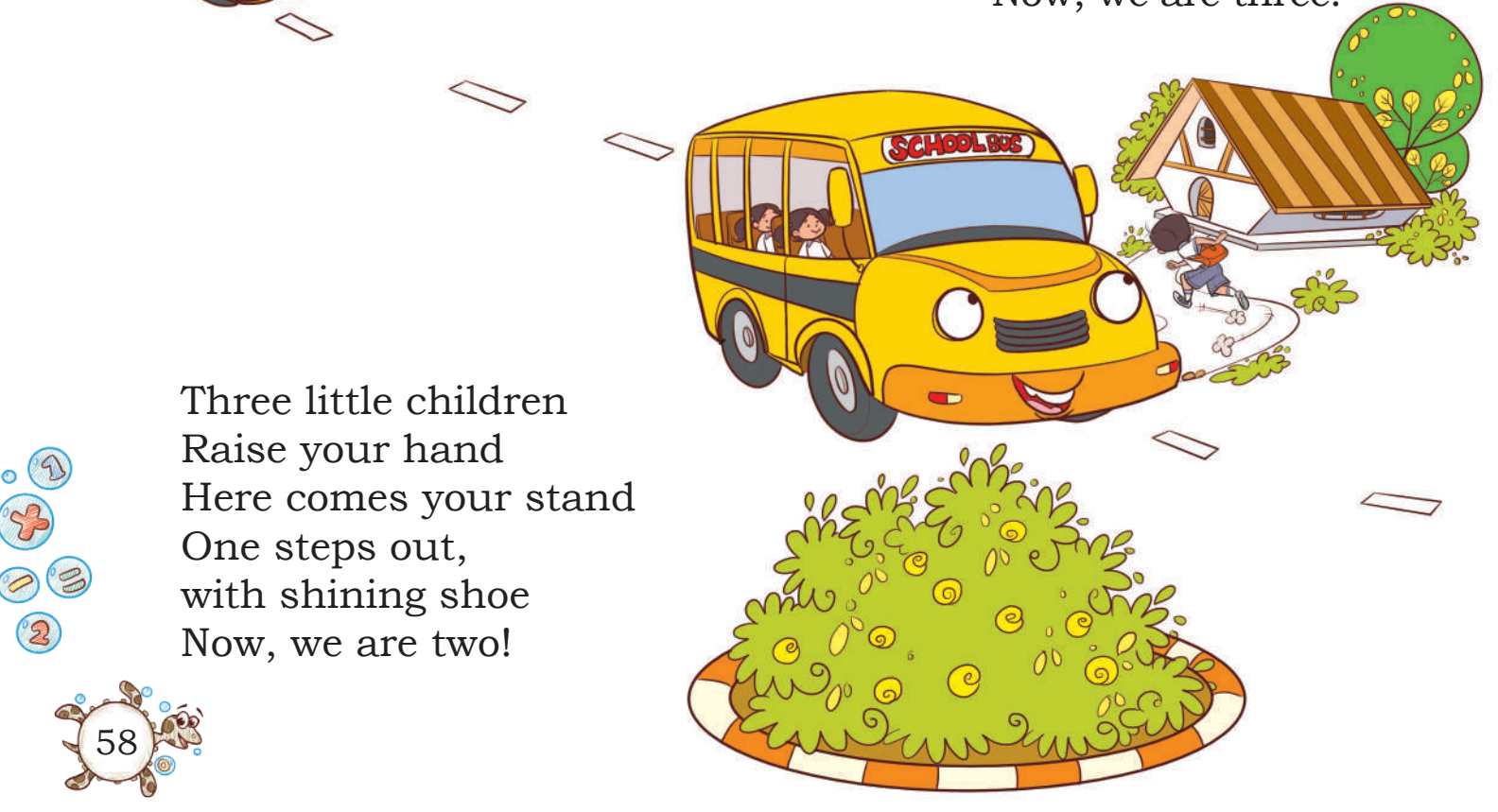


Five Little Children

Five little children
Raise your hand
Here comes your stand
One steps out, with a roar
Now, we are four!

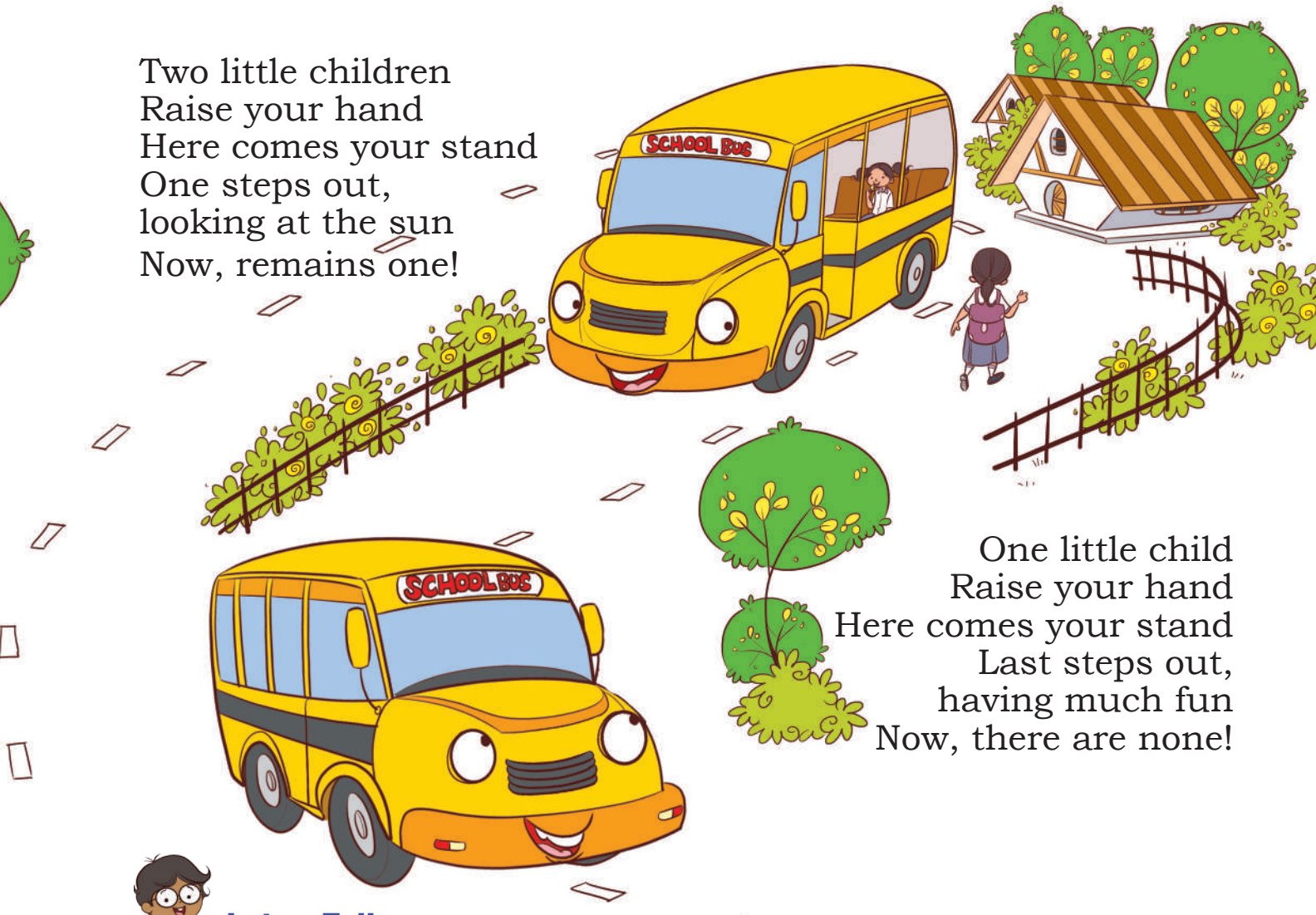


Four little children
Raise your hand
Here comes your stand
One steps out, near a tree
Now, we are three!



Three little children
Raise your hand
Here comes your stand
One steps out,
with shining shoe
Now, we are two!

Two little children
Raise your hand
Here comes your stand
One steps out,
looking at the sun
Now, remains one!



One little child
Raise your hand
Here comes your stand
Last steps out,
having much fun
Now, there are none!



Let us Talk

A. How many children are there in the bus at the beginning?

B. How many children get down from the bus on the first stand?

C. How many children are left in the bus after the first stop?

D. How many children are left after the second stand? Answer the same for third, fourth and fifth stand.

E. How many children are left in the bus at the end?



Project Work

Find out the number of people at your home. How many are going to school, for work and how many stay at home?



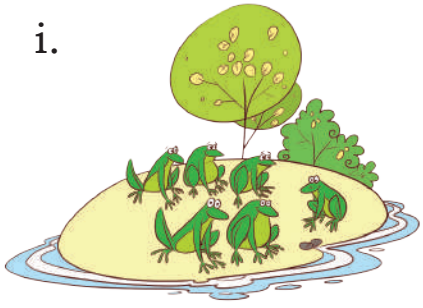


Let us Do

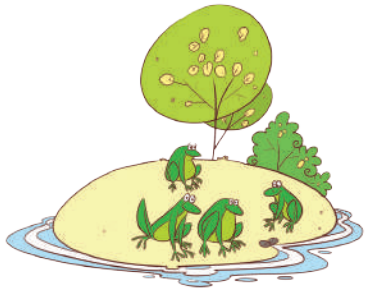
How Many Left?

A. Fill in the blanks.

i.







6 frogs 2 jumped away _____ left

6 – 2 = _____

ii.



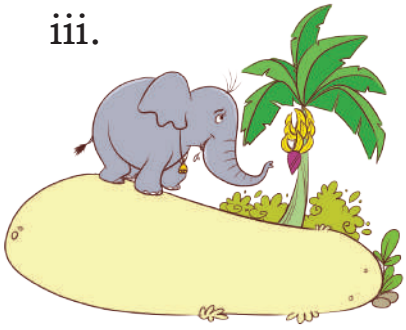


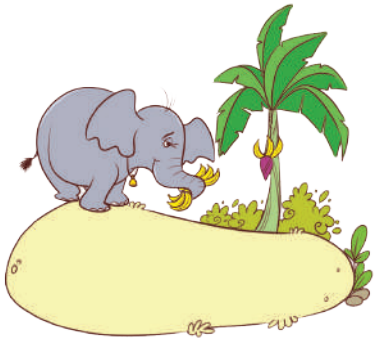


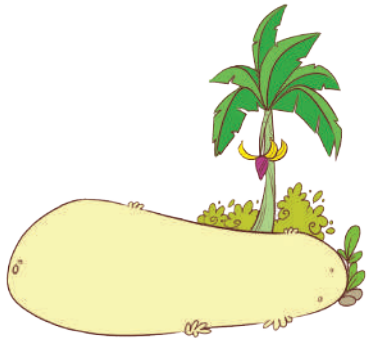
7 balloons _____ flew away 5 left

7 – 2 = _____

iii.







৭ bananas 6 taken away ____ left

৭ – 6 = _____



B. Draw the objects that are being left and fill in the blanks.

i.







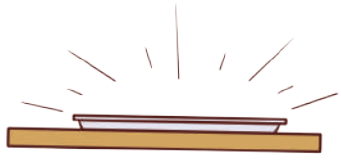
____ pots ____ pot broke ____ left

3 – _____ = _____

ii.







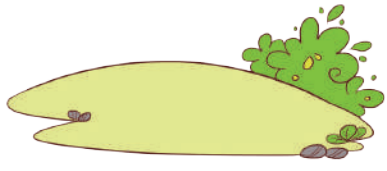
7 *laddoos* 4 eaten ____ left

7 – 4 = _____

iii.







7 balls _____ took away _____ left

7 – _____ = _____

C. Answer the following questions.

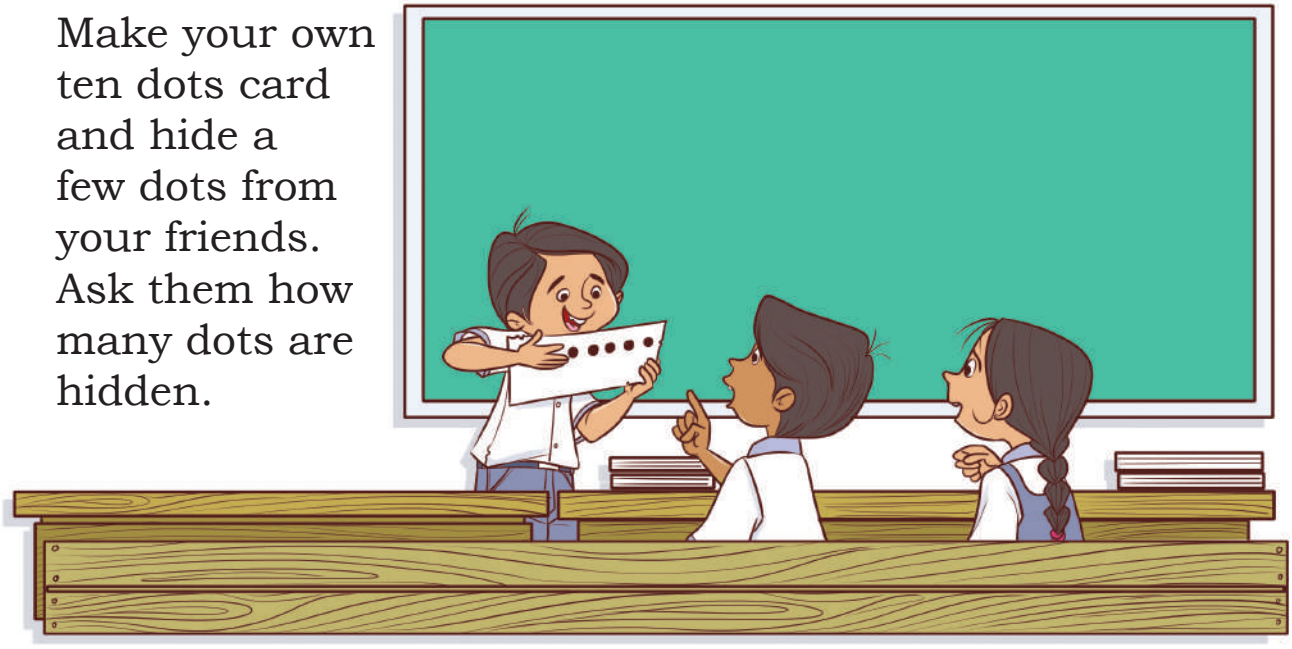
i. Muani  has 9 bananas  . She ate 3 bananas. How many bananas are left? ☐

ii. There are 8 butterflies  on the flowers. 5 butterflies flew away. How many butterflies are left? ☐



Let us Do

Make your own ten dots card and hide a few dots from your friends. Ask them how many dots are hidden.



How many dots are hidden and how many dots are visible?

Total Dots 10	Hidden Dots	Visible Dots
	0	10
		
		
		

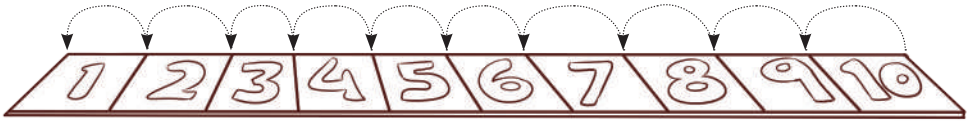




Project Work

Ask children to make a frame with 8 dots. Now hide few dots using their hands or handkerchief and see how many dots are hidden and how many are visible. Is there any pattern in the numbers? Extend this activity for other numbers. Is it possible to do this without hiding the dots?

Hop backwards on the number strip.

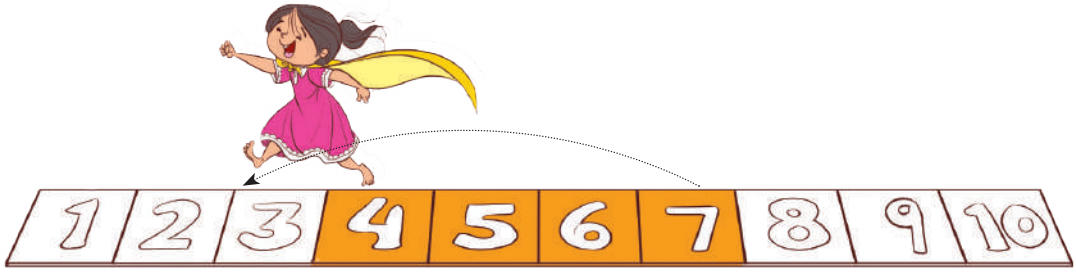


A. Jump 3 steps back from 9.



9 – 3 = 6

B. Jump 4 steps back from 7.



7 – 4 = ____

Do the subtraction in your own way.

A. 8 – 2 = ____

B. 7 – 3 = ____

C. 9 – 5 = ____

D. 6 – 3 = ____

E. 5 – 1 = ____

F. 4 – 2 = ____



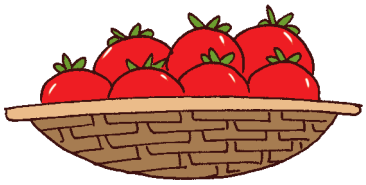
6 Vegetable Farm

QRickit

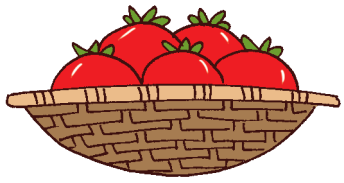
0124CH06



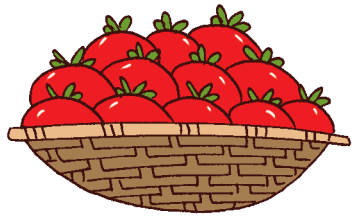
Ruata and Siami helped each other taking out vegetables from the field. Each of them took a basket and plucked the vegetables. Let's see how many vegetables they both took out.



