



GOVERNMENT OF TAMILNADU



CLASSES : 1, 2 & 3

TEACHER'S HANDBOOK

MATHEMATICS

TERM - I

2025- 2026

Department of School Education

**Untouchability is Inhuman and a Crime**

## Government of Tamil Nadu

First Edition - 2022

Revised Edition - 2023, 2024, 2025

## Content Creation



State Council of Educational  
Research and Training

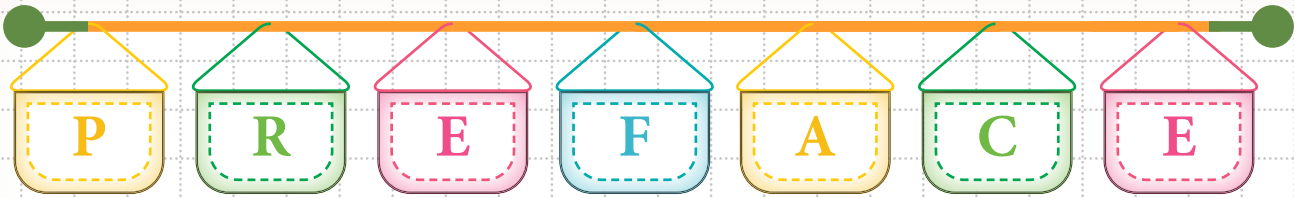
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## Printing & Publishing



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**ENNUM EZHUTHUM is**

- Child focused
- Simplified teaching and
- Lively classroom

The “**Ennum Ezuthum**” Education Plan has been successfully implemented to provide excellent education to future generations. It is marching towards its goal on a victorious path by bridging the learning gap among the children.

Congratulations to everyone who made this project possible. The videos, photos and experiences you post in the group show your interest and effort in the project.

#### Introduction

For classes 1 to 3 from the academic year 2022-2023

#### Objective

To bridge the learning gap caused by Covid-19 pandemic.

#### Goal

By 2025, all eight-year-olds should be able to read, understand/comprehend and do basic math.

#### Teaching Learning Material

Teacher’s Handbooks for Tamil, English and Mathematics with EVS Integration, Workbooks, EE kit material have been provided. Course corrections have been carried based on feedback from teachers.

#### Learning Corners

Song corners, story corners, reading corners, creativity corners, puppetry corners, and quiz corners.

#### Activities

Individual, pair and group activities based on Learning Outcomes.



### Technology support

QR codes, Model classes in QR codes, Kalvi TV broadcast and guidance via online groups (WhatsApp, Telegram).

### QR codes

Video describing the modules, model classes has been included.

### Annexure

Formative assessment (a), Learning Outcomes, Teaching Learning Materials (TLMs)

### Project

Simple projects related to day-to-day life situations have been given in Teacher's Handbook.

### Lesson Plan

Classroom management will be more effective if the teaching videos for the modules of each week are watched and planned accordingly before writing the lesson plan.

### Teacher's Time

The teacher can plan and implement activities according to the classroom environment and the need of the children.

### Workbook

Workbook activities can be carried out by the students in groups, pairs, or individually. However, students should be encouraged to do the activities in segments like 'I can do' and 'I can do happily' by themselves.

### Assessment

Formative assessment (a), Formative assessment (b), Monthly summative assessment and Term end Summative assessment

### Motivation

Fostering curiosity during the introduction of a concept, with the aim of achieving a desired learning outcome among students, involves utilizing storytelling, discussions, and games as motivational tools.

### Concept Formation

Students independently form and grasp concepts through discussions, activities, and games.

### Moment of learning

Students confirm their understanding of mathematical concepts by engaging in activities that incorporate motivation and concept formation.

The inclusion of motivation, Concept Formation, and the Moment of learning in these activities is tailored to the specific requirements. For instance, when dealing with a previously introduced concept, the Moment of learning is presented directly, bypassing the need for additional motivation and Concept Formation.

### Modules 9 and 10

When working with students at the Mottu and Malar levels, reinforce numbers and fundamental operations, for Arumbu level students, by making them do their workbook exercises.

### Science and Social Science Activities (not integrated)

Activities for Science and Social Science concepts at the Malar level that are not integrated are provided at the end of the teacher's handbook. Exercises corresponding to these concepts can be found in the workbook for the Malar level.

Warm wishes to our dedicated teachers who cultivate an engaging learning atmosphere, encouraging children to actively participate and learn with enthusiasm. They consistently strive to offer opportunities for children to express themselves, uncover hidden talents, and achieve comprehensive learning. Let's soar to new heights by using the experiences from the previous term as stepping stones.

*With regards*  
*State Council for educational research and training*  
*Chennai- 6.*

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E-Book



Assessment

VI

# 1

## Around Me

### Learning outcomes



#### Arumbu

- ❖ Able to compare properties related to position such as Inside-outside, Top-bottom, On- under, Above- below, Near- far and Big-small

Textbook Pages  
1-8

#### Mottu

- ❖ Understand and apply properties related to position such as Inside-outside, Top-bottom, On- under, Above- below, Near- far and Big-small

Textbook Pages  
-

#### Malar

- ❖ Understand and apply properties related to position such as Inside-outside, Top-bottom, On- under, Above- below, Near- far and Big-small

Textbook Pages  
-

### Activity

1

#### Inside - Outside

#### Motivation

●●● Draw a big circle, and make the students stand on the circle. When the teacher says **inside** the students have to jump inside the circle. When the teacher says outside the students have to jump **outside** the circle. Make all the students participate in this activity.

●● The teacher has to make the students stand on the circle and continue the game. Now, when the teacher says, **right leg inside**, students have to keep their right leg **inside** the circle, when the teacher says, **right leg outside** they have to keep their right leg outside. The teacher has to continue the game, in the same manner by saying left leg inside and left leg outside.



## Moment of learning

●●● For strengthening the concept of **inside – outside**, Mottu and Malar level students have to frame and ask questions like the following by using the objects in the class/school environment.

- ❖ Where is the chalk?
- ❖ Where are the slippers?
- ❖ Where is the tree?

Ensure all the students get a chance to frame a question and answer a question.

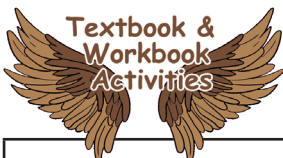
## Learning outcomes

### Arumbu

Know the position related concept, inside-outside.

### Mottu & Malar

Understand and apply the position related concept, inside-outside



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	3	-		-		
<b>Workbook</b>	1.1	1.1	1.2	1.1	1.2	1.3

## Activity

2

### Top Bottom

### Motivation

●●● Make all the students stand in a circle. When the teacher says **start**, the students have to sing the following song and go around the circle.

Parrots dance at the treetop

Rats run at the bottom

A goat climbs to the hill top

The river flows at the bottom.



When the teacher says, '**stop**', the students have to stop where they are. If the teacher says, **top**, the students have to touch their head and if the teacher says, bottom they have to touch their **feet**.



## Activity

3

### On – Under, Above – Below

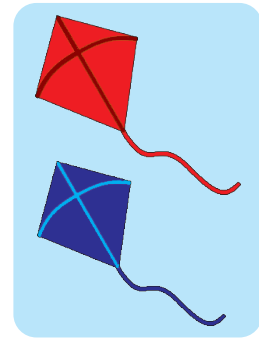
The teacher shows pictures related to Above – Below in the annexure and ask, ‘Which kite flies above? Which kite flies below it?’ and make them sing the following song.

Red kite, Red kite,

Flies above!

Blue kite, Blue kite,

Flies below!



Divide the students into two groups. One group has to draw any two pictures, with one picture above and the other below. The next group has to look at the picture and say correctly which picture is above and which picture is below. Interchange the groups and continue the activity in the same manner.



Then, take any two kites brought by the students, place one on the table and the other under the table and introduce the concept of on-under by asking

- ❖ Which kite is on the table?
- ❖ Which kite is under the table?

**Note:** The teacher has to explain the difference between the position related concepts on and above clearly. The teacher has to clarify that if an object is touching the object below, it is ‘on’. If it is not touching the object below, it is ‘above’.

### Learning outcomes

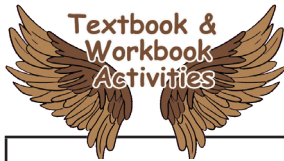
#### Arumbu

Know the position based concepts such as top-bottom, above-below.

#### Mottu & Malar

Understand and apply the position based concepts such as top-bottom, above-below.

4



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	5, 6	-		-		
<b>Workbook</b>	1.3, 1.4	1.5, 1.7	1.6, 1.8	1.7, 1.8	1.9, 1.10	1.11, 1.12

## Activity

4







### Near - Far

#### Motivation

**Materials Required :** Masks of animals such as fox – rabbit, eagle – rat, crane – fish, dog – cat, tiger – deer.

● ● ● Divide the students into groups of two and demonstrate the activity with one of the students in the class as follows.



-  : I am very hungry... I couldn't find any animal to eat.
-  : Mmm... I could see a deer **far**. Let me catch it.
-  : **Near... Near... Near...** (The tiger has to come close to the deer).
-  : Oh... The tiger is coming to catch me.
-  : **Far... Far... Far** (The deer has to run away from the tiger).
-  : Oh... the deer is running away... **Near... Near... Near...**

Following this, all the groups have to wear the masks and act like this.

#### Moment of learning

● ● Then, the teacher has to make the students follow the situation related instructions like,

- ❖ Stand near the blackboard.
- ❖ Keep the school bag far.

5

Divide the students into two groups. The first group has to frame instructions like the ones given above and the second group has to follow the instructions. Continue the activity by interchanging the groups.

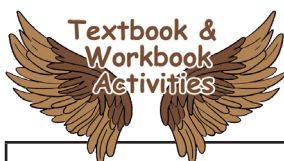
### Learning outcomes

#### Arumbu

Know the position based concepts far-near.

#### Mottu & Malar

Understand and apply the position based concepts far-near.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	7	-		-		
<b>Workbook</b>	1.5	1.9	1.10	1.13	1.14	1.15

### Activity

5

### Big - Small

### Concept Formation

●●● The teacher has to bring different kinds of vegetables to the class. Example: big onion, small onion, big snake gourd, small snake gourd, big broad bean, small broad bean, big brinjal, small brinjal, big potato, small potato, big drumstick, small drumstick, big bitter gourd, small bitter gourd, big pumpkin and small pumpkin.



Also, ask the students to collect the objects found in their classroom environment. Place the collected objects on the table and make them observe.

Take two objects of the same kind but in different sizes (Example: big and small brinjals), compare and say which one is **big** and which one is **small**. Encourage the students to compare objects in the same way.

Likewise, take two objects of two different kinds and sizes (Example: Pumpkin and potato), compare and say which one is **big** and which one is **small**. Encourage the students to compare objects in the same way.

6

## Moment of learning

●● Divide the students into two groups. The first group has to show any object from the classroom environment. The other group has to show one bigger object and one smaller object than the object shown by the first group. In the next round interchange the groups and continue the activity.

Then, call the students one after the other and make the first student to draw an object on the blackboard. Say, 'big' to the next student and she/he has to draw an object bigger than the object drawn earlier, or say, 'small' and the student has to draw an object smaller in size. By saying big and small alternately and making the students to draw accordingly the concept of big – small can be strengthened.

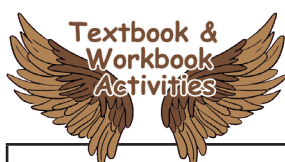
## Learning outcomes

### Arumbu

Know the position based concepts far-near and big-small.

### Mottu & Malar

Understand and apply the position based concepts far-near and big-small.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	8	-		-		
<b>Workbook</b>	1.6	1.11	1.12	1.16	1.17	1.18

## Activity

6

### Teacher's time

- Carry out the pending activities and exercises in this module.
- Check children's textbooks and workbooks.
- Provide remedial teaching if required.
- Give practice to the children who need special attention.

Implement any of the above activities as needed or carry out activities according to the need of your class, children's level and interest.

7

# 2

## I Know Shapes

### Learning outcomes



#### Arumbu

- ❖ Know about curved and flat objects.
- ❖ Know about corners and edges of objects.

Textbook Pages  
9-10

#### Mottu

- ❖ Know 3D shapes.
- ❖ Make 2D shapes from 3D objects.

Textbook Pages  
1-9

#### Malar

- ❖ Know the properties of 2D shapes.
- ❖ Know the properties of 3D objects namely cube, cuboid and sphere.

Textbook Pages  
1-7

### Activity

1

#### Curved and flat

### Concept Formation

**Materials required :** Things available in the classroom environment, such as chalk piece box, balls, slate, pencil box, marbles, beads, Rubik's cube, etc., guava, lemon, etc.,

Divide the students into two groups. The teacher has to call the students one by one from each group alternately and give hints like the following and the student has to place the objects as per the hint.

- ❖ Place the chalk piece on a pencil box.
- ❖ Place the ball on a slate.
- ❖ Place the Rubik's cube on a ball.



- ❖ Place the marble on a lemon.
- ❖ Place the chalk piece box on the water bottle kept horizontally.
- ❖ Place the chalk piece box on the water bottle kept vertically.

Give hints to place the objects on the curved surface while doing this activity using objects like apple guava and lemon. Ask the following questions and elicit answers from the students.

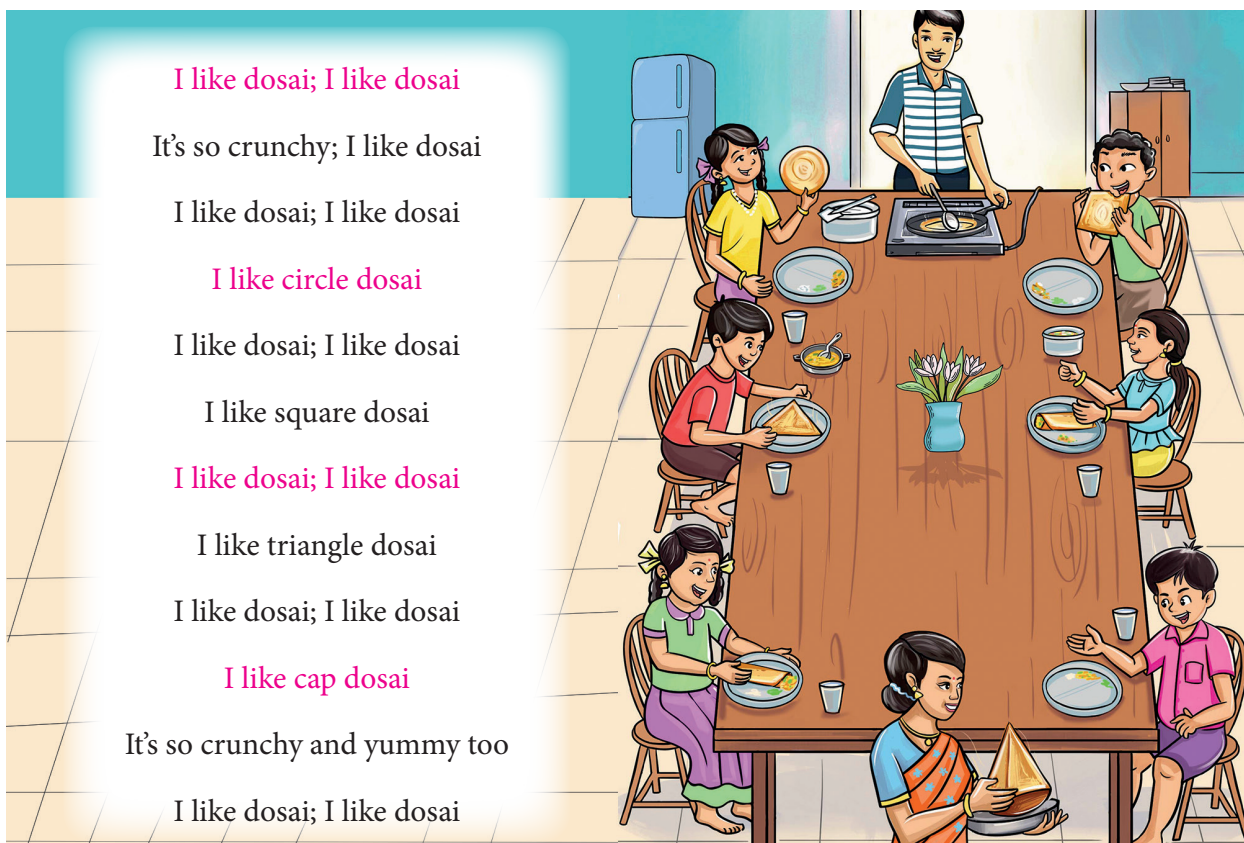
- ❖ Which objects you were able to keep one above the other? Why?
- ❖ Which objects you were not able to keep one above the other? Why?
- ❖ When were you able to keep an object on the water bottle? Why?

From the responses of the students, introduce round objects, flat objects and round and flat objects.

**3D Objects**



**Motivation**



I like dosai; I like dosai  
 It's so crunchy; I like dosai  
 I like dosai; I like dosai  
 I like circle dosai  
 I like dosai; I like dosai  
 I like square dosai  
 I like dosai; I like dosai  
 I like triangle dosai  
 I like dosai; I like dosai  
 I like cap dosai  
 It's so crunchy and yummy too  
 I like dosai; I like dosai



## Concept Formation

**Materials required :** Models of 3D objects given in the kit, Rubik's cube, dice, pencil box, chalk piece box, water bottle, tiffin box, birthday caps, paper cones, cone wafers, marbles, balls, carrot, guava, lemon, etc.

● ● Draw five circles on the floor and keep one 3D model in each of the circles. Keep the other objects mentioned above in a cardboard box and ask the students to come one by one and take an object, observe it and try to match it with the 3D object kept in the circle and place it in the appropriate circle. Then the teacher has to introduce the names of the 3D objects to the mottu level students.

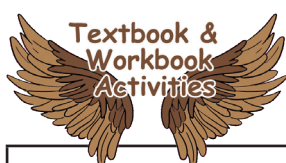
● Then the teacher has to ask the students which 3D object has only flat surface, which 3D object has only curved surface, and which 3D object has both flat and curved surfaces.

## Learning outcomes

**Arumbu** Touch and feel objects and know whether their sides are curved or flat.

**Mottu** Identify shapes of 3D objects found in the environment, such as cube, cuboid, cone, cylinder and sphere.

**Malar** Know whether the objects have flat or curved surface.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	9	2, 3, 4, 5		5		
<b>Workbook</b>	2.1	2.1, 2.2	-	2.1	2.2	-

▶▶▶▶▶▶▶▶▶▶ **Project :** Ask students to make and bring the 3D shapes such as cuboid, cube, cylinder, cone and sphere using clay or mashed paper.

## Activity

2

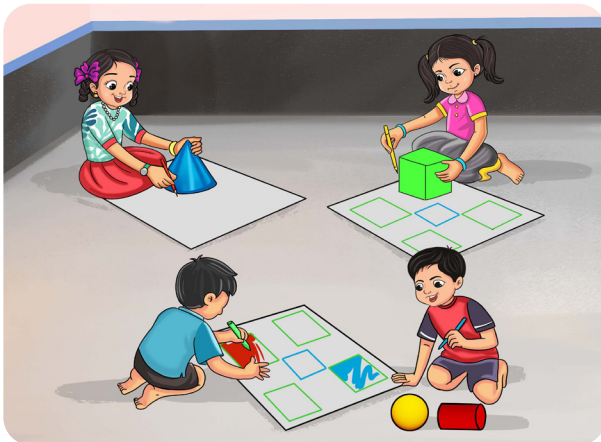
●● Make the students recall the activities done in the previous day and do the exercises in the workbook/textbook.

### 2D from 3D

**Materials Required:** Colour papers, papers, colour pencils and model objects which have the shapes of square, rectangle, triangle or circle as their sides.

● Divide the students into two groups. Name one group as 'Shape Pattern' and the other group as 'Shape Doll'. Now, give the required model objects to the two groups to draw outlines of the shapes such as square, rectangle, triangle and circle. Mottu level students in the 'Shape Pattern' group have to draw outlines of these objects and form shape pattern (kolam). Malar level students have to colour it.

Shape Pattern



Shape Doll



Similarly, Mottu level students in the 'Shape Doll' group have to create a doll by drawing outlines using the given objects. Malar level students have to colour it. Then, each group has to talk about the pattern (kolam) and the doll they have created.

### Learning outcomes

**Arumbu**

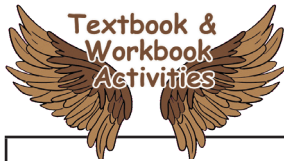
Know whether the sides of objects are flat or curved through the sense of touch.

**Mottu**

Able to create 2D shapes from 3D objects available in the environment.

**Malar**

Know the properties (sides, corners and edges) of cube, cuboid and sphere.



	Arumbu	Mottu		Malar		
Textbook Pages	-	6, 7		6		
Workbook	2.2	2.3	-	2.3	2.4	2.5

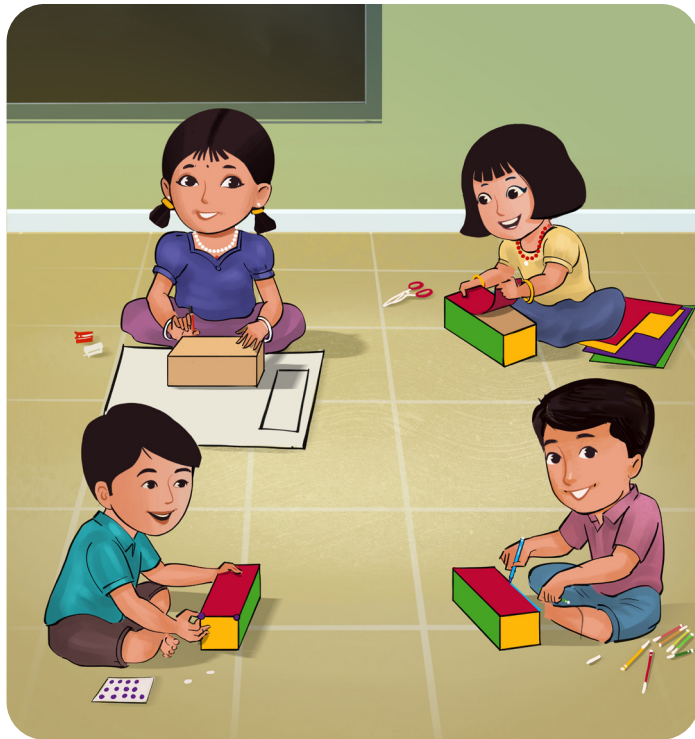
### Activity

3

#### Properties of 3D objects

**Materials Required:** Cube and cuboid boxes, spherical balls - 2 sets. Colour papers in 6 different colours, gum, sketch pens, *pottus* and models of cube, cuboid and sphere objects.

●●● Divide the students into two groups and give each group a set of cuboid shaped box, cube shaped box and a ball. First, the **Mottu level students** in the group have to trace and draw each side of the cube shaped box on paper. Then, the **Malar level students** have to paste papers of different colours on each side of the box. Next, the **Arumbu level students** have to colour the edges of the box, where the two different coloured papers meet. Then stick *pottus* in the corners.



Then, the **Mottu level students** have to say the names of the shapes traced and drawn. **Malar level students** have to get the total number of the sides of the cube box by counting the traced and drawn sides, the total number of edges by counting the coloured edges and the total number of corners by counting the *pottus*. Then, the **Arumbu level students** have to touch and show the edges and corners of the object.

Similarly, this activity has to be conducted using a cuboid box. Then, paste the colour paper around the ball. Point out to the students that since sphere has no edges and corners, a single colour paper is pasted around it. The teacher has to tell the students that the sphere has no edges or corners.

### Learning outcomes

#### Arumbu

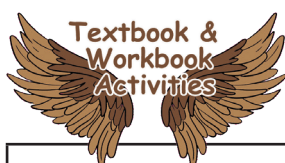
Identify the corners and edges of 3D objects by touching and feeling it.

#### Mottu

Identify 3D shapes in the environment.

#### Malar

Know the properties (sides, corners and edges) of cube, cuboid and sphere.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	10	8		7		
<b>Workbook</b>	2.3, 2.4	2.4	-	2.6	2.7	-

### Activity

4

● Make the students recall the activities done in the previous day and do the exercises in the workbook/textbook.

### Properties of 2D shapes

### Concept Formation

**Materials Required:** Paper sticks or ice cream sticks with cut edges, colour thread, object used to trace the shape of square, rectangle, triangle and circle.

●● Divide the students into four groups. Give each group a set of materials mentioned above.

The Mottu level students in the group have to draw square, rectangle, triangle and circle by tracing the given object. Then the Malar level students have to keep sticks on the outline of the shapes. Teacher has to make sure that the sticks fit to the lengths of the sides. Then, the teacher has to say that these

are the sides of the shapes and the number of sticks used is the number of sides of the shape. Then, make the students compare the sticks and talk about how they look like. When students realise that they cannot paste sticks, teacher has to say circle has no sides. Also teacher has to say, as the circle has no sides, it has no corners.

Make the students join the two opposite corners by using sticks. Make them realise that it is the **diagonal** of the shape. The teacher has to say that the number of sticks used is the number of diagonals of the shape. The students have to compare the length of the sticks used as diagonal by placing beside each other.



Likewise, ensure that each group is familiar with the corner, sides and diagonals of the given shapes.

### Moment of learning

Divide the students into two groups. Draw shapes as shown in the picture. A student from the first group has to stand on the first shape (square). The other group has to sing a question song about a shape from the two shapes in front of her/him. The jumping student has to jump onto the right shape singing the answer song.



For example, if the second group sings 'Opposite sides are equal. Do you know who am I?' the student who is standing on the shape has to jump onto the rectangle shape singing 'Opposite sides are equal. I know you are a rectangle!'

Question Song	Answer Song
Opposite sides are equal. Do you know who am I?	Opposite sides are equal. I know you are a rectangle!
Four sides are equal. Do you know who am I?	Four sides are equal. I know you are a square!
I have three sides. Do you know who am I?	You have three sides. I know you are a triangle!
I have no sides, no corners. Do you know who am I?	You have no sides, no corners. I know you are a circle!

In the same manner, while the second group is singing, the student has to jump onto the right shapes till the end. If the student jumps onto the wrong shape without knowing the properties of the shape said by the second group, she/he has to be excluded from the game. The next student from the same group has to start from the beginning. If a student jumps correctly till the end, give a ★ to her/his group. Interchange the groups and continue the game. At the end, the group which gets more number of ★ is the winning group.

### Learning outcomes

#### Arumbu

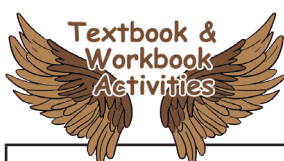
Able to identify edges and corners of objects.

#### Mottu

Able to create 2D shapes from 3D objects and identify them.

#### Malar

Able to create 2D shapes and know their properties.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	-	9		4		
<b>Workbook</b>	2.5, 2.6	2.5	2.6	2.8	2.9	-

### Activity

5

#### Teacher's time

- Carry out the pending activities and exercises in this module.
- Check children's textbooks and workbooks.
- Provide remedial teaching if required.
- Give practice to the children who need special attention.

Implement any of the above activities as needed or carry out activities according to the need of your class, children's level and interest.

# 3

## I Know Numbers



### Learning outcomes

#### Arumbu

- ❖ Know the numbers from 1 to 9.
- ❖ Know the concept of zero.

**Textbook Pages**  
11-25, 48-49

#### Mottu

- ❖ Know the number names of numbers up to 20.
- ❖ Know the place value of 2-digit numbers.

**Textbook Pages**  
10, 14 - 19, 23 - 25

#### Malar

- ❖ Know the numbers from 100 to 999 and their number names.
- ❖ Know the place value of 3-digit numbers.

**Textbook Pages**  
8 - 14

### Activity

1

#### One-to-one Correspondence

**Materials Required:** Objects easily available in the environment such as stones, seeds, flowers, leaves, beads, bead strings and masks of various birds.

#### Motivation

●●● Sing the following song with appropriate rhyme and action along with the students. Also, Show the video song given in the QR code.



Rat Rat Rat here and there  
 Rat Rat Rat everywhere.  
 One little rat played a horn  
 Two little rats played their pipes  
 Rat Rat Rat here and there  
 Rat Rat Rat everywhere.  
 Three little rats sang a song  
 Four little rats went clapping on  
 Rat Rat Rat here and there  
 Rat Rat Rat everywhere.  
 Five little rats climbed the stairs  
 Six little rats danced for the song  
 Rat Rat Rat here and there  
 Rat Rat Rat everywhere.  
 Seven little rats played hide and seek  
 Eight little rats went round and round  
 Rat Rat Rat here and there  
 Rat Rat Rat everywhere.  
 Nine little rats jumped up high  
 Ten little rats played on the ground  
 Rat Rat Rat here and there  
 Rat Rat Rat everywhere.  
 All cute rats were happy and glad  
 They all had fun and said hurray!



● Divide the students into groups of five. Call one group to the front and make them wear the bird masks. Now, the teacher has to place objects (not exceeding nine) on the table. Now, the teacher has to sing the song given below and call a bird.



The student wearing the mask of a sparrow has to come to the front, take objects corresponding to the count of the objects which the teacher has placed on the table and place them there on one-to-one basis.

After completing a few rounds with the remaining students like this, continue the game as follows. This time, the students have to draw one circle each for an object shown by the teacher on the low-level blackboard. Give a ★ to the students who do this correctly.

● ● While conducting this activity, instead of showing an object, the teacher has to show a number card not exceeding 99. Students have to bring and show beads and bead strings corresponding to that number. Ensure the participation of all the students and continue this activity.

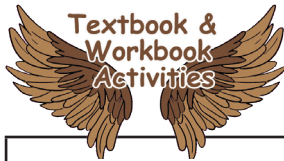
### Learning outcomes

#### Arumbu

Know one-to-one correspondence not exceeding 9.

#### Mottu & Malar

Recall and apply the numbers from 1 to 99.



	Arumbu	Mottu		Malar		
Textbook Pages	12, 13, 14	10		-		
Workbook	-	3.1	3.2	3.1	3.2	3.3

## Activity

2

### Numbers from 1 to 9

#### Motivation

- Discuss with students by asking the following questions.
- ❖ What is your favourite food item?
- ❖ How many of that food items will you eat?
- ❖ How many eyes do you have?
- ❖ How many fingers do you have?
- ❖ How many fingers are there in each hand?
- ❖ How many moons are there?
- ❖ How many stars are seen in the night sky?
- ❖ You go to a shop and ask for 8 eggs. The shopkeeper gives you some eggs. How would you know that he has given the correct count of eggs?

Ask similar questions related to daily life situations and make the students realize the importance of numbers and counting to the students. Continue the activity by telling, “Come let us learn numbers and counting”.