Ruata's Basket



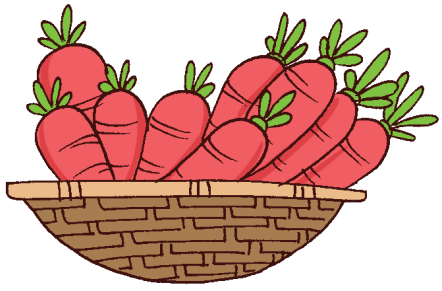
Siami's Basket

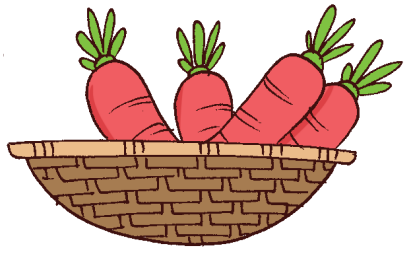


Both have

A. 7 tomatoes and 5 tomatoes altogether make 12 tomatoes.

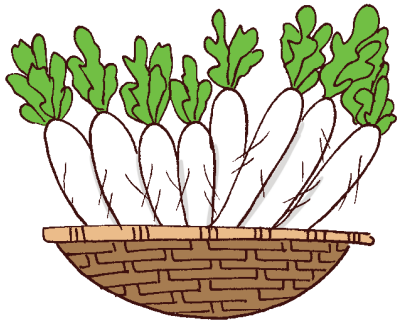
7 + 5 = _____

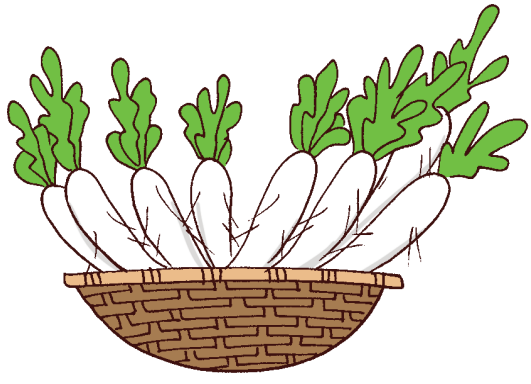




B. ৭ carrots in one basket and 4 carrots in another basket.

৭ + ৪ = _____





C. 8 radishes in one basket and 8 radishes in another basket.

8 + 8 = _____



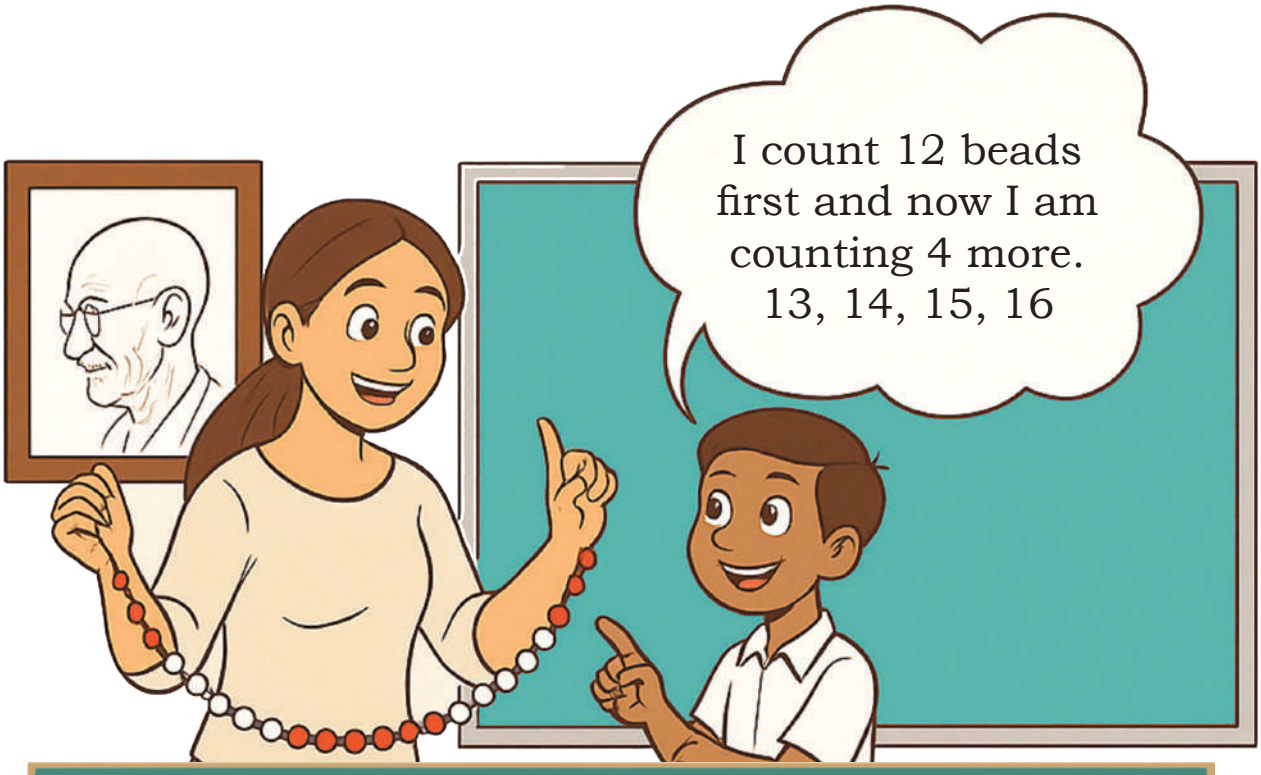
Project Work

Plant any vegetable sapling at your home, school or nearby place. Share your experiences with your family and take care of the sapling. You may draw or take pictures of the growing sapling.

Beads and Necklace

Let us Play



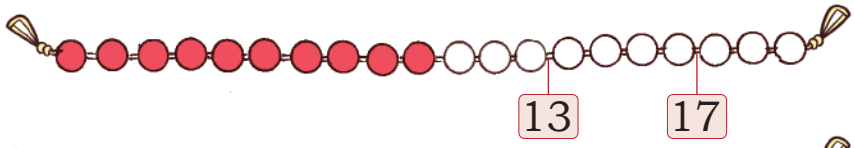


Ginladi is a string with beads used for counting, addition and subtraction.

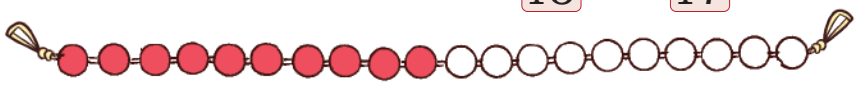


Show how you can add these numbers on *ginladi*.

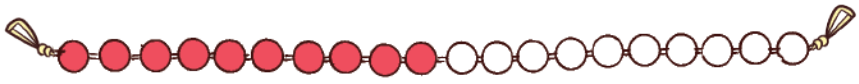
13 + 4 =



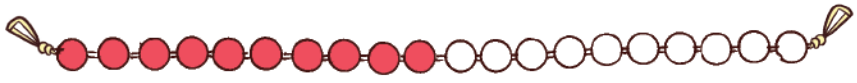
14 + 5 =



6 + 8 =



5 + 7 =



Hop and find the sum.



8 + 5 = 13

13 + 3 = ☐

2 + 16 = ☐

4 + 12 = ☐

5 + 3 = 8

☐ + ☐ = 13

☐ + ☐ = 10

☐ + ☐ = 18

Add in your own way.

A. Sangi has 12 coloured pencils  and Siami has 6 coloured pencils  . How many pencils do they have in all?

Sangi counted 12 and 6 more and got 18.

12 + 6 = 18



Discuss the process of addition. How do children count 12 and then further add 4? Discuss the strategies they are using.





Siami did it as

$12 + 6$

$10 + 2 + 6$

$10 + 8 = 18$



Can you do it differently?
Try and discuss with your teacher.

B. Arema has 8 *laddoos* and Chhana brought 6 *laddoos*. How many *laddoos* are there in all? ____



C. Seni has 12 bangles, she got 6 more from her sister. How many bangles does she have now? ____





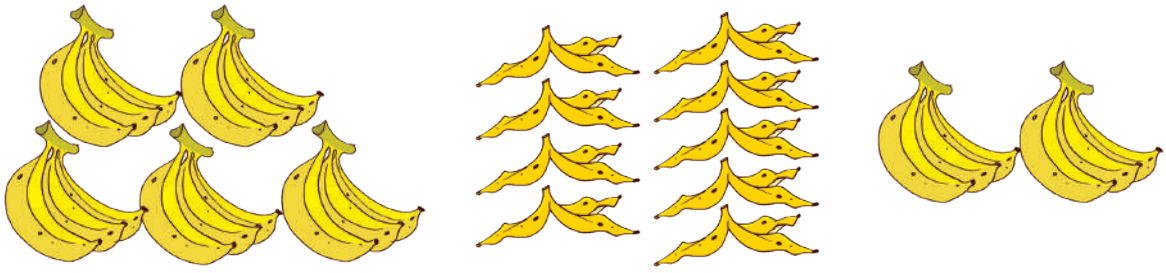
Let us Do

What would you like to bring for the picnic? Discuss with your friend. Draw the things you would like to take to the picnic and write the total number of eatables in the space provided.

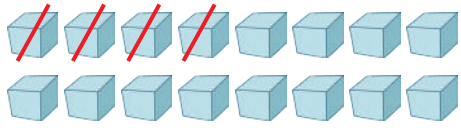
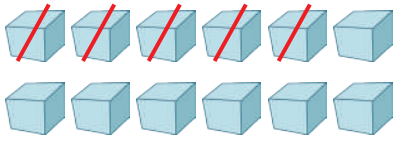
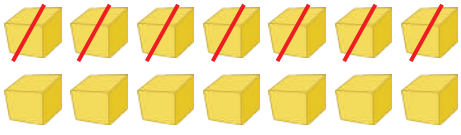
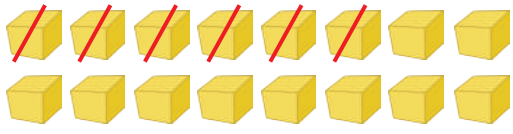


Subtraction

Subtract with some more numbers.



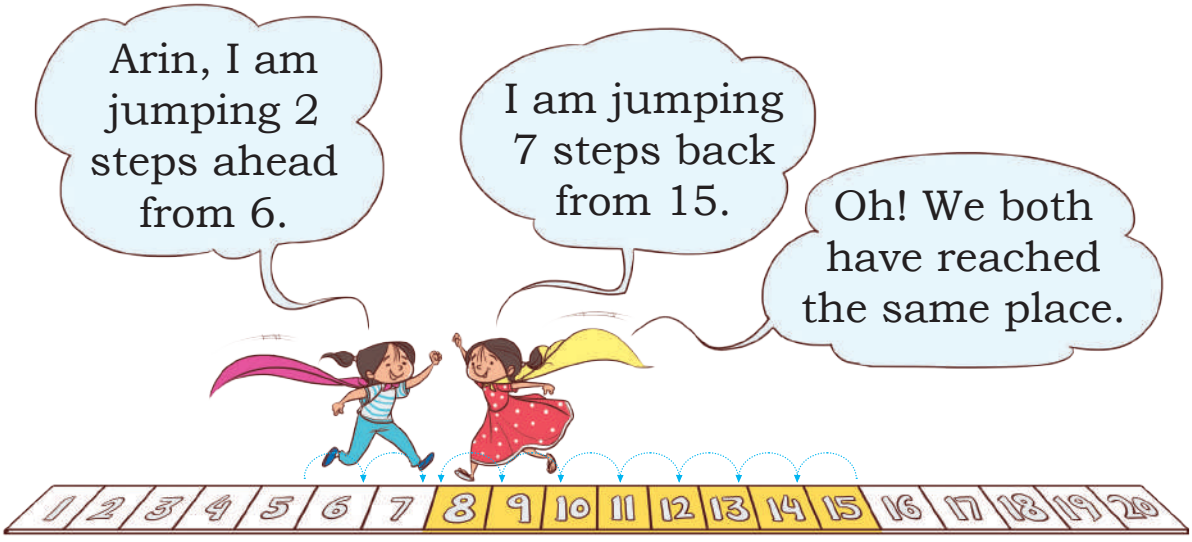
15 – 9 = 6

A.	 16 – 4 = ☐	B.	 12 – 5 = ☐
C.	 14 – 7 = ☐	D.	 16 – 6 = ☐
E.	 15 – 5 = ☐	F.	15 – 0 = ☐
G.	17 – 9 = ☐	H.	13 – 3 = ☐



Hop and Jump

Arini and Remi are playing by hopping and jumping.





Let us Do

Make a number strip in the playground or at home and find the different ways by which you can reach to the same place.

Add, Subtract and Match

8 + 7	12	15 – 3
9 + 9	15	18 – 1
10 + 2	14	17 – 2
16 + 1	17	18 – 0
11 + 3	18	16 – 2

Make similar questions and let children use their own strategies to solve these questions.

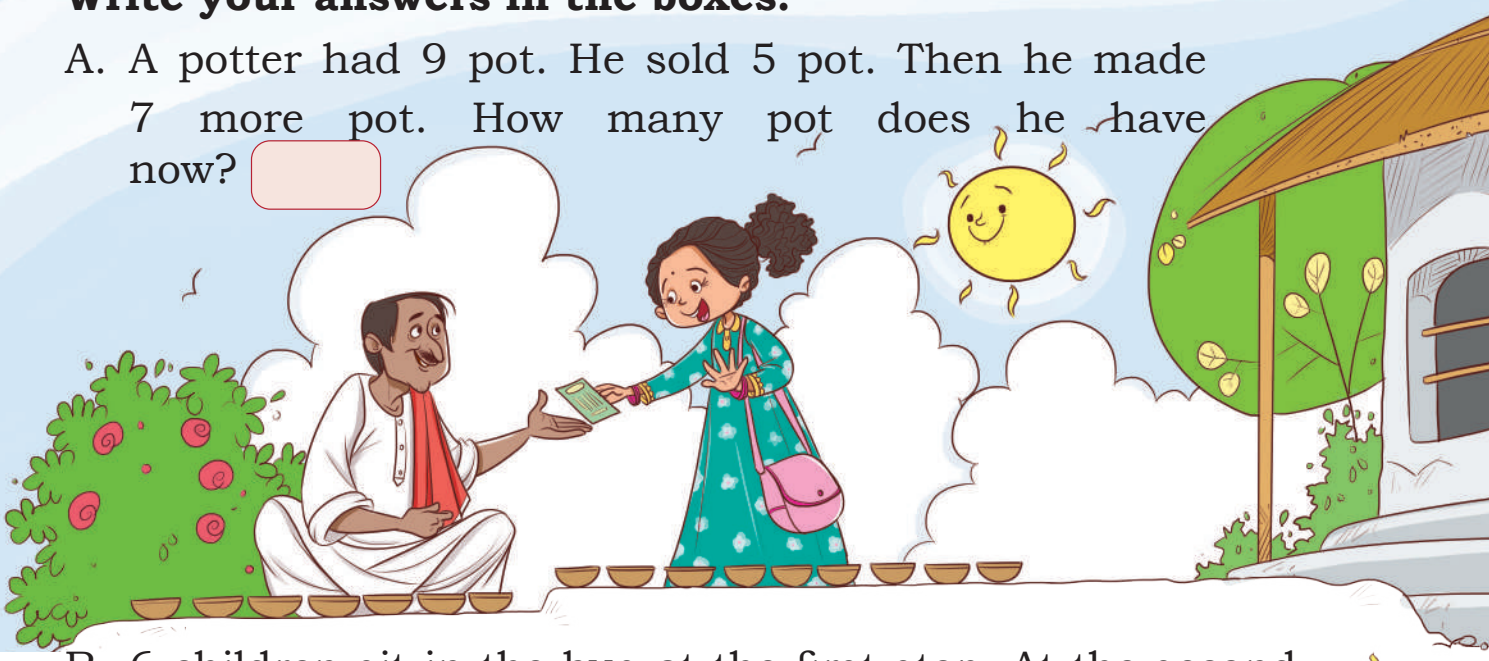




Problem Stories

Write your answers in the boxes.

A. A potter had 9 pot. He sold 5 pot. Then he made 7 more pot. How many pot does he have now?



B. 6 children sit in the bus at the first stop. At the second stop, 8 more children board the bus. 7 children get down at the third bus stop. How many children are there in the bus at the third stop?



C. There are 18 seats in a bus. If 9 children are already sitting in it, how many more children can sit inside the bus?

D. Kimi got 14 toffees in her box. She shared few toffees with her friends. She was left with 6 toffees. How many toffees did she share with her friends?

E. Rova got 12 bananas and ate a few of them. He is left with 5 bananas. How many bananas did he eat?

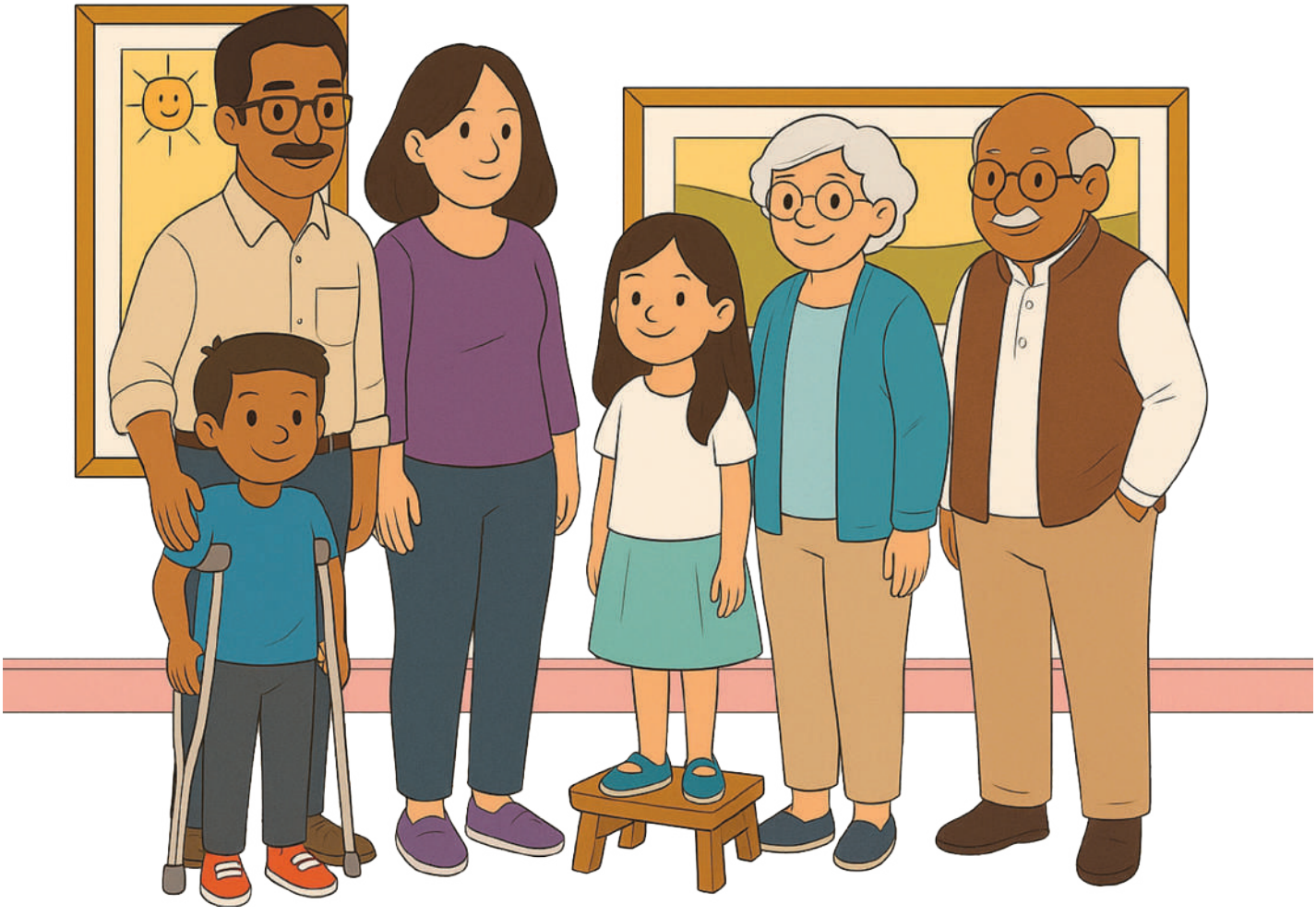
QRickit

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7 Linda's Family

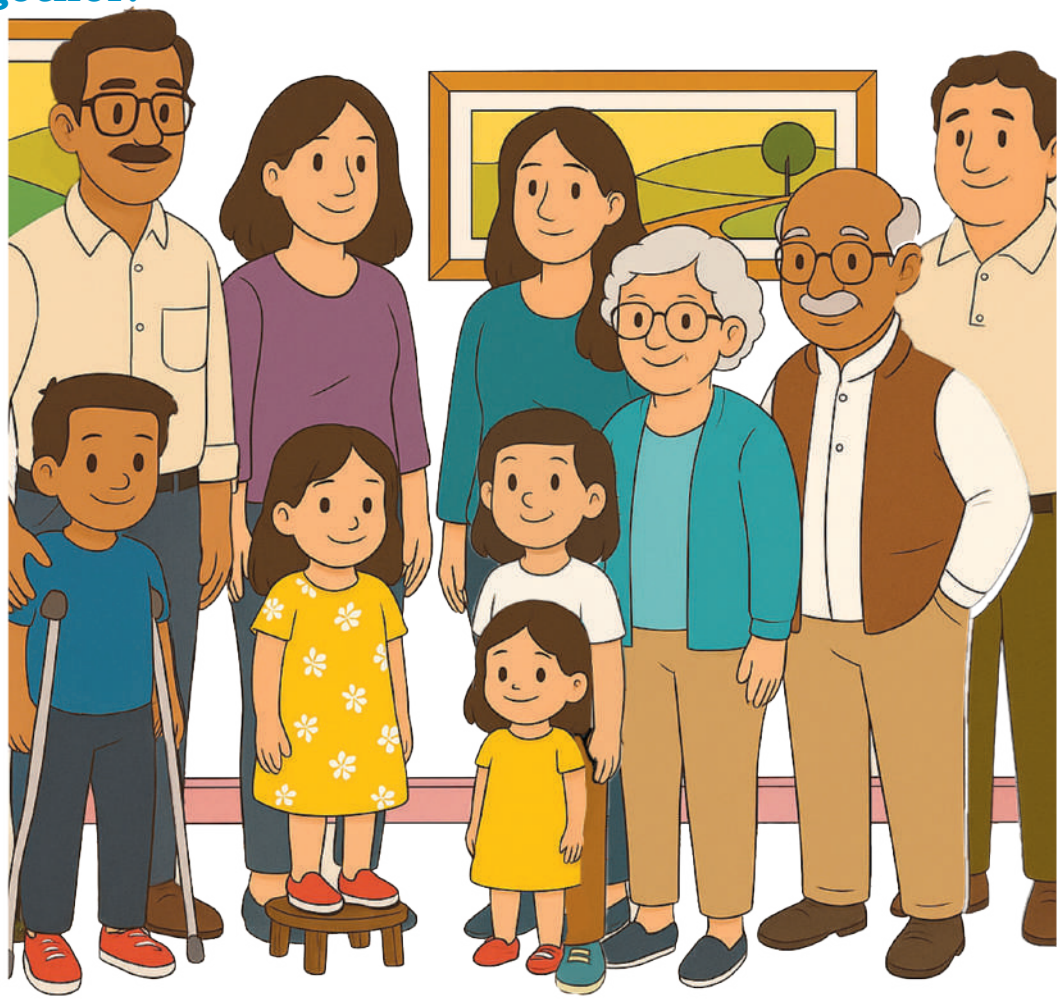
Linda's Family Get Together

Linda stays with her family in a village. She stays with her grandparents, parents and a brother Shanbor. Her uncles, aunts and cousins live near to their house.



Linda is standing on the stool. She likes to be tall. Find out and circle the tallest member in the family.

Linda's family invited all the family members for a get together.



Let us Talk

A. How many members are there in Linda's family?

B. Tick the tallest member in the family.

C. Draw a cap on the shortest family member.

D. Draw a moustache for the one who is taller than Linda's mother but shorter than Linda's father?

E. Who is the tallest and shortest member of your family?

F. Who is the tallest child in your class?

G. How many children in your classroom are taller than you?



Linda lives in a hut-shaped house in a hilly area. Can you locate her house in the picture? Circle the correct options:

A. Her house is **nearest to/farthest from** the shop and **nearest to/farthest from** the school.

B. The school is **nearest to/farthest from** the shop and **nearest to/farthest from** the red roof houses.

C. The child is **nearest to/farthest from** the school bus and **nearest to/farthest from** the red roof house.

Amazing Facts

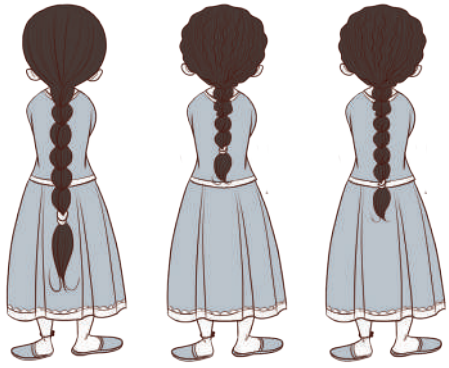
This is a statue of Sardar Vallabhbhai Patel also called the Statue of Unity. It is the tallest statue in the world and is located in Gujarat, India.



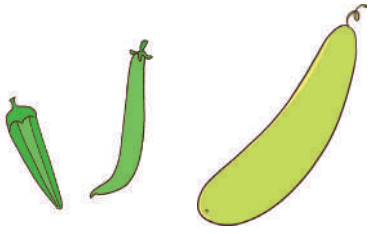
Let us Do

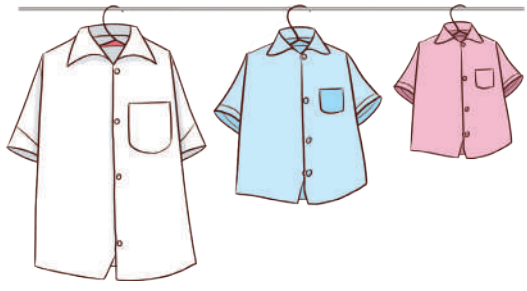
A. Tick ✓ the one which is longest.

i. 

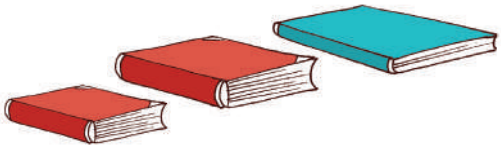
ii. 

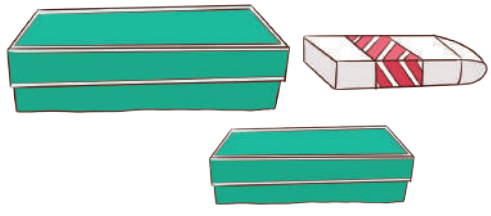
B. Tick ✓ the one which is shortest.

i. 

ii. 

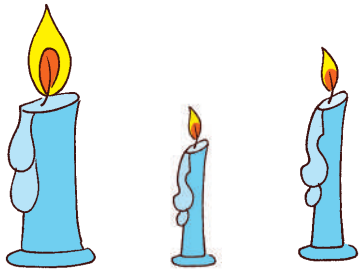
C. Tick ✓ the one which is thickest.

i. 

ii. 

D. Tick ✓ the one which is thinnest.

i. 

ii. 

Think and Do

Draw a stick or bamboo longer than this—



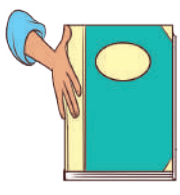
Draw a rope shorter than this—



Remi's grandmother is checking the length of Remi's sweater by a handspan.

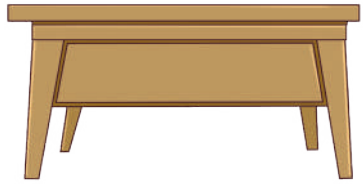


Remi also wants to find out the length of the stick, table, pencil and notebook using her handspan.









Think and Answer

A. My table is _____ handspans long.

B. My bag is _____ handspans long.

C. My classroom blackboard is _____ handspans long.

D. My Maths book is _____ handspans long.

E. My arm is _____ handspans long.

F. My friend's arm is _____ handspans long.

Can Remi use a handspan to find the length of all these things? Find out and circle the things which are shorter than a handspan in the picture below? Can we use fingers also to find the length of these things?



Let us Do

What would you choose, handspan or fingers to find the length of these objects and why? Circle your options in the table. Try to guess before finding the length of these objects.

Name of the things	Circle, what will you use?	My guess	My findings
Bottle 	 handspan or fingers		
Book 	 handspan or fingers		
Pencil 	 handspan or fingers		
My friend's nose 	 handspan or fingers		
Leg 	 handspan or fingers		
Pencil Box 	 handspan or fingers		

Measure by footspan	My guess of footspan	My findings of footspan
Distance between my seat and the door of the classroom		
One side of classroom		
Distance between the bed and washroom		
Distance between two walls of your room		

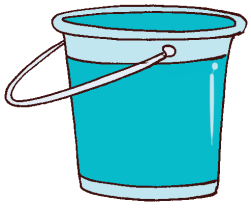




Let us Do

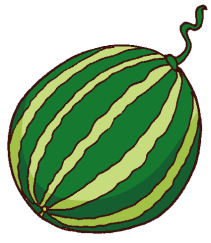
A. Tick ✓ the heavier object.

i.





ii.





B. Tick ✓ the lighter object.

i.





ii.





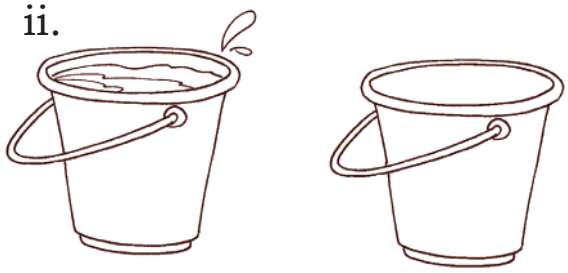


C. Colour the heavier object.

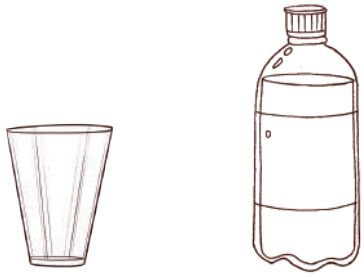
i.



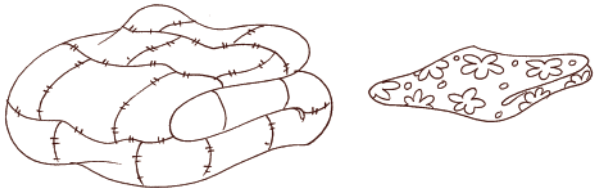
ii.



iii.

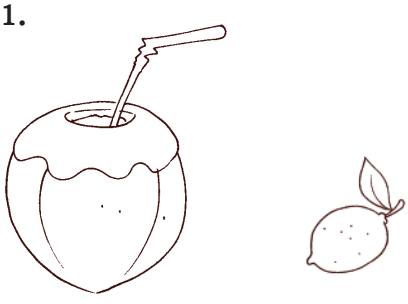


iv.

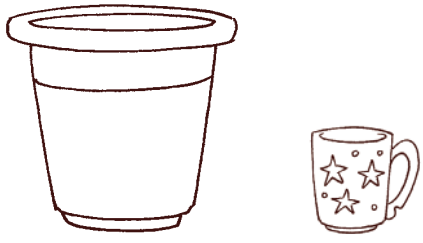


D. Colour the lighter object.

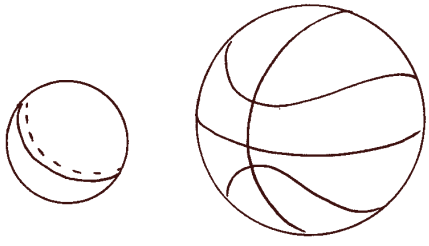
i.



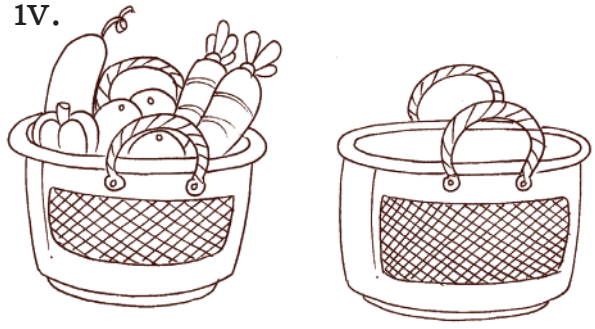
ii.



iii.



iv.





Let us Talk

A. Who is heavier between you and your friend? How will you find out? Discuss in the class.

B. Find out your weight. Can you tell how and where your weight is usually checked?

Let us Do

A. Fill the bucket with water.



i. _____ jugs of water will fill the bucket.

ii. _____ glasses of water will fill the bucket.

iii. _____ bowls of water will fill the bucket.

B. Answer the following questions.

i. How many cups of water will fill your water bottle?

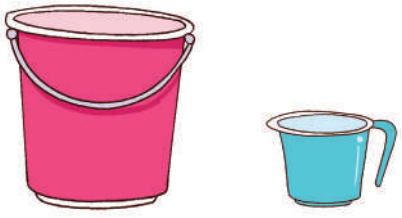
_____

ii. Now fill your friend's water bottle with the same cup. How many cups of water will fill your friend's bottle?

_____

iii. Which bottle holds more water? _____

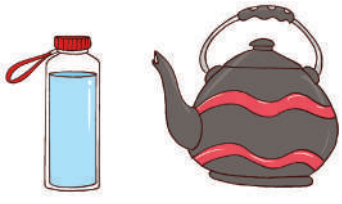
C. Circle the one which holds more water.









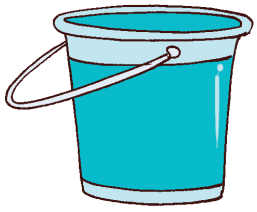


D. Water is very useful for us.

Tick ✓ the amount of water you need for the given activities.

i. 

For brushing the teeth



A bucket full of water



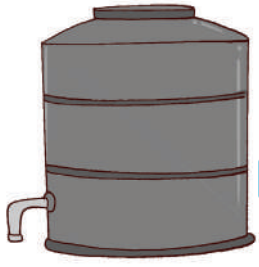
A mug full of water

ii. 

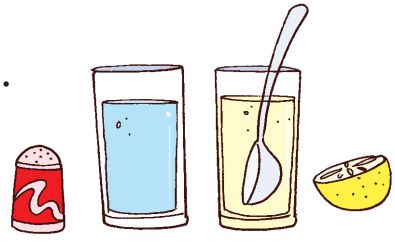
For bathing



A bucket full of water



A tank

iii. 

For preparing 2 glasses of lemon water



A jug of water



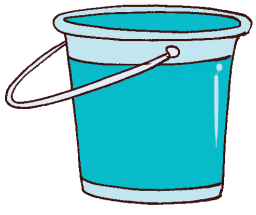
A bucket of water

iv. 

For watering a plant



A mug of water



A bucket of water



Project Work

A. Discuss why is it important to take water in a bucket for bathing instead of shower or running tap water.

B. Tear and paste colourful paper strips to make one portion of the strip short and another longer. The strips should be of different sizes.

Shorter These are shorter	**Longer** These are longer

C. List things which are easier to carry and which are difficult to carry.

Easier to carry	**Difficult to carry**

D. Get bottles, bowls and glasses of different sizes. Now see how many glasses or bowls of water can fill the bottle. Which of these can hold more water?

Ask children how many glasses of water they drink in a day. Discuss and sensitise them about water getting wasted around them, what they would do if water is left in the glass, should it be thrown or given to the plants. Also discuss other ways of saving water like closing the tap when not in use, reusing water, etc.



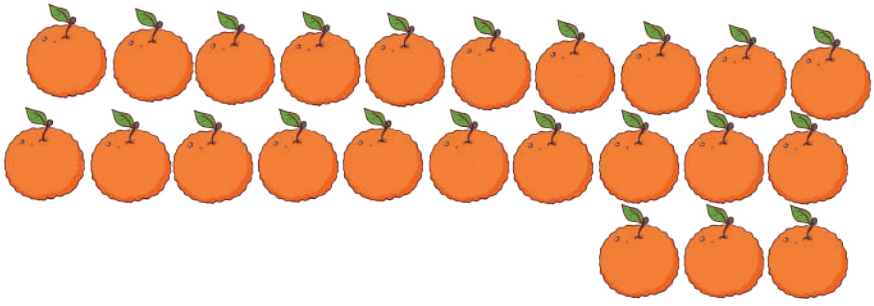
Fun with Numbers

8

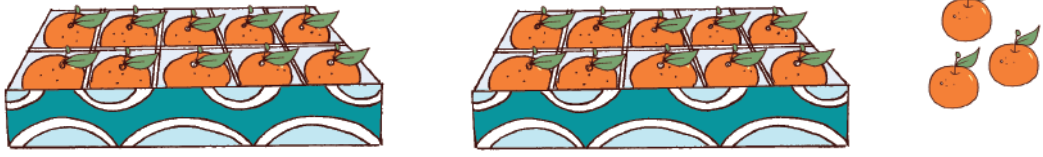
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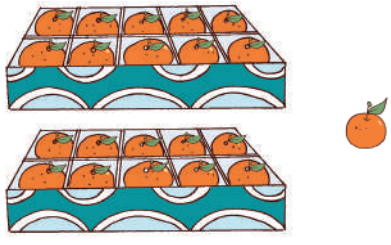
Siami was putting oranges in boxes. Each box can hold 10 oranges. How many boxes would she need?

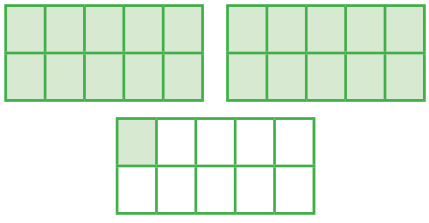


She packed them in boxes.

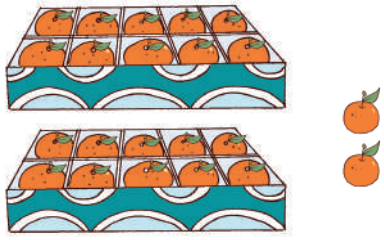


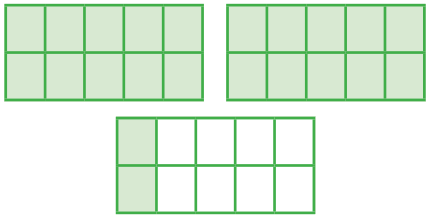
Do you know how many oranges are there?