#### Concept Formation

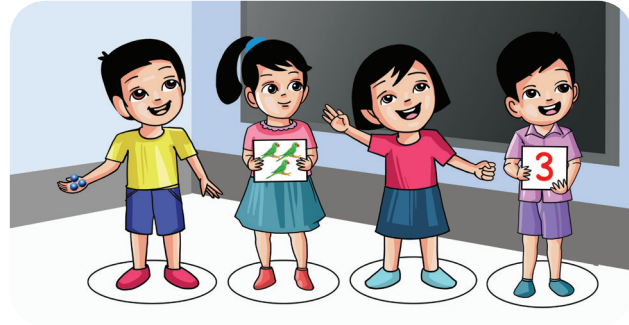
**Materials Required :** Beads, number cards and picture cards.

First, introduce numbers 1-3 using picture cards, beads, fingers and number cards. Then, continue the activity as given below.



Divide the students into four groups. Give beads to the first group, picture cards to the second group, number cards (1-3) to the fourth group. Third group has to use fingers.

Draw four circles in the front portion of the classroom (floor) with enough space in between them. When the teacher says a number, a student from each group has to take corresponding items and stand inside her/his circle. All in the group have to say the count one by one, loudly.



For example, if the teacher says 3, the student from the first group, who stands on the first circle, has to show the beads and say, 'three beads,' the student from the second group has to show the picture

### Moment of learning



After introducing the numbers like this, the teacher has to give sandpaper and make them sense it by touching and teach the way of writing numbers. Then, the teacher has to write it on the blackboard.



Following the teacher, the students have to practice writing the numbers in sand and on the low-level blackboard.

Then interchange the picture cards, number cards and objects among the groups and continue the activity till they get enough practice.



**Note:** Using this activity, introduce the numbers from 1 to 9 (3 numbers per day for three days) to Arumbu level students.

●● As the teacher says a number not exceeding 99, Mottu and Malar level students have to place objects or beads according to the number. Another student has to pick and show the corresponding picture card from the Ennum Ezhuthum kit, and write the numeral for the corresponding number on the low-level blackboard. After conducting this activity like this, finally, the students have to write the numbers from 1 to 99 on the low-level blackboard.



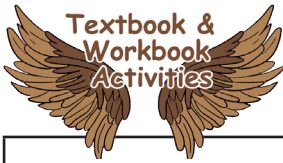
## Learning outcomes

### Arumbu

Know numbers from 1 to 3.

### Mottu & Malar

Recall numbers from 1 to 99.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	15, 16, 17	-		-		
<b>Workbook</b>	3.1	3.3	3.4	3.4	3.5	3.6

## Activity

3

### Number Name



## Motivation

**Materials required :** Number name cards given in annexure, letters for forming number names 1-10, number and number name cards for 21-99.

**One** little deer; **One; one; one**

**Two** little parrots; **Two; two; two**

**Three** little rabbits; **Three; three; three**

**Four** little puppies; **Four; four; four**

**Five** colourful peacocks; **Five; five; five**

**Six** little lambs; **Six; six; six**

**Seven** strong bulls; **Seven; seven; seven**

**Eight** little sparrows; **Eight; eight; eight**

**Nine** tall camels; **Nine; nine; nine**

**Ten** short ducks; **Ten; ten; ten**



## Moment of learning

●● Place the pictures on the table. Draw a circle near the table and 'place the letter cards to form number names' in it. The teacher has to sing the following song using the picture cards. Then, divide the students into groups of ten. Each Student in the group has to sing a line from the song and pick the card according to the line.

● Then, they have to stand in a line, one after the other, from left to right. They have to show the number names on the reverse side of the picture card one by one and sing the song with appropriate gestures. They have to take the letters from the circle, arrange them and form the number name according to the number name they have. They have to write it on the low-level blackboard also. They have to continue this activity, by singing the song one by one and showing the number name.

● The teacher has to cut out and use the cards of numbers and number names from 21 – 99 in such a way that they can be matched with one another, as shown in the picture.



Divide the students into two groups and mix up and place the numbers from 21 to 30 in front of the first group and 31 to 40 in front of the second group. Put the appropriate number names in two boxes and give them to the groups. When the teacher says, **start**, each group has to place the numbers in correct order and match them with their number names correctly. Once both the groups complete the activity, the teacher has to reinforce once again by saying the number names. Likewise, recall the number names up to 99.

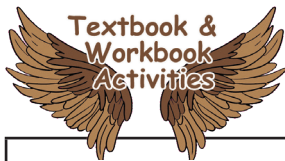
● Use this activity, which is meant for Mottu level students, as a strengthening activity for Arumbu level students in identifying numbers from 1 to 3 using the lines of the song dealing up to number 3. Then, introduce the numbers from 4 to 6 through activity 3.

## Learning outcomes

**Arumbu** Know numbers from 4 to 6.

**Mottu** Identify number names up to 10.

**Malar** Recall and apply number names up to 99.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	18, 19, 20, 21	-		8		
<b>Workbook</b>	3.2	3.5	3.6	3.7	3.8	-

## Activity

4

### Introduction of 100

## Concept Formation

**Materials required:** Ten-bead strings–10, hundred-bead string bunches – 9, letters for forming number names, number name cards given in pages 140-144 of the annexure.

● Give 10-bead strings, one each to 10 students. Call the students one by one and make them place the beads on the table and tell the total count of the beads.

For example, the first student has to place one ten-bead string on the table and say 1 ten. The second student has to keep the ten-bead string that he has and say 2 tens make 20. Continue the activity like this. When the 10<sup>th</sup> student places the ten-bead string, the teacher has to say that 10 tens together make 100 and introduce 100 by showing a 100-beads string bunch. Also, write and show the method of writing 100.

After introducing 100, give 100-bead string bunches one each to 9 students and introduce hundreds up to 900 by saying **hundred and hundred is two hundred, two hundred and hundred makes three hundred** and so on.

## Moment of learning

Divide the students into groups of 4. Shuffle and give matchboxes with numbers 100, 200, 300... 900 written on them. Students in a group have to join the matchboxes in order and make a train. Appreciate the group which completes the activity correctly and quickly.



● When the teacher shows the number card 11, the student has to pick the picture card with corresponding count. Then, she/he has to take the letters from the circle and form the number name according to the number name on the reverse side of the picture card. She/he has to write it on the low-level blackboard. Likewise, the students have to form number names up to 20.

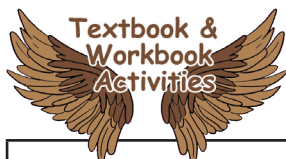
● For Arumbu level students, introduce numbers from 7 to 9 through activity 3. Then, write numbers 1, 2, 3... 9 on matchboxes and play the train game given above.

## Learning outcomes

**Arumbu** Recall numbers from 1 to 6 and know the numbers from 7 to 9.

**Mottu** Identify number names from 11 to 20.

**Malar** Know hundreds such as 100, 200, 300,...900.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	22, 23, 24	24, 25		-		
<b>Workbook</b>	3.3	3.7	3.8	3.9	3.10	3.11

## Introduction of zero

## Concept Formation

**Materials Required :** 9 balloons, number name cards from 100, 200, 300... 900 and letter cards to form number names of 100, 200, 300... 900.

● Divide the students into groups of 9. Place 9 air-filled balloons on the table. Ask the students how many balloons are there on the table and confirm the same. Ask a student from the first group to pick a balloon from the table, speak about a good quality of her/his favourite friend and gift her/him the balloon. For example, a student can say 'My friend is Kayal. She is very affectionate by nature' and gift the balloon to Kayal. After this, ask the student, 'How many balloons are there on the table?'



Continue the activity with other students. After giving out all the 9 balloons, ask 'how many balloons are there on the table, now?' The teacher has to explain that the number to represent "nothing" is "0" and thus introduce zero.



**Note:** The teacher has to introduce how to write zero and make the students write it.

## Moment of learning

Show all the number cards to the students and ask them to make a gesture according to them. For example:

- ❖ Touch your ears once.
- ❖ Touch your forehead twice.
- ❖ Touch your nose thrice.

Doing so, say 0 in-between the numbers and tell the students to not to make any gesture when 0 is said.

For example, touch your head for 0 times.

If a student touches her/his body part for 0, she/he will be out of the game. Continue the game till the students clearly understand the concept of zero.

● The students have to count numbers in tens using 10-bead strings and write them on the low-level blackboard.

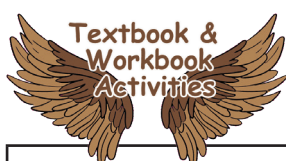
● When the teacher shows the number card 100, the student has to take the string bunch indicating the number. Then she/he has to form the number name which is written on the reverse side of the card by placing the letters in the circle, in order. In the end, they have to write it on the low-level blackboard. Likewise continue the activity for 200, 300... 900.

### Learning outcomes

**Arumbu** Know the concept of zero.

**Mottu** Recall the numbers 10, 20, 30... 90.

**Malar** Know to write the numbers 100, 200, 300... 900 and their number names.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	48, 49	-		-		
<b>Workbook</b>	3.4	3.9	3.10	3.12	3.13	3.14

### Activity

6

### Introduction of Numbers 101 – 999

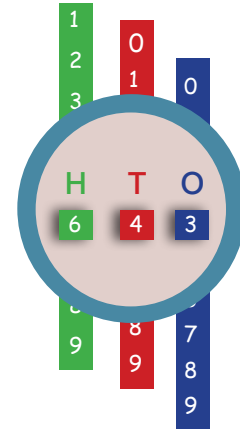
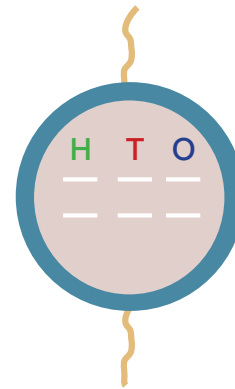
**Materials Required :** Number wristwatch – 4.



● Make the students stand in a semicircle. Prepare a number wristwatch as shown in the picture and form and introduce numbers from 101 to 200 using it.

For example, place 1 in the hundreds line, 0 in the tens line, 1 in the ones line and

say it is 101. Then, pull the ones line slightly upwards, make 2 visible and say it is 102. Like this, show up to 109. To create 110, place 1 in tens line and pull the ones line completely down so that 0 is visible. Whenever the tens change, the ones line has to be pulled completely down. Like this, show numbers up to 199. To create 200, place 2 in the hundreds line, pull the tens and ones lines completely down, so that 0 is visible in both the lines.



Then, divide the students into four groups. Give each group a number wristwatch. The first group has to create numbers 201 to 400 and write it on the low-level blackboard. Likewise, the second, third and fourth groups have to use the number wristwatch and create numbers 401 to 600, 601 to 800 and 801 to 999 respectively. They have to write the numbers on the low-level blackboard.

● Use the tens and ones lines in the numbers wristwatch and strengthen the learning of numbers 1-99.

● Divide the students into groups of two. First, a student has to say a number (not exceeding 9) and the other student has to draw lines on the low-level blackboard according to that number. In the consecutive rounds, continue the activity by asking the student who said the number to draw lines and the student who drew lines to say the number.

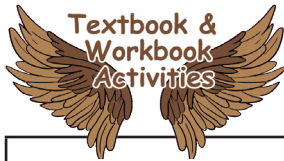
### Learning outcomes

**Arumbu** Identify numbers up to 9.

**Mottu** Recall numbers up to 99.

**Malar** Identify numbers from 101 to 999.





	Arumbu	Mottu		Malar		
Textbook Pages	25	15		12		
Workbook	3.5	3.11	3.12	3.15	3.16	-

### Activity

7

●●● Make the students recall the activities done in the previous day and do the exercises in the workbook/textbook.

### Learning outcomes

#### Arumbu

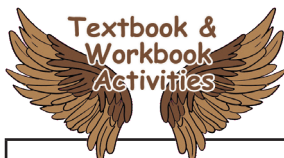
Know and apply numbers up to 9.

#### Mottu

Know and apply numbers up to 99.

#### Malar

Know and apply numbers from 101 to 999.



	Arumbu	Mottu		Malar		
Textbook Pages	-	-		-		
Workbook	3.6	3.13	3.14	3.17	3.18	3.19

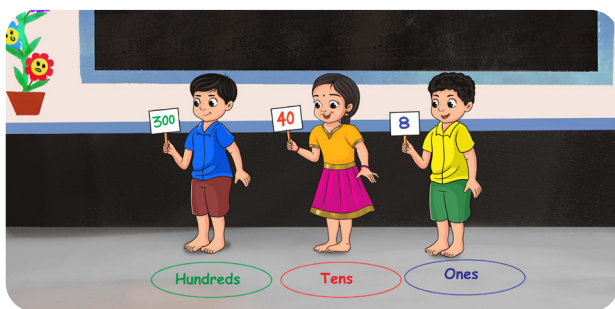
### Activity

8

### Number Name and Place Value

**Materials Required :** Placards of numbers 1 to 9; 10, 20, 30,...90; 100, 200, 300, ...900 with number names written on the reverse side and numbers cards from 1 to 9.

● Divide the students into three groups. Give hundreds placards to group one, tens placards to group two and ones placards to group three. Draw three circles at the centre of the classroom. Name the first circle as hundreds, the second circle as tens and the third circle as ones.



Now, call a student from each group. The students from each group have to stand in their respective circle. For example, when the teacher calls a student saying, who am I, who am I, find out, who am I! Three hundred, three hundred, come out and stand! The student with the number placard 300 in the hundreds group has to come forward and stand near the hundreds circle. Then, the teacher has to call a student saying, who am I, who am I, find out, who am I! Forty, forty, come out and stand! The student with the number placard 40 in the tens group has to come forward and stand near the tens circle. After this, the teacher has to call a student saying, who am I, who am I, find out, who am I! Eight, eight, come out and stand! The student with the number placard 8 in the ones group has to come forward and stand near the ones circle

Make the three students stand together. By joining the number placards of each of them (place tens placard on hundreds placard and ones placard on the tens placard) a three-digit number is formed.

Say the number in the following way.

Who are we, who are we, find out, who are we!

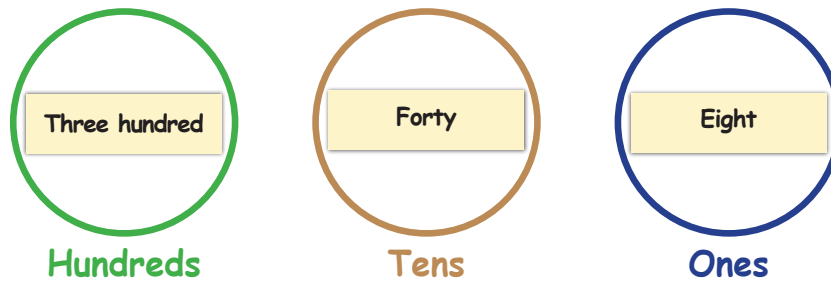
We are Three Hundred and Forty Eight !

Introduce the simplified form (348) by writing it on the blackboard. Then make the three students stand apart and ask them to show their placards individually. By this, introduce the expanded form ( $300+40+8$ ) and write it on the blackboard.

Place the number cards corresponding to this number in the appropriate place value circles, saying as follows. There are 8 ones in 348, so 8 has to be placed in the ones circle. There are 4 tens in 40, so 4 has to be placed in the tens circle. There are 3 hundreds in 300, so 3 has to be placed in the hundreds circle.



Ask the students how many ones, tens and hundreds are there in 348 and strengthen the concept of place value. Now, make the students flip their number placards and show the number names.

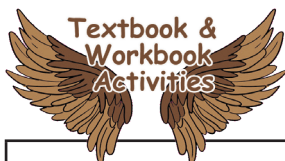


Now, get the number name cards from the students and write the number name as Three Hundred and Forty Eight on the blackboard and introduce the same. Likewise, introduce a number each from the number ranges 200, 300, 400, 500, ... 900.

- Carry out the same activity for simplified form and expanded form using numbers from 1-99.
- Ask the students to write numbers from 1 to 9 in the low level blackboard and draw pictures of their choice according to the count.

### Learning outcomes

- Arumbu** Know and apply numbers up to 9.
- Mottu** Know and apply the place value of numbers up to 99.
- Malar** Know and apply the number names and place value of numbers from 101 to 999.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	-	17, 18, 19		13		
<b>Workbook</b>	3.7	3.15	3.16	3.20	3.21	3.22

### Activity 9

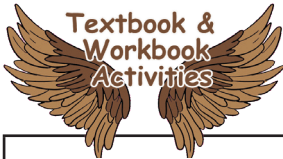
●●● Make the students recall the activities done in the previous day and do the exercises in the workbook/textbook.

## Learning outcomes

**Arumbu** Know and apply numbers up to 9.

**Mottu** Identify the place value of numbers up to 99.

**Malar** Know and apply the number names and place value of numbers from 101 to 999.



	Arumbu	Mottu		Malar		
Textbook Pages	-	-		14		
Workbook	3.8	3.17	3.18	3.23	3.24	3.25, 3.26

## Activity

10

### Teacher's time

- Carry out the pending activities and exercises in this module.
- Check children's textbooks and workbooks.
- Provide remedial teaching if required.
- Give practice to the children who need special attention.

Implement any of the above activities as needed or carry out activities according to the need of your class, children's level and interest.

# 4

## I can compare numbers



### Learning outcomes

#### Arumbu

- ❖ Compare numbers up to 9 and know big number and small number.
- ❖ Identify before, after, In-between numbers up to 9.
- ❖ Identify the ordinal numbers up to 9.

**Textbook Pages**  
26-31

#### Mottu

- ❖ Compare numbers up to 99 and know big number and small number.
- ❖ Identify the predecessor, successor and in-between numbers up to 99.
- ❖ Identify odd and even numbers up to 99.

**Textbook Pages**  
11-12, 20-23

#### Malar

- ❖ Compare numbers up to 999 and know big number and small number.
- ❖ Identify before, after, in-between numbers up to 999.
- ❖ Arrange numbers up to 999 in ascending and descending orders.
- ❖ Identify odd number and even number up to 999.

**Textbook Pages**  
15-23

### Activity

1

**Materials required:** Things easily available in the surroundings such as tamarind seeds / beads / stones.

● Heap the collected seeds. Divide the students into two groups. Call one student from each group to come forward. When the teacher says **Take**, both the students have to take handful of seeds and keep their hands closed.

Next when the teacher says **Guess**, the respective groups have to guess and say the number of seeds taken by the student of their group.

Next when the teacher says **Count** both the students have to count the seeds and write the count on the blackboard. Appreciate the group that has estimated correctly and continue the game with the

next two students of both the groups in the same manner.

●● Mottu and Malar level students in the groups have to compare both the numbers and write the symbols.



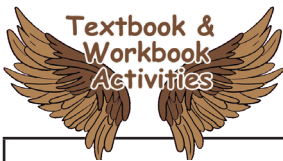
**Note:** For arumbu, mottu and malar level students, use seeds of appropriate count.

### Learning outcomes

**Arumbu** Able to compare numbers up to 9 and know big numbers and small numbers.

**Mottu** Able to compare numbers up to 99 and know big numbers and small numbers.

**Malar** Able to compare numbers up to 999 and know big numbers and small numbers.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	26	22, 23		-		
<b>Workbook</b>	-	4.1	-	4.1	4.2	4.3

### Activity

2

### Big number and Small number

### Motivation

Divide the students into two groups and name one group as **big** and the other group as **small**. Say a common noun (animals, birds, etc.), the group big has to say a bigger one related to the noun and the small team has to say a smaller one.

For example, if the teacher says 'animals', the group **big** has to say 'elephant' and the group **small** has to say an animal smaller than elephant. Next, the teacher has to say another common noun. The **small** group has to say the answer first and the **big**



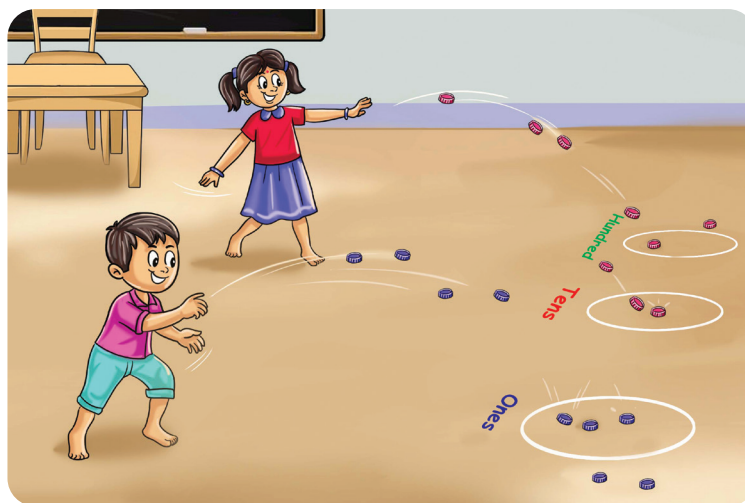
group has to say something bigger than that. In the same way continue the activity by giving the first chance to groups alternately.

### Moment of learning

**Materials Required :** Bottle caps of any two different colours - each 20, ice-cream sticks.

● Draw three circles and write hundreds, tens and ones below them in the classroom, as shown in the picture.

Call two students and make them stand apart at a specific distance. Give the first student 20 caps of one colour and the second student 20 caps of the other colour. The students have to throw the caps into the circles, alternately. Then, they have to write the numbers formed by the caps on the floor.



Then, the teacher has to introduce students how to compare the two numbers and find out the **big number** and **small number**. First, compare the caps in the hundreds circle and find out the **big** and **small** numbers. If the number of caps in the hundreds circle are equal, then compare the caps in the tens circle. If the number of caps in the tens circle also are equal, then compare the caps in the ones circle. Make the students compare the big number and small number and guide them to create the appropriate symbol using ice-cream sticks and place it between the two numbers. Teacher has to guide the students to create the symbols. Continue the activity in the same manner by involving the other students.



**Note :** Through this activity, the students understand the concept of big and small numbers by comparing concrete objects first and then move on to comparing numbers. Thus, there is a transition of understanding from concrete to abstract concepts.

● Students alone have to be introduced with symbols ( $>$   $<$   $=$ ).

**Small Number  $<$  Big number**

**Big Number  $>$  Small Number**

● Draw only two circles of ones and tens and conduct the same activity.

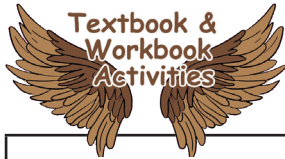
● Use only the ones circle and conduct this activity.

## Learning outcomes

**Arumbu** Able to compare numbers up to 9 and know big numbers and small numbers.

**Mottu** Able to compare numbers up to 99 and know big numbers and small numbers.

**Malar** Able to compare numbers up to 999 and know big numbers and small numbers.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	-	21		19		
<b>Workbook</b>	4.1	4.2	-	4.4	4.5	4.6

## Activity

3

### Predecessor, Successor and Number in-between

**Materials Required :** 1 to 9 medal garlands.

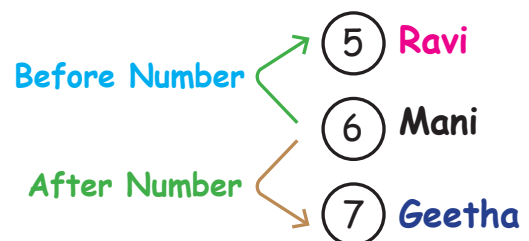
● Place the medal garlands 1 to 9 in a box and keep it at the centre of the classroom. Make all the students run in a circle around it. When the teacher signals, the students have to take the medal garlands and stand in the appropriate circle. The other students have to stand in a semicircle shape as spectators.



Now the teacher has to say a few names of the students and discuss who is before her/him? who is after her/him? Through this, introduce before numbers, after numbers and in-between numbers.

For example,

- ❖ What is the number Mani is wearing?
- ❖ Who is standing before Mani?
- ❖ What is her/his number?
- ❖ Who is standing after Mani?
- ❖ What is her/his number?



Next, say two numbers and introduce the number in-between.

- ❖ Who has the number 5?
- ❖ Who has the number 7?
- ❖ Who stands in-between them? What is her/his number?

By asking so, introduce the number in-between. Make the students observe that before number, in-between number and after number are three continuous numbers in a line.

●● Prepare medal garland sets in sufficient number with three consecutive numbers written on them, as shown in the picture. Call the students to the front in groups of three. Make them wear the three consecutive number medal garlands. They have to stand in order as per the numbers in the medal garlands. The student in the middle has to wear the ‘number in-between’ crown. Then say the predecessor and successor to the number in-between.



For example, if the students are wearing the medal garlands 299, 300 and 301, the student wearing the medal garland 300 has to wear the ‘number in-between’ crown. Then she/he has to say that the predecessor of 300 is 299 and the successor of 300 is 301.

### Learning outcomes

#### Arumbu

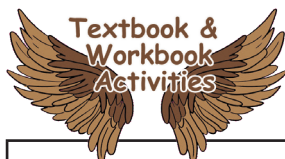
Identify before, after and in-between numbers in the numbers up to 9.

#### Mottu

Identify predecessor, successor and number in-between in the numbers up to 99.

#### Malar

Identify predecessor, successor and number in-between in the numbers up to 999.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	27	12		-		
<b>Workbook</b>	-	4.3	4.4	4.7	4.8	4.9

## Activity

4

### Ascending Order and Descending Order

#### Motivation

**Materials Required :** 1-9 number blocks, 1-9 number cards (2 sets), sticks of various heights, ascending/descending order cards as shown in the picture, place value strips and number strips.

●●● Divide the students into three groups. Ask each group to collect sticks of different heights. Ask the first group to arrange the sticks in order, from the shortest to the tallest in height. Likewise, ask the second group to arrange the sticks, from the tallest to the shortest in height.



#### Concept Formation

●● Make Arumbu level students as one group and Mottu level students as another group. Mix up the number cards from 1 to 9 and give them to Arumbu level students. For Mottu level student mix up and give any 10 continuous number cards, from the numbers 1-99. When the Teacher says, **start**, students have to arrange the number cards in order.

● When the number of digits of the given numbers are different, arrange them in ascending and descending order as per their number of digits (e.g. 3, 17, 234). When the number of digits of the given numbers are equal, then arrange them using the following procedure. Divide the students into two groups. Give each group an ascending / descending order card, place value strip, number strip. Now, make the students arrange the number in ascending and descending order by using ascending and descending card and following the instructions given below.



Ascending order and  
Descending order card

**Step 1 :** Insert the 4 number strips into ascending/descending order card.

**Step 2 :** Now, only the number in the hundreds place of the numbers is visible. If all the four digits of the hundreds place are different, take out the number cards and place them in order, from the smallest to the biggest.



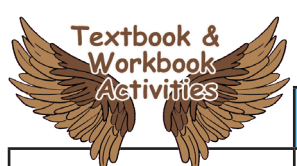
As the digits in hundreds place are kept in ascending order, we get ascending order. Similarly, if the digits are kept in descending order, that is from the biggest to the smallest number, we get descending order.

**Step 3 :** If the hundreds digits are equal in the given numbers, move in such a way that the next digits are visible. Then compare those digits to find out the smaller number and write in ascending order.

Likewise, encourage the students to write in descending order. Later students have to record it on the low-level board.

### Learning outcomes

- Arumbu** Know the order of numbers up to 9.
- Mottu** Know the order of numbers up to 99.
- Malar** Able to arrange numbers up to 999 in ascending order and descending order.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	29	-		20		
<b>Workbook</b>	-	4.5	4.6	4.10	4.11	4.12

### Activity 5

### Ordinal Numbers

**Materials Required :** Masks of any 9 animals, 1 to 9 number cards – 3 sets, 1 to 99 number cards any 20 – 2 sets.



● Divide the students into groups of 9. Draw 9 long lines on the floor as shown in the picture. Call the students of the first group and ask them to wear their favourite face masks and stand near the starting point of the line. Make the other students to stand near the end of the line.



When the teacher says 'walk', each student has to walk with action according to the animal mask she/he is wearing. When teacher says, 'statue', all the 9 animals have to stand still in the place where they are.

Now the audience can ask questions like, which animal comes first, in which place the elephant is, and introduce ordinal numbers. By saying 'statue' and 'walk' alternately, involving different groups, strengthen the concept of ordinal numbers.

● Divide the students into two groups. Give each group 10 number cards continuously. The students in the group have to take cards and write them in correct order on the low-level blackboard. Like this, ask them to take cards like this for five times and write them in correct order on the low-level blackboard.





● Divide the students into groups of three. Place sufficient number of number cards in a small box. As the teacher extends the box to the students, a student from each group has to come to the front and take three cards.

Then, each group has to write all the possible three-digit numbers separately on the low-level blackboard which they can form using the number cards with them. They have to compare the numbers and write them in **ascending order** or **descending order**. Also, they have to write the **biggest** and **smallest** numbers separately.

For example, if a group gets number cards 2, 6 and 5, it has to write 265, 256, 652, 625, 562, 526 on the low-level blackboard. Then, the students of the group have to write the numbers in order like 256, 265, 526, 562, 625, 652 or like 652, 625, 562, 526, 265, 256. In the end they have to write the **biggest number** 652 and the **smallest number** 256.



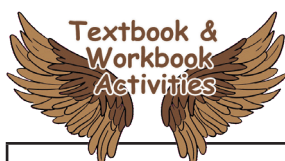
**Note:** while writing the numbers in ascending order smallest number is obtained and in descending order biggest number is obtained.

### Learning outcomes

**Arumbu** Know the ordinal numbers up to 9.

**Mottu** Know the order of numbers up to 99.

**Malar** Able to form and compare three-digit numbers by using the numbers only once.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	28, 30	-		23		
<b>Workbook</b>	-	4.7	4.8	4.13	4.14	4.15



## Activity

6

● Make the students recall the activities done in the previous day and do the exercises in the workbook/textbook.

### Odd numbers and Even numbers

**Materials required:** Stones/beads/seeds/leaves– 99.

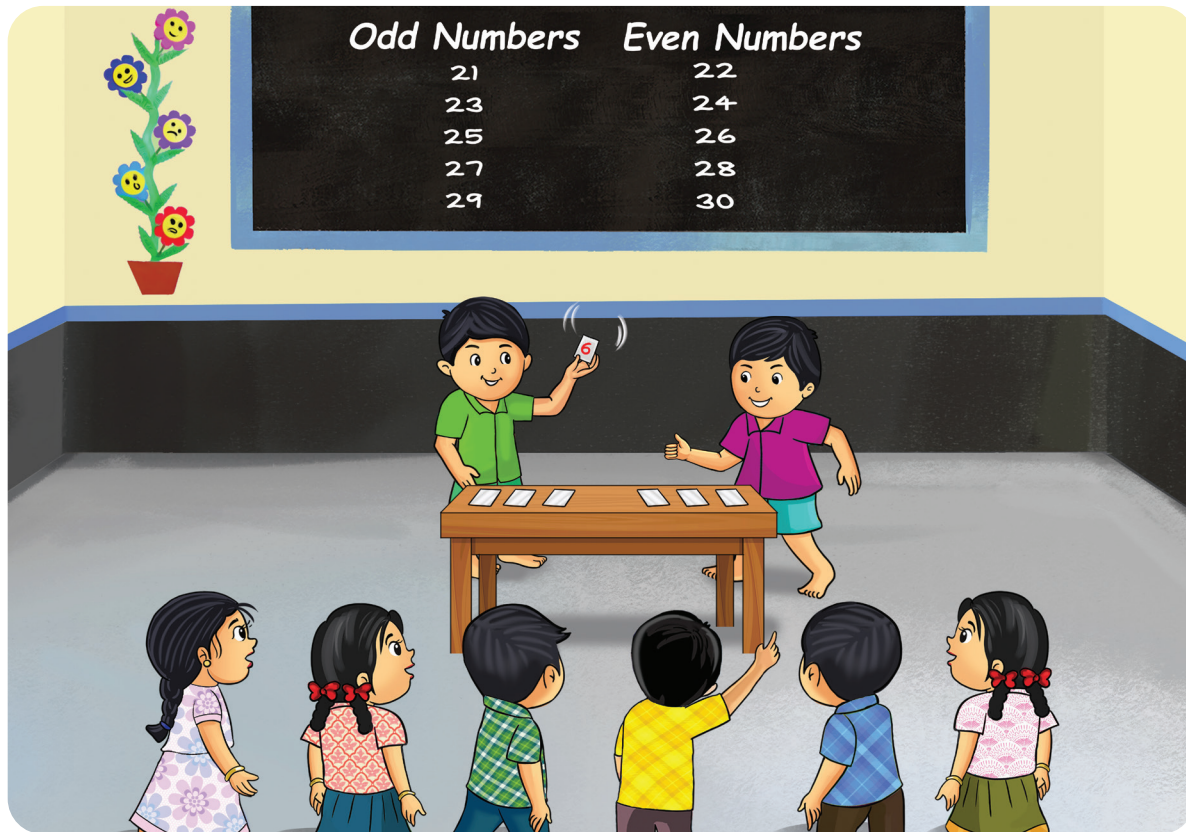
● Divide the students into groups of two. Give each of them seeds or stones or beads not exceeding 99. Divide the blackboard into two equal parts and name the parts 1 and 2.