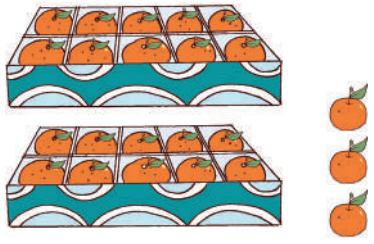


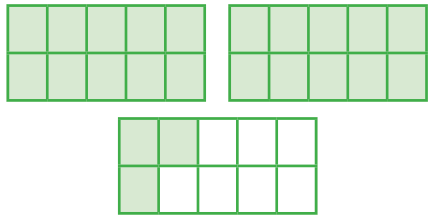
21
Twenty One



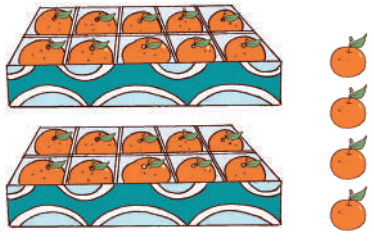


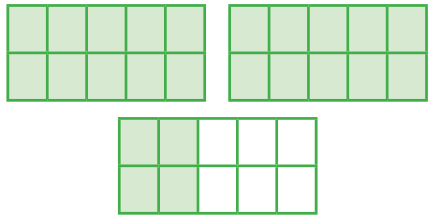
22
Twenty Two



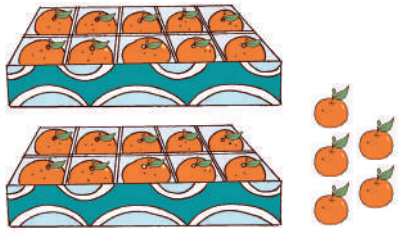


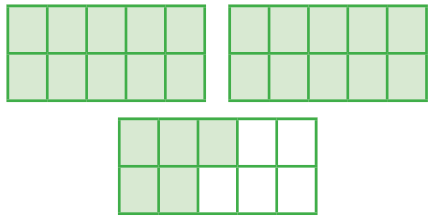
Twenty Three



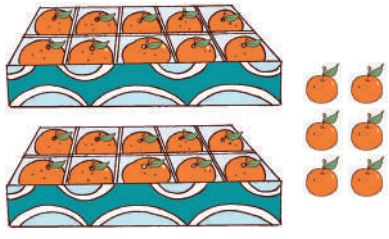


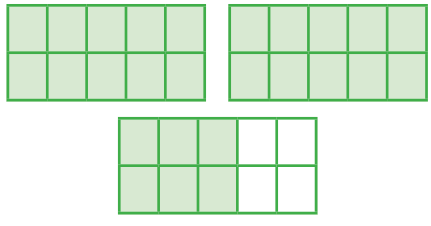
24 Twenty Four



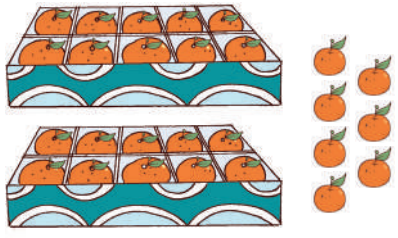


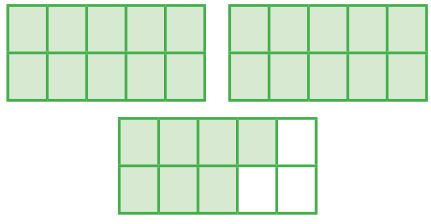
Twenty Five





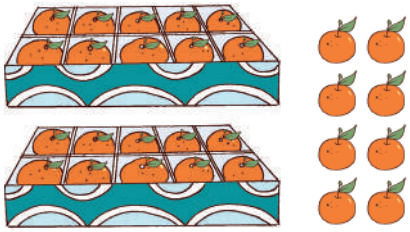
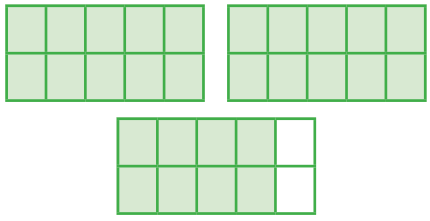
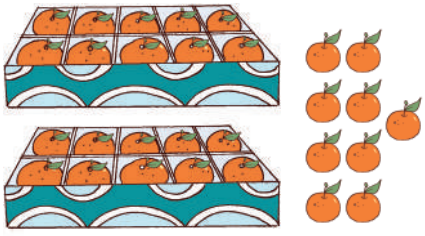
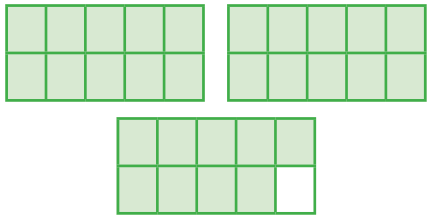
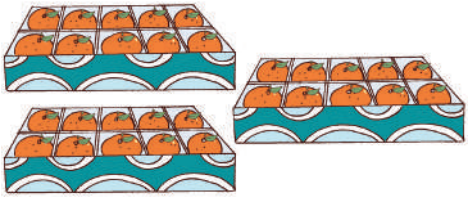
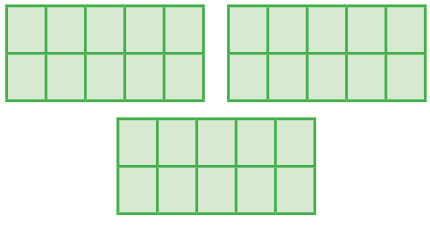
Twenty Six





27 Twenty Seven

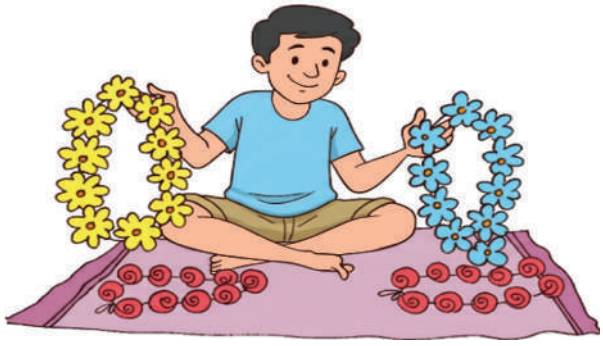


		28 Twenty Eight
		 Twenty Nine
		30 Thirty

Write 21 to 30

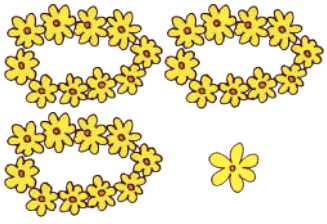
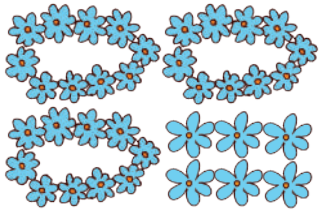
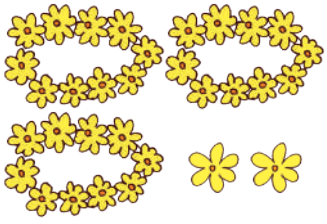
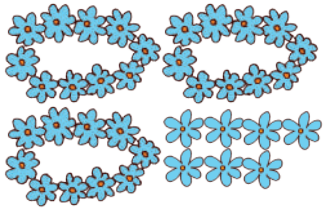
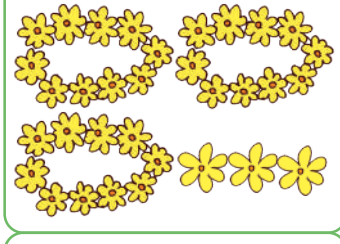
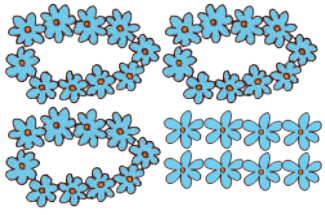
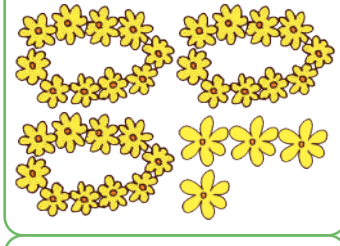
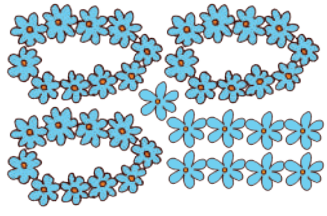
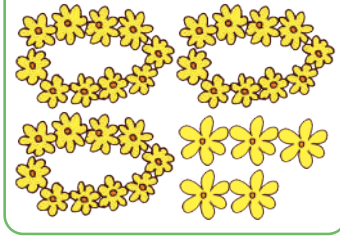
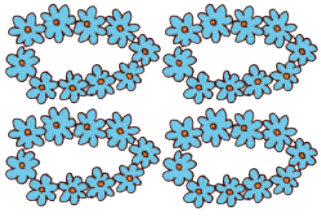
21				25					
		23							30
	22					27			

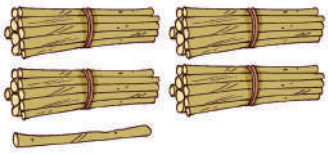
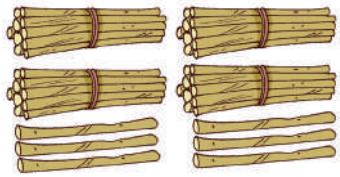
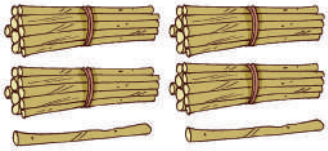
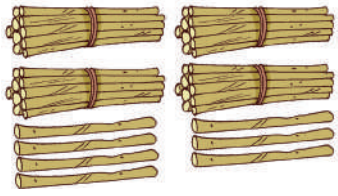
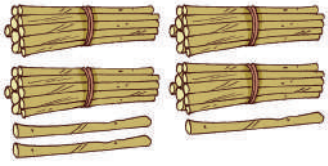
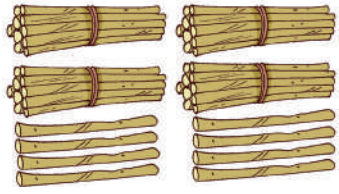
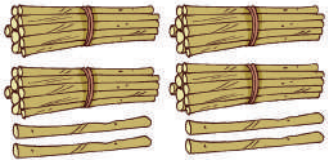
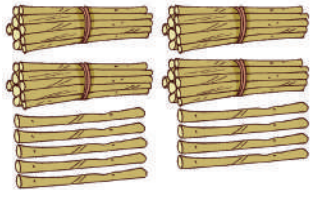
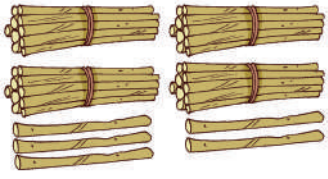
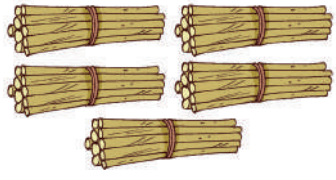
Let us count the number of flowers and the number of sticks.





Number 31 to 50

	31 Thirty One		36 Thirty Six
	32 Thirty Two		____ Thirty Seven
	____ Thirty Three		____ Thirty Eight
	____ Thirty Four		39 Thirty Nine
	35 Thirty Five		40 Forty

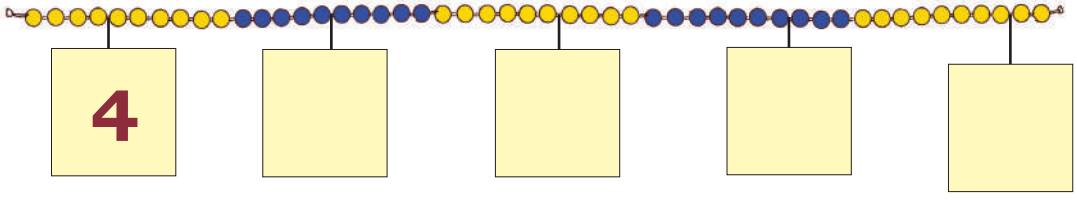
	41 Forty One		46 Forty Six
	 Forty Two		 Forty Seven
	43 Forty Three		 Forty Eight
	 Forty Four		49 Forty Nine
	45 Forty Five		50 Fifty



Let us Do

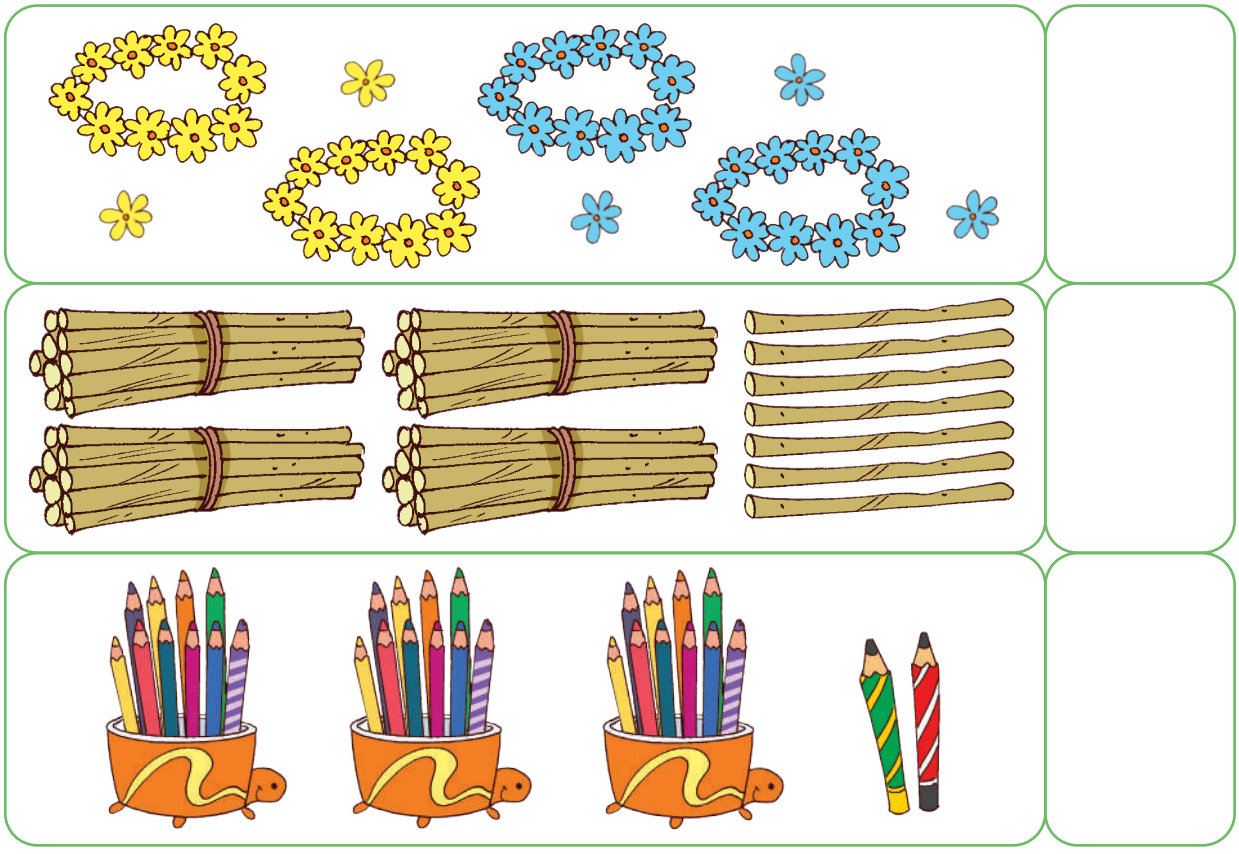
A. Pick up any number card from 1 to 50. Can you place the number card with help of the clip on *ginladi* at the right place?

B. Write the number on the number cards placed on the *ginladi*.





Count and write the numbers.

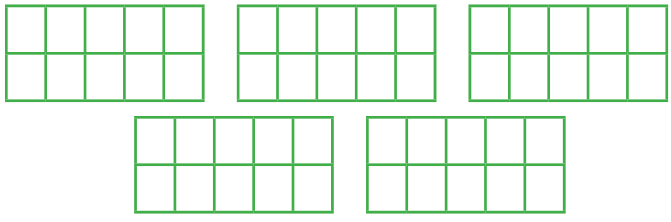


Fill up the tens frames to show the number. One has already been done for you.

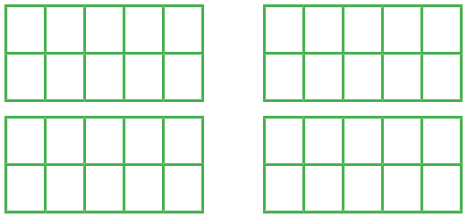
29
Twenty nine



41
Forty one



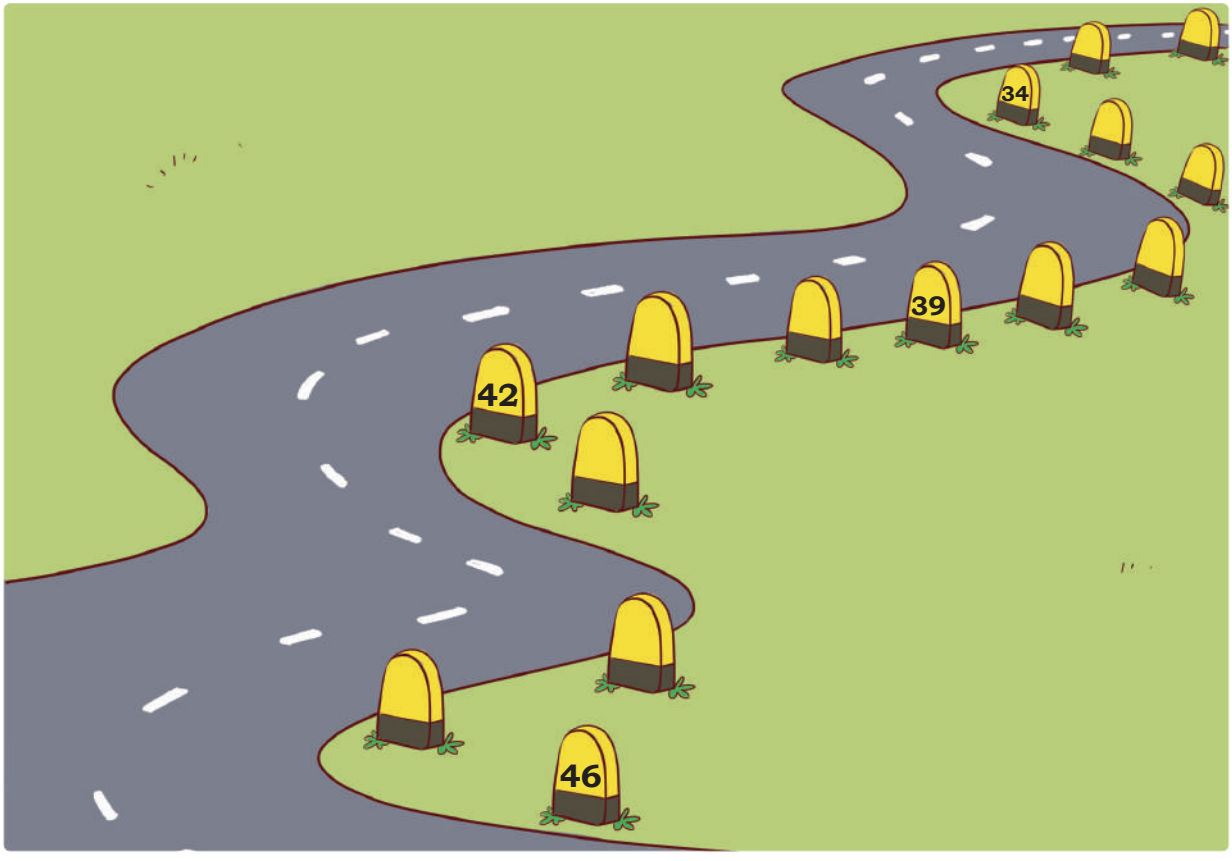
30
Thirty



Use *ginladi* to talk about tens and numbers 21 to 50. Also encourage children to count backwards from any given number using *ginladi* or number line initially. Once they gain confidence, they can do without the *ginladi*.



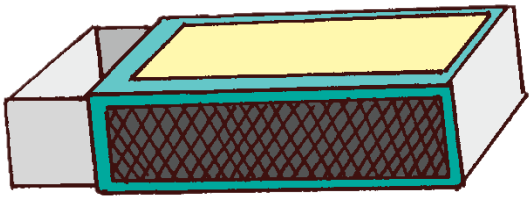
Fill up the missing numbers.





Project Work

Feli said that she has packed more than fifty amazing things in her box. Her friends wondered what these things could be. They had a big surprise when she opened her box.
Can you collect some items and see how many a box can hold?

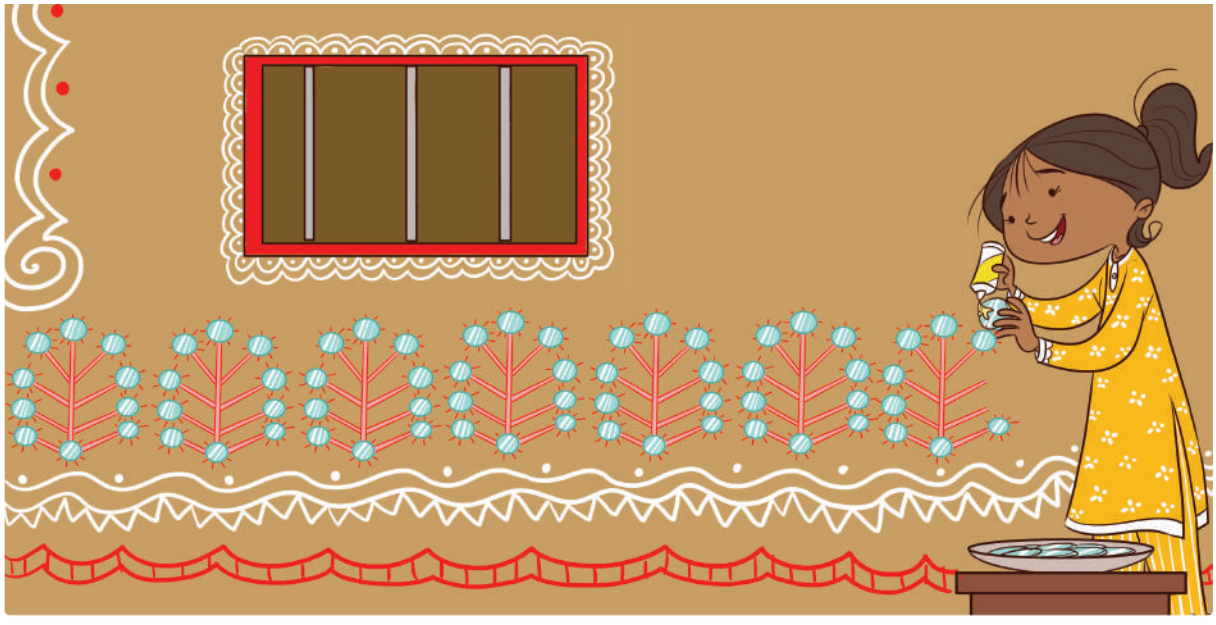




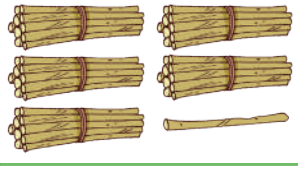
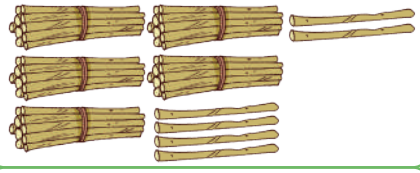
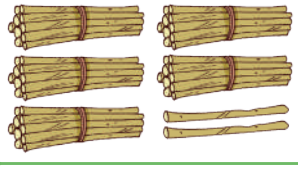
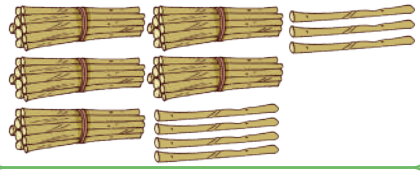
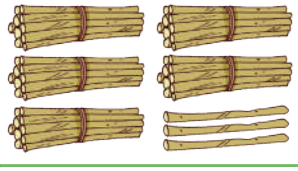
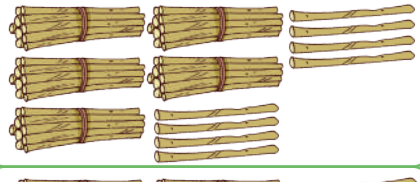
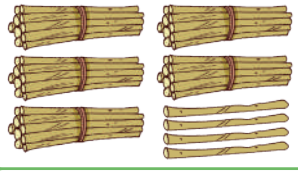
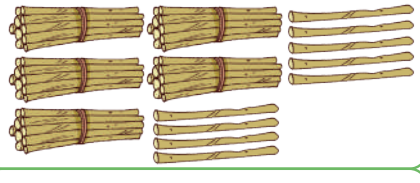
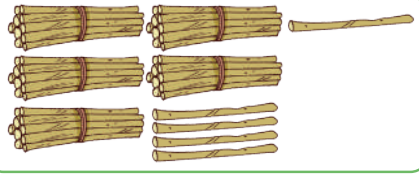
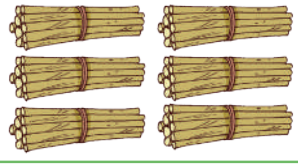


Numbers from 51 – 99

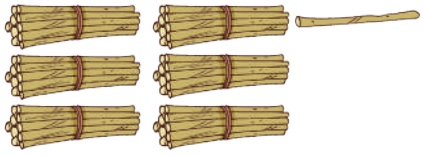
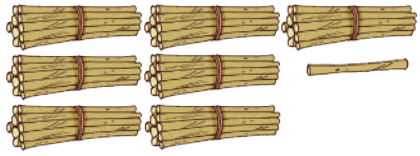
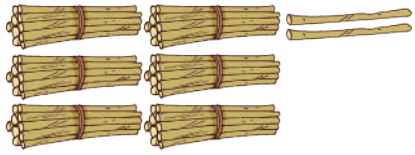
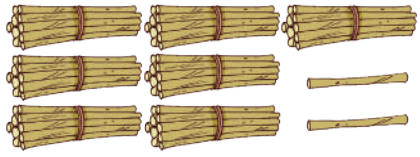
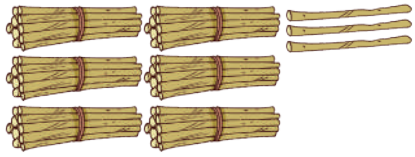
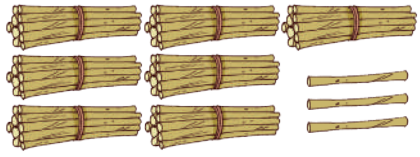
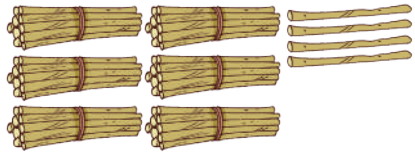
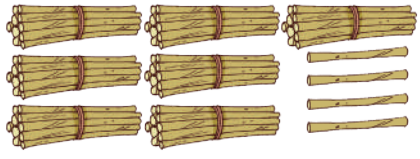
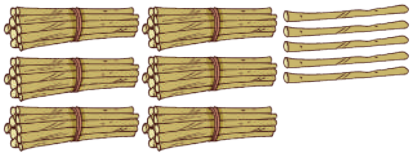
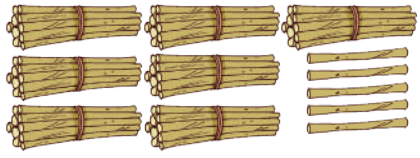
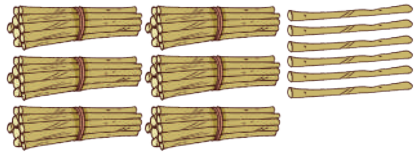
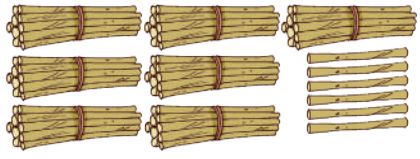
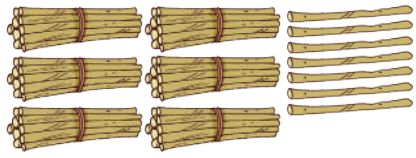
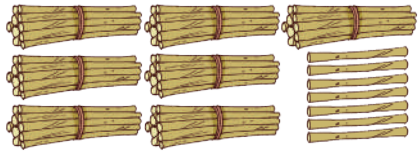
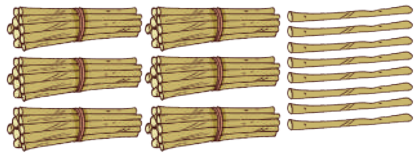
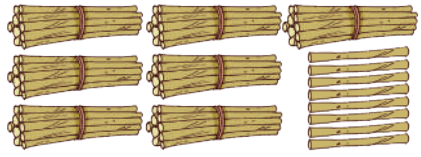
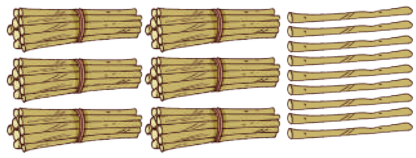
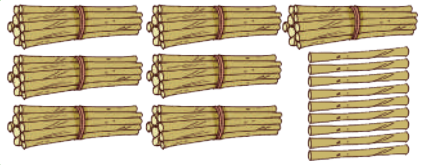
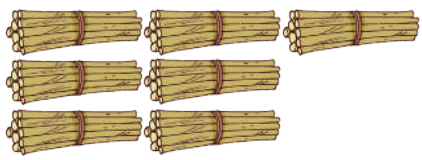
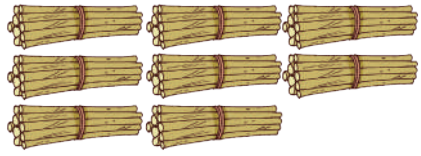
Ankita is pasting mirrors on her house. Help her to find out how many mirrors she has used in the design. ____



Count and write the numbers from 51 to 60

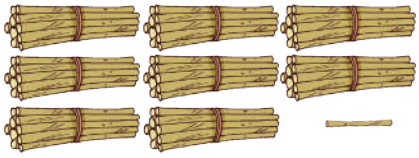
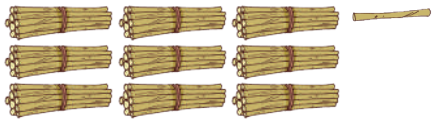
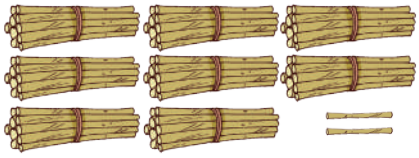
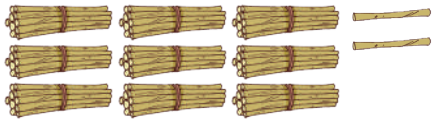
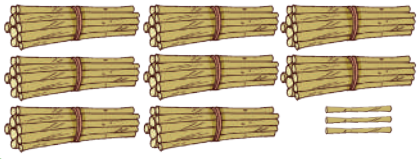
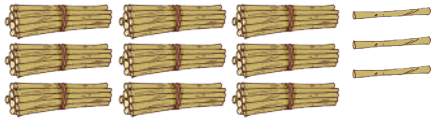
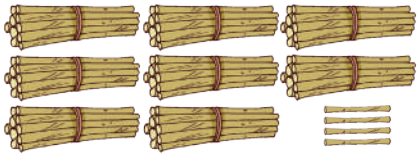
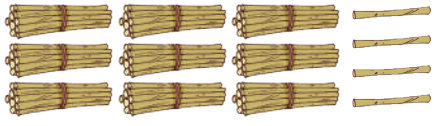
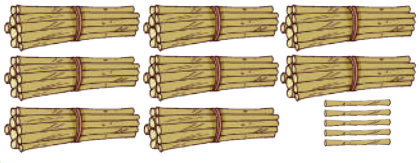
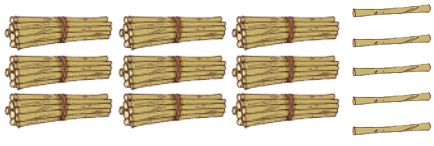
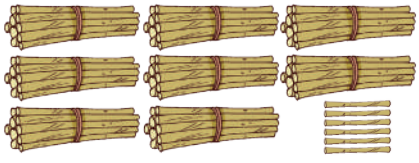
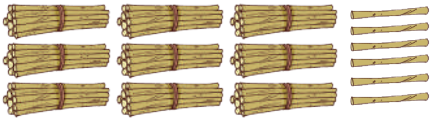
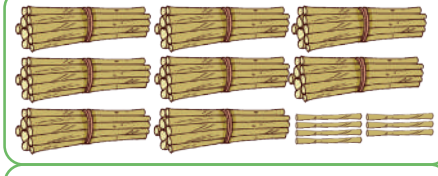
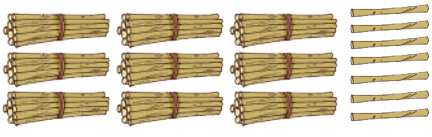
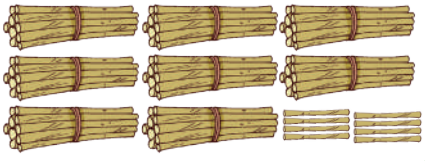
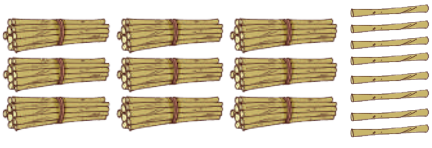
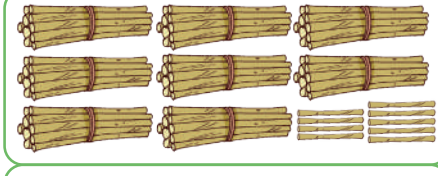
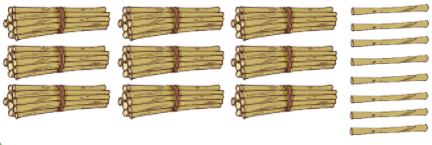
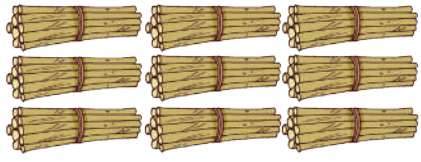
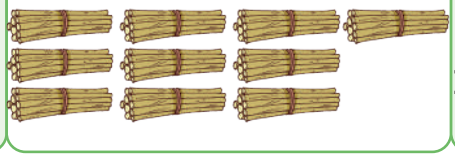
	51 Fifty One		____ Fifty Six
	52 Fifty Two		____ Fifty Seven
	____ Fifty Three		____ Fifty Eight
	____ Fifty Four		59 Fifty Nine
	____ Fifty Five		60 Sixty

Count and write the numbers from 61 to 80

	61 Sixty One		71 Seventy One
	62 Sixty Two		72 Seventy Two
	Sixty Three		Seventy Three
	Sixty Four		74 Seventy Four
	Sixty Five		75 Seventy Five
	Sixty Six		Seventy Six
	Sixty Seven		Seventy Seven
	Sixty Eight		78 Seventy Eight
	Sixty Nine		Seventy Nine
	70 Seventy		80 Eighty



Count and write the numbers from 81 to 100

	81 Eighty One		91 Ninety One
	Eighty Two		Ninety Two
	83 Eighty Three		Ninety Three
	Eighty Four		Ninety Four
	Eighty Five		95 Ninety Five
	86 Eighty Six		Ninety Six
	Eighty Seven		97 Ninety Seven
	Eighty Eight		Ninety Eight
	89 Eighty Nine		Ninety Nine
	90 Ninety		100 Hundred



Let us Do

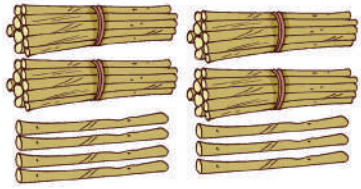
Tie a *ginladi* from one end to the other. Choose a random number (1 to 99) card. Attach the number cards at the appropriate place on the *ginladi* with a clip. Play with your friends using other cards also.

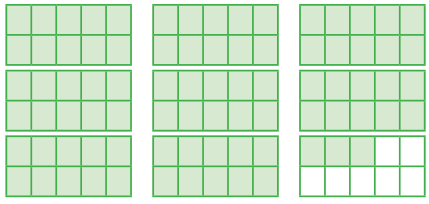


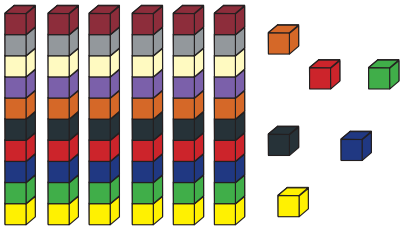
Use *ginladi* to add numbers. Ask about the numbers between any two given numbers.



Count and write the numbers.







Make a slide and ladder game by filling the missing numbers.

100		98	97	96	95			92	
81	82	83	84		86	87	88		90
80	79		77	76		74	73	72	71
61	62	63		65	66		68	69	
	59	58		56		54	53	52	51
41	42	43		45			48		50
40		38	37	36		34	33	32	31
21	22		24	25		27	28		30
20	19	18	17	16	15		13	12	11
1	2	3		5	6		8	9	

This game can be played outdoors (draw squares with movable sticks and ropes as ladders and slides). Some task cards can be placed on the squares. Instructions can also be modified like jump to a number where the digits are exchanged, skip one number on your right and jump, etc.



Look at the Picture





Let us Talk

A. Observe and discuss what is happening in the picture.

B. What are the different things which you see in the given picture?

C. How many houses are there?

D. How many people are there in the picture?

E. Guess how many lines are used to draw the leaves of a tree.

F. Do you know the special name for this type of painting?

G. Which part of India is famous for 'Warli' painting?

Make your own *warli* drawing.







9

Utsav

QRickit

0124CH09



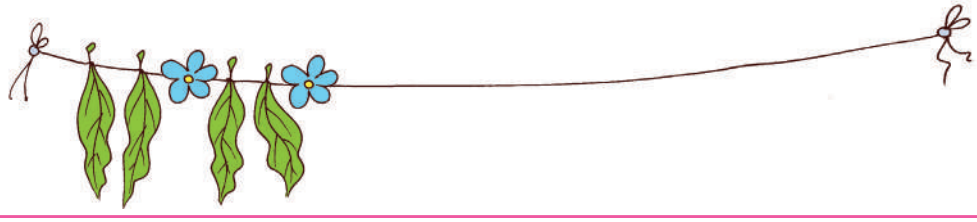
According to the Indian calendar, the festival of Uttarayan like Makar Sankranti, Pongal, Bihu, Lohri and Chapchar Kut marks the beginning of the transition from winters to summers. The celebration signifies the return of sunny days and the start of the harvest season. Discuss the various local festivals celebrated by children with their families. The picture also highlights the main elements of each celebration and various shapes and patterns which can be discussed with children.





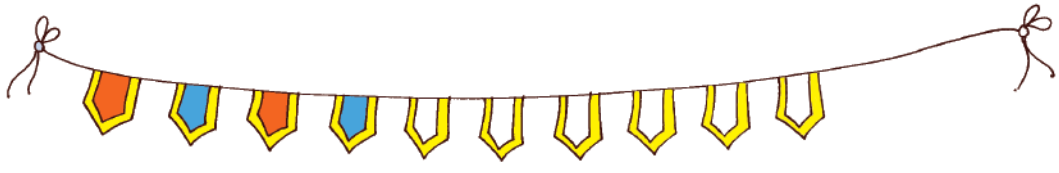
Extend the patterns by drawing further.