When the teacher says **start**, the first student from each group has to take seeds in her/his hand in a quantity she/he wishes and asks the second student **odd or even?** The second student has to say either odd or even. Then, the first student has to count the seeds in her/his hand and arrange them in twos. **If there is a single seed at the end, the student has to write the total number of seeds in the part marked as 1 on the blackboard. If there are two seeds at the end the student has to write the total number of seeds in the part marked as 2 on the blackboard.**

Here, teacher has to introduce odd and even numbers as if the arrangement ends with 1 the number is odd and if arrangement ends with 2 the number is even.

If the result is the same as said by the second student, the second student has to take the seeds and continue the game, if not the first student has to take the seeds and continue the game.



Like this, all the groups have to continue to play the game and write the answers they get, on the blackboard. After 10 rounds, make the students observe the numbers on the blackboard. Make the student realise that the numbers ending with 1, 3, 5, 7, 9 have come repeatedly on part 1 of the blackboard and the numbers ending with 2, 4, 6, 8, 0 have come repeatedly on part 2 of the blackboard and conclude that **all the numbers ending with 1, 3, 5, 7, 9 are odd numbers and all the numbers ending with 2, 4, 6, 8, 0 are even numbers** and introduce **odd numbers** and **even numbers**.

● In the same way write 3-digit numbers and make the students find odd and even numbers. Thus, reinforce the concept of odd numbers and even numbers.

Complete the activity by asking the student to find whether the digits in tens place and ones place have repeated. If so, whether it is odd or even, the next day.

### Learning outcomes

#### Arumbu

Know the ordinal numbers up to 9.

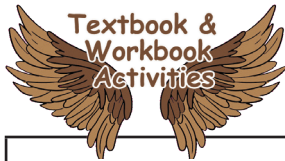
#### Mottu

Classify numbers up to 99 as odd and even numbers.

#### Malar

Recall and classify numbers as odd and even numbers.





	Arumbu	Mottu		Malar		
Textbook Pages	30	-		15, 16, 22		
Workbook	4.2	4.9	4.10	4.16	4.17	4.18

## Activity

7

### Teacher's time

- Carry out the unfinished activities and exercises in this module.
- Check children's textbooks.
- Provide remedial teaching if required.
- Give practice to the children who need special attention.

Implement any of the above activities as needed or carry out activities according to the need of your class, children's level and interest.

# 5

## I Know Addition



### Learning outcomes

#### Arumbu

- ❖ Able to do addition problems, sum not exceeding 9.

**Textbook Pages**  
1-8

#### Mottu

- ❖ Able to do addition problems without regrouping (sum not exceeding 99).

**Textbook Pages**  
1-8

#### Malar

- ❖ Able to do addition problems, with and without regrouping (sum not exceeding 999).

**Textbook Pages**  
1-8

### Activity

1

#### Motivation



### Addition without Regrouping



## Moment of learning

**Materials Required :** Cardboard box, paper cups with their bottoms removed- 2, balls/beads and seeds.

● Prepare an addition machine as shown in the picture. Then, saying any two numbers, take objects in the left hand corresponding to the first number (for example, 4 balls) and objects in the right hand corresponding to the second number (for example, 3 balls). Now, drop the objects in the left hand into the paper cup on the left side, counting the numbers one, two, three, four. Then, drop the objects in the right hand



into the paper cup on the right side, counting one, two, three. Make the students realise that the total number of objects in the box in the end is the addition of two numbers. Do this as a group activity.



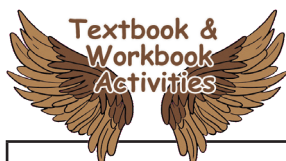
**Note:** Introduce the addition symbol (+) to the students. Make them realise that words used in day-to-day life like adding, total are related to addition.

## Learning outcomes

**Arumbu** Able to do addition problems with sum not exceeding 9.

**Mottu** Recall the addition without regrouping (sum not exceeding 20).

**Malar** Recall the addition without regrouping (sum not exceeding 99).



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	33, 34	26		23		
<b>Workbook</b>	-	5.1	5.2	5.1	5.2	5.3

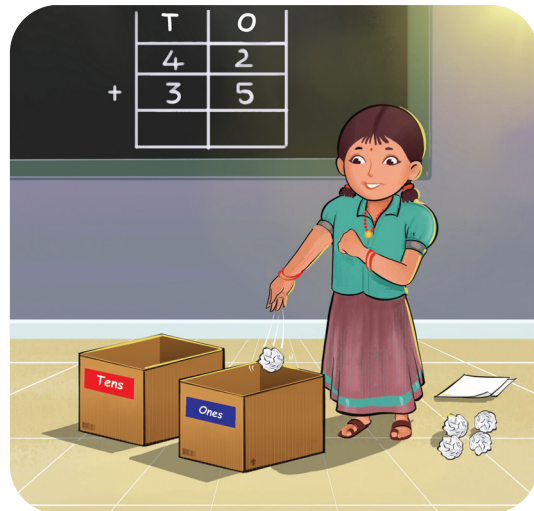
## Activity

2

**Materials Required :** Cardboard boxes-2, paper balls-18 and addition cards.

● Take two boxes, write tens on one box and ones on the other box. Place the boxes next to each other. Give each student an addition card.

Students have to come one by one, take the paper balls according to the ones count of the first number and put them in the ones box. Likewise, they have to take the balls according to the ones count of the second number and put them in the ones box. Then, they have to count the balls and write the total in the ones place. Similarly, they have to add the tens of the two numbers and write the total in the tens place. Like this, guide all the students to do their problems.



● For Malar level students carry out the same activity by adding another box for hundreds place.



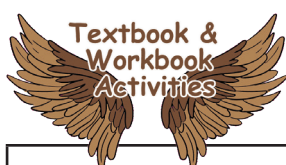
**Note:** Make the students realise that only the ones have to be added with the ones first, and then the tens have to be added only with the tens.

### Learning outcomes

**Arumbu** Able to do addition problems with sum not exceeding 9.

**Mottu** Able to do addition problems without regrouping (sum not exceeding 99).

**Malar** Able to do addition problems without regrouping (sum not exceeding 999).



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	35, 36	27, 28		23		
<b>Workbook</b>	-	5.3	-	5.4	5.5	5.6

## Activity

3

●●● Make the students recall the activities done in the previous day and do the exercises in the workbook.

### Learning outcomes

#### Arumbu

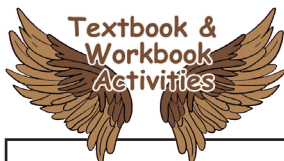
Able to do addition problems with sum not exceeding 9.

#### Mottu

Able to do addition problems without regrouping (sum not exceeding 99).

#### Malar

Able to do addition problems without regrouping (sum not exceeding 999).



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	-	29, 30		24		
<b>Workbook</b>	5.1	5.4	-	5.7	5.8	5.9

## Activity

4

●● Make the students recall the activities done in the previous day and do the exercises in the workbook/textbook.

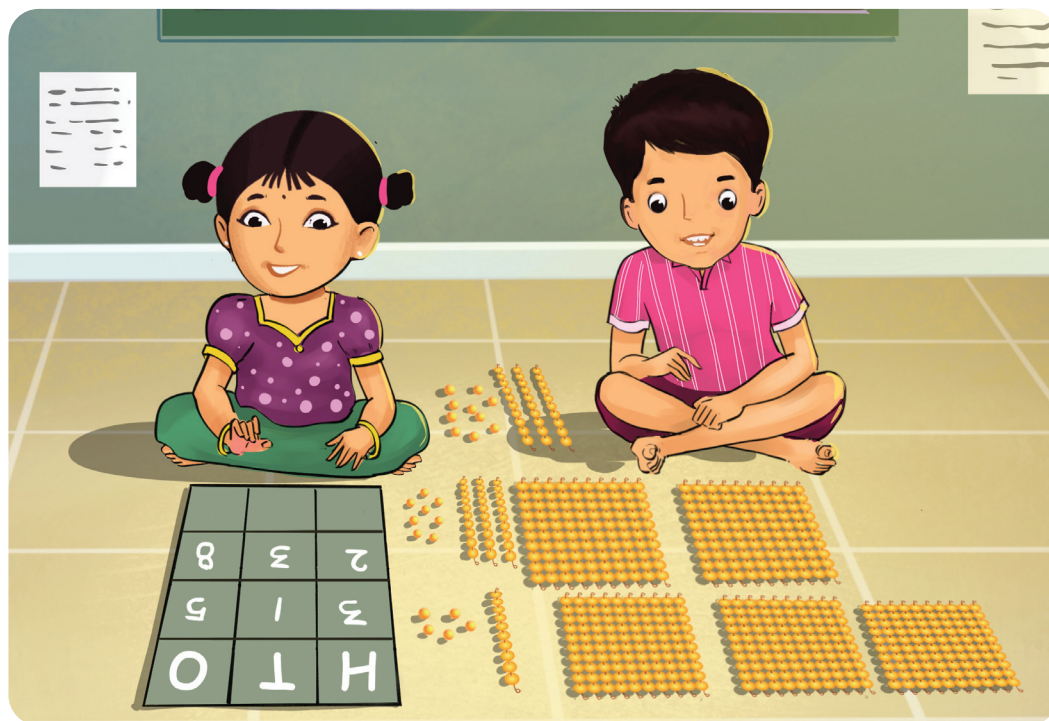
### Addition with Regrouping

**Materials Required:** Single beads, ten-bead strings, hundred-bead string bunches – as required, addition cards with regrouping – 2 sets, thread for stringing beads, beads in two colours, number cards (1-9) – 2 sets.

● Divide the students into 2 groups and give each group required number of single beads, ten-bead strings, hundred-bead string bunches and an addition card with an addition problem. Call any two students from the first group. They have to arrange the beads in the first row according to the number in the first row of the addition card. Then, they have to arrange the beads below, according to the second number. They have to add the beads in the two rows together and find the sum as follows. If the single beads are ten or more, take away only 10 beads from it and place a ten-bead string and

find the sum. Likewise, if there are ten or more ten-bead strings take only 10 ten-bead strings away and place a hundred-bead string bunch and find the sum.

For example,  $315 + 238$



Then, call any two students from the second group and make them find the sum as the first group did. Ask the remaining students to observe this. Give different sums to the groups and make them find the sum. Give to the group which completes correctly and appreciate it. Also, guide the other groups to do all the problems correctly.

### Learning outcomes

#### Arumbu

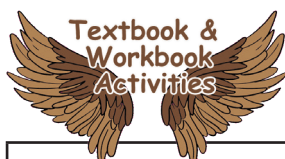
Know that the sum does not change in an addition problem even if the numbers are interchanged.

#### Mottu

Do addition problems without regrouping (sum not exceeding 99).

#### Malar

Do addition problems with and without regrouping (sum not exceeding 999).



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	37, 38	31		25		
<b>Workbook</b>	-	5.5	-	5.10	5.11	5.12

## Activity

5

●●● Make the students recall the activities done in the previous day and do the exercises in the workbook.

### Learning outcomes

#### Arumbu

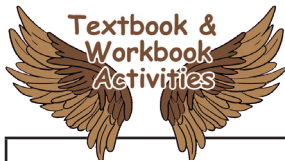
Know that the sum does not change in an addition problem even if the numbers are interchanged.

#### Mottu

Do addition problems without regrouping (sum not exceeding 99).

#### Malar

Do addition problems with and without regrouping (sum not exceeding 999).



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	-	-		-		
<b>Workbook</b>	5.2	5.6	5.7	5.13	5.14	5.15

## Activity

6

●●● Make the students recall the activities done in the previous day and do the exercises in the workbook.

### Learning outcomes

#### Arumbu

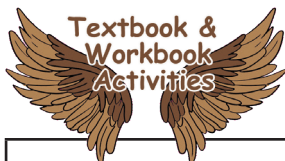
Know that the sum does not change in an addition problem even if the numbers are interchanged.

#### Mottu

Do addition problems without regrouping (sum not exceeding 99).

#### Malar

Do addition problems with and without regrouping (sum not exceeding 999).



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	-	-		-		
<b>Workbook</b>	5.3	5.8	5.9, 5.10	5.16	5.17	5.18

## Activity

7

● Make the students recall the activities done in the previous day and do the exercises in the workbook/textbook.

● Divide the students into two groups of nine. Make them wear crowns with numbers 1,2,3,...9. The two groups have to stand in opposite rows.

Draw a circle between the two rows and place the number cards face down. At the beginning of the activity, turn over only one card. The students, the sum of whose numbers can make the number in the card, have to come and pick that card immediately. For example, if the number in the circle is 5, the students with numbers 2 and 3 or the students with the numbers 1 and 4 have to come to the front.



At the same time, the students from the opposite group, the sum of whose numbers make the number in the card, have to come forward and try to touch the first group's students before they could take the card. If the second group students touch the first group students while they try to take the card, they will get ★★. If not, the first group students will get ★★. Then, begin the game all over again. At the end, the group that gets more number of ★ is the winning group.

## Mind Math

● Divide the students into two groups. Ask a few questions to each group as given below. Then, encourage each group to create questions on their own. Appreciate the group that asks the questions correctly and also the group that answers correctly, with . After specific number of rounds the group that has more number of ★ will be the winning group.

- ❖ Mugil wanted to grow fishes in a fish tank. He bought 5 gold fish and 4 white-coloured fish. What is the total number of fishes bought by Mugil?
- ❖ Girls planted 4 rose plants and boys planted 3 hibiscus plants, this evening in the school garden. How many plants were planted in all?
- ❖ There are 7 sparrows on the branch of a tree. Then, 5 more sparrows came to that branch of the tree. What is the total number of sparrows on that branch of the tree?
- ❖ Kavitha wanted to gift a sesame ball each to all her classmates on her birthday. If there are 34 boys and 24 girls in her class, how many sesame balls she needs to buy?
- ❖ Madhi picked 25 mangoes from the mango tree at her house on the first day and 32 mangoes on the second day. How many mangoes did she pick in total?
- ❖ One has to climb 24 steps to go to the terrace in Asha's house. As it was about to rain, Asha went up to the terrace and collected the drying clothes and came down. What is the total number of steps she climbed up and climbed down?
- ❖ There are 300 boys and 250 girls studying in a school. What is the total number of students in the school?
- ❖ A mango vendor was selling mangoes in two baskets. When he started selling in the morning, the first basket contained 125 mangoes and the second basket contained 175 mangoes. If he sold all the mangoes by that evening, what was the total number of mangoes he sold?
- ❖ Mangai has read 340 pages of a book. If she has 110 pages more to read, what is the total number of pages in the book?

## Learning outcomes

### Arumbu

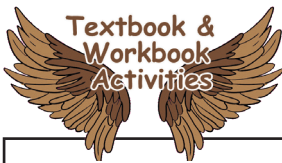
Know that the sum does not change in an addition problem even if the numbers are interchanged.

### Mottu

Do addition problems without regrouping (sum not exceeding 99).

### Malar

Do addition problems with and without regrouping (sum not exceeding 999).



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	39, 40	32		-		
<b>Workbook</b>	5.4	5.11	5.12	5.19	5.20	5.21

## Activity

8

### Teacher's time

- Carry out the pending activities and exercises in this module.
- Check children's textbooks and workbooks.
- Provide remedial teaching if required.
- Give practice to the children who need special attention.

Implement any of the above activities as needed or carry out activities according to the need of your class, children's level and interest.

## 6

## I Know Subtraction



## Learning outcomes

## Arumbu

- ❖ Able to subtract numbers up to 9.

Textbook Pages  
41-47

## Mottu

- ❖ Able to subtract numbers up to 99, without regrouping.

Textbook Pages  
33-39

## Malar

- ❖ Able to subtract numbers up to 999, with and without regrouping.

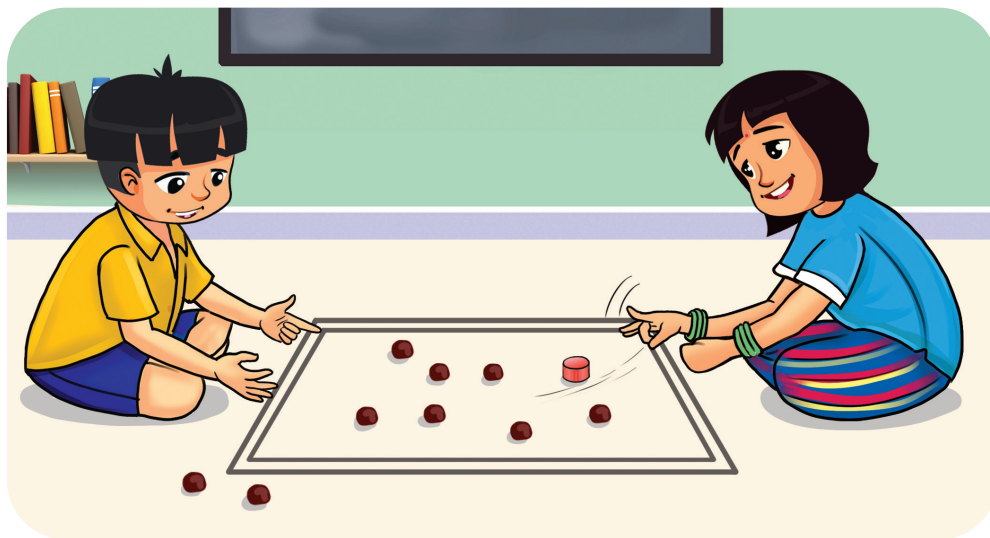
Textbook Pages  
26-31

## Activity

1

## Subtraction without regrouping

**Materials Required:** Tamarind seeds, bottle caps and sheets of paper.



●●● Prepare subtraction problems as shown in the picture. Divide the students into groups of two. Give two sheets of paper and 9 tamarind seeds to each group. The two students in a group have to sit facing each other. Draw a square in between them, place 9 or less tamarind seeds in it and play the game.

Make them to note the number of tamarind seeds in the square before starting the game. Strike the tamarind seeds out of the square by using the bottle caps as strikers in a carom board game. Each student has to be given three or five chances. Each has to note the number of tamarind seeds she/he has taken out and the number of seeds remaining in the end. Give them practice to form this into subtraction problems as shown below.

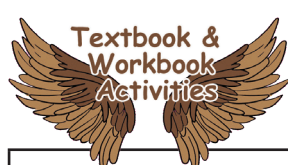
Number of tamarind seeds in the square, in the beginning	-	Number of tamarind seeds taken out	=	Number of tamarind seeds remaining in the end
9	-	4	=	5
	-		=	

After the first student completes playing, the second student has to play in the same manner and note her/his results also. Both of them have to continue playing in the same way for 5 rounds and form 5 subtraction problems. Check the problems and appreciate the students by giving one ★ for every correct problem.

**Note:** Introduce subtraction sign (-) for Arumbu level students and make them realize that words used in day-to-day life such as removing, taking away, remaining and difference are related to subtraction.

### Learning outcomes

- Arumbu Able to create and solve subtraction problems up to number 9.
- Mottu Recall the subtraction up to number 20.
- Malar Recall the subtraction up to number 99.

	<b>Arumbu</b>	<b>Mottu</b>		<b>Malar</b>		
<b>Textbook Pages</b>	42, 43	-		-		
<b>Workbook</b>	-	6.1	6.2	6.1	6.2	6.3

## Subtraction without regrouping

**Materials Required:** Tennikoit ring, small cards with numbers 1, 10, 100 written on them - each 9.

● Make the students sit in a circle and give them a Tennikoit ring. Draw a circle in front of the students and spread the number cards 1, 10, 100 indicating any number. For example, if the number is 444, spread 4 hundreds, 4 tens and 4 ones cards.



When the teacher signals, the students have to pass the Tennikoit ring from one to another. When the teacher signals again, the student who has the Tennikoit ring has to throw it into the circle.

Now, ask the number formed by the number cards that are caught inside the Tennikoit ring and the student has to say it (e.g.: 252). Next, ask the student to subtract 252 from 444 and find the answer.

For this, they can use their notebook or slate. Confirm the answer by counting the numbers not caught inside the ring. If the student says the correct answer she/he can pass the ring to others and continue the game. If the student's answer is incorrect the next student has to create the subtraction problem, answer it and then pass the ring to others. Give ★★ and appreciate the students who give the correct answer. After the completion of first round like this, use other number cards for the next round and continue the game.

- For Mottu level students conduct the activity using number cards 1 and 10, 9 each.
- For Arumbu level students conduct the activity using only 9 number cards of 1.



**Note:** Give practice to the students to find a number which has to be subtracted from a Particular number to get the given answer.

Example:  $\boxed{5} - \boxed{\phantom{0}} = \boxed{2}$        $\boxed{78} - \boxed{\phantom{00}} = \boxed{35}$

### Learning outcomes

#### Arumbu

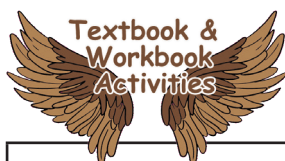
Able to solve subtraction problems up to number 9.

#### Mottu

Able to solve subtraction problems, without regrouping, up to number 99.

#### Malar

Able to solve subtraction problems, without regrouping, up to number 999



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	44	33, 34		27		
<b>Workbook</b>	-	6.3	-	6.4	6.5	6.6

## Activity

3

●●● Make the students recall the activities done in the previous day and do the exercises in the workbook.

### Learning outcomes

#### Arumbu

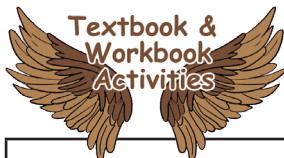
Able to solve subtraction problems up to number 9.

#### Mottu

Able to solve subtraction problems, without regrouping, up to number 99.

#### Malar

Able to solve subtraction problems, without regrouping, up to number 999



	Arumbu	Mottu		Malar		
Textbook Pages	-	35		-		
Workbook	6.1	6.4	6.5	6.7	6.8	6.9

## Activity

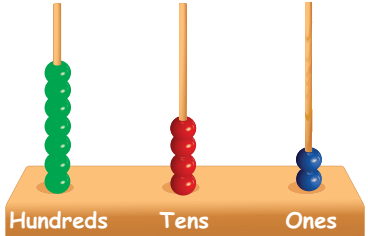
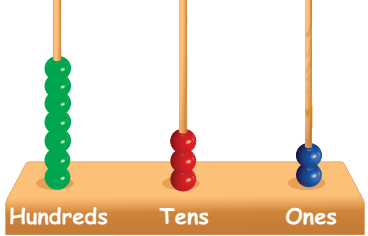
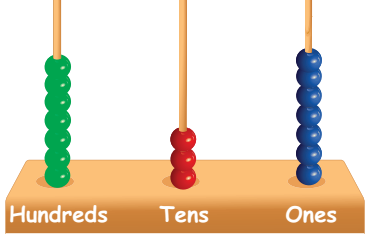
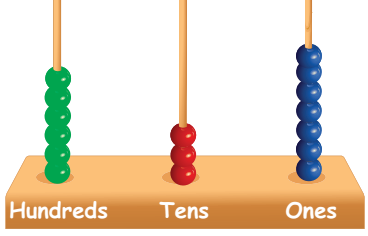
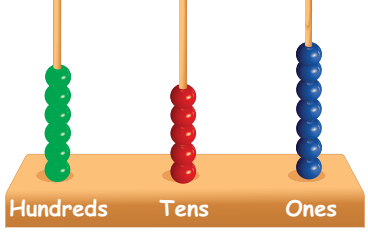
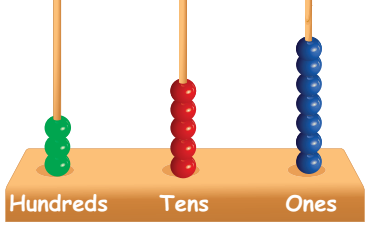
4

### Subtraction with Regrouping

**Materials Required:** Abacus, blue and red beads – each 19, green beads -9, 5 subtraction statement cards – 2 sets, 9 pieces of paper with single-digit subtraction written on them.

● Divide the students into two groups. Give one set of the above objects to each group. When the teacher says, **start**, the groups have to take a subtraction statement card and place the beads in the abacus as per the first number in it. Then, they have to take the beads out of the abacus as per the second number. In the end, write the number of beads which are left in the abacus as answer in the subtraction statement card.

For example, in the subtraction statement  $742 - 385 =$  the steps given below have to be followed:

<p><b>Step 1</b></p> <p>First, place the beads according to the first number 742 in the abacus correctly.</p>	
<p><b>Step 2</b></p> <p>Now, as there are 5 ones in the second number 385, 5 blue beads have to be taken out from the ones place in the abacus. Since there are only 2 blue beads, it is not possible. So, from the adjacent (tens) place, take one red bead in exchange for 10 blue beads and keep them in hand.</p>	<p>● = ●●●●●</p> 
<p><b>Step 3</b></p> <p>Take out 5 blue beads from the 12 blue beads in hand and place the remaining beads in the ones place. So, there would be 7 blue beads in the ones place.</p>	
<p><b>Step 4</b></p> <p>Now, as the second number 385 has 8 tens, 8 red beads have to be taken out from the tens place in the abacus. Since there are only 3 red beads, it is not possible. So, from the adjacent (hundreds) place, take one green bead in exchange for 10 red beads and keep them in hand.</p>	<p>● = ●●●●●●●●</p> 
<p><b>Step 5</b></p> <p>Take out 8 red beads from the 13 red beads in hand and place the remaining red beads in the tens place in the abacus. There would be 5 red beads in the tens place.</p>	
<p><b>Step 6</b></p> <p>Now, as the second number 385 has 3 hundreds in it, take out 3 green beads from the 6 green beads in the hundreds place of the abacus.</p>	

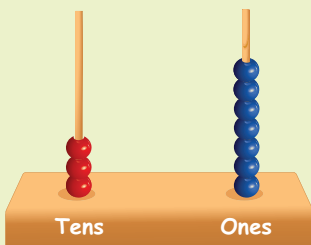
Now, the count (357) formed by the beads in the abacus is the answer. Write this in the subtraction statement card as  $742 - 385 = 357$ . The group that solves all the problems quickly and correctly like this is the winner.

● For Mottu level students conduct this activity by giving subtraction without regrouping upto 99.

For example, in the subtraction statement  $37 - 12 =$  the steps given below have to be followed:

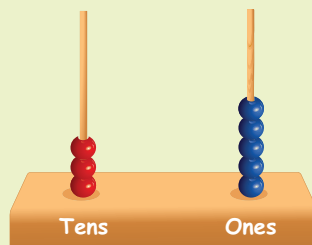
**Step 1**

Place beads in the abacus according to the first number 37.



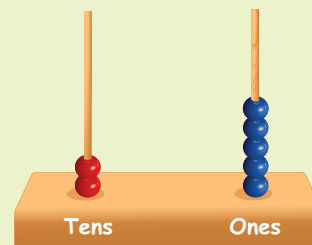
**Step 2**

There are 2 ones in the second number 12. As per this number, take 2 blue beads from the ones place.



**Step 3**

Now, there is 1 tens in the second number 12. As per this number, take 1 red bead from the tens place.



**Step 4**

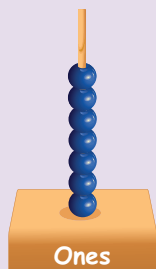
After taking beads from the abacus according to the second number, count the beads left in the abacus and write the answer

● Carry out the activity with difference not exceeding 9.

For example, Do the subtraction problem  $7 - 2 =$  following the steps given below.

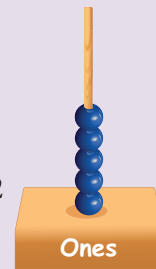
**Step 1**

Place beads in the abacus according to the first number 7.



**Step 2**

Take beads in the abacus according to the second number 2



**Step 3**

Count the beads left in the abacus and write the answer



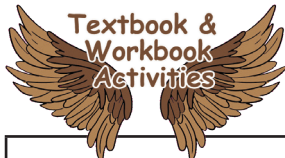
**Note:** While giving practice to students on writing subtraction statements make them realize that first they have to write the big number and then the small number when writing the statement horizontally. Likewise, they have to write the big number above and the small number below while writing the statement vertically.

## Learning outcomes

**Arumbu** Able to solve subtraction problems up to 9.

**Mottu** Able to solve subtraction problems without regrouping, up to 99.

**Malar** Able to solve subtraction problems with and without regrouping, up to 999.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	45, 46	37		26, 28		
<b>Workbook</b>	-	6.6	-	6.10	6.11	-

## Activity

5

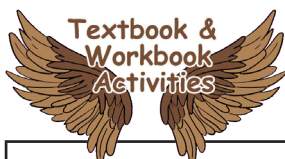
●●● Make the students recall the activities done in the previous day and do the exercises in the workbook.

## Learning outcomes

**Arumbu** Able to solve subtraction problems up to 9.

**Mottu** Able to solve subtraction problems without regrouping, up to 99.

**Malar** Able to solve subtraction problems with and without regrouping, up to 999.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	-	-		-		
<b>Workbook</b>	6.2	6.7	6.8	6.12	6.13	6.14

## Activity

6

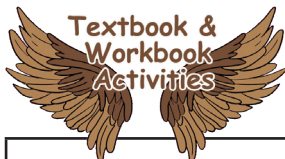
●●● Make the students recall the activities done in the previous day and do the exercises in the workbook.

## Learning outcomes

**Arumbu** Able to solve subtraction problems up to 9.

**Mottu** Able to solve subtraction problems without regrouping, up to 99.

**Malar** Able to solve subtraction problems with and without regrouping, up to 999.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	-	-		-		
<b>Workbook</b>	6.3	6.9	6.10	6.15	6.16	6.17

## Activity

7

●● Make the students recall the activities done in the previous day and do the exercises in the workbook/textbook.