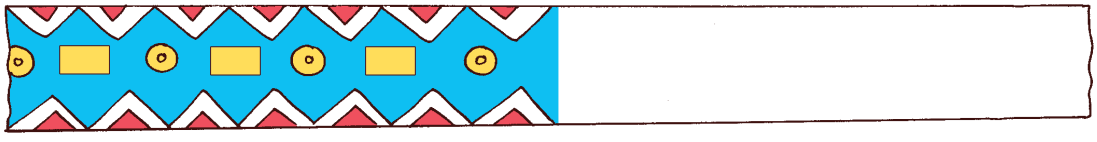
A. 

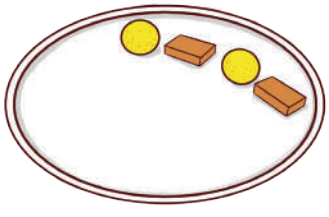
B. 

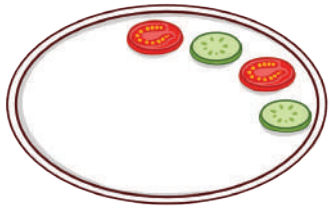
C. 

D. 

E. 

F. 

G. 

H. 

Encourage children to use concrete objects to make patterns.

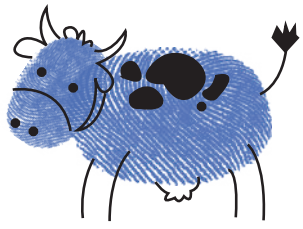


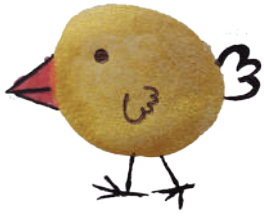
Let us Do

Muana  is very fond of colouring. He created a pattern by using the impression of his thumb and fingers. You can also create a pattern like this by using your finger print in the given space.













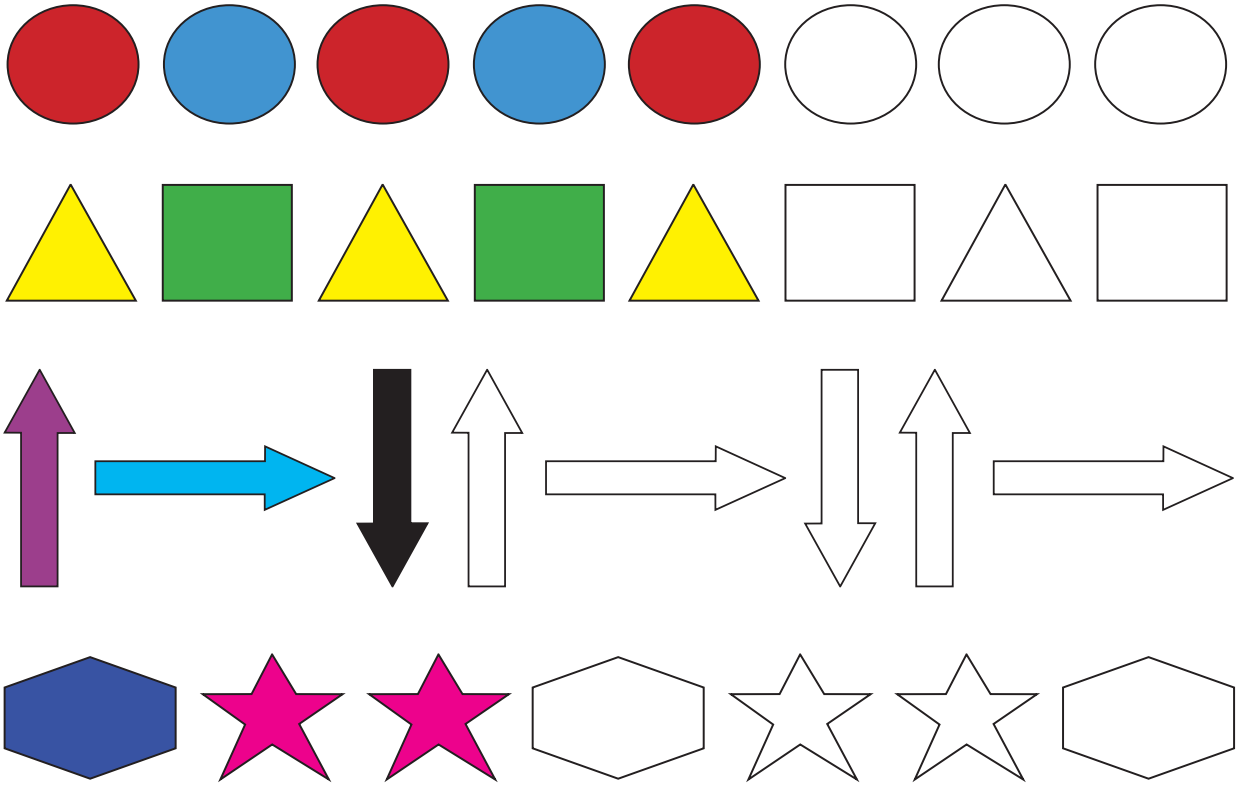


What colour should come after pink and why? Discuss.

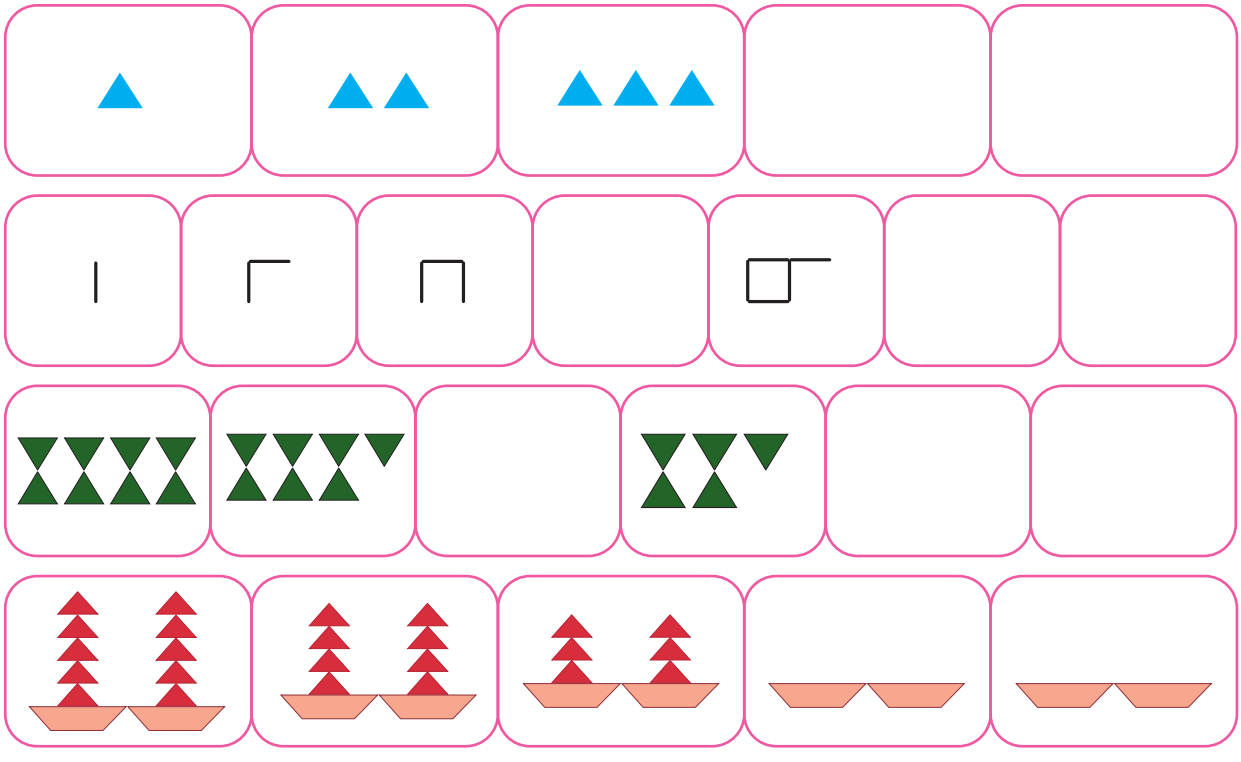
Ask children to collect different vegetables and cut them into slices with the help of adults. Use cut slices of these vegetables to create a pattern of your choice.



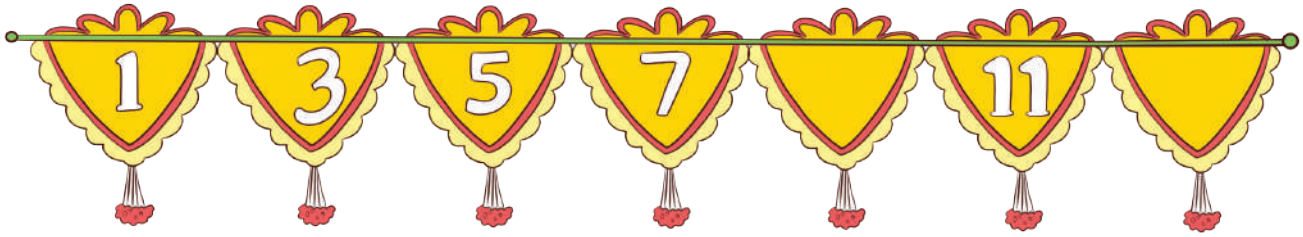
Look at the patterns and extend them by colouring.

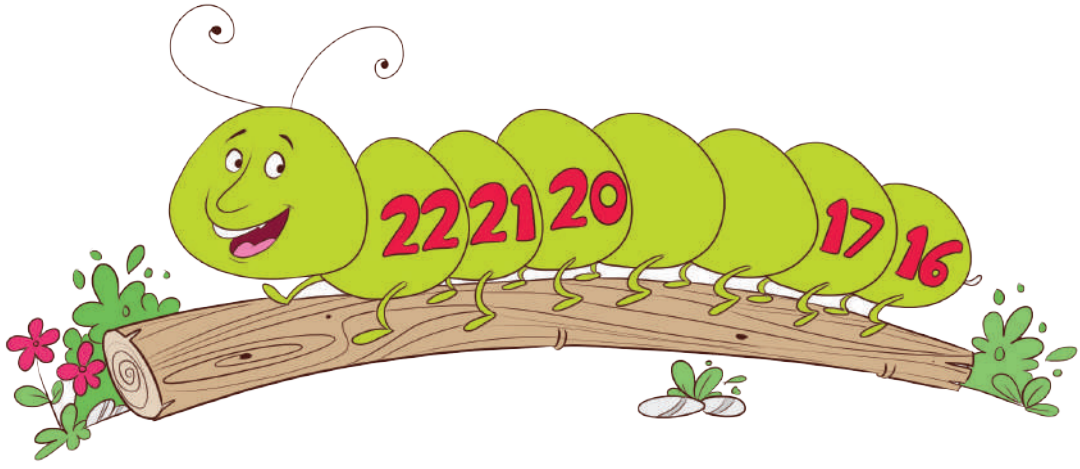


Complete the pattern.

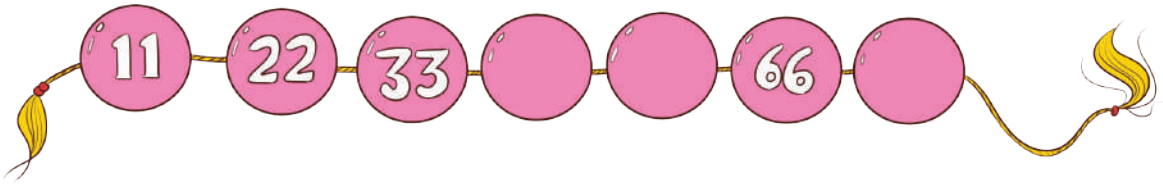


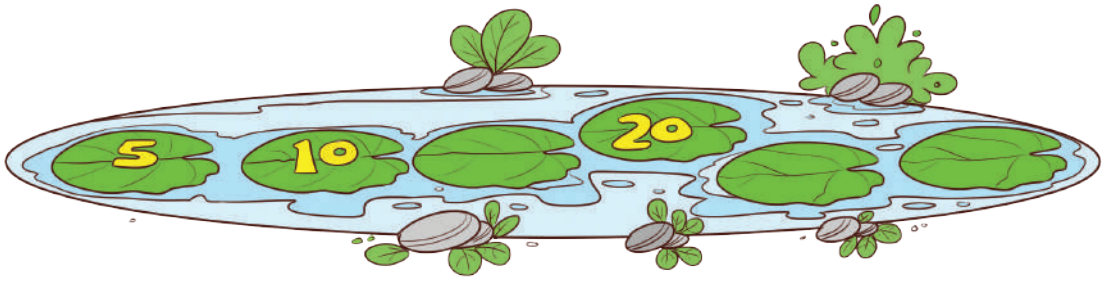
Study the pattern and fill in the missing numbers.







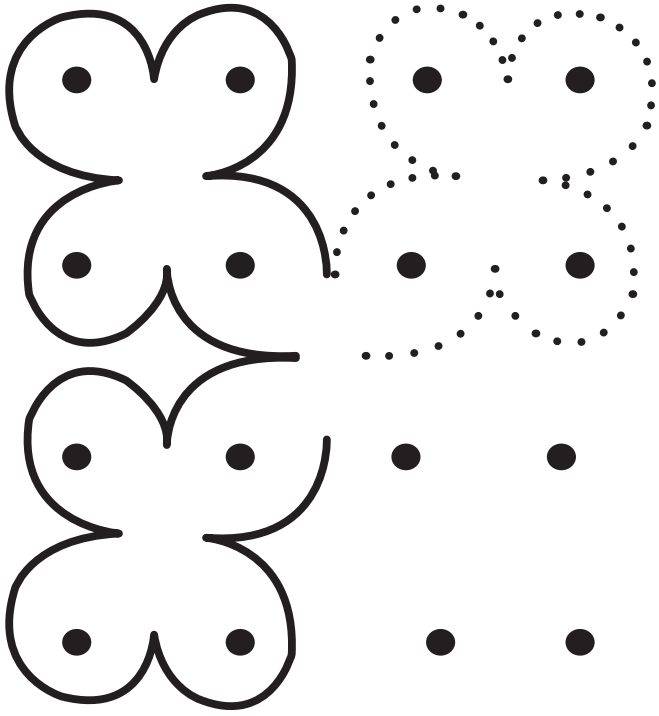








Murthy and Vani are helping their Amma in making *kolam* or *rangoli*. You can also help them by completing the below *kolam*.





Project Work

A. Collect pebbles, flowers, leaves, glasses, bowls, sticks, bangles, coins, caps, etc., and arrange them in a pattern. Create different patterns of jewellery, floral pot arrangements, art showpieces, etc.

B. Observe and find the patterns in nature like leaves, butterfly, animal skins (cat, dog, zebra, tiger), curtains, *sarees*, *dupattas*, tiles, beehive, etc.

C. Collect different objects seen around and make a collage.

D. Create patterns using different actions like clapping, snapping your fingers, stamping your feet, etc.

The world around us is full of shapes. Encourage children to appreciate the rich heritage of India through exploring beautiful patterns in church, temples, mosque, gurudwara and monuments around them. Also ask them to share their observations of patterns in different art forms, movement patterns in dance forms, etc.



How do I Spend my Day?

10

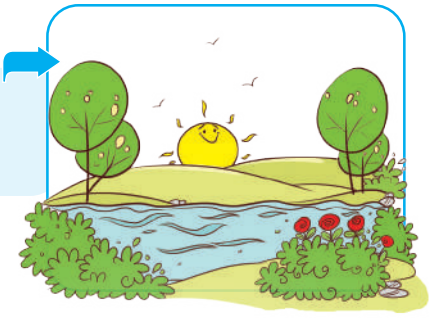
QRickit

0124CH10



Hello friends, I am Peki.
I am 6 years old.
Today, I will share my daily routine, what I do from morning to night.

Look, the sun is rising in the sky. It is morning.





I get up from bed in the morning and have a glass of warm water.

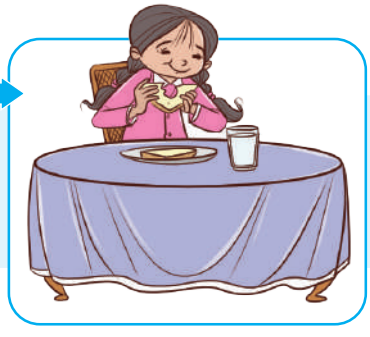
Then, I brush my teeth.





My day starts with an exercise and take a bath.

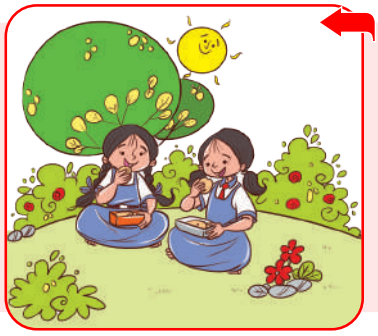
I eat morning meal and get ready for school.





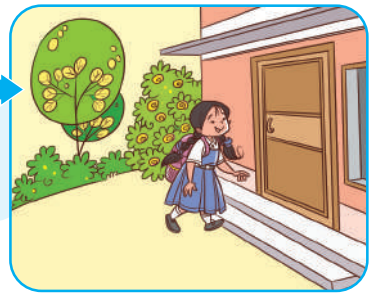
I study and play with my classmates in the school.



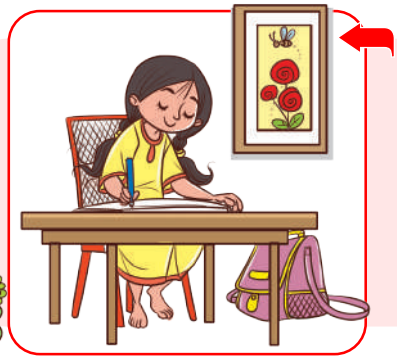


The sun is high in the sky. It is noon time. I wash my hands and have lunch with my friends.

I come back home from school and take rest for some time.



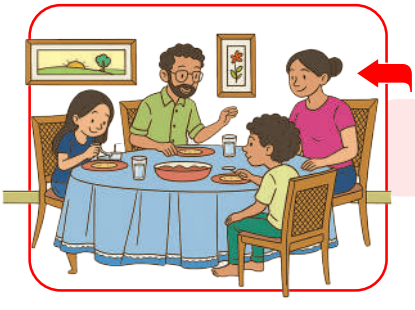




See, the sun is setting. It is evening time. I play with my friends and then I study.

Look there, the moon and the stars are visible in the sky. It is night time.





I eat dinner with my family.

I read my book and go to sleep at night.



Let us Talk

A. What is your daily routine?
B. When do you brush your teeth?
C. When do you take a bath?

Let us Do

A. Tick ✓ the activities that you do in the morning.






B. Tick ✓ the activities or things that you do or see during the day.



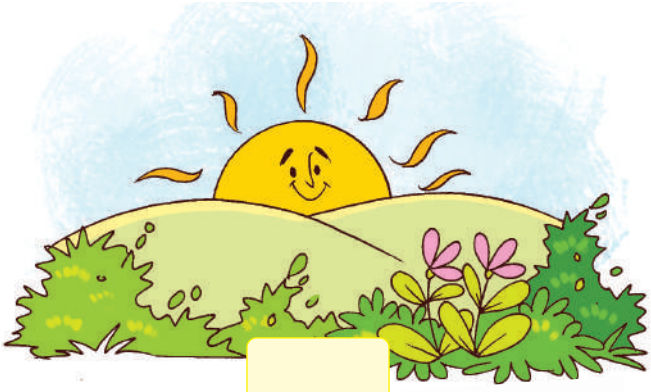


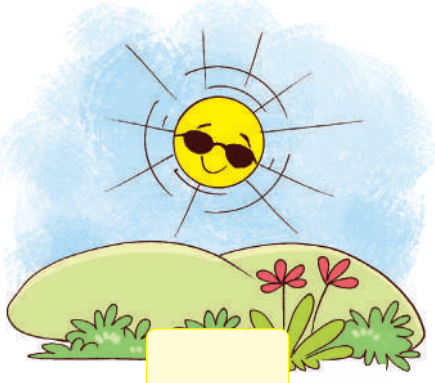

C. Tick ✓ the activities that you do at night.

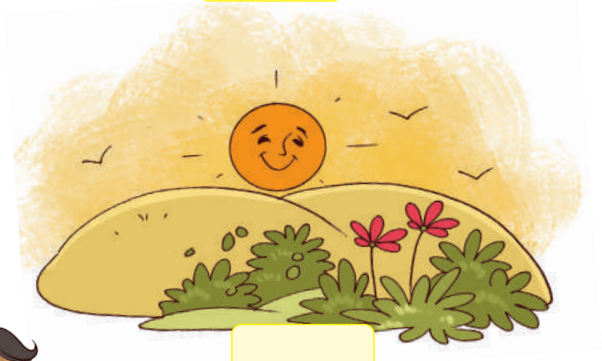





Guess the time of the day by looking at the picture. Discuss with your friends what you do during that time.











Let us Do

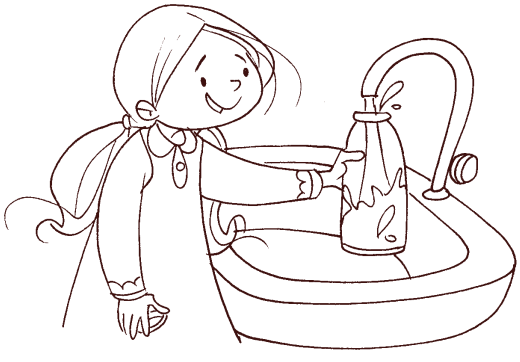
Colour the activity that usually takes longer time.

A.





B.





Seasons



Summer



Spring



Monsoon



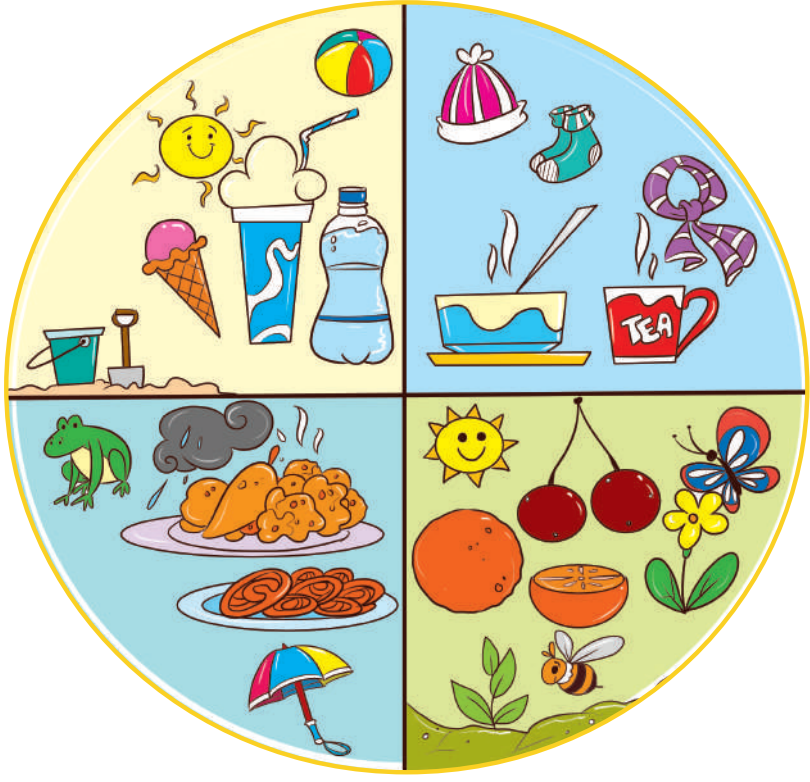
Winter

Look at the above pictures and discuss the differences among summer, winter, spring and monsoon seasons.

Match the objects with the season.

Monsoon

Spring



Summer

Winter



Let us Talk

A. What do you like to eat in the summer season?

B. What do you like to wear in the winter season?



Let us Do

Write the name of the seasons and match them with the pictures.





















Project Work

Ask children to draw or stick pictures of their favourite food items during different seasons and local festivals which are celebrated during these seasons.

How Many Times?

11

QRickit

0124CH11

A Visit to an Amusement Park

A group of children visited an amusement park.



Wow! 2 of us can sit on the horse. I will sit with my friend.

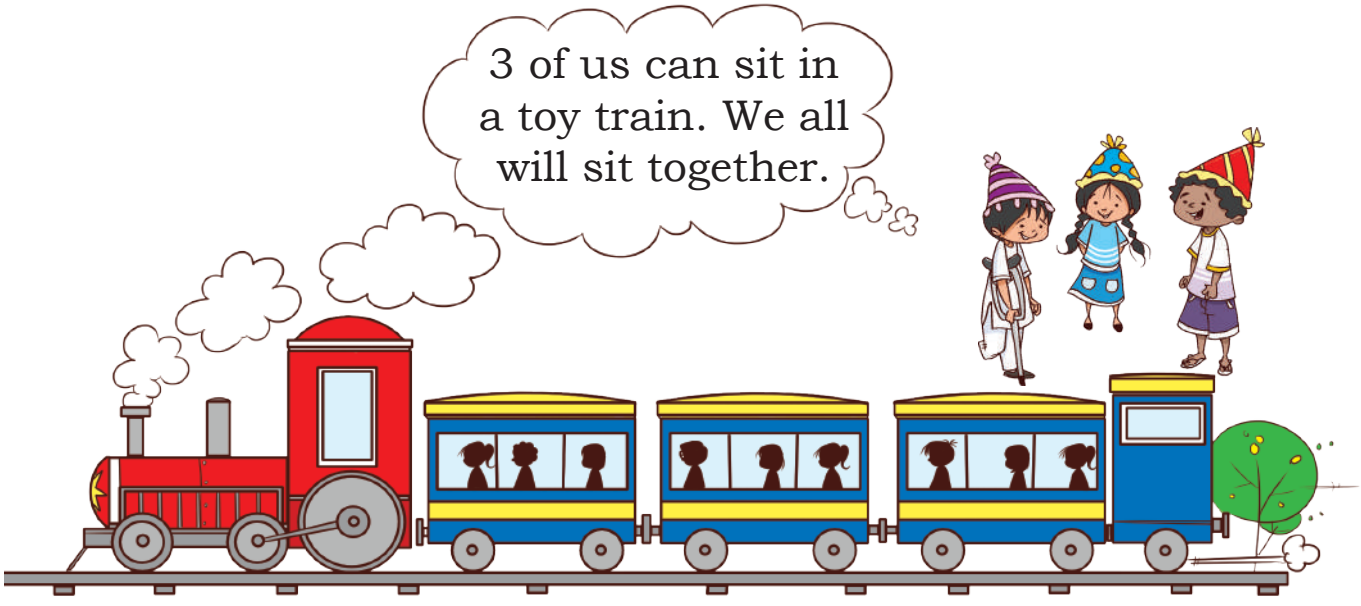


The total children are

2 + 2 + 2 + 2 = ☐

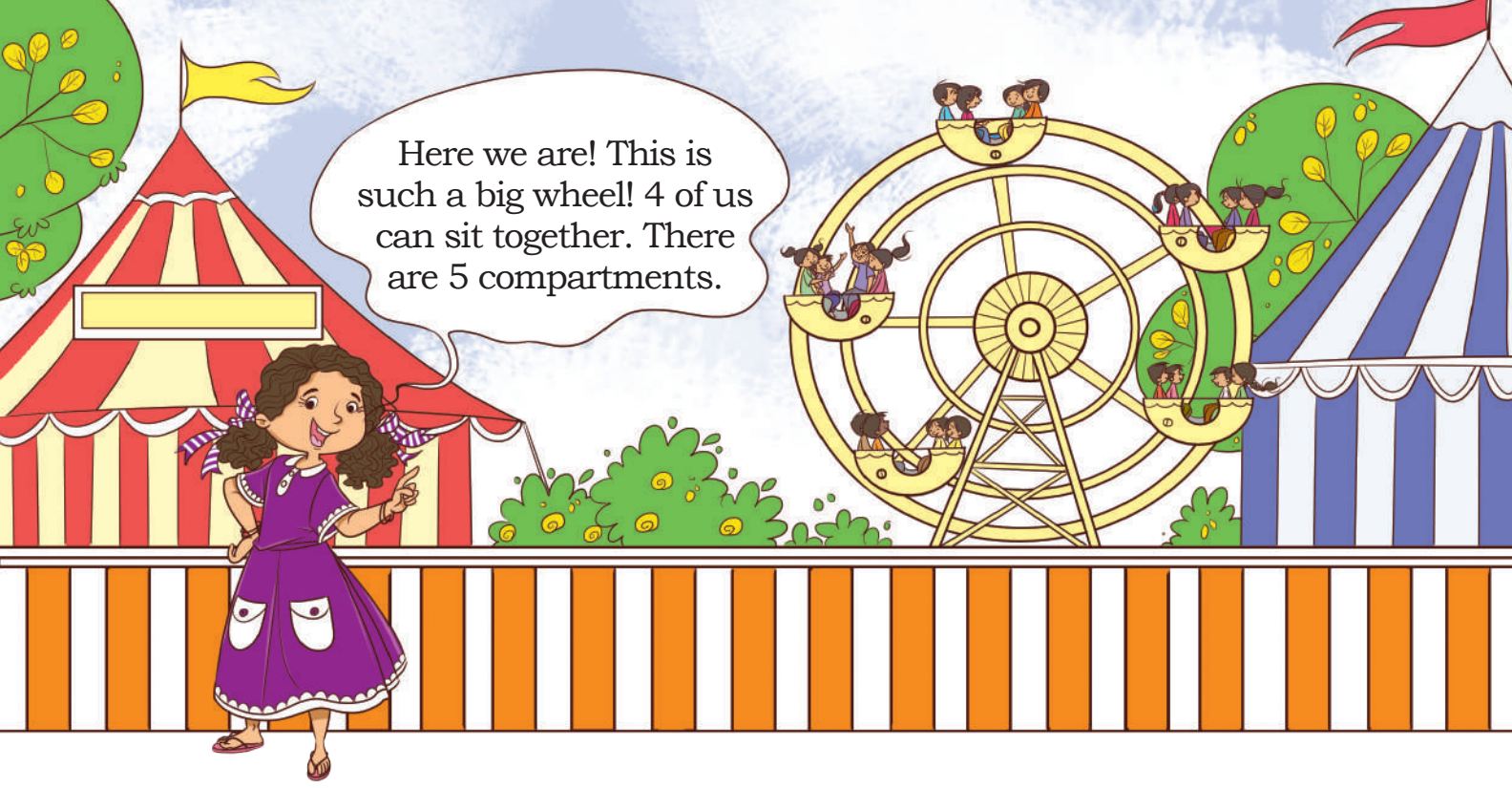
☐ of us can sit on the horse swing altogether.

3 of us can sit in a toy train. We all will sit together.



There are 3 bogies. 3 + 3 + 3 = ☐

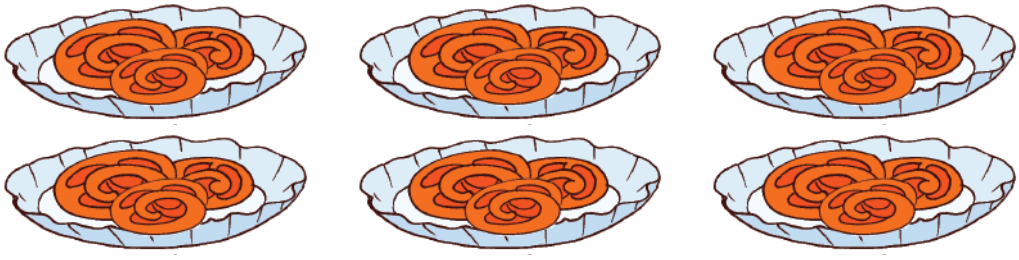
Total ☐ children can sit in 3 bogies.



☐ + ☐ + ☐ + ☐ + ☐ = ☐

Total ☐ children can sit in the swing.

After riding on the swings, children planned to eat *jalebis*. Each plate of *jalebi* has 3 pieces. They ordered 6 plates of *jalebis*.

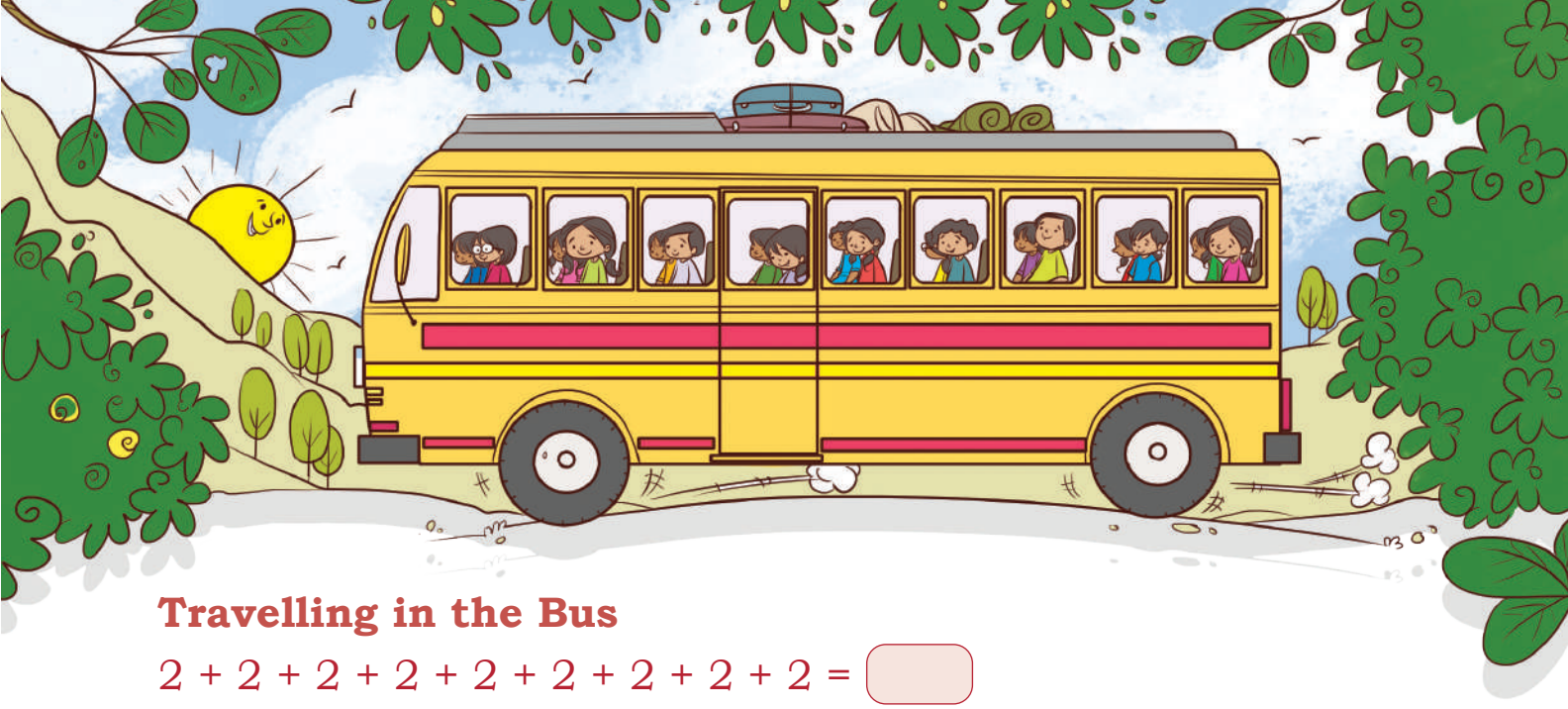


☐ + ☐ + ☐ + ☐ + ☐ + ☐ = ☐

6 times 3 is ☐

Discuss the number of groups in each activity through questions like how many children are there in the picture, how many children are sitting in each compartment, total number of children on the ride.





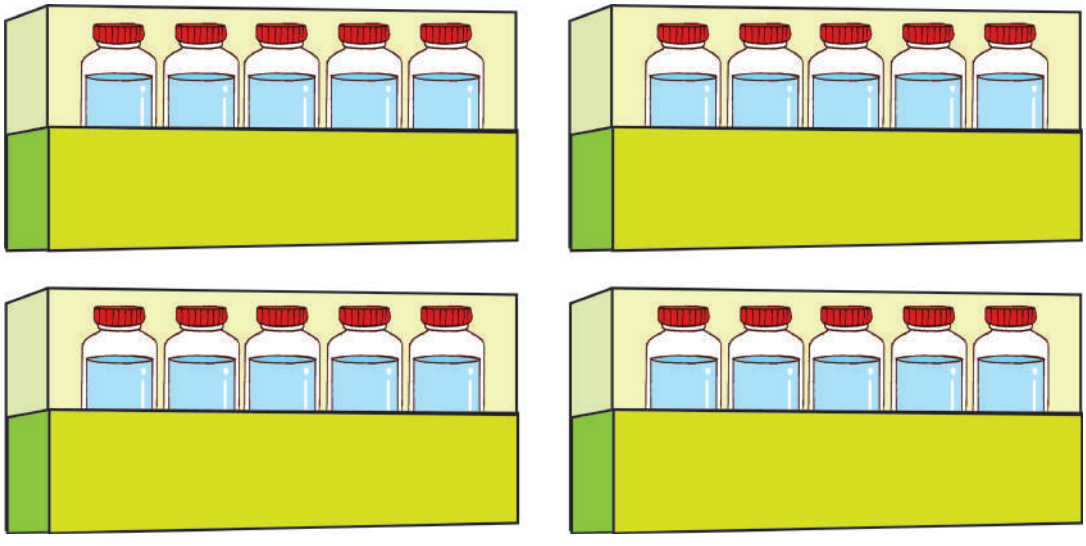
Travelling in the Bus

2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = ☐

9 times 2 = ☐

Total number of people in the bus = ☐

Some crates of water bottles are kept in the bus. Count them.