### Mind Math

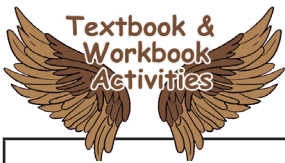
● Divide the students into two groups. Ask a few questions to each group as given below. Then, encourage each group to create questions on their own. Appreciate the group that asks the questions correctly and also the group that answers correctly, with ★. After specific number of rounds the group that has more number ★ will be the winning group.

- ❖ Mugil grew 15 fishes in a fish tank. Out of it, he gave 15 fishes to his friend. How many fishes do Mugil have now?
- ❖ Dad prepared 7 dosais for breakfast. Meena and her brother ate 4 dosais. Now, how many dosais are left?
- ❖ Kayalvizhi took 8 colour papers to make a flower garland. So far, she has used 4 papers to prepare flowers. How many papers are left now?
- ❖ There were 5 roses in Nila's garden. She plucked 3 roses to gift her friends in the school. How many roses are left now?
- ❖ In a theatre, there are 9 seats in a row and 5 people have already occupied the seats. Can 4 people sit in that row now? Give reason for your answer.

- ❖ Maya was travelling by a bus. The conductor said that there were 55 passengers in the bus. 15 passengers got down at the next stop. How many passengers would have been there in the bus?
- ❖ Rani asked the shopkeeper Raju for 8 peanut candies. Raju said that he had only two peanut candies then, he will give her the remaining candies the next day, how many peanut candies Raju has to give Rani the next day?
- ❖ There were 250 mangoes in a fruit stall. If 110 mangoes were sold out, how many mangoes would be there in the fruit stall?
- ❖ There are 367 students in Jahir's school. If 180 of them are boys, what is the number of girls studying there?

### Learning outcomes

- Arumbu** Able to solve subtraction problems up to 9.
- Mottu** Able to solve subtraction problems without regrouping, up to 99.
- Malar** Able to solve subtraction problems with and without regrouping, up to 999.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	47	38, 39		30, 31		
<b>Workbook</b>	6.4	6.11	-	6.18	6.19	6.20

### Activity 8

#### Teacher's time

- Carry out the pending activities and exercises in this module.
  - Check children's textbooks and workbooks.
  - Provide remedial teaching if required.
  - Give practice to the children who need special attention.
- Implement any of the above activities as needed or carry out activities according to the need of your class, children's level and interest.

# 7

## I Know Patterns



### Learning outcomes

#### Arumbu

- ❖ Able to know and create patterns in sound and colours.

Textbook Pages  
50-55

#### Mottu

- ❖ Able to create patterns in sound, sound with body movements and colours.

Textbook Pages  
40-48

#### Malar

- ❖ Able to create growing and rotating patterns in shapes.
- ❖ Able to create patterns in shapes using straight lines.
- ❖ Able to identify and create symmetrical shapes.

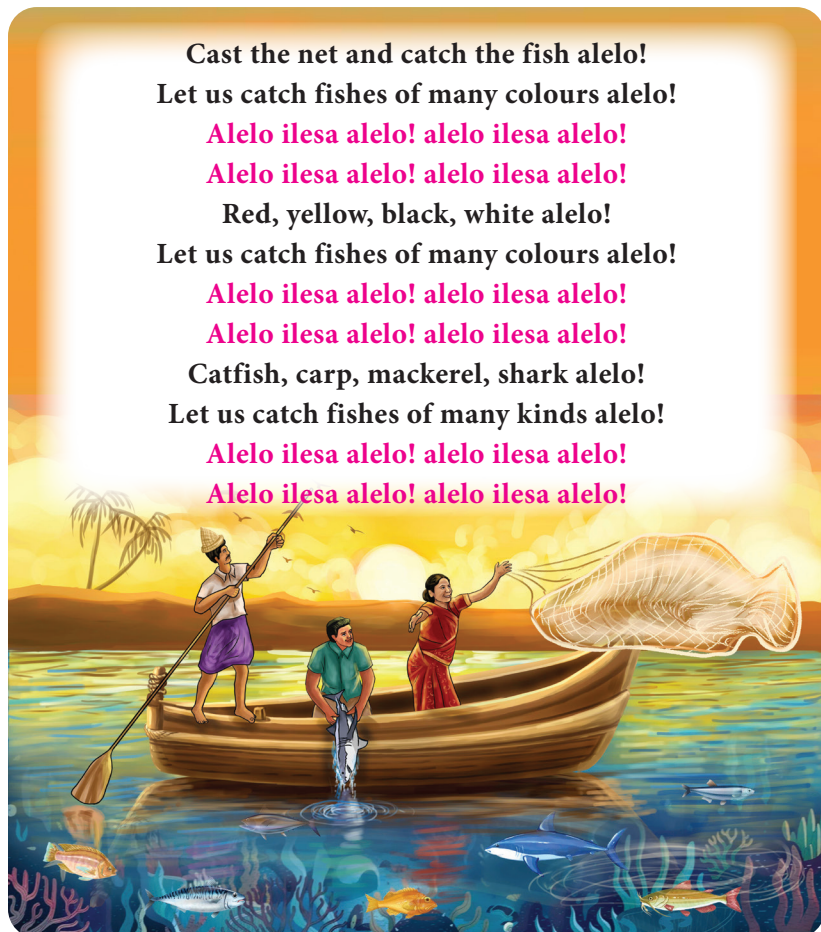
Textbook Pages  
34-43

### Activity

1



Cast the net and catch the fish alelo!  
Let us catch fishes of many colours alelo!  
**Alelo ilesa alelo! alelo ilesa alelo!**  
**Alelo ilesa alelo! alelo ilesa alelo!**  
Red, yellow, black, white alelo!  
Let us catch fishes of many colours alelo!  
**Alelo ilesa alelo! alelo ilesa alelo!**  
**Alelo ilesa alelo! alelo ilesa alelo!**  
Catfish, carp, mackerel, shark alelo!  
Let us catch fishes of many kinds alelo!  
**Alelo ilesa alelo! alelo ilesa alelo!**  
**Alelo ilesa alelo! alelo ilesa alelo!**



## Motivation

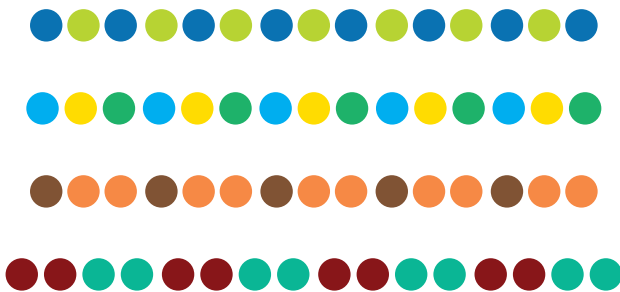


## Patterns in colours

### Moment of learning

**Materials required:** Pictures with colour papers, beads in three colours, thread or plastic string.

Divide the students into three groups and give colour beads and thread to each group. Give one set of colour patterns given in the annexure to each group and make the students observe it.



Discuss about the colour patterns. Then the teacher has to create a new pattern using beads and discuss about it. Now, the groups have to make small garlands of beads as they wish. Then, they have to display the colour garlands of beads created by them and talk about the colour patterns in it.

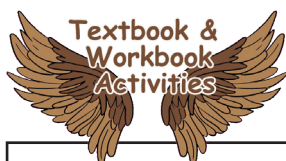
### Learning outcomes

Arumbu

Mottu

Malar

Able to observe patterns in colours and create them



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	53, 54	46		-		
<b>Workbook</b>	-	7.1	7.2	7.1	7.2	7.3

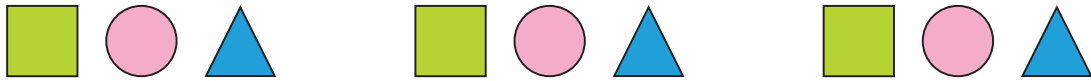
## Activity

2

### Rotating patterns in shapes

**Materials Required:** Colour papers of any one shape from square, rectangle, circle and triangle (as required), geometrical shapes like square, triangle, circle and rectangle.

● Create a shape pattern on the blackboard and ask the students, “Can anyone find the shape which comes next?” Elicit answers from the students and draw the next shape and introduce rotating patterns in shapes.



Divide the students into two groups. Give equal number of paper slips to each group. When the teacher says **start** each group has to create a rotating pattern in shapes of their choice. When the teachers says **find** each group has to observe the rotating pattern in shapes created by the other group and complete it. The group which finds and completes the rotating pattern in shapes correctly and quickly is the winning group.

### Learning outcomes

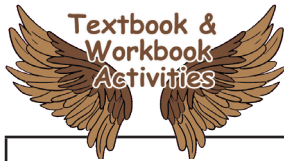
**Arumbu**

**Mottu**

Able to observe patterns in colours and create them

**Malar**

Able to observe rotating pattern in shapes and create them



	Arumbu	Mottu		Malar		
Textbook Pages	-	47		37, 38		
Workbook	7.1	7.3	-	7.4	7.5	-

### Activity

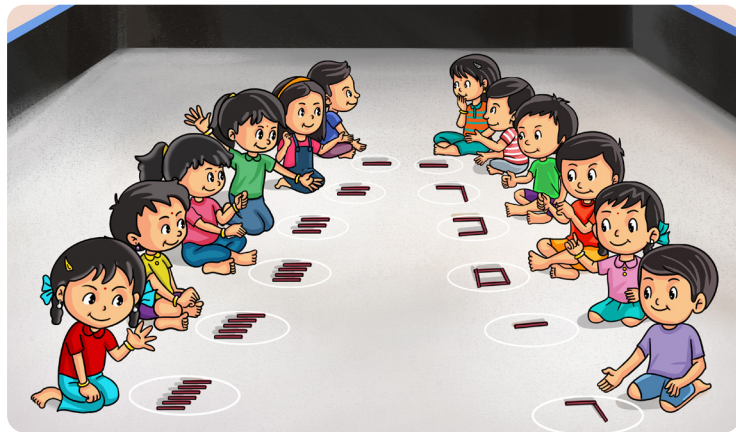
3

#### ⋮ Growing patterns and Straight line patterns ⋮

**Materials Required:** Sticks - 50.

● Divide the students into two groups. Give sticks in required number to each group to form shapes. Groups have to sit in a line, facing each other. Draw a small circle in front of each student. When the teacher says, **start**, the first student has to take one stick and place it in the circle in front of her/him. The next student has to take two sticks and place it in the circle. In the same manner, successive students have to increase the number of sticks by one and place it in the circle. Make them observe the pattern after everyone completes placing the sticks. Teacher has to introduce that increasing one by one is growing pattern.

Next, when the teacher says **square**, the first student has to place a stick for a square in the circle. The second student has to place two sticks for making two sides of the square. The third student has to place three sticks for making three sides of the square. The fourth student has to place the three sticks as



the third student placed and the fourth stick to complete the square. Fifth student has to place one stick for a square and continue the activity.

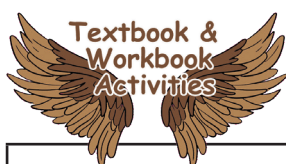
The teacher has to introduce that this pattern is a straight line pattern. Further, when the teacher says 'rectangle', 'triangle', the students have to arrange the sticks and create straight line patterns. The group which creates the patterns more number of times quickly and correctly is the winning group.

●● Divide the students into groups of four. Cut the vegetables such as ladies finger, onion and bitter gourd and give. The students have to dip them in the natural colours such as beetroot extract, turmeric mix, hibiscus extract and create different colour patterns and display it.

### Learning outcomes

**Arumbu** **Mottu** Able to observe patterns in colours and create them

**Malar** Able to create growing patterns and straight line patterns.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	55	48		37, 39		
<b>Workbook</b>	-	7.4	-	7.6, 7.7	7.8, 7.9	-

### Activity

4

### Patterns in sound

**Materials Required:** Stainless steel tumblers - 8, table spoons - 2.

●●● First, the teacher has to fill the tumblers with water at different levels and create various sound patterns in front of the students. For example, the teacher has to tap each tumbler once. Then he/she has to tap the first tumbler once and the second tumbler twice and repeat the tapping. Like this, the teacher has to demonstrate various patterns of sound.

Then, divide the students into two groups and give each group four stainless steel tumblers and a teaspoon. The students have to fill the tumblers with water at different levels, tap them with teaspoon and create different patterns of sound like the teacher did.

Then make the students to stand in semicircle. Now, give an animal name to each student. For example, if we name a student as dog, another student as cat, next student as goat and the next one as cow, repeat the same set of names for successive students. Continue naming in the same way. When the teacher says **start**, the students have to make sound accordingly. Like this, let them enjoy by generating different patterns of sound continuously.



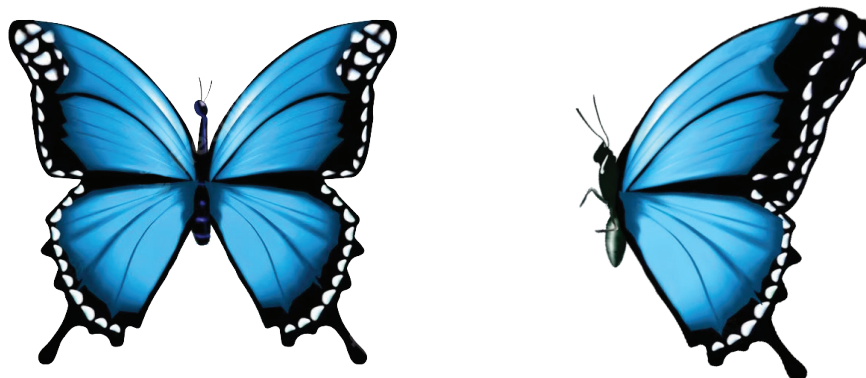
Next, use only three animal names alternately for naming the students and play this game. Play the game using names of birds in the same manner. Then, continue this activity by naming the students with the names of both birds and animals alternately and making different sounds.

Students can also be involved in dance forms including Gummiattam and Kolattam and create sound patterns with body movements.

## Symmetry

**Materials Required:** Pictures of 2D shapes, pictures like birds, insects and animals.

● Divide the students into two groups. Cut and give the pictures of 2D shapes, birds, insects, animals given in the annexure to each group. When the teacher says, 'start', students have to fold the pictures into two equal parts in such a way that the edges coincide. One group has to fold horizontally and the other group vertically.



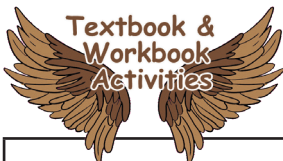
Then make them say which of the pictures have coincided equally. Then, the teacher has to point out these shapes and say that they are symmetrical. Tell the students that the line formed by folding the symmetrical pictures into two equal parts is called line of symmetry. Each student has to draw a 2D shape of their choice and its lines of symmetry.

### Learning outcomes

**Arumbu** Able to know and create patterns in sound.

**Mottu** Able to know and create patterns in sound and sound with body movement.

**Malar** Able to know symmetry in objects and shapes.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	50, 51, 52	40, 41, 42, 43, 44		42, 43		
<b>Workbook</b>	-	-	-	7.10	7.11	-

### Activity

5

#### Teacher's time

- Carry out the pending activities and exercises in this module.
- Check children's textbooks and workbooks.
- Provide remedial teaching if required.
- Give practice to the children who need special attention.

Implement any of the above activities as needed or carry out activities according to the need of your class, children's level and interest.

# 8

## I Can Process Information

### Learning outcomes



#### Arumbu

- ❖ Able to collect, classify and handle information

**Textbook Pages**  
56-61

#### Mottu

- ❖ Able to collect information.
- ❖ Able to list all the possibilities.

**Textbook Pages**  
65-71

#### Malar

- ❖ Able to collect information and represent in pictograph and draw inferences.
- ❖ Able to list all the possibilities.

**Textbook Pages**  
56-62

### Activity

1

#### Collecting Information

**Materials Required:** Stick puppets (for example, monkey – 8, lion – 2, tiger -1, deer – 4, bear – 5 and elephant -3).

●●● Place the stick dolls in various places of the classroom. Begin the game by asking, “Shall we go on a journey and look around the forest?” with the teacher acting as driver and the students as passengers. Sing the following song and go around the classroom as travelling in a bus.

Jolly trip jolly trip! Jolly trip to a forest  
We are going to see all animals  
What do we see! What do we see!  
In the deep forest  
We see an elephant! We see an elephant!  
In the deep forest



When they go near the place where the animal toys have been kept, they have to make sound like that animal. Then, the teacher and the students have to continue the activity by singing as follows.

**Teacher** : Look out, look out. What is standing there?

**Students** : We looked out, looked out. The deer is standing there.

**Teacher** : How many deer? How many deer? How many are standing there?

**Students** : 4 deer, 4 deer, 4 are standing there.

Sing like this and enjoy making sound like the animal standing there. Likewise, continue the game for other animals also



**Note:** Instead of stick puppets, the students can hide themselves as animals.

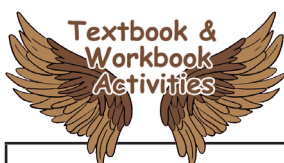
### Learning outcomes

Arumbu

Mottu

Malar

Able to collect information



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	56	69		60		
<b>Workbook</b>	-	8.1	8.2	8.1	8.2	-

## Activity

2

### Gathering Information and Representing in Pictograph

**Materials Required:** Things easily available in the classroom.

● ● ● Draw two circles near the blackboard. Place the things easily available in the classroom (pen, pencil, eraser, colour pencils) inside the two circles in equal numbers.



Draw two circles near the blackboard. Place the things easily available in the classroom (pen, pencil, eraser, colour pencils) inside the two circles in equal numbers. The Arumbu and Mottu students in each group have to classify the objects in their circle. Then, note down the number of items classified.

● Then, Malar students have to write the name of the things and represent the count in the table by drawing 😊 one for each object as given below

Name of the Object	Count
Pen	😊 😊
Pencil	😊 😊 😊 😊 😊
Eraser	😊 😊 😊
Sharpener	😊 😊 😊 😊

The group that completes the activity quickly and correctly is the winning group. One group has to verify the answers of the other group and give a ★.

Then, ask the following questions to the students and the students have to answer the questions by observing the pictograph prepared by them.

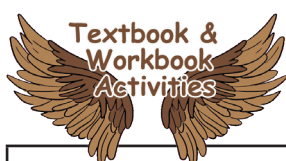
- ❖ Which object is the most in count?
- ❖ Which object is the least in count?
- ❖ How many erasers are there?
- ❖ What is the difference between the most and least count of the objects?

**Note:** Both gathering information and collecting facts mean the same. Data is obtained after classifying and systematizing the collected information.

### Learning outcomes

**Arumbu** **Mottu** Able to gather information and record it.

**Malar** Able to gather information and represent in pictograph



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	57, 58	70		61		
<b>Workbook</b>	-	8.3	-	8.3	8.4	8.5

### Activity

3

**Materials Required:** Pieces of papers with pictures or names of fruits and vegetables.

●●● Divide the students into two groups. Write the names of fruits and vegetables or pictures of fruits and vegetables in paper slips. Put names/pictures of vegetables in one box and names/pictures of fruits in another box. Give a box to each group. The teacher has to write the following table on the blackboard.



S.No	Name of the fruit	Face 😊	Number of Students
1	Mango		
2	Jackfruit		
3	Banana		
4	Guava		
5	Sapota		

At first, students those who selected fruits have to take a piece of paper from the box. If the name is mentioned as banana on the paper, they have to sing. Do you like? Do you like? Do you like banana? Only the students those who like banana have to raise their hands and say I like, I like, I like banana. Only those who like banana have to come to the blackboard and draw a 😊 on the table against the fruit name banana.

In the same manner collect the information for each fruit. Count and write the number of 😊 against each fruit. Teacher has to ask questions about the data in the table as follows.

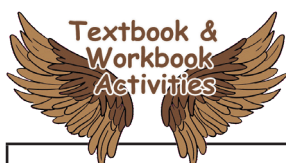
- ❖ How many students like jackfruit?
- ❖ Which is the favourite fruit of many students?
- ❖ Which is the favourite fruit of fewer students?

Then carry out the activity in the same way and ask questions about vegetables for the vegetables group. Appreciate and give to the students who answer quickly and correctly.

### Learning outcomes

**Arumbu** **Mottu** Collect the information.

**Malar** Collect and represent the information in the pictograph.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	59	71		62		
<b>Workbook</b>	8.1	8.4	8.5	8.6	8.7	-



## Activity













4

### Systematic Listing

**Materials Required:** Four different coloured balloons / flowers / balls / marbles / kites.

● ● Divide all the students into four groups. Give a chart for each group as follows. The teacher has to show the students three balloons in different colours.



Now the students have to draw two balloons of different colours in every box in the chart. The students should not repeat the same colour pattern.

The group that completes the activity by drawing balloons in all the boxes quickly and correctly is the winning group.

Then, display the other groups' charts and explain the ways how they had chosen all the balloons. Then give each group the following items.

**First group** : Four flowers in different colours.

**Second group** : Four balls in different kinds.






**Third group** : Four marbles in different colours.

**Fourth group** : Four kites in different colours.

Each group has to find all the ways to choose two objects from the four objects given to them. They have to draw and colour them in their notebooks. In the end, each group has to display and explain in front of everyone that how they have chosen.

● Divide the students into two groups. Give them a table as follows



Which is your favourite animal?		
S.No	Animal	Number of Students
1		
2		
3		
4		
5		

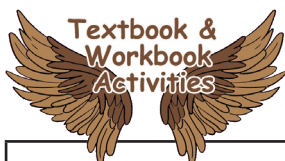
The students in the first group have to collect data for the questions given in their table. For example, Ask, “how many of you like kittens?” students who like kittens should raise their hands. Count the number of students who have raised their hands and write the number in the table. Complete the table in the table.

### Learning outcomes

**Arumbu** Able to collect and record the information.

**Mottu** Able to list all the possibilities.

**Malar** Able to list all the possibilities.



	Arumbu	Mottu	Malar
<b>Textbook Pages</b>	60, 61	66, 67, 68	57, 58
<b>Workbook</b>	-	8.6, 8.7	-

### Activity

5

### Teacher's time

- Carry out the pending activities and exercises in this module.
- Check children's textbooks and workbooks.
- Provide remedial teaching if required.
- Give practice to the children who need special attention.

Implement any of the above activities as needed or carry out activities according to the need of your class, children's level and interest.



# 9

## I Know Measurements



### Learning outcomes

#### Mottu

- ❖ Able to measure length using non-standard units.
- ❖ Able to know the standard units (cm, m) to measure length.
- ❖ Able to measure the length of the objects using a scale.

#### Textbook Pages

49-56

#### Malar

- ❖ Able to measure length using non-standard units.
- ❖ Able to know the standard units (mm, cm, m, km) to measure length.
- ❖ Able to measure the length of the objects using a scale.

#### Textbook Pages

44-50

### Activity

1

#### Need for Standard Measurement

#### Motivation

Make the students stand in a line. When the teacher sounds **keech keech**, the students have to stretch their elbow on sideways and walk on their toes. When the teacher sounds **mooch mooch**, the students have to stand still. If a student moves, she/he has to be sent out of the game. The student, who is sent out, can distract the attention of others. End the game by clapping and saying '**mooch**



**mooch**. Now, ask the students who have walked more distance and who have walked less distance. Continue to play the game in the same way for few more rounds.

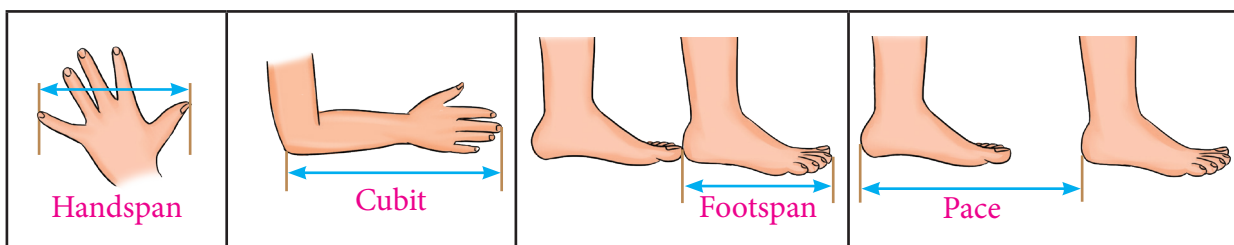
### Concept Formation

**Materials Required:** Picture cards showing hand span, cubit, foot span, pace and colour paper ball or sponge ball.

Divide the students into four groups. Draw a line on the ground. Ask one student from each group to come forward and throw the ball standing on the line. Note the places where the ball fell down. The group which has thrown the ball to the longest distance is the winning group.

Now, ask the students, “Shall we measure the distance to which the winning group has thrown the ball?” and draw a straight line with the help of a rope connecting the starting point of the throw and the landing point of the ball.

Place the picture cards face down near the straight line in which the words like handspan, cubit, footspan and pace are written. Call a student from the first group and ask him/her to choose a card. Explain the students how to measure according to the measurement in the card chosen. Then, make all the students in the first group to measure the distance of the straight line individually.



For example, if the first group has chosen pace, explain them what pace means and how to measure in pace. Then, ask all the students in the group to measure and tabulate it.

Likewise, ask the successive groups to choose a card, make them measure according to the measuring method in the card and tabulate them. Ask them to observe and make them realise that measuring by **handspan**, **cubit**, **footspan** and **pace** differs with each person.

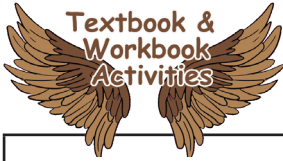
Group - 1		
S.No	Name of the Student	Number of Pace
1		
2		
3		
4		

## Learning outcomes

**Mottu**

**Malar**

Able to measure the length using non standard measures.



	Arumbu	Mottu		Malar		
Textbook Pages	-	49, 52		45		
Workbook	9.1	9.1	-	9.1	9.2	-

## Activity

2

### Introduction of scale

**Materials required:** Scale of length 15 cm, sticks/twigs of a particular length.

### Concept Formation

● ● Divide the students in the groups as per their number. Give each group few scale of length 15 cm. Make them observe the lines and numbers on it. Then, kindle the students' thought by asking questions like the following.

- ❖ Show the scale and ask what is this?
- ❖ Have you seen a bigger scale than this?
- ❖ Where have you seen it?
- ❖ Which number is given first in the scale?
- ❖ Which number is found at the end?
- ❖ How many numbers are there in total?
- ❖ How many smaller lines are there in between first two bigger lines ?
- ❖ Can you find the same pattern between two consecutive bigger numbers?
- ❖ Have you seen anyone using the scale?
- ❖ For what purpose, they used the scale?
- ❖ Have you seen any other object marked with measurements like this?

Elicit answers from the students and ensure the correctness of the answers.

The teacher has to explain clearly the methods of using a scale. He/she has to tell them that the distance between two consecutive smaller lines in the scale represent one millimeter and the distance between two bigger lines is one centimeter. Also, explain that to measure any object, place one end of the object at the zero of the scale and mark the number shown at the other end of the object. One must look at the scale straight while measuring the objects. Instruct clearly that one should not tilt her/his head while reading the measure.

### Moment of learning

Next, the teacher has to demonstrate measuring of an object using a scale and give practice to the students to measure in the same way. Then each student has to measure an object she/he has, using a scale.

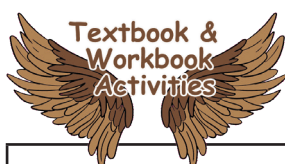
Give each group sticks of the same size and ask the students to first measure its length by handspan method and give the answer and the teacher has to write the answers on the blackboard. Then, ask the students to measure the sticks with the measuring scale and give the answers and the teacher has to write the answers on the blackboard. By observing the two sets of measurements given by the students make them realize that the measurement remains the same when measured with the scale but it varies in the handspan method and tell them measuring using a scale gives a standard measure. This is the reason Standard measures are used all over the world.

### Learning outcomes

Mottu

Malar

Learn to measure length using standard units.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	-	53, 56		47		
<b>Workbook</b>	9.2	9.2	-	9.3	9.4	-

## Activity

3

### Measuring Length

**Materials Required:** Metre (m), centimetre (cm), millimetre (mm) flashcards, scale/measuring tape, things available in the environment such as rice, wheat, pencil, sticks, handkerchief, long cloth, pencil box, chalk piece, etc.,

●● Place the collected things at the centre of the classroom and make the students sit around them. Draw three circles as shown in the picture and keep a thing in each circle which can be measured in millimetre, centimetre and metre respectively.

Divide the students into three groups, name them as millimetre group, centimetre



group and metre group respectively and make them stand near the respective circles. When the teacher signals the groups, they have to collect things from the circle in the centre which are approximately similar in length to the thing already kept in the circle.

Then, make sure that students of each group have classified the things correctly. Take a thing from the first circle and measure its length in millimetre with scale. Then, ask the students of that group to measure and tell the length of the remaining things in the circle. Record it in the low level blackboard.

Likewise, show how to measure the lengths of things in the successive circles in centimetre and metre respectively, and make the students measure the remaining things in the circle. Ask them to write the measurements on the low-level blackboard.



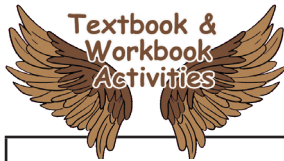
**Note :** The standard measures such as mm, cm, m are accepted universally.

### Learning outcomes

**Mottu**

**Malar**

Able to choose appropriate units and measure an object.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	3	55		48		
<b>Workbook</b>	9.3	9.3	-	9.5	9.6	-

### Activity

4

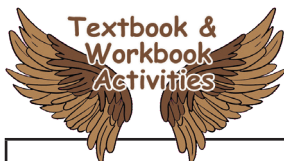
●● Make the students recall the activities done in the previous day and do the exercises in the workbook/textbook.

### Learning outcomes

**Mottu**

**Malar**

Able to choose appropriate units and measure an object.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	-	-		49, 50		
<b>Workbook</b>	9.4	9.4	9.5	9.7	9.8	9.9

### Activity

5

### Teacher's time

- Carry out the pending activities and exercises in this module.
- Check children's textbooks and workbooks.
- Provide remedial teaching if required.
- Give practice to the children who need special attention.

Implement any of the above activities as needed or carry out activities according to the need of your class, children's level and interest.

# 10

## I Know Time



### Learning outcomes

#### Mottu

- ❖ Know the days of a week, months of a year and seasons.
- ❖ Know the number of days in a month.

**Textbook Pages**  
57-64

#### Malar

- ❖ Able to find day, date and month from a calendar.
- ❖ Able to find a particular day and date.
- ❖ Know the date of manufacture and expiry.

**Textbook Pages**  
51-55

### Activity

1

#### Days of a Week

**Materials Required:** Finger puppets, medal cards with days written on them.

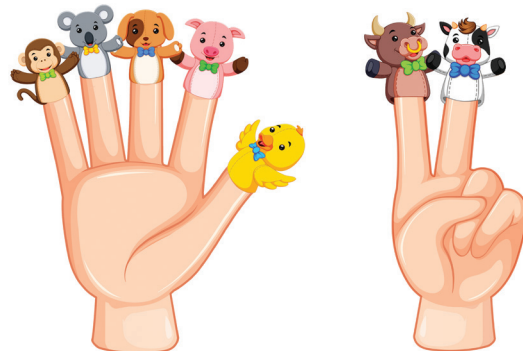
●● To introduce the days of a week, wear seven finger puppets one each for a day. Introduce Sunday using the first puppet and singing the following song.

I came jumping all the way!

My name is Sunday!

I am the first day!

I am the first day of the week!



Then, introduce Monday by using the puppet in the next finger and singing the following song.

I came jumping all the way!

My name is Monday!

I am the second day!

I am the second day of the week!

Likewise, introduce all the days from Sunday to Saturday in order, using each of the puppets.

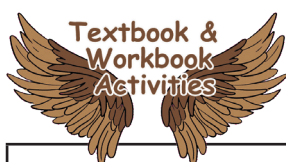
Then, call seven students and give each of them the name of a day or give them a placard or a medal card with the name of a day written on it. All the seven students have to stand one behind the other in order. Each student has to come forward singing like the teacher and stand as per the order of the days.

### Learning outcomes

Mottu

Malar

Know the days of a week and their order.



	Arumbu	Mottu	Malar
Textbook Pages	-	58, 59	51 (a)
Workbook	10.1	10.1	10.1

### Activity

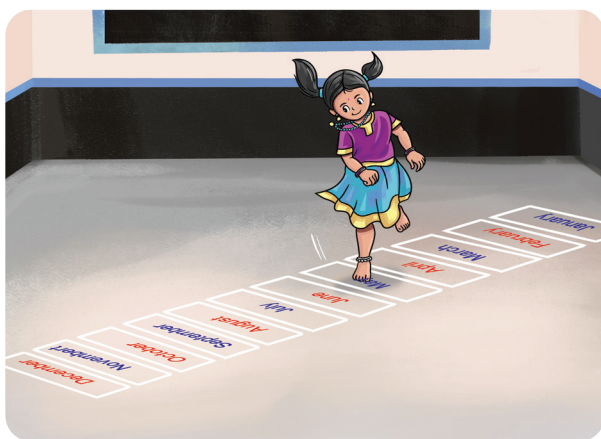
2

### Months of a Year

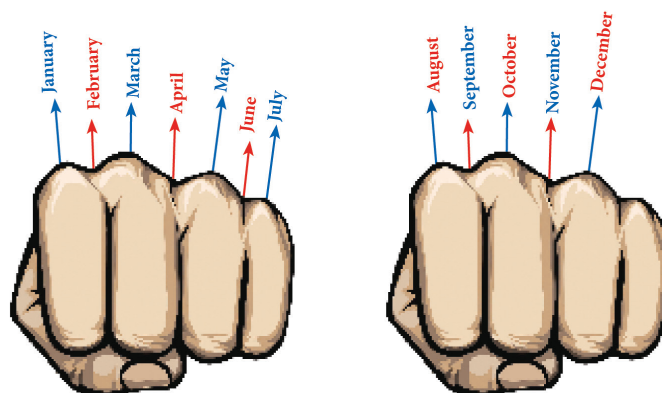
**Materials Required:** Cards with names of 12 months, monthly calendar cards of 2025, cards for each month with blank boxes without dates.

● ● Draw squares in the classroom or playground and write the names of the months in order as shown in the figure. Make the students to stand in a line and jump onto each square one by one. As they jump into a square they have to say the names of the month. Appreciate the students who said names of all the months, by clapping and make others to continue.

Make the students sit in a circle and play the game January, February as shown in the figure. First a student has to say January and tap the hand of the next student. The second student has to say February and tap the hand of the third student and the game has to continue like this. When it comes to December the student who says December will try to tap the hand of the next student. That student has to pull the hand out. If she/ he gets tapped, the student is out of the game. The student who is not out till the end of the game is the winner. Introduce the number of days in each month using the monthly calendar pasted on the wall.



Also, introduce the method to calculate the number of days of a month by comparing the names of the months with the knuckles of the hand. The teacher has to compare the months with the knuckles and grooves of the hand by saying that the months on the knuckles have 31 days, the months in-between the knuckles (grooves) have 30 days and the month of February has 28 or 29 days. Thus introduce the number of days in a month.



● Divide the students into two groups, give each group the sheets with empty boxes to create monthly calendar and make them create the monthly calendar of 2025. The group that completes the activity quickly and correctly is the winning group.

September - 2025						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

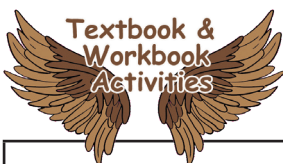
**Note :** A normal year has 365 days, and February has 28 days. A leap year has 366 days and the month of February has 29 days. 2024 happens to be a leap year. The students have to be clarified that the next leap year will be four years later i.e., 2028.

### Learning outcomes

**Mottu**

**Malar**

Know the months of a year, their order and number of days in the months.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	-	61		51 (b,c)		
<b>Workbook</b>	10.2	10.2	-	10.3	10.4	-

### Activity

3

#### Seasons

**Materials Required:** Word cards, pictures of three seasons, coloured monthly cards, few seasonal food items (watermelon, ice apple, tender coconut, tea, coffee, soup... etc.) and clothes (cotton dresses, raincoat, umbrella... etc.).

●● The teacher has to perform a puppet show with the materials mentioned. Standing behind the puppet show screen the teacher has to introduce himself/herself as a student and has to give clues about a season by showing pictures related to that season. Ask questions to make the students guess the season. Finally,



introduce the name of the season using the word card of that season. Introduce other seasons in the same manner.

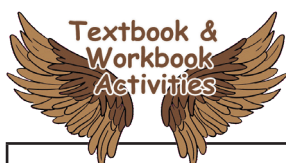
The teacher can make the malar level students to perform in the puppet show. Hide the picture card and word cards used for the puppet show, here and there, in the class and give clues as given in a treasure hunt to make the students find them. For example, give a clue as “The picture of the cloth worn in winter season is behind the blackboard”, and give a ★ to the group which takes the correct picture hidden behind the blackboard. Continue the activity in the same manner and the group with the highest number of ★ is the winning group.

### Learning outcomes

**Mottu**

**Malar**

Know seasons of a year and months of each season.



	Arumbu	Mottu	Malar
<b>Textbook Pages</b>	-	64	-
<b>Workbook</b>	10.3	10.3	10.5, 10.6, 10.7

### Activity

4

### Calendar - Date

**Materials Required:** 2025 calendar, cards with name of the students and their birth date written on the reverse side, letters of the month names.

● Make all the students sit in shape. Keep a box at the centre and put the name cards of students and the months of their birth written on them. Write each letter in the names of the months separately and shuffle these letter cards.

Call the first student and ask her/him to take card from the box with closed eyes. Crown the

September - 2025						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

student whose name is found in the card taken. Crowned student has to say her/his month of birth and arrange the shuffled letter cards and form that month. After the student arranges correctly and says the month, give the group that particular month of the calendar.

In that particular month of calendar, the student has to mark the date of his birth and say the day. Appreciate the student who does correctly and make the other students to play the game one by one in the same manner.

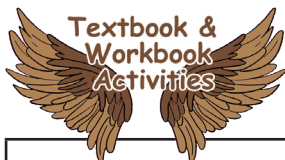
Monthly Birthday Celebration Table		
S.No	Month	Name of the Students
1	January	
2	February	
3	March	
4	April	
5	May	
6	June	
7	July	
8	August	
9	September	
10	October	
11	November	
12	December	

● Prepare a birthday card with months written on it, as shown in the picture. Divide all the students into two groups. When the teacher makes signal, a student from each group has to come forward and write her/his name near the box of his/her month of birth. For Mottu level students, it's enough to write their names near the month of birth. Malar level students have to write their name and date of birth.

### Learning outcomes

**Mottu** Recall the months of a year

**Malar** Know a particular day and date.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	-	-		52, 53		
<b>Workbook</b>	10.4	10.4	10.5	10.8	10.9	-

### Activity

5

● For Mottu level students, reinforce the months using the previous activity.

## ☺ Date of Manufacture - Date of Expiry ☺

**Materials Required:** Wrappers of food items and medicines.

● Divide the students into two groups. The teacher has to write the date in the format of dd/mm/yyyy and mm/yyyy. The teacher has to give a few wrappers to the groups. The students have to find the dates mentioned in the given wrappers and write them separately on the low-level blackboard. Finally, the teacher has to explain the date of manufacture and date of expiry of consumer goods.



The teacher has to reinforce the date of manufacture and date of expiry by making the students answer the following questions.

- ❖ How many dates are there in each wrapper?
- ❖ Which one is the manufacturing date?
- ❖ What is the date of expiry?
- ❖ Is the expiry date over or yet to come?
- ❖ Can we use expired items? Why?

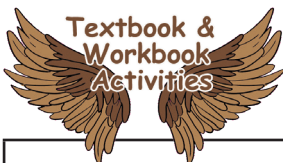
Then the teacher has to give same type of things to both the groups. Now the teacher has to ask a question. The group which gives the right answer quickly is rewarded with and give a for the group that gives the answer secondly.

For example, if the teacher mentions 'expired things', students have to observe the wrappers and give only the expired things. The group which gets more number of rewards is the winning group.

### Learning outcomes

**Mottu** Recall the months of a year.

**Malar** Know the date of manufacture and expiry.



	Arumbu	Mottu		Malar		
<b>Textbook Pages</b>	-	-		54, 55		
<b>Workbook</b>	10.5	10.6	10.7	10.10	10.11	-

### Activity

6

### Teacher's time

- Carry out the pending activities and exercises in this module.
- Check children's textbooks and workbooks.
- Provide remedial teaching if required.
- Give practice to the children who need special attention.

Implement any of the above activities as needed or carry out activities according to the need of your class, children's level and interest.



**SCIENCE,  
SOCIAL SCIENCE  
PROJECT  
(NON-INTEGRATED TOPICS)**

# Science

## 1

## States of Matter

### Learning Outcomes

- Know about the things around us.
- Observe and know the properties of things.
- Observe and understand through experiments that liquids do not have definite shape.
- Know the differences among solid, liquid and gas.
- Know about the substances that are used as fuel and that are not used as fuel.

Textbook : 82-92

### Activity

#### 1

### Do you know me?



I am your teacher, Iniya. I saw many things on my way to school. I know their name. You might also have seen many things on your way to school. Do you know their names?

Some of them are natural and some of them are man-made. Can you classify them as natural things and man-made things?

### Learning outcome

Know about the things around us.



**Textbook**

Page number : 82

**Workbook**

Exercise number : 1.1, 1.2



## Activity

2

### Who am I?

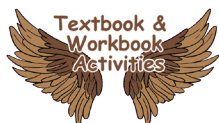


I observed a stone, water and smoke from the incense stick and checked whether they have definite shape and volume and also tested whether they can flow or not.

You also observe the things in your environment and classify them.

#### Learning outcome

Observe and know the properties of things.



<b>Textbook</b>	<b>Workbook</b>
Page number : 87	Exercise number : 1. 3

## Activity

3

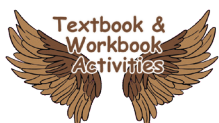
### Know the shape!



I took a bucket full of water and filled different containers with the water. You can also do it.

#### Learning outcome

Observe and understand through experiments that liquids do not have definite shape.



<b>Textbook</b>	<b>Workbook</b>
-	Exercise number : 1. 4

## Activity

4

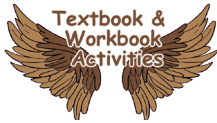
### Classify and understand



I observed a few things and classified them into solid, liquid and gas. Can you classify the things in your environment?

#### Learning outcome

Know the differences among solid, liquid, and gas.



Textbook	Workbook
Page number : 86	Exercise number : 1.5, 1.6

## Activity

5

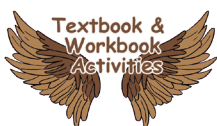
### Know the fuels



I used a few things as fuel. I know their names. What are the things that are used as fuel in your house? Classify them.

#### Learning outcome

Know about the substances that are used as fuel and that are not used as fuel.



Textbook	Workbook
Page number : 89	Exercise number : 1.7

# 2

## Force

### Learning Outcomes

- ◆ Know about push.
- ◆ Know about pull.
- ◆ Know the definition of force.
- ◆ Understand about gravitational force through experiments.
- ◆ Understand about magnetic force through experiments.

Textbook : 93-101

### Activity

1

#### Push! Push!



**Materials required:** Ice apple shell (nungu mattai) - 2, small stick - 2, Y-shaped stick - 1

Let us learn about push by making an ice apple cart with its shells.



#### Learning outcome

Know about push.

### Activity

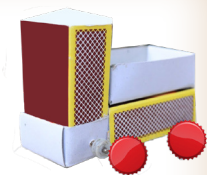
2

#### Pull! Pull!



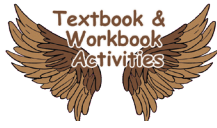
**Materials required :** Empty matchbox - 1, bottle caps - 4, match sticks - 2, thread.

Let us make a cart using the given materials and pull it.



**Learning outcome**

Know about pull.



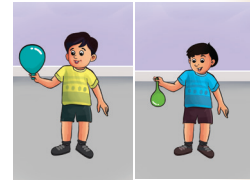
<b>Textbook</b>	<b>Workbook</b>
Page number : 95	Exercise number : 2.1,2.2,2.3.

**Activity****3**

⋮ **Know the definition of force** ⋮

**Materials required:** balloons - 2

I took two balloons. Then I filled one with air and the other with water. I pressed both, one after the other. Do you know what happened to them? Try it.



Also find out what happens when an object at rest is displaced or a moving object is stopped.

**Learning outcome**

Know the definition of force.

**Activity****4**

⋮ **Why do I fall?** ⋮

**Materials required :** Ball, coin etc.

I threw some objects up in the air and they came down. You try the same and observe what happens.

**Learning outcome**

Understand the gravitational force through experiments.



## Activity

5

### Come closer

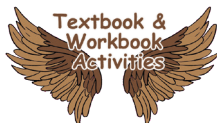


I kept a few things on the table and moved the magnet towards them. Some of the things got attracted to the magnet. You can conduct the same experiment and classify the things that are attracted and the things that are not attracted by the magnet.



### Learning outcome

Understand the magnetic force through experiments.



<b>Textbook</b>	<b>Workbook</b>
-	Exercise number : 2.4

# 3

## Science in Everyday Life

### Learning Outcomes

- Observe and understand the food preparation methods.
- Know the uses of household things that are used in day-to-day life.

Textbook : 102 - 114

### Activity

1

#### The food I like

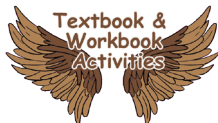


I ate idlies in the morning. I like it very much. It is cooked in steam and so it is easily digestible. I know how to prepare it. What are your favorite food items? Do you know how they are prepared? mention them.



#### Learning outcome

Observe and understand the food preparation methods.



<b>Textbook</b>	<b>Workbook</b>
—	Exercise number : 3.1

### Activity

2

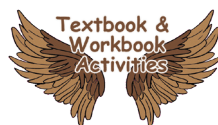
#### Science Everywhere



We use many things to cook and preserve food. You also use many things to cook at your home. Can you name some of them?

#### Learning outcome

Know the uses of household things that are used in day-to-day life.



<b>Textbook</b>	<b>Workbook</b>
Page number :108,109.	Exercise number : 3.2

## Social Science

# 1

# Family

### Learning outcomes

Know about the types of families.

Understand that family gives a feeling of security.

### Note

Two activities are given for the lesson 'Family'. Every day the teacher has to explain an activity, guide and encourage the students to carry out the textbook and workbook activities for the day, which are given in **workbook activities**.

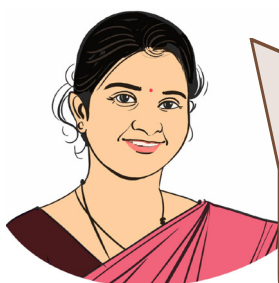
### Activity

# 1

### I SAW! I KNEW!

Divide the students into two groups and give them the family pictures provided in the annexure. Make the groups observe the pictures and then ask the questions as follows. (discuss and introduce the kinds of families.)

1. Can you identify and tell the members of the families in these three pictures?
2. Is there a picture similar to your family?
3. What is the difference among these pictures?



Now, discuss and introduce the kinds . . .

- A family with mother, father and one or two children is a small family.
- A family with mother, father and more than two children is a large family.
- A family of mother, father, and children along with three generations of relatives living together is a joint family.



**Learning outcome:** Know about the kinds of families.

### Workbook Activities 1

Textbook	Workbook
Page number – 122	Exercise Number – 1.1

#### Activity

2

**I will know the values of family**

Ask questions and discuss about love, respect, protection and sharing.

Appreciate the students who answer correctly.

1. Who cooks food in your house?
2. Who answers patiently to all your questions?
3. Who takes care of you when you are not well?
4. Your mother prepared many sweet dosas. Now, only one is left. Your brother/sister and you want it? What will you do?
5. Is there any elderly people in your house?
6. How do you behave with elderly people?



Now, discuss the values of family...

- Family fulfill our basic needs like food, clothing and shelter.
- There are several values that bind the family members together. They are: love and affection, respect, protection and sharing



**Learning outcome:** Understand that family gives a feeling of security.

### Workbook Activities 2

Textbook	Workbook
Page number – 125,130	Exercise Number – 1.2

# 2

## Our Friends

### Learning outcomes

Know about our friends.

Understand the nature of their work.

### Note

An activity has been given for the topic 'Our Friends'. Explain the activity. Guide and encourage the students to do the activities given in textbook and workbook.

### Activity

#### 1

### Let us know our friends!

Ask questions like the following ones. Discuss and introduce 'Our Friends'.

1. What did you have for lunch?
2. What ingredients were used to prepare the food you had?
3. Where were those ingredients obtained from?
4. Who produces them?
5. Who treats you, when you are sick?
6. Who builds your houses?
7. Who teaches you?
8. Who catches the thief?
9. When there is a fire accident, who helps to put out the fire?
10. Who helps to maintain the garden in the park?
11. Who helps to keep the streets clean?





Elicit answers from the students. Make them understand that these people make our lives better. (nurse, civil engineer, firefighter, teacher, farmer, road worker, soldier, conductor) and they are our friends.



**Learning outcome:** Know about our friends.

### Workbook Activities 1

Textbook	Workbook
Page number – 141	Exercise Number – 2.1

# 3

## Panchayat

### Learning outcomes

Know about our Panchayat system.



Know about the functions of Panchayat union.

### Note

An activity has been given for the topic 'Panchayat'. Explain the activity. Guide and encourage the students to do the activities given in textbook and workbook.

### Activity

#### 1

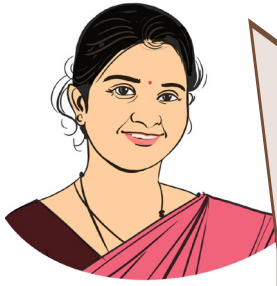
**I know the functions of Panchayat!**

Show the video provided in the QR code. After playing the video ask questions like the following. Discuss and introduce the functions of the Panchayat.



1. What have you seen in the video?
2. What kinds of bridges are built by the Panchayat?
3. What does the Panchayat do to dispose sewage water?
4. What are the facilities provided to primary schools by the Panchayat?
5. Whose duty is it to provide electricity and maintain streetlights in villages?
6. Say any two of the important functions of the Panchayat.





Now, discuss the functions of Panchayat...

- Providing electricity and maintaining the street lights
- Drilling and maintaining of village wells
- Providing drinking water
- Laying roads and maintaining them
- Setting up sewage channels
- Constructing small bridges
- Repairing primary school buildings
- Providing sanitation facilities



**Learning outcome:** Know about the functions of Panchayat.

### Workbook Activity 1

Textbook	Workbook
Page number – 152,156	Exercise Number – 3.1

# 4

## Safety

### Learning outcomes

Know about road safety, water safety, fire safety and electrical safety.



Understand the safety measures to avoid accidents.

### Note

Two activities are given for the lesson 'Safety'. The teacher has to explain an activity in a day, guide and encourage the students to carry out the textbook and workbook activities for the day, which are given in **workbook activities**.

### Activity

1

Let us avoid! Let us safeguard!



Make students watch the video given in the QR code. After students watch the video, ask questions like the ones given below. Discuss and elicit answers from the students. Tell them the ways to keep themselves safe from the dangers of water, electricity and fire.

1. What have you seen in the video?
2. Which number should you call if there is a fire accident?
3. What should we wear when we travel on water?
4. Is it safe to go near a pond or a river?
5. What kinds of clothes are safe to wear while cooking?
6. Why shouldn't we touch electric appliances with wet hands?





Now, discuss about safety...

- We should handle the highly inflammable things carefully.
- It is safe to wear cotton clothes while cooking.
- We should be cautious and careful while firing crackers. Elders should be with us when we fire crackers.
- We should not go alone to bathe in water bodies.
- We have to wear life jacket when we travel in water.
- Do not touch switches with wet hands. Do not climb on electrical posts.
- Do not go near the wires or electrical posts.



**Learning outcome:** Know about road safety, water safety, fire safety and electrical safety.

### Workbook Activities 1

Textbook	Workbook
Page number – 160, 162, 163	Exercise Number – 4.1

#### Activity

2

Let us be aware!

Make students watch the video given in the QR code. After students watch the video, ask questions like the ones given below. Discuss and elicit answers from the students. Tell them about road safety and safety measures to avoid accidents.



1. What have you seen in the video?
2. Which number will you use to inform if there is a road accident?
3. What should we wear while riding a two-wheeler?
4. What is the reason for the accident shown in the video?
5. What should have been done to avoid the accident?
6. What are the colours you see in a traffic light?
7. Is it correct to play with friends on the road?





Now, discuss the safety measures to avoid accidents...

- We have to follow traffic rules.
- We have to walk only on the pavement.
- We should look at the colours in the signal while crossing the road.
- We should not play on the road.
- We should wear helmet while riding a two-wheeler.



**Learning outcome:** Understand the safety measures to avoid accidents.

### Workbook Activities 2

Textbook	Workbook
Page number – 164,170,171	Exercise Number – 4.2

# ENNUM EZHUTHTHUM – MATHEMATICS – TERM - I

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# ANNEXURE

## 1. FORMATIVE ASSESSMENT (a) or FA (a)

Title	Teachers Hanbook	Texbook \ Workbook	Workbook	
		Arumbu	Mottu	Malar
1. Around Me	3	5, 6	1.7, 1.8	1.7, 1.9, 1.11
2. I Know Shapes	2, 4	2.5	2.4, 2.6	2.3, 2.4, 2.5
3. I Know numbers	1, 3, 5	12, 14, 18, 19, 21, 49	3.17, 3.18	3.17, 3.18, 3.19
4. I can compare numbers	1, 2, 5	29	4.9, 4.10	4.4, 4.5, 4.6
5. I Know Addition	1, 2	35, 39	5.3, 5.7	5.10, 5.11, 5.12
6. I Know Subtraction	1, 2	42, 43	6.4, 38	6.13, 6.14, 6.15
7. I Know Patterns	1, 2	52, 55	7.1, 7.2	7.1, 7.2, 7.3
8. I Can Process Information	1, 3	56, 58	8.4, 8.5	8.3, 8.4, 8.5
9. I Know Measurements	1, 3	-	9.4, 9.5	9.7, 9.8, 9.9
10. I Know Time	1, 3, 5	-	10.3, 10.5	10.5, 10.6, 10.7

## 2. Learning outcomes

Title	Arumbu	Mottu	Malar
1. Around Me	<ul style="list-style-type: none"> <li>❖ Able to compare properties related to position such as Inside-outside, Top-bottom, On- under, Above-below, Near- far and Big-small</li> </ul>	<ul style="list-style-type: none"> <li>❖ Understand and apply properties related to position such as Inside-outside, Top-bottom, On- under, Above-below, Near- far and Big-small</li> </ul>	<ul style="list-style-type: none"> <li>❖ Understand and apply properties related to position such as Inside-outside, Top-bottom, On- under, Above- below, Near- far and Big-small</li> </ul>
2. I Know Shapes	<ul style="list-style-type: none"> <li>❖ Know about curved and flat objects.</li> <li>❖ Know about corners and edges of objects.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Know 3D shapes.</li> <li>❖ Make 2D shapes from 3D objects.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Know the properties of 2D shapes.</li> <li>❖ Know the properties of 3D objects namely cube, cuboid and sphere.</li> </ul>
3. I Know numbers	<ul style="list-style-type: none"> <li>❖ Know the numbers from 1 to 9.</li> <li>❖ Know the concept of zero.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Know the number names of numbers up to 20.</li> <li>❖ Know the place value of 2-digit numbers.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Know the numbers from 100 to 999 and their number names.</li> <li>❖ Know the place value of 3-digit numbers.</li> </ul>
4. I can compare numbers	<ul style="list-style-type: none"> <li>❖ Compare numbers up to 9 and know big number and small number.</li> <li>❖ Identify before, after, In-between numbers up to 9.</li> <li>❖ Identify the ordinal numbers up to 9.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Compare numbers up to 99 and know big number and small number.</li> <li>❖ Identify the predecessor, successor and in-between numbers up to 99.</li> <li>❖ Identify odd and even numbers up to 99.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Compare numbers up to 999 and know big number and small number.</li> <li>❖ Identify before, after, in-between numbers up to 999.</li> <li>❖ Arrange numbers up to 999 in ascending and descending orders.</li> <li>❖ Identify odd number and even number up to 999.</li> </ul>

Title	Arumbu	Mottu	Malar
5. I Know Addition	<ul style="list-style-type: none"> <li>❖ Able to do addition problems, sum not exceeding 9.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Able to do addition problems without regrouping (sum not exceeding 99).</li> </ul>	<ul style="list-style-type: none"> <li>❖ Able to do addition problems, with and without regrouping (sum not exceeding 999).</li> </ul>
6. I Know Subtraction	<ul style="list-style-type: none"> <li>❖ Able to subtract numbers up to 9.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Able to subtract numbers up to 99, without regrouping.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Able to subtract numbers up to 999, with and without regrouping.</li> </ul>
7. I Know Patterns	<ul style="list-style-type: none"> <li>❖ Able to know and create patterns in sound and colours.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Able to create patterns in sound, sound with body movements and colours.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Able to create growing and rotating patterns in shapes.</li> <li>❖ Able to create patterns in shapes using straight lines.</li> <li>❖ Able to identify and create symmetrical shapes.</li> </ul>
8. I Can Process Information	<ul style="list-style-type: none"> <li>❖ Able to collect, classify and handle information</li> </ul>	<ul style="list-style-type: none"> <li>❖ Able to collect information.</li> <li>❖ Able to list all the possibilities.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Able to collect information and represent in pictograph and draw inferences.</li> <li>❖ Able to list all the possibilities.</li> </ul>
9. I Know Measurements	–	<ul style="list-style-type: none"> <li>❖ Able to measure length using non standard units.</li> <li>❖ Able to know the standard units (cm, m) to measure length.</li> <li>❖ Able to measure the length of the objects using a scale.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Able to measure length using non standard units.</li> <li>❖ Able to know the standard units (mm, cm, m, km) to measure length.</li> <li>❖ Able to measure the length of the objects using a scale.</li> </ul>
10. I Know Time	–	<ul style="list-style-type: none"> <li>❖ Know the days of a week, months of a year and seasons.</li> <li>❖ Know the number of days in a month.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Able to find day, date and month from a calendar.</li> <li>❖ Able to find a particular day and date.</li> <li>❖ Know the date of manufacture and expiry.</li> </ul>

**Note :** The pink coloured learning outcomes have to be treated as critical learning outcomes.



### 3. Teaching Learning Materials

Module 10 - Activity 4 - ● Calendar and Date

Card of Monthly Birthday Celebration		
S.no	Month	Name of the Students
1	January	
2	February	
3	March	
4	April	
5	May	
6	June	



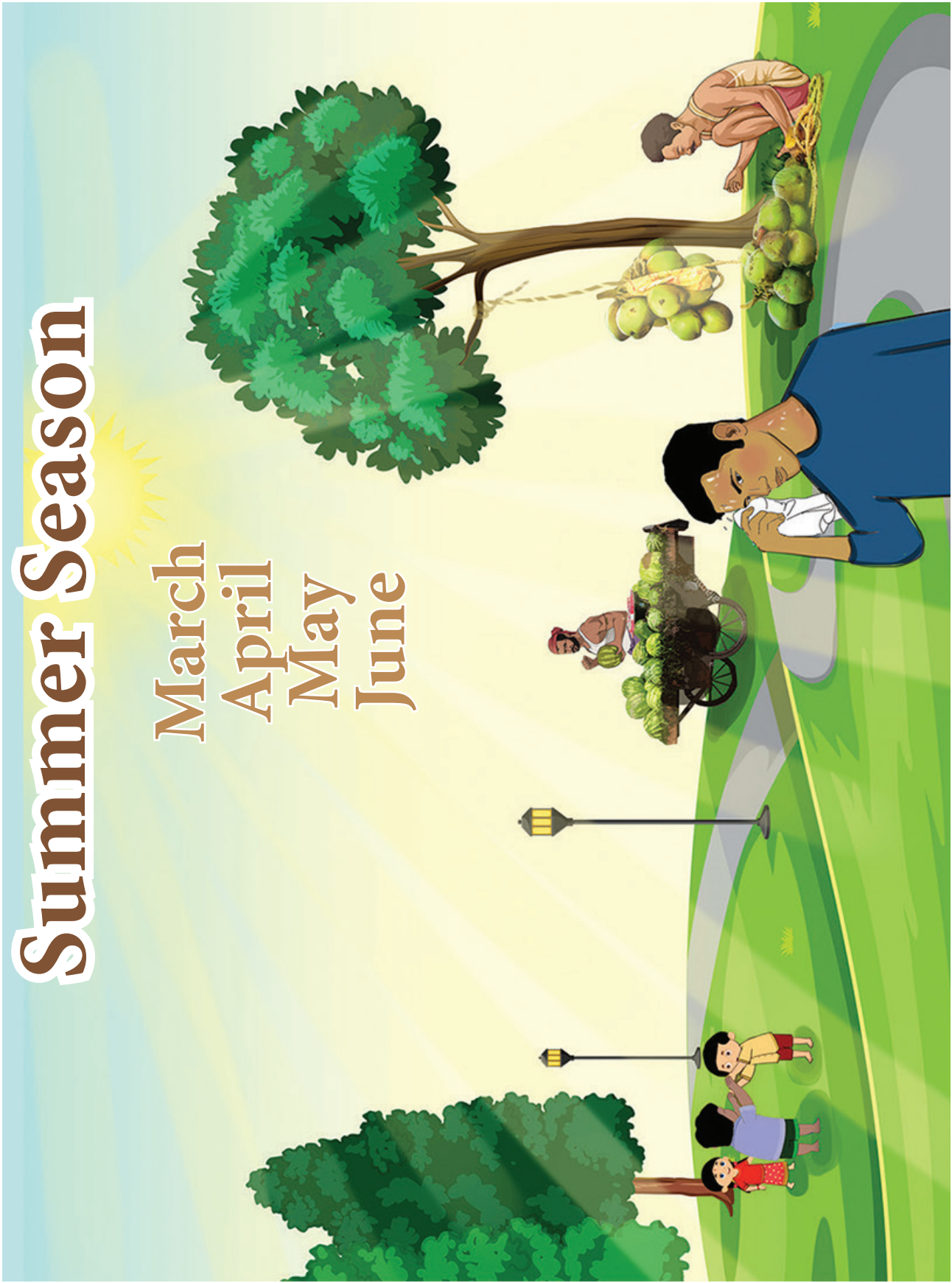
Card of Monthly Birthday Celebration		
S.no	Month	Name of the Students
7	July	
8	August	
9	September	
10	October	
11	November	
12	December	





# Summer Season

March  
April  
May  
June











# Rainy Season



July

August

September

October





# January - 202\_\_

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

# February - 202\_\_

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday





# March - 202\_\_

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

# April - 202\_\_

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday







# May - 202

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

# June - 202

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday







# July - 202\_\_

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

# August - 202\_\_

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday



# September - 202\_\_

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

# October - 202\_\_

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday



# November - 202\_\_

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

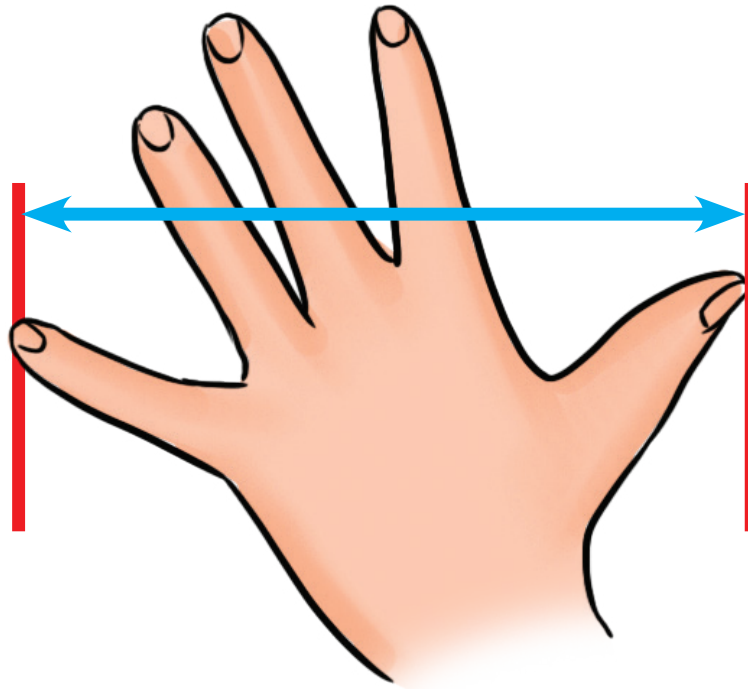
# December - 202\_\_

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

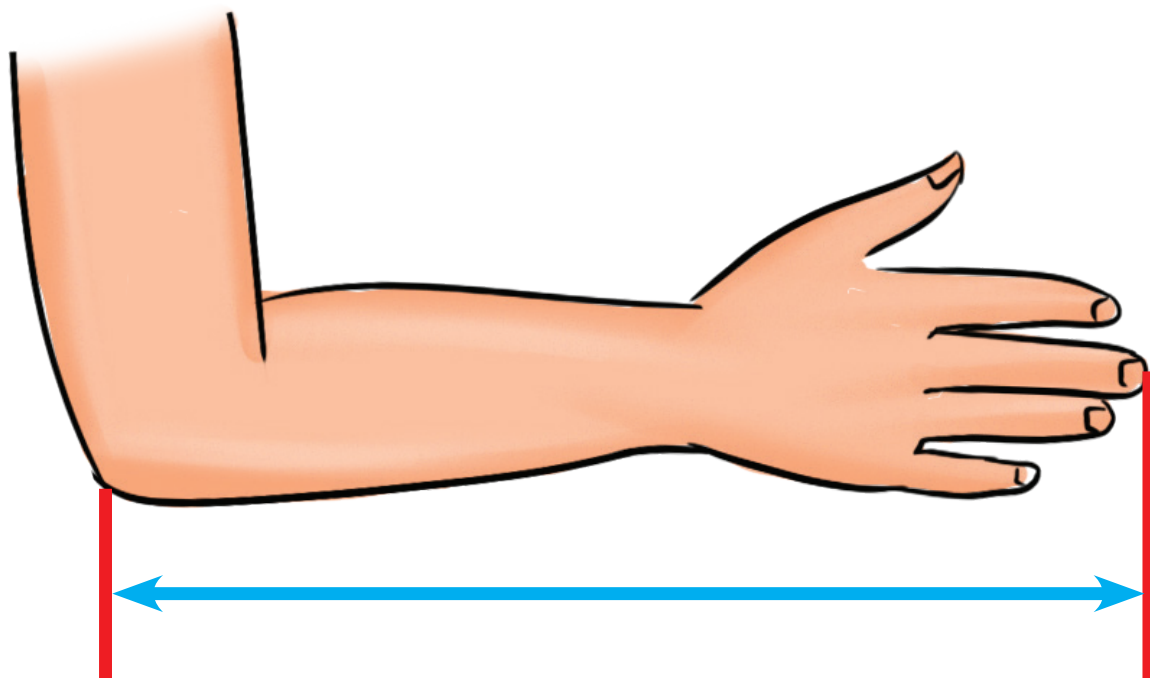




## Handspan



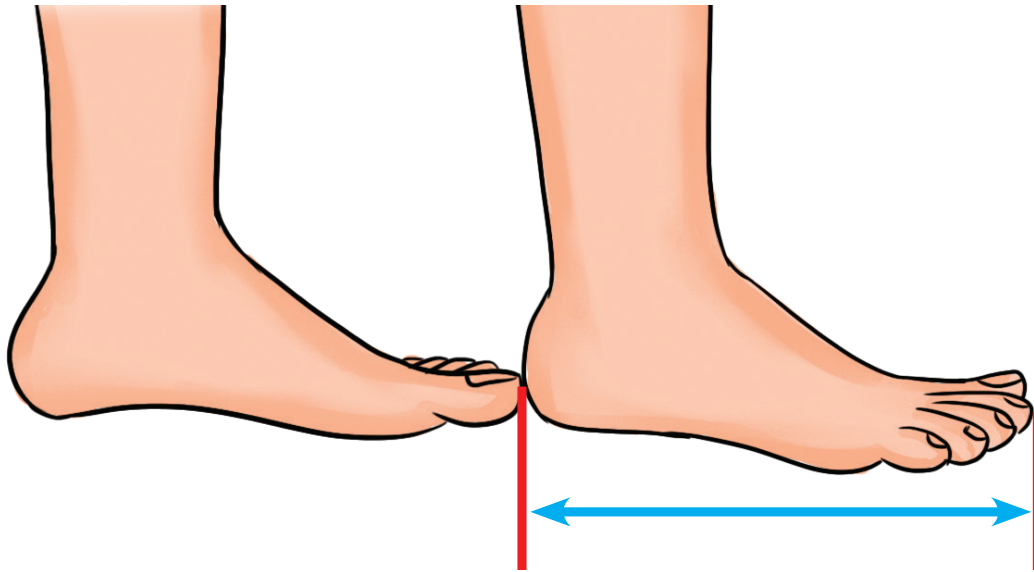
## Cubit



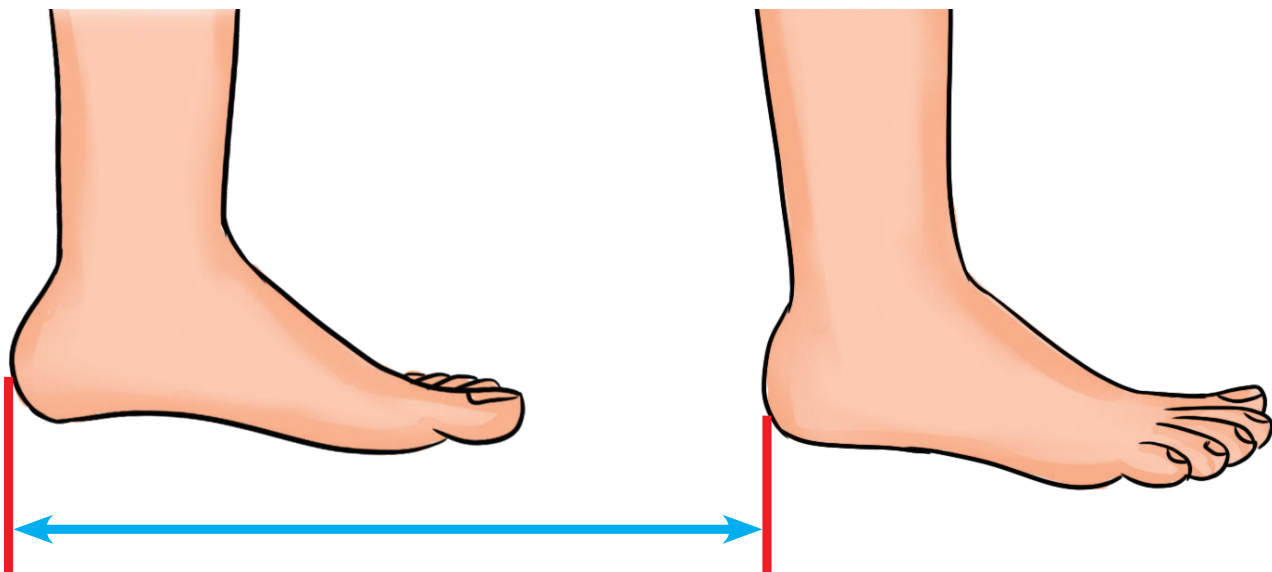









# Footspan








# Pace





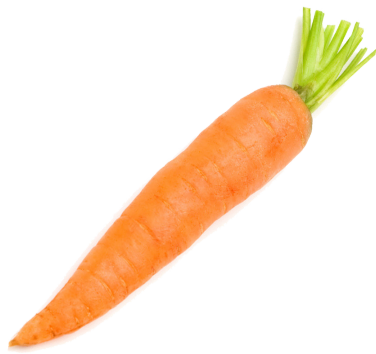
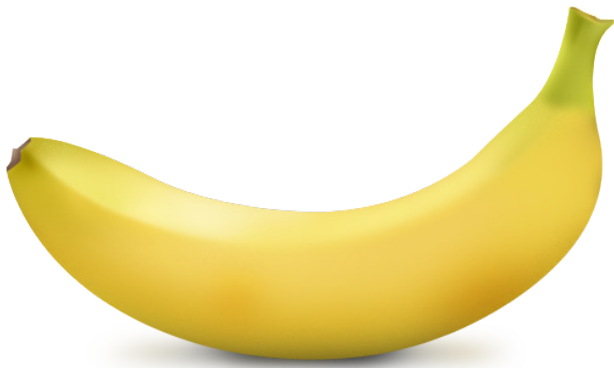
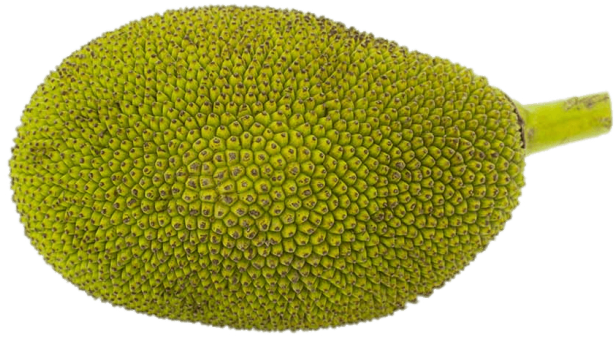
Which is your favourite animal?		
S. No.	Animal	Number of Students
1		
2		
3		
4		
5		

Which is your favourite flower?		
S. No.	Flower	Number of Students
1		
2		
3		
4		
5		





Module 8 - Activity 3 - ●●●







Module 7 - Activity 4 - ● Symmetry







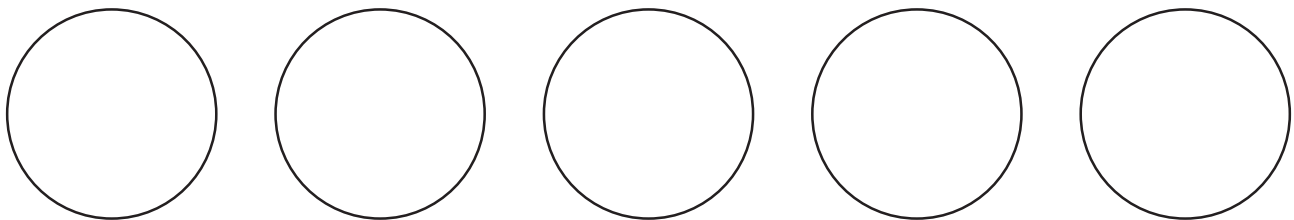
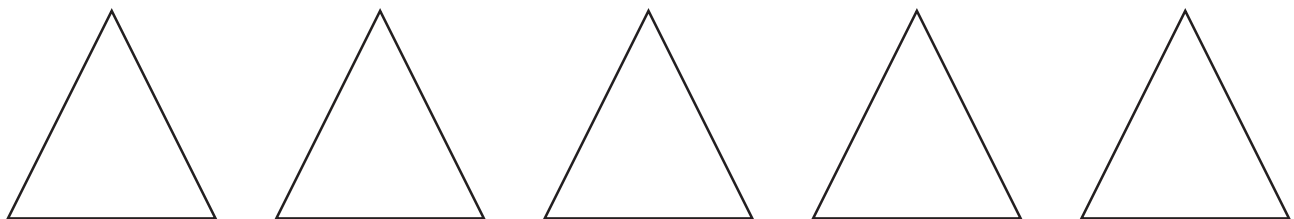
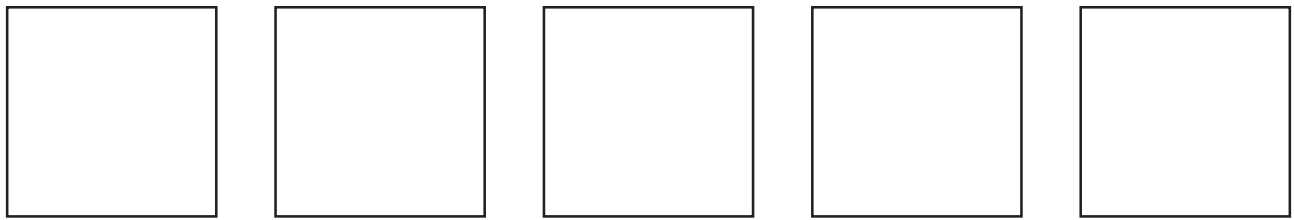
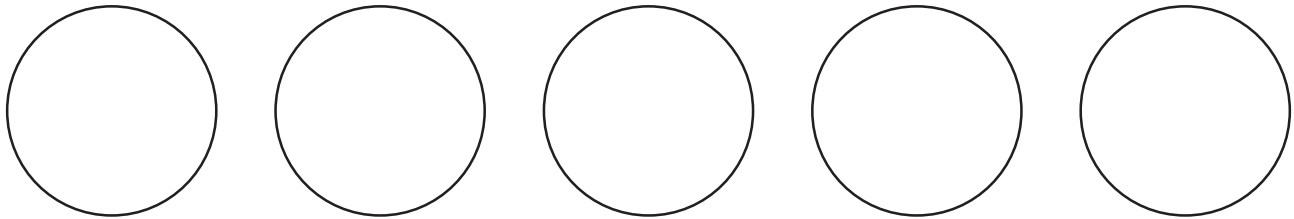
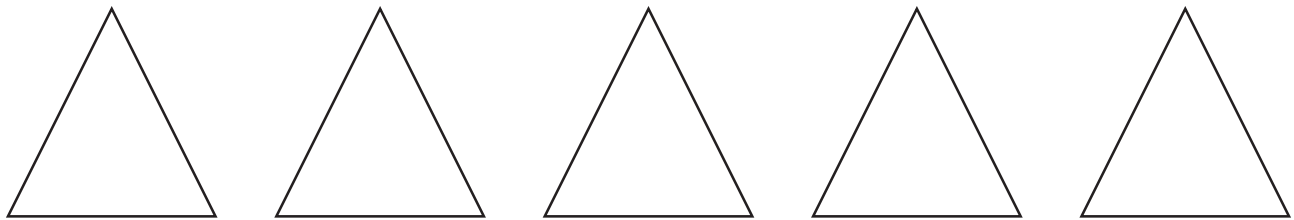
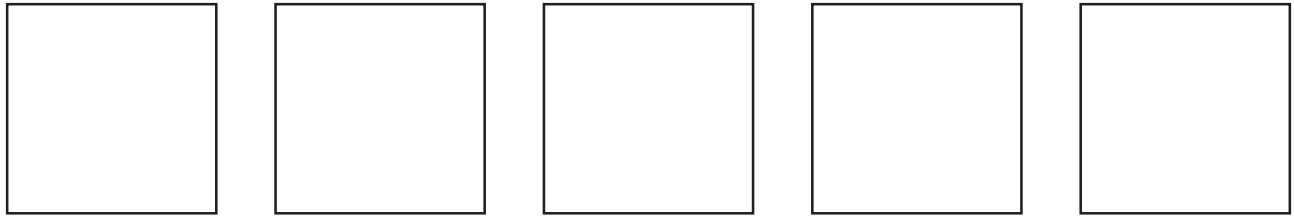
Module 7 - Activity 4 - ● Symmetry







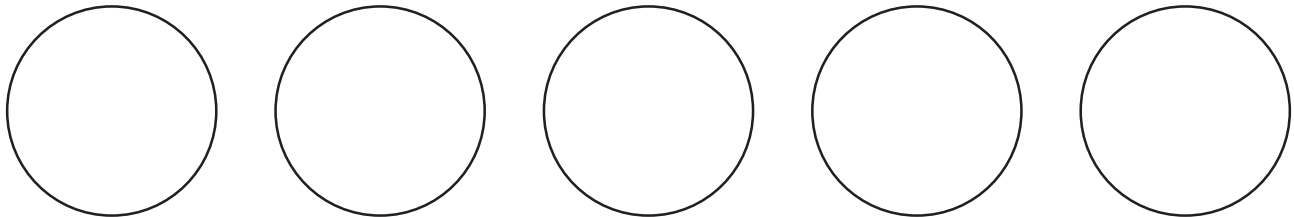
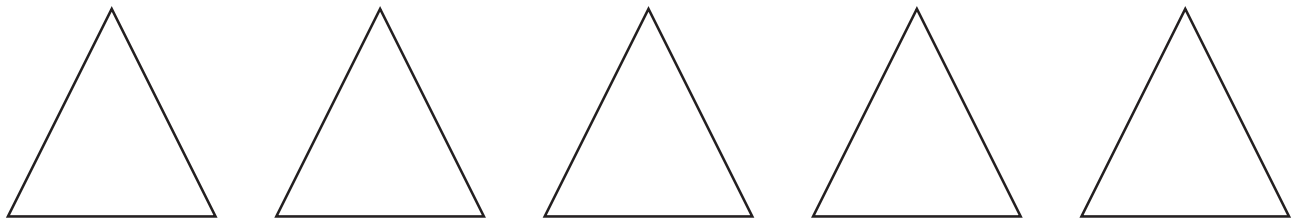
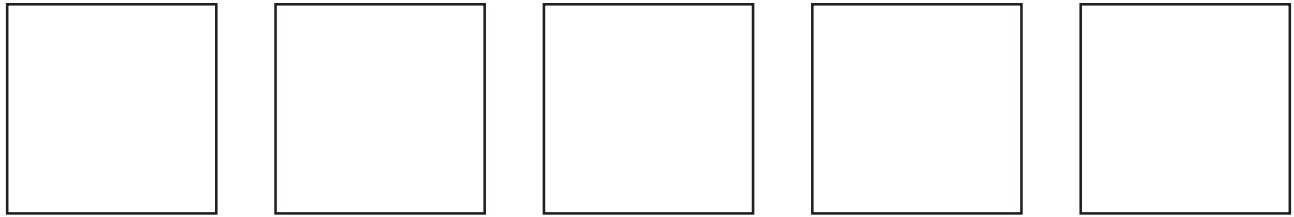
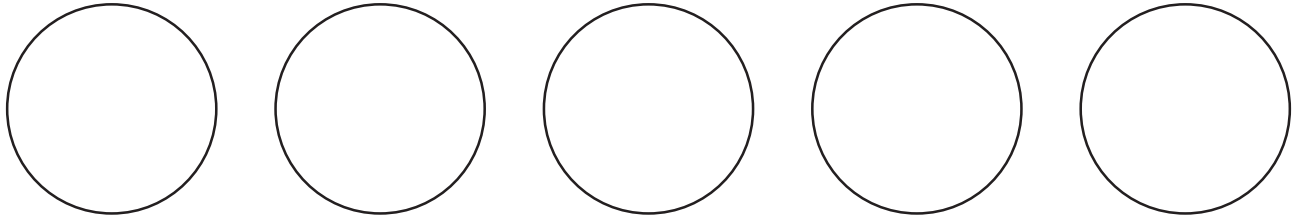
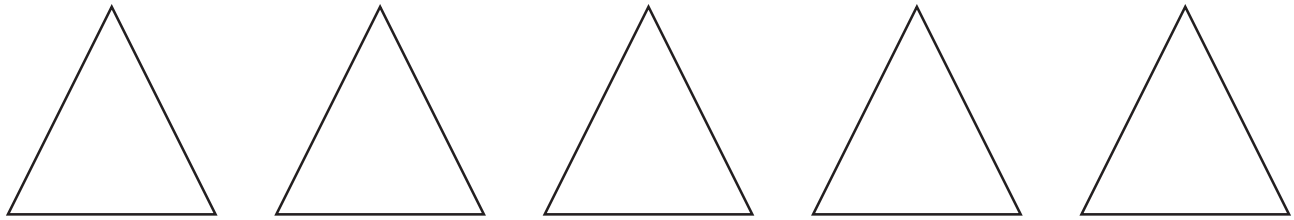
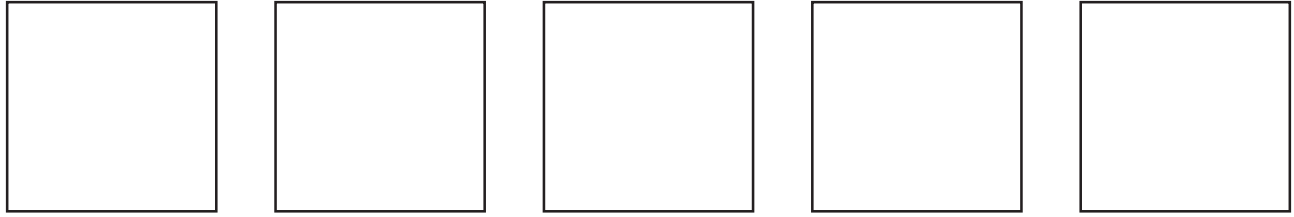
Module 7 - Activity 2 - ●●● Patterns in Shapes









Module 7 - Activity 2 - ●●● Patterns in Shapes









Module 3 - Activity 3 - ●● Number Name

	
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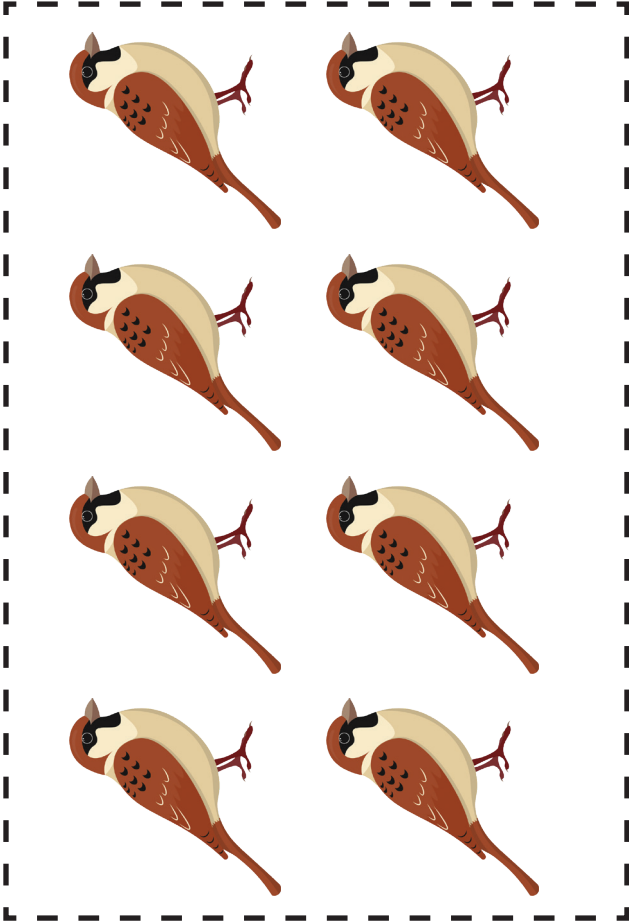
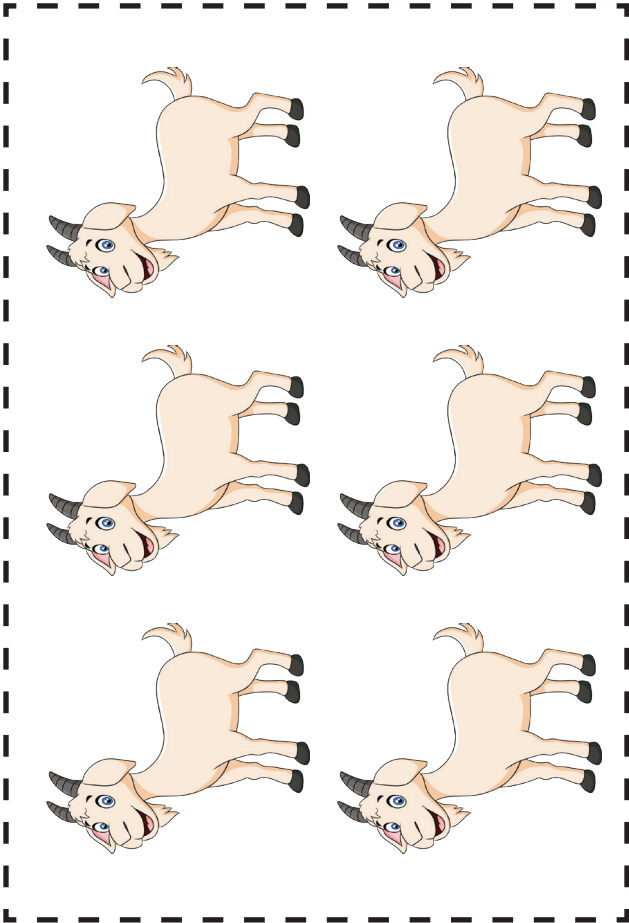
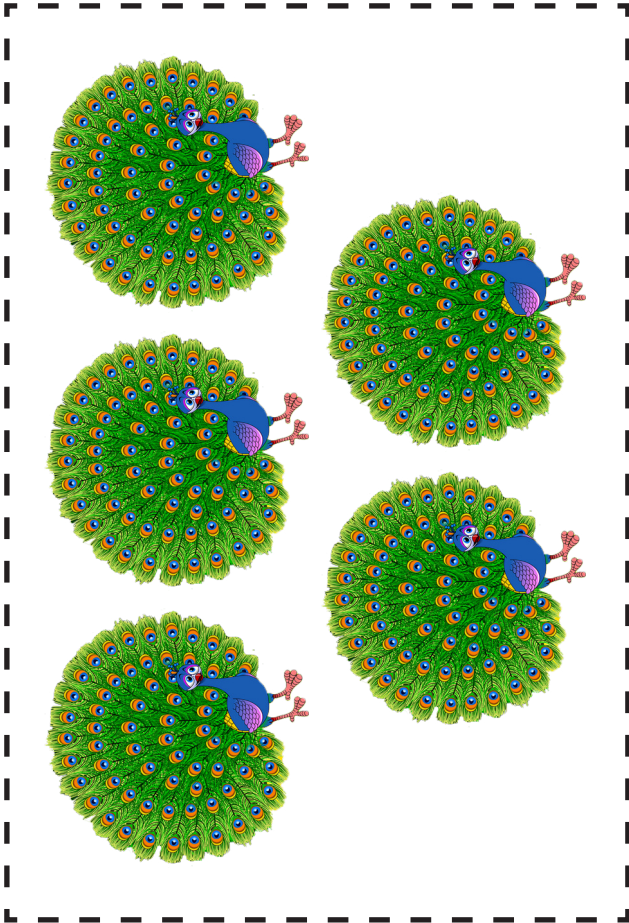


<p>Two</p>	<p>One</p>
<p>Four</p>	<p>Three</p>





Module 3 - Activity 3 - ●● Number Name





Six

Five

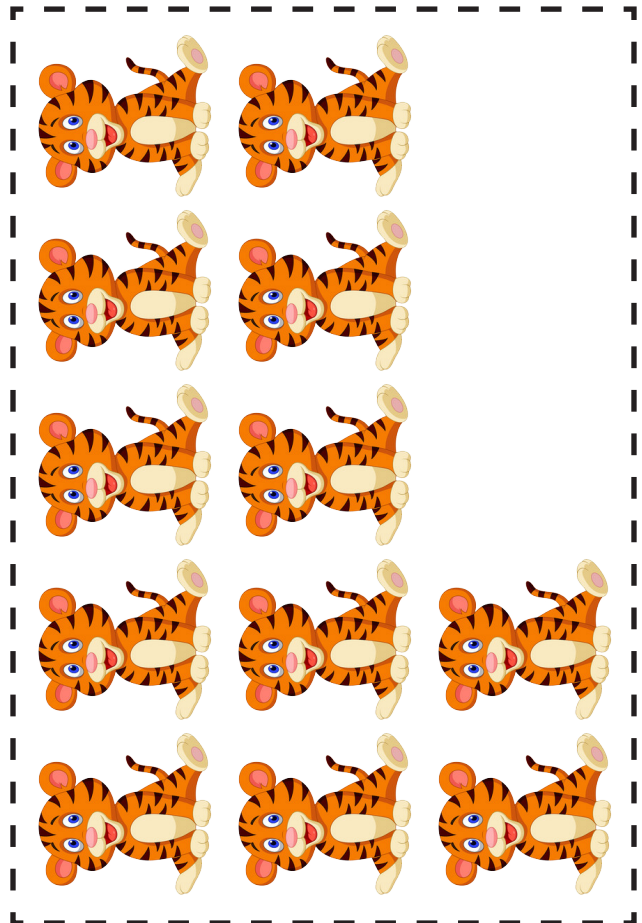
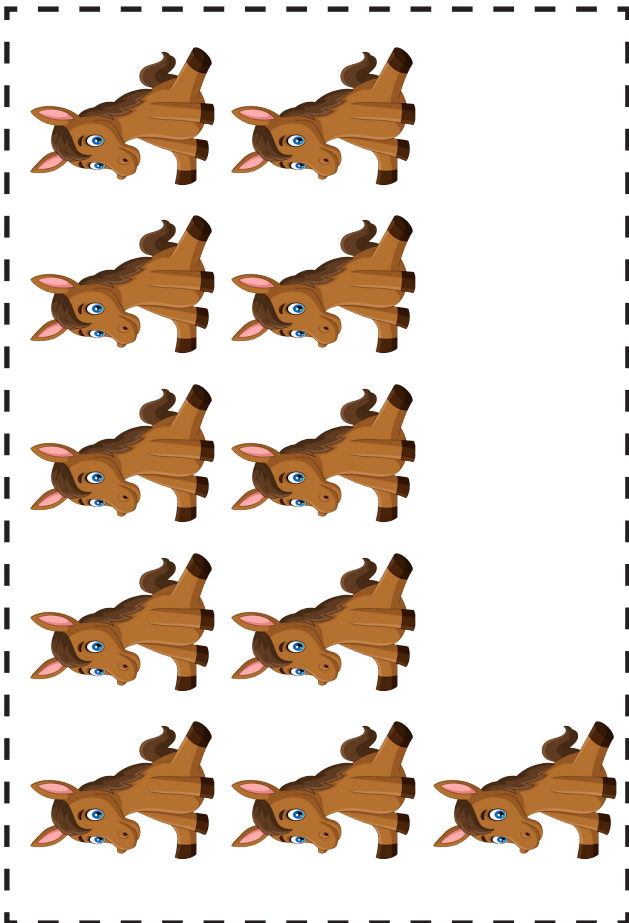
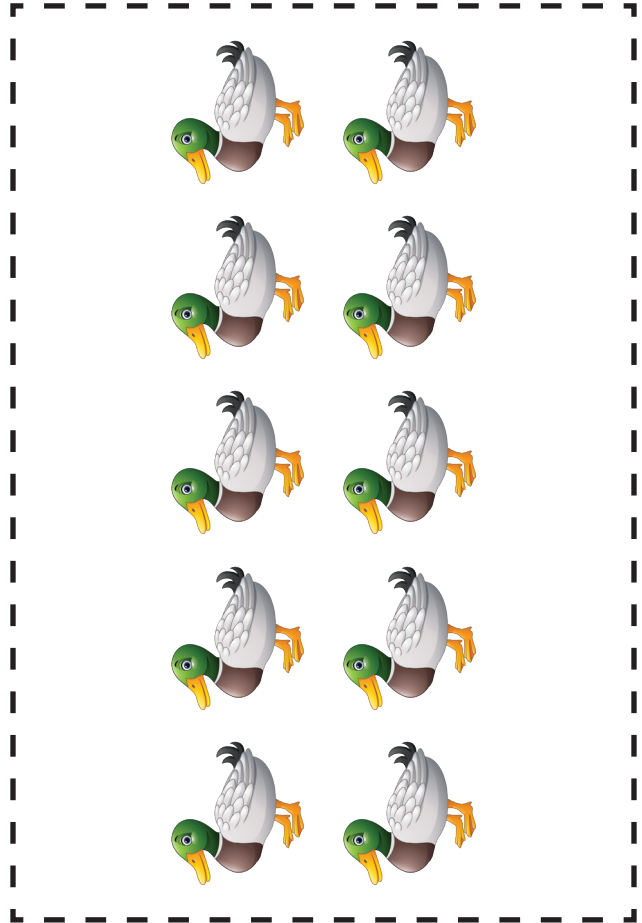
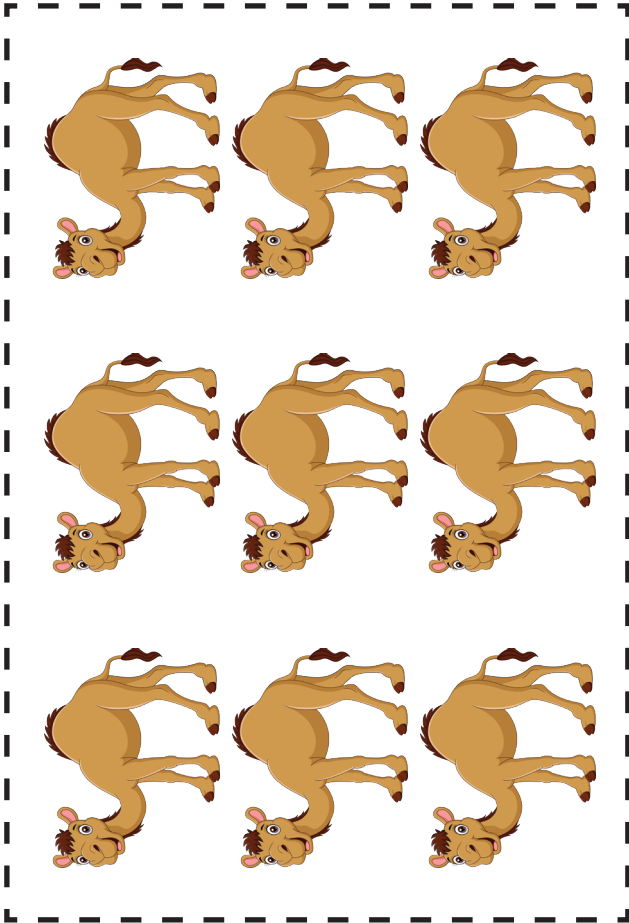
Eight

Seven





Module 3 - Activity 3 - ●● Number Name





Ten

Nine

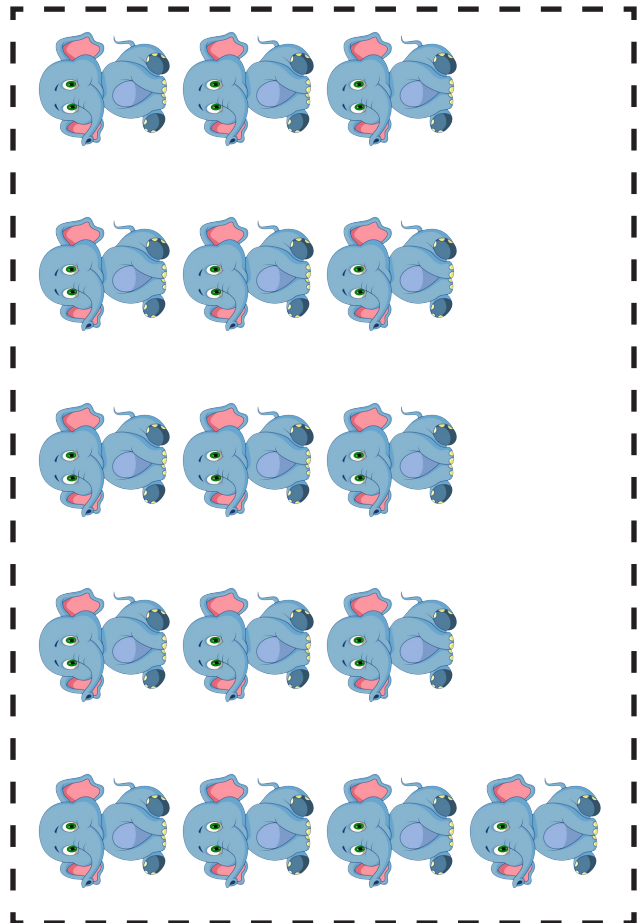
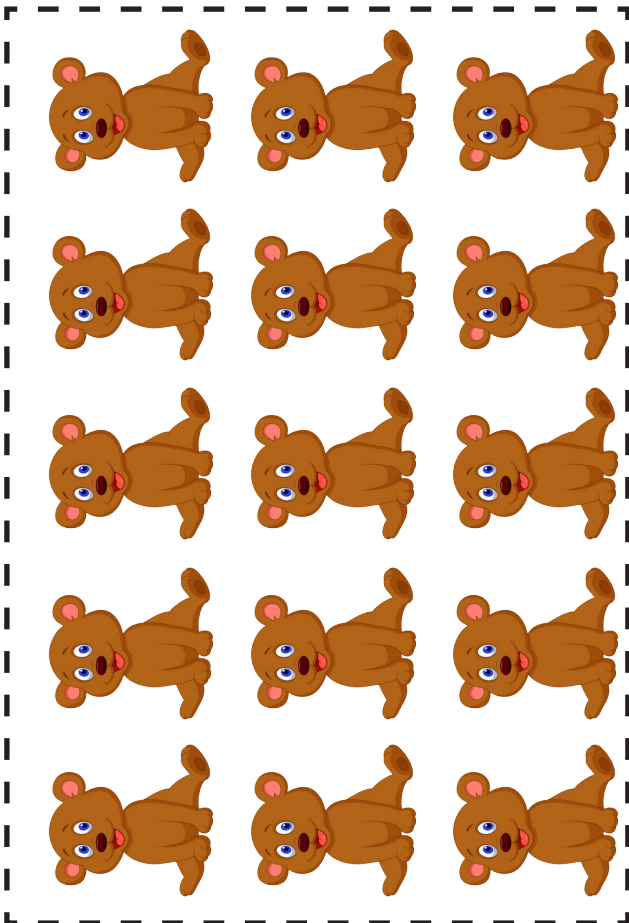
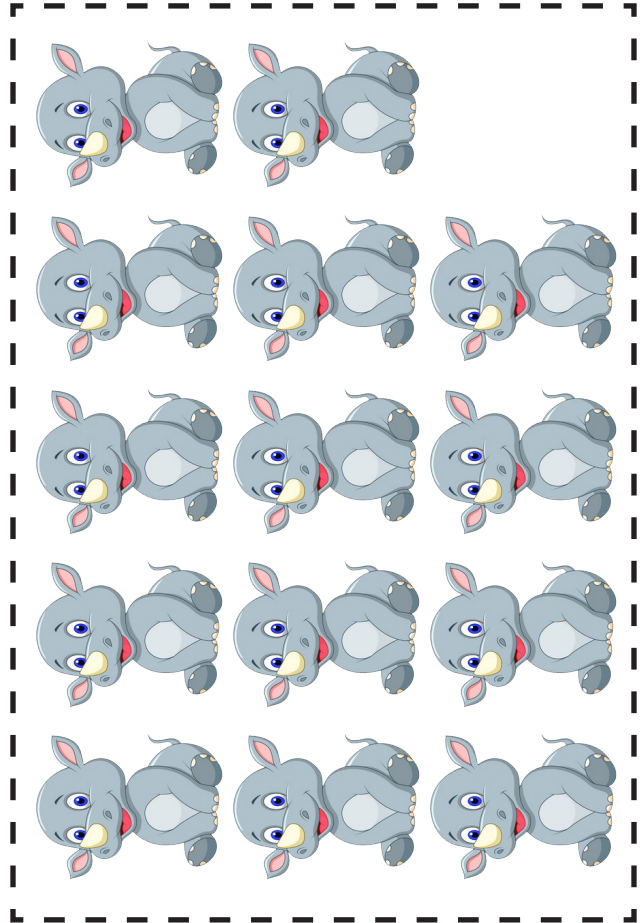
Twelve

Eleven





Module 3 - Activity 3 - ●● Number Name





Fourteen

Thirteen

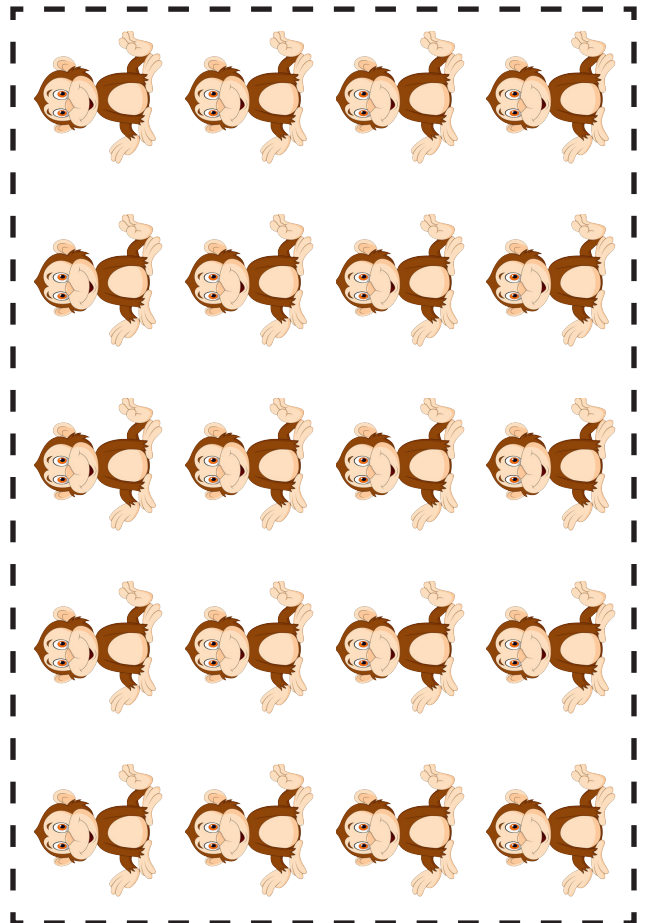
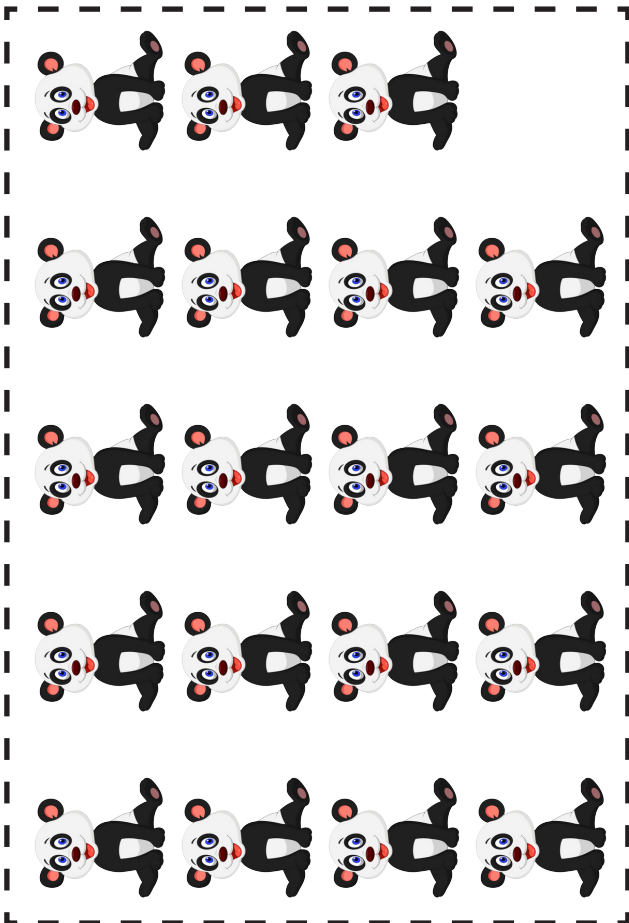
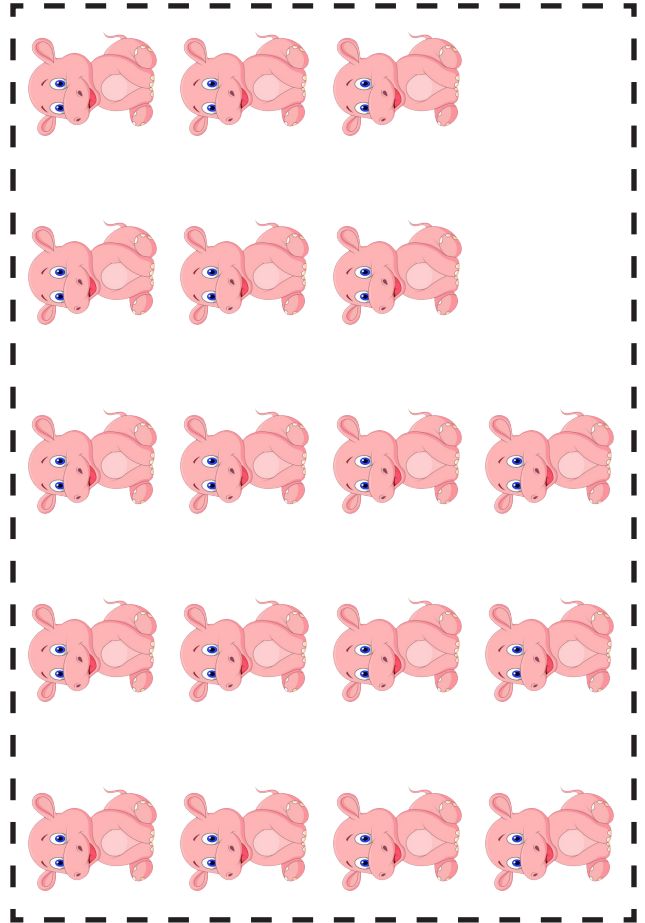
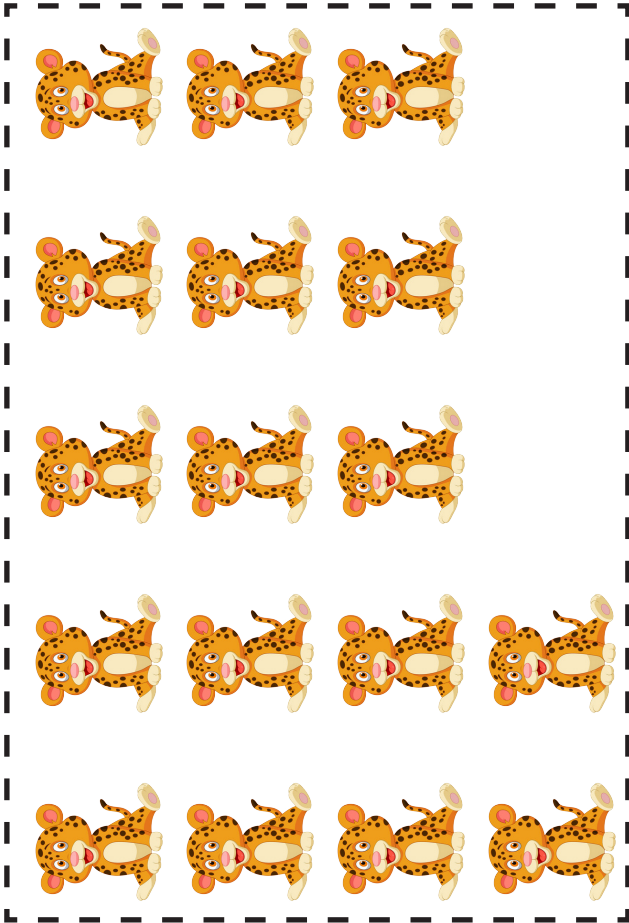
Sixteen

Fifteen





Module 3 - Activity 3 - ●● Number Name





Eighteen

Seventeen

Twenty

Nineteen





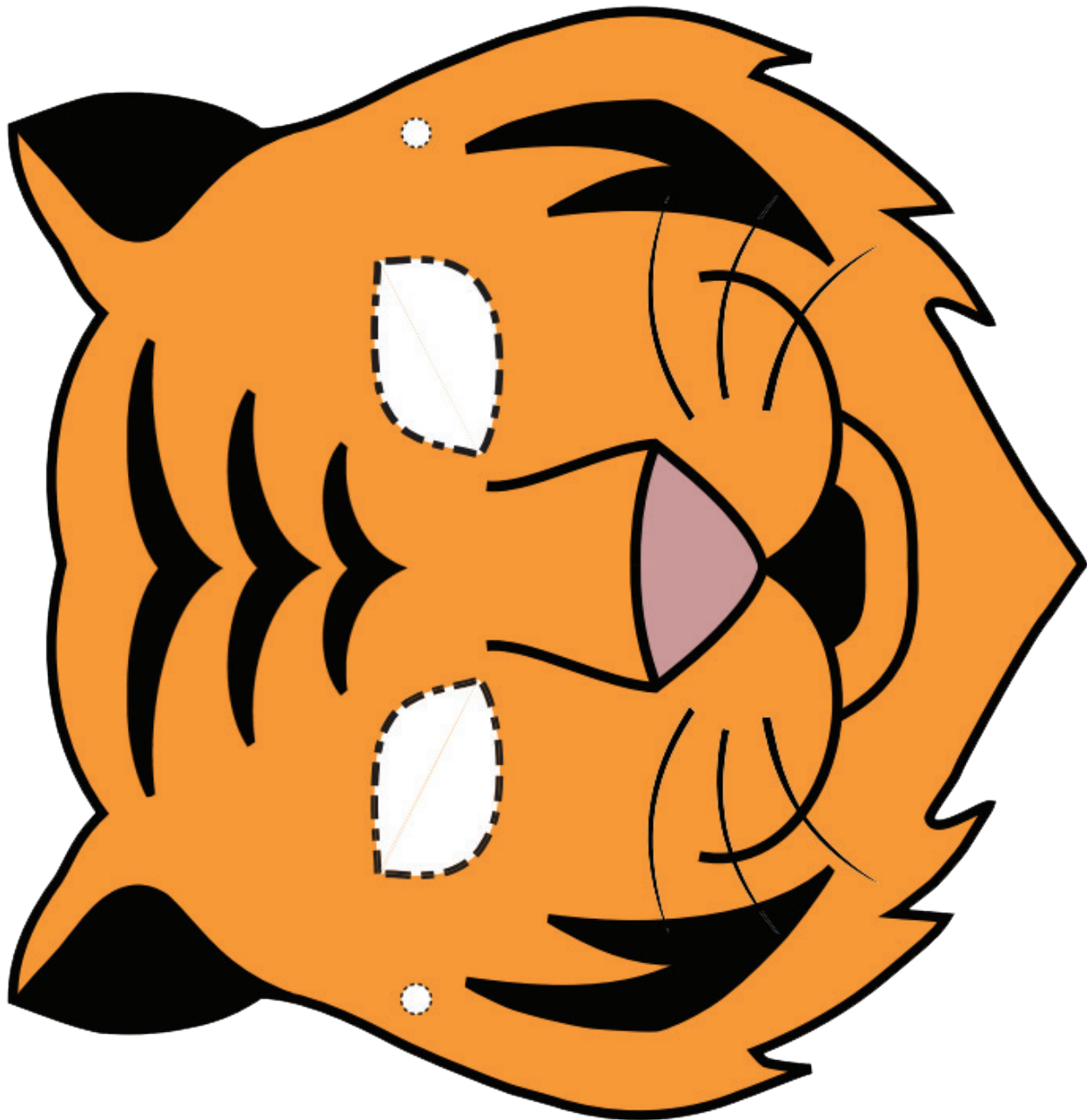
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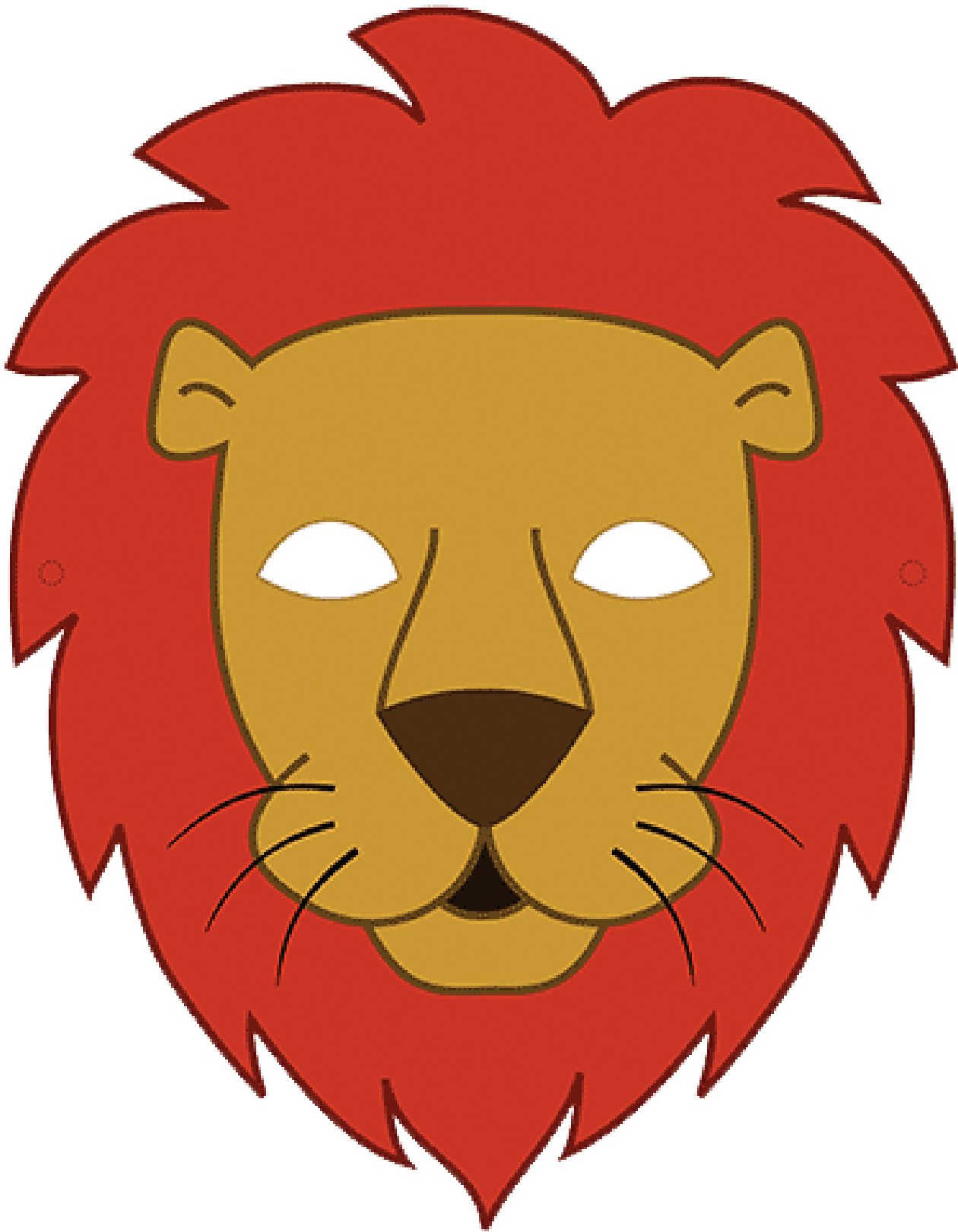
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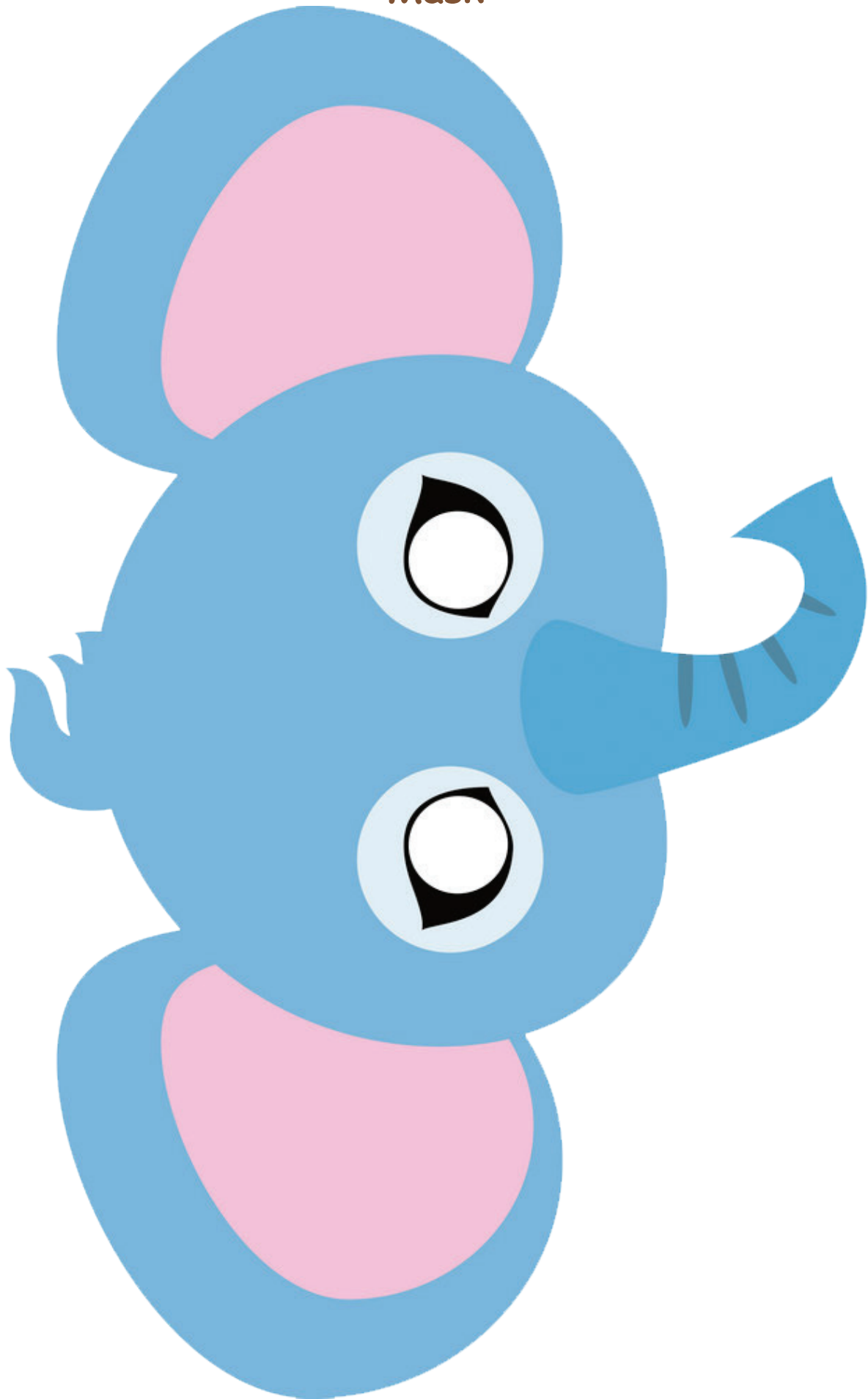
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# Mask







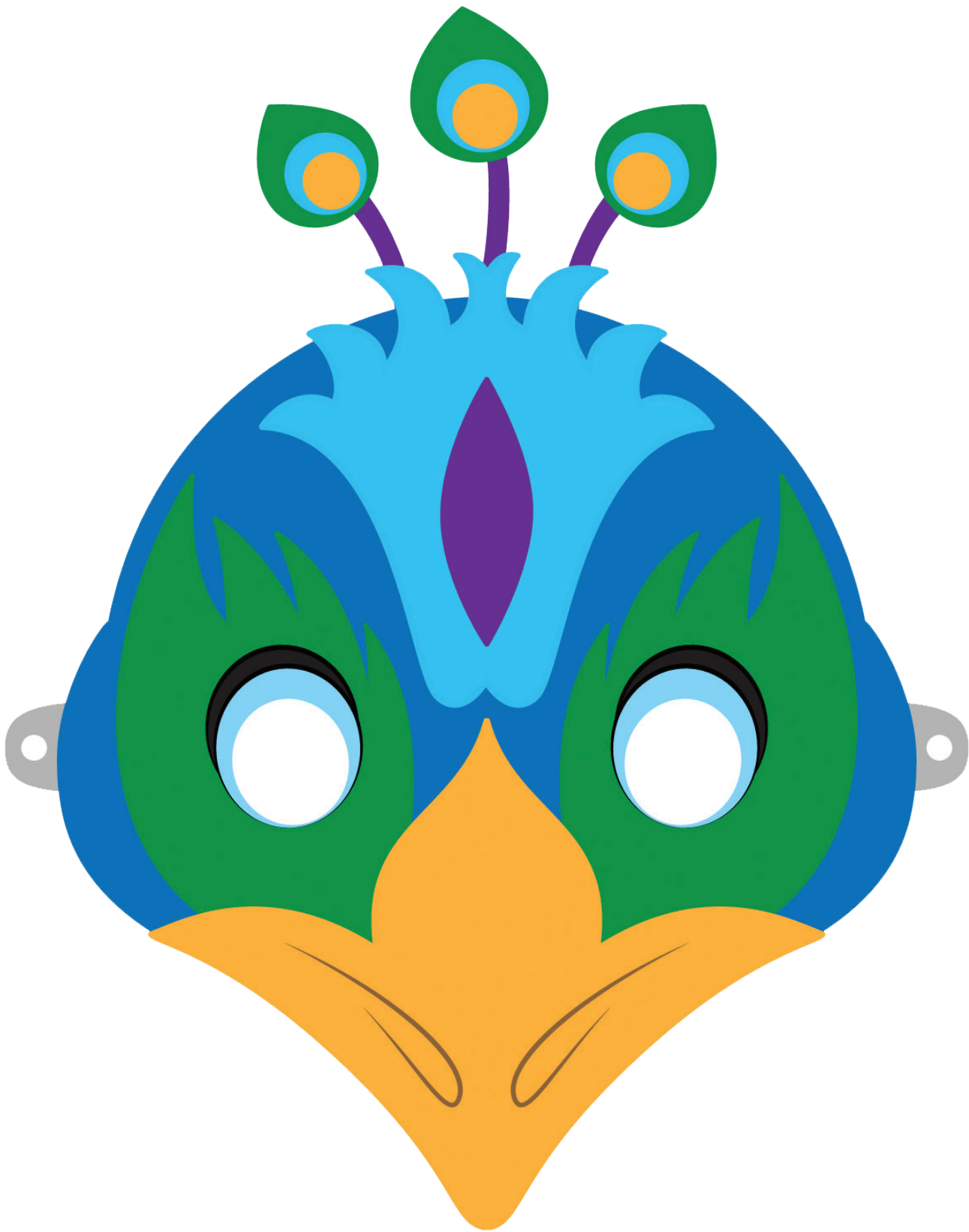
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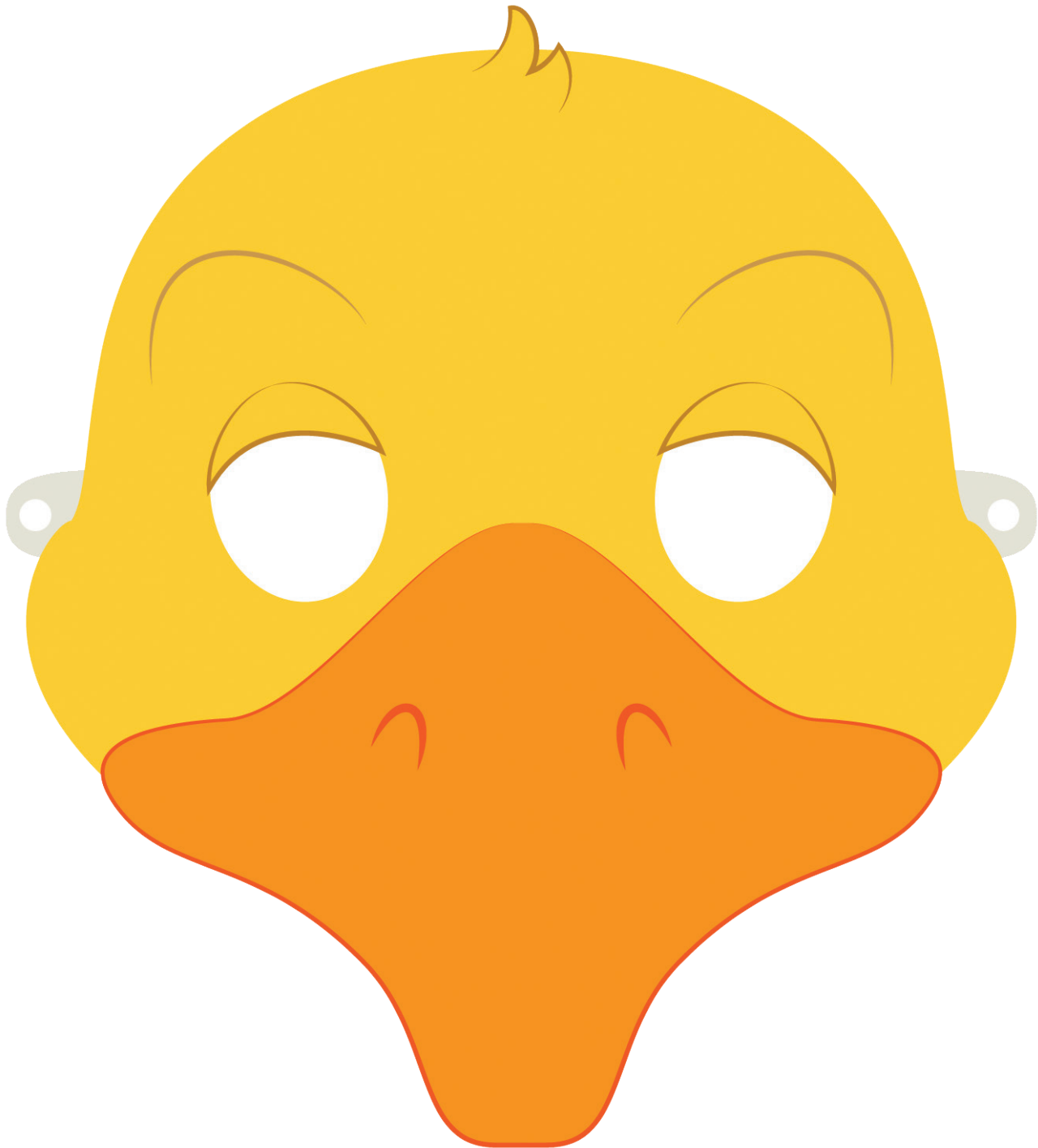
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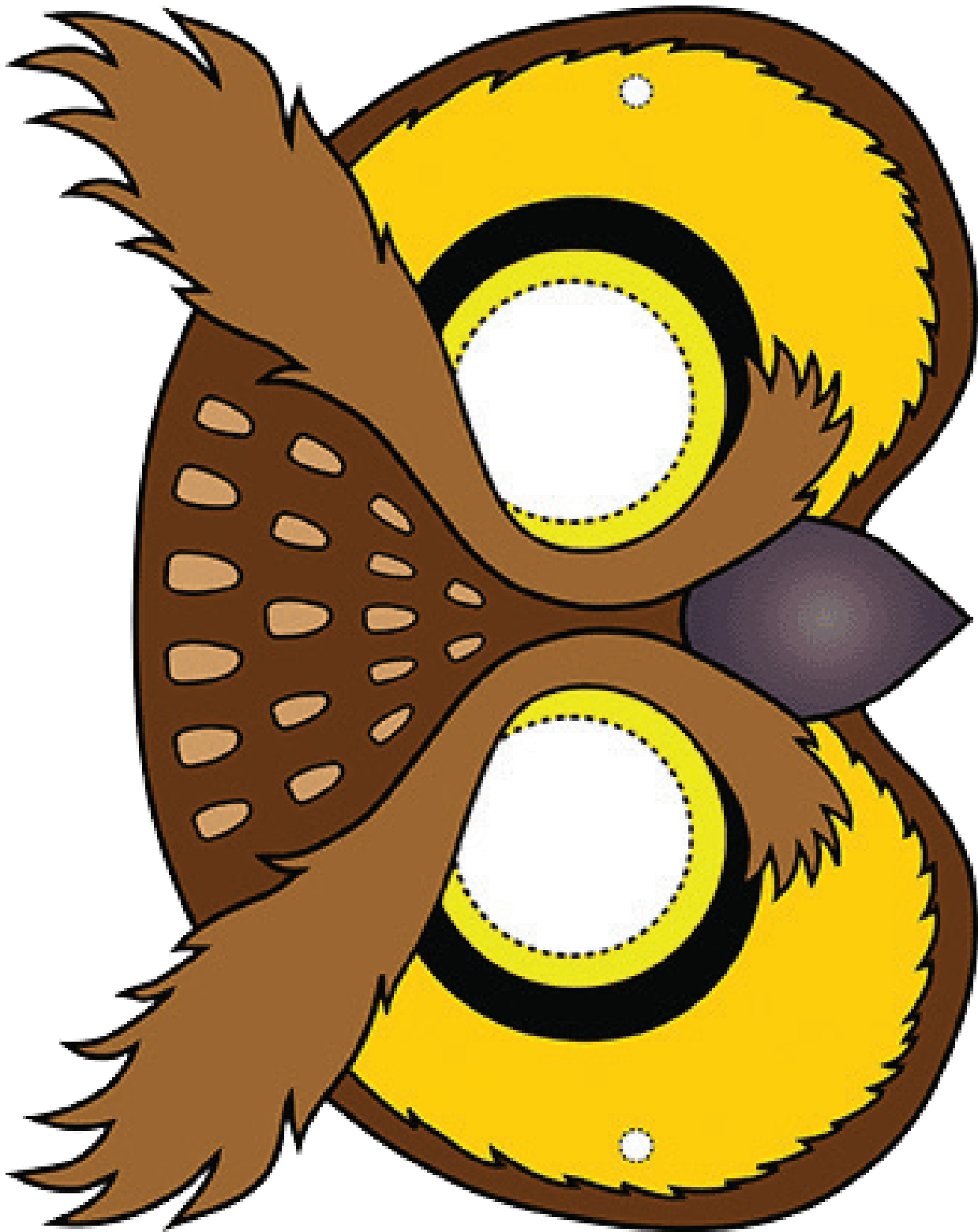
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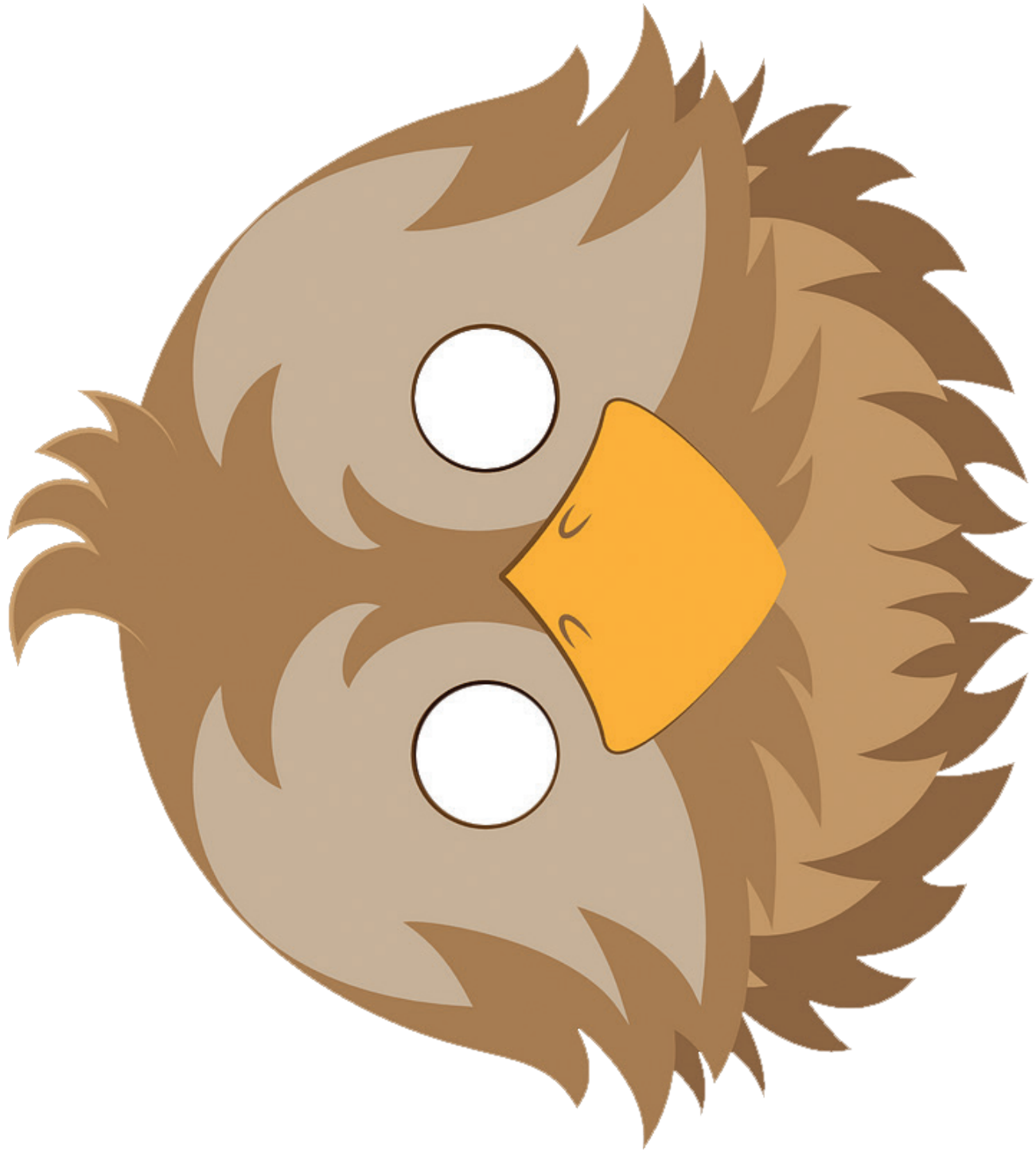
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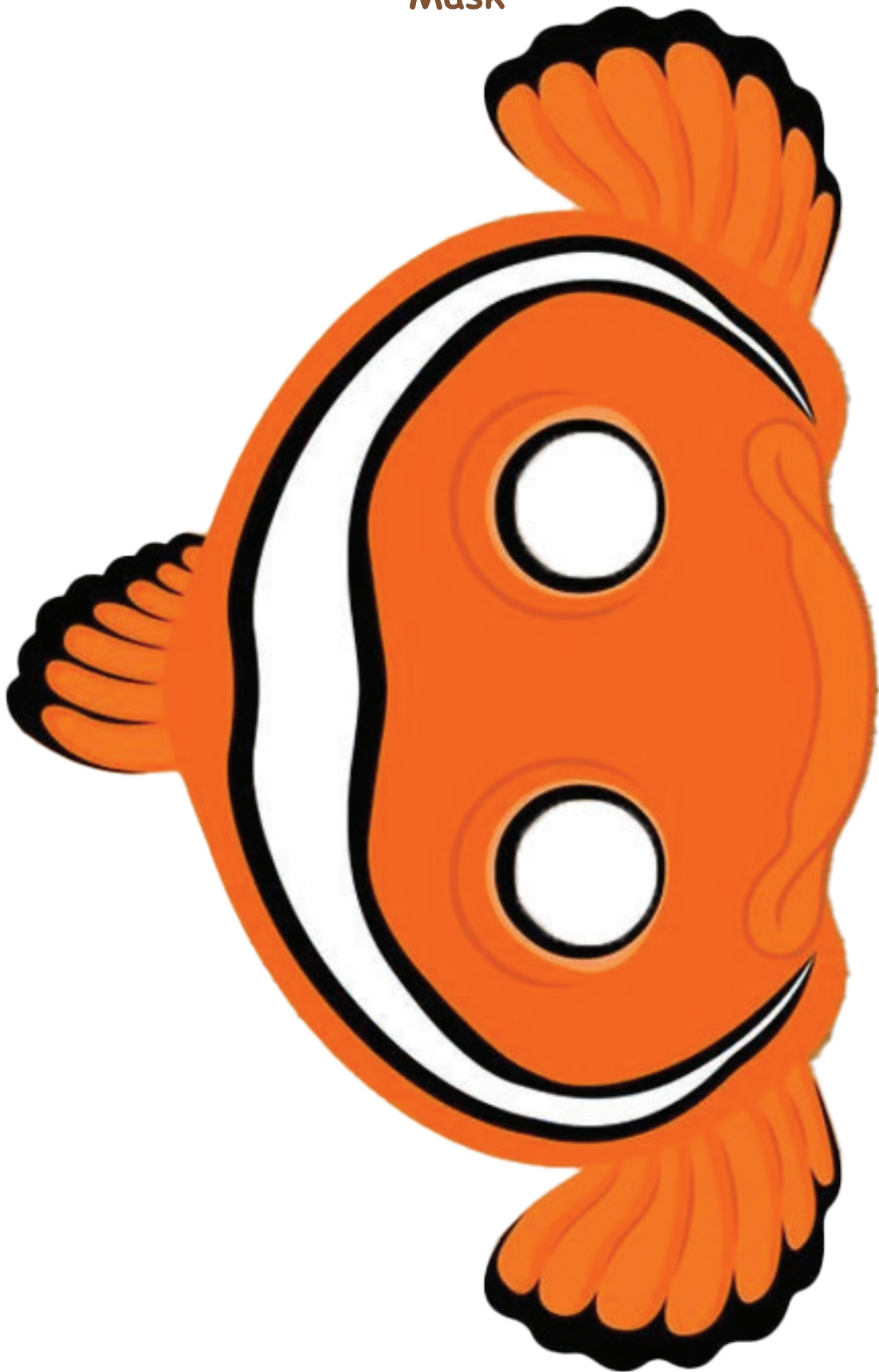
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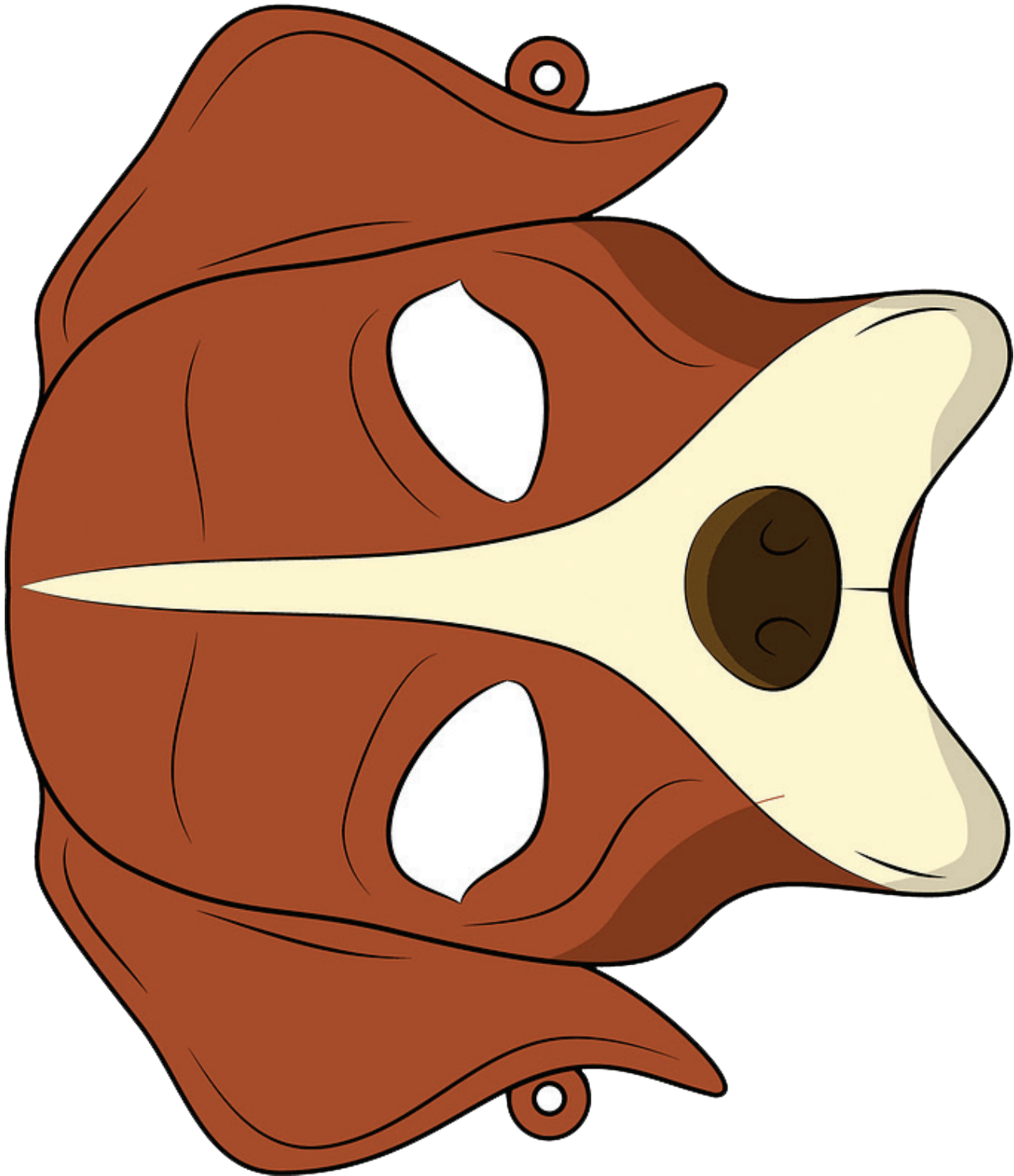
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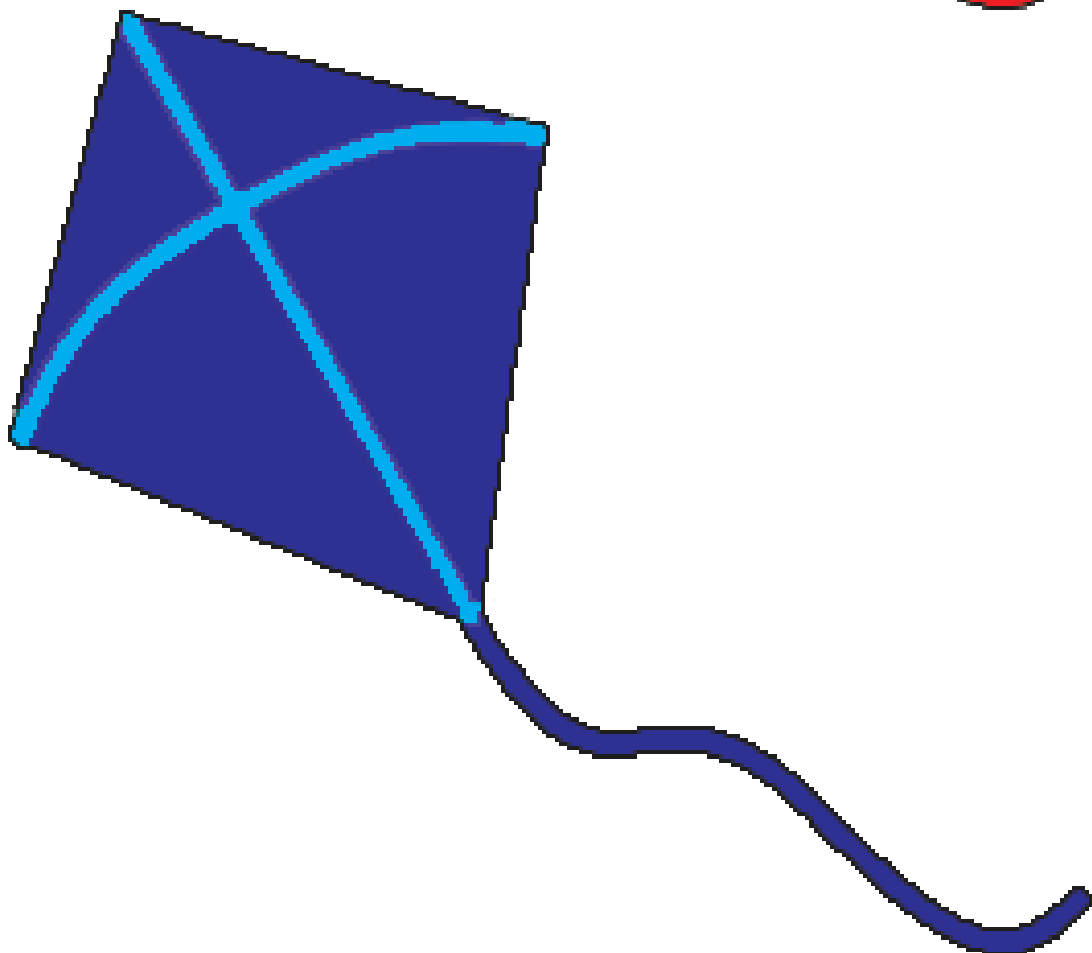
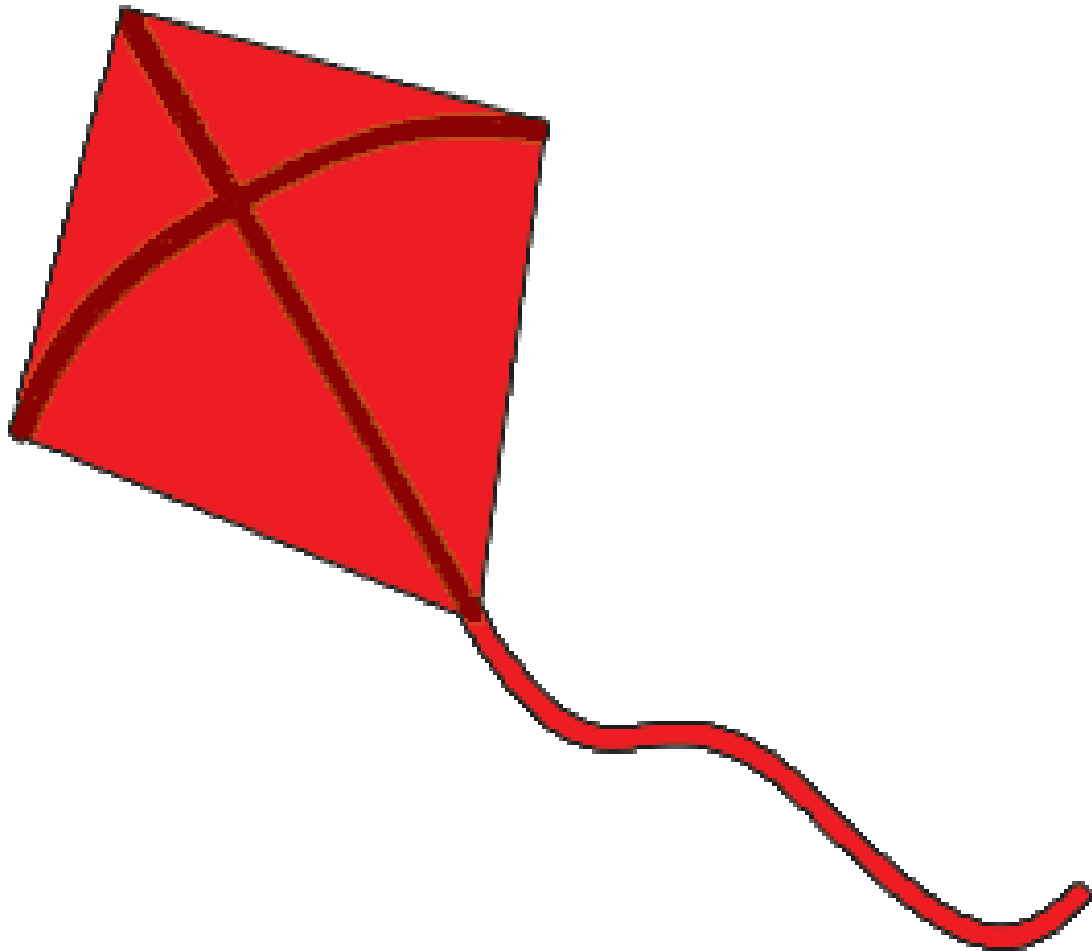
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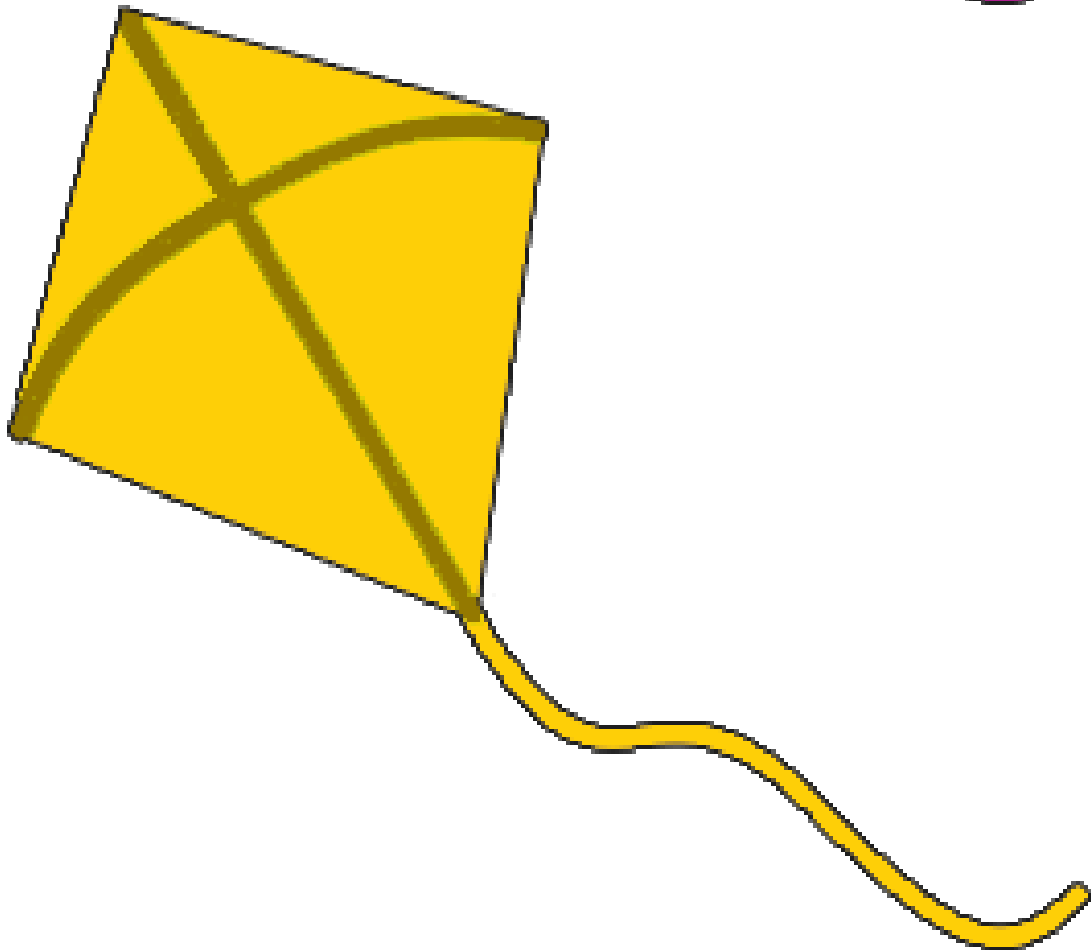