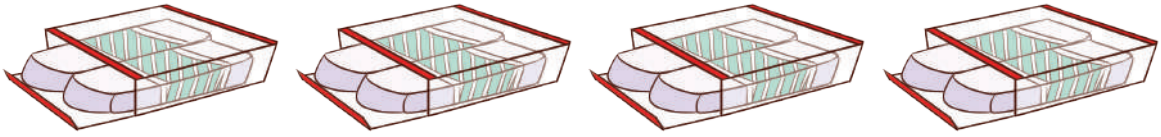
☐ + ☐ + ☐ + ☐ = ☐

4 times 5 = ☐

Total number of bottles in the bus = ☐

Chhinga bought some packs of erasers, pencils and apples from the shop. Find the total of each item.

A.

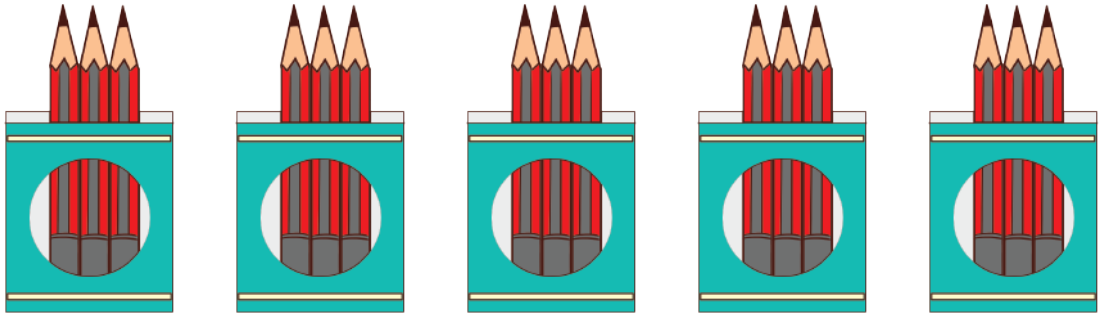


2 + ☐ + ☐ + ☐ = ☐ erasers

4 times 2 = ☐

Total number of erasers = ☐

B.



3 + ☐ + ☐ + ☐ + ☐ = ☐ pencils

5 times 3 = ☐

Total number of pencils = ☐

C.



3 + ☐ + ☐ = ☐ apples

3 times 3 = ☐

Total number of apples = ☐





Project Work

Draw a cycle wheel. Ask your friends or find out how many cycles you have at home. Find out the total number of wheels in all the cycles.

How Much Can We Spend ?

12

QRickit

0124CH12



Rami started to count the number of coins ₹1, ₹2, ₹5, ₹10 and Sawma started to count notes of ₹10, ₹20, ₹50 and ₹100. Look at these coins and notes, and write their denominations below.

			
₹1			
			
₹10			

Pu Rohminga— The Toy Seller



Let us Do

A. One ball  costs ₹20.

Rami gives _____ coins of ₹5 for the ball.

Sawma gives _____ note of ₹10 for the ball.

B. Name the toys you can buy for ₹10.

C. Name the toys you can buy for ₹20.

D. If the cost of a car is ₹14 and Rami has ₹10 with her, how much more money does she need to buy the car?

E. Rami and Sawma together have ₹30. Write the name of the toys which they can buy.

Find the total amount and tick ✓ the correct option.



Let us Play

Make your own currency notes and coins of paper slips. Play a shopping game in the classroom.

Some children will be shopkeepers and others customers. Let them buy things using play money made by paper slips. Encourage them to pay money in different combinations.

Fill or draw the amount in different combinations using the given currency.







₹20

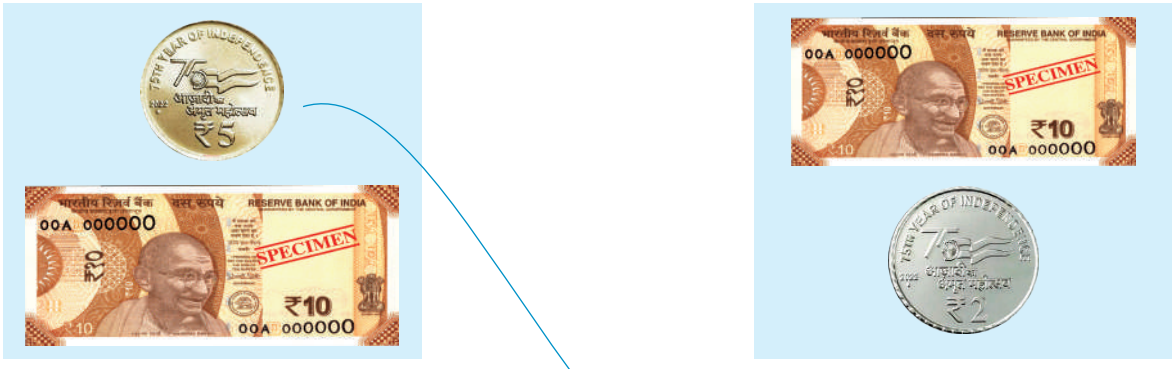
₹10

₹13

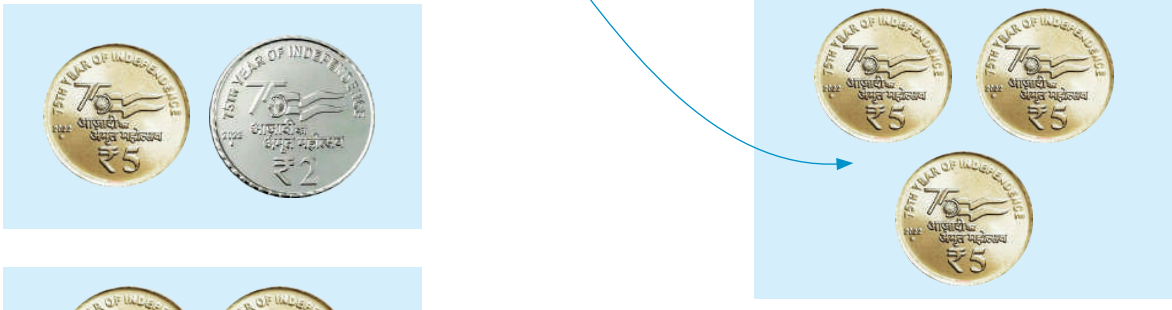
₹8

Match the same amount by drawing a line.

A.



B.



C.

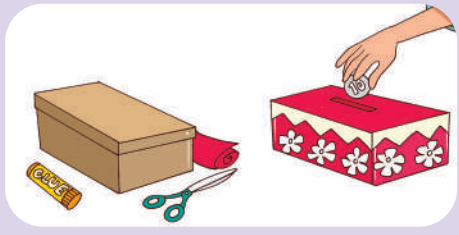


Saving money is a good habit. Discuss.



Project Work

Try to make your own *gullak* (piggy bank) with a spare box at your home with the help of your siblings or elders.



Ask children to form different combinations for a given amount using play money.

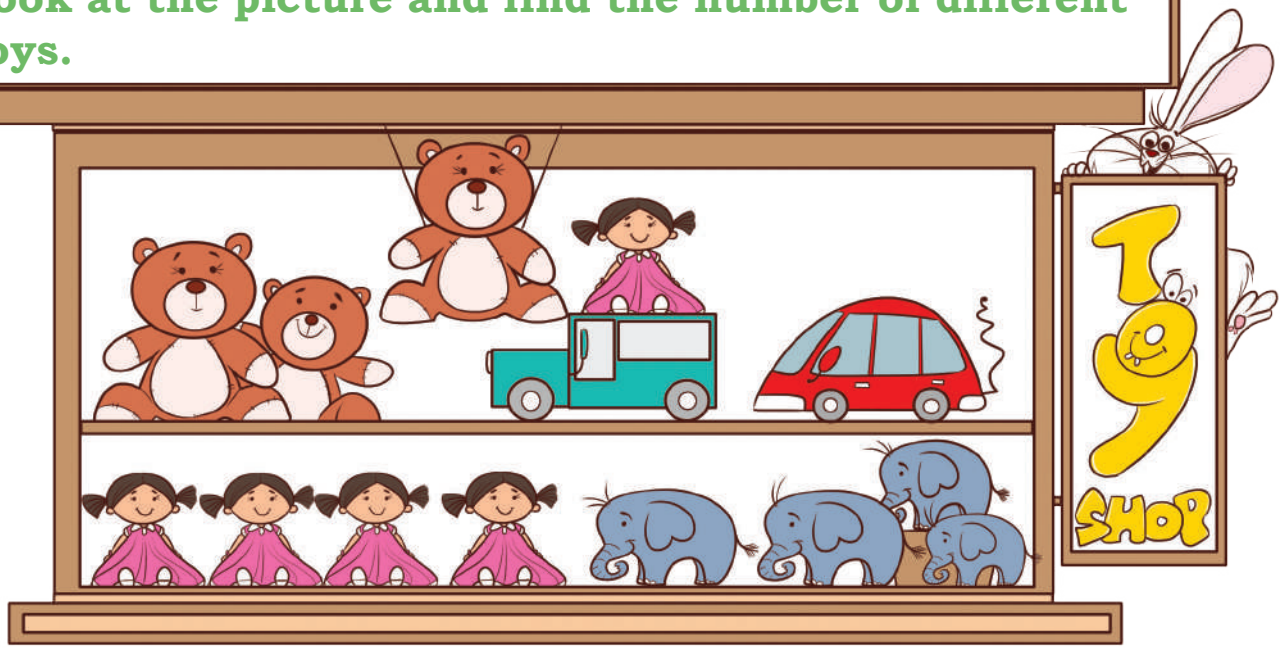


QRickit

0124CH13

13 So Many Toys

Look at the picture and find the number of different toys.



Elephants  ☐

Teddy Bears  ☐

Cars  ☐

Dolls  ☐

Complete the following sentences by using more than/ less than.

A. The number of dolls  is _____ the number of cars  .

B. The number of elephants  is _____ the number of dolls  .

C. The number of teddy bears  is _____ the number of elephants  .

D. The number of cars  is _____ the number of teddy bears  .

Colourful Flowers

Name the colour of the flowers which you see mostly in a garden.

Look at the picture of colourful flowers and write the number of flowers.

Blue flowers  ☐ Orange flowers  ☐

Red flowers  ☐ Purple flowers  ☐

A. Name the colour of flowers which are least in number. _____

B. Name the colour of the flowers which are most in number. _____

True or False

A. Number of red flowers  is more than the blue flowers  . ☐

B. Number of orange flowers  is less than the purple flowers  . ☐



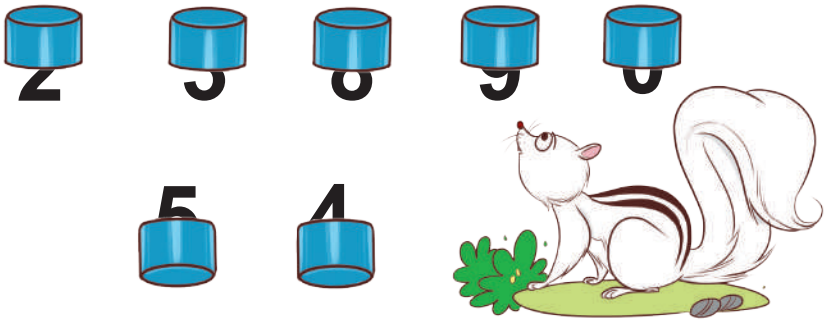
Project Work

A. Make a card with a border of colourful flowers.

B. Find out in your class how many children have 3 letters in their names, how many children have 4 letters in their names and how many children have more than 4 letters in their names.

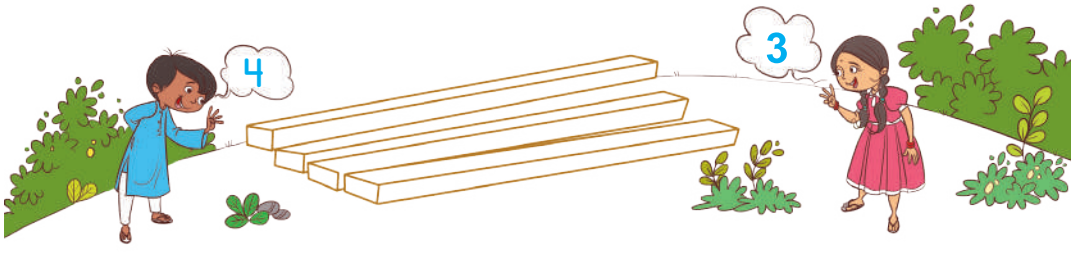
Puzzles

A. Kima arranged number cards in the below image and Angaihi hide them with bowls as shown. Can you recognise the numbers?



You can also hide the numbers on a number card by using your hands and play this game with your friends.

B. Count the number of logs. Is it 3 logs or 4 logs?



C. This is how Zorini set the glasses. Help her in extending the arrangement.



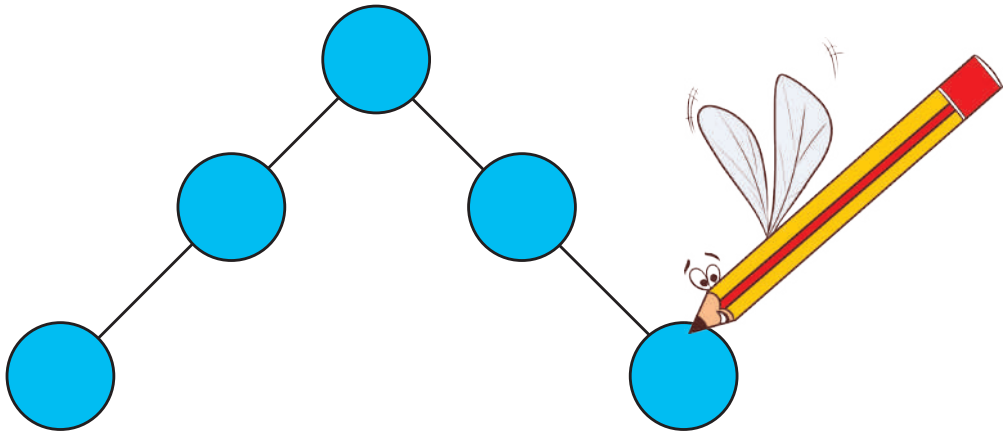
_____ _____

D. Find the numbers from one to ten.

e	i	g	h	t	t	s
f	i	v	e	h	t	e
o	t	w	o	r	x	v
u	n	i	n	e	o	e
r	n	t	t	e	n	n
s	i	x	o	w	e	n



E. Fill the numbers from 1 to 5 in the given balls so that the sum on both sides is equal.



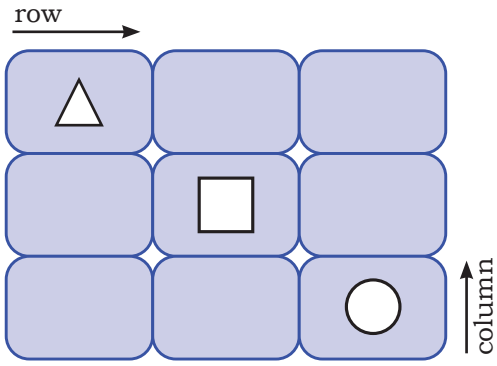
F. Gilbert favourite number is 8. If the answer of the asked question is 8, he becomes happy and if not, he becomes sad.

Ask some questions to Gilbert that has an answer 8 only.

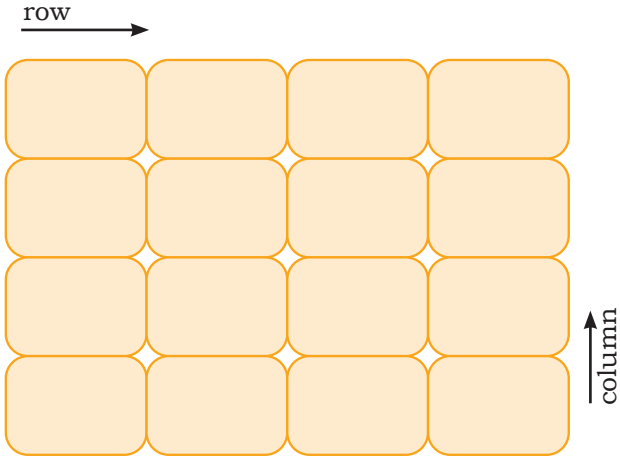
G. Fill △, □ and ○ in the boxes in such a way that any shape occurs only once in a row (horizontal) and column (standing).







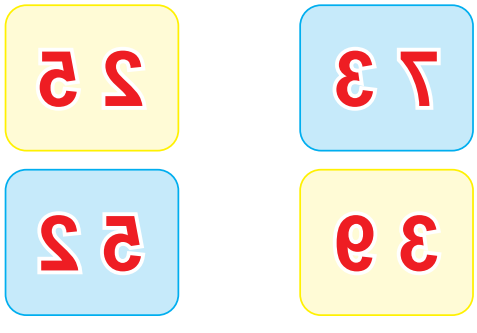
H. Take 4 different objects (each object should be 4), such as 4 buttons, 4 pebbles, 4 seeds, 4 clay balls, etc. Now place them in the given boxes in such a way that every object occurs only once in a row (horizontal) and a column (vertical standing).





Can you fill them through some other ways?

I. Who am I? (A mirror can help you.)





J. Who am I?

i. I am between 5 and 10. I become three more when read upside down.

ii. I am 3 more than 8 and 3 less than 14.

iii. I am after 50 and before 54. Sum of my digits is 7.

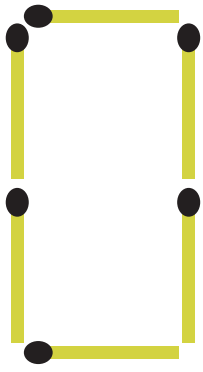
iv. I am just before 40.

v. Add 5 to me and you will get 24.

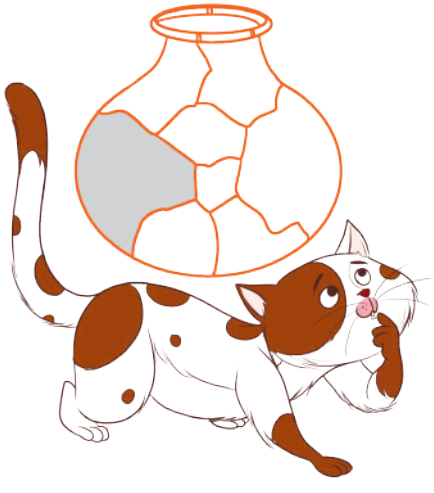
vi. I am just after 35.

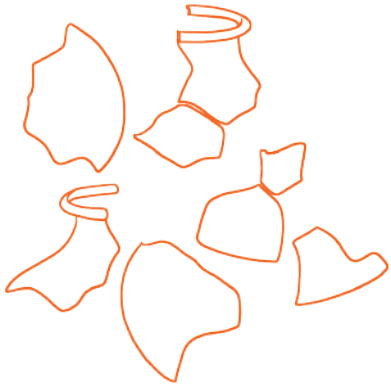
vii. Reduce 8 from me and 14 will be left.

K. Six matchsticks are used to make a zero. Can you make any other number by shifting a single matchstick?



L. Find out the missing piece and complete the pot.





M. How many times can you subtract 5 from 25?

N. Ruati has 3 seeds. She wants to place them on any 3 numbers of the given chart in such a way that the sum of those numbers will be 17. Can you help Ruati in finding the numbers.

4	9	6	7
16	0	8	5
15	13	1	2
17	10	3	12

In how many ways did you do it?

If you have 2 seeds, which numbers will you place them to get a total of 17?

O. Encircle the identical shadow image.





i



ii



iii



iv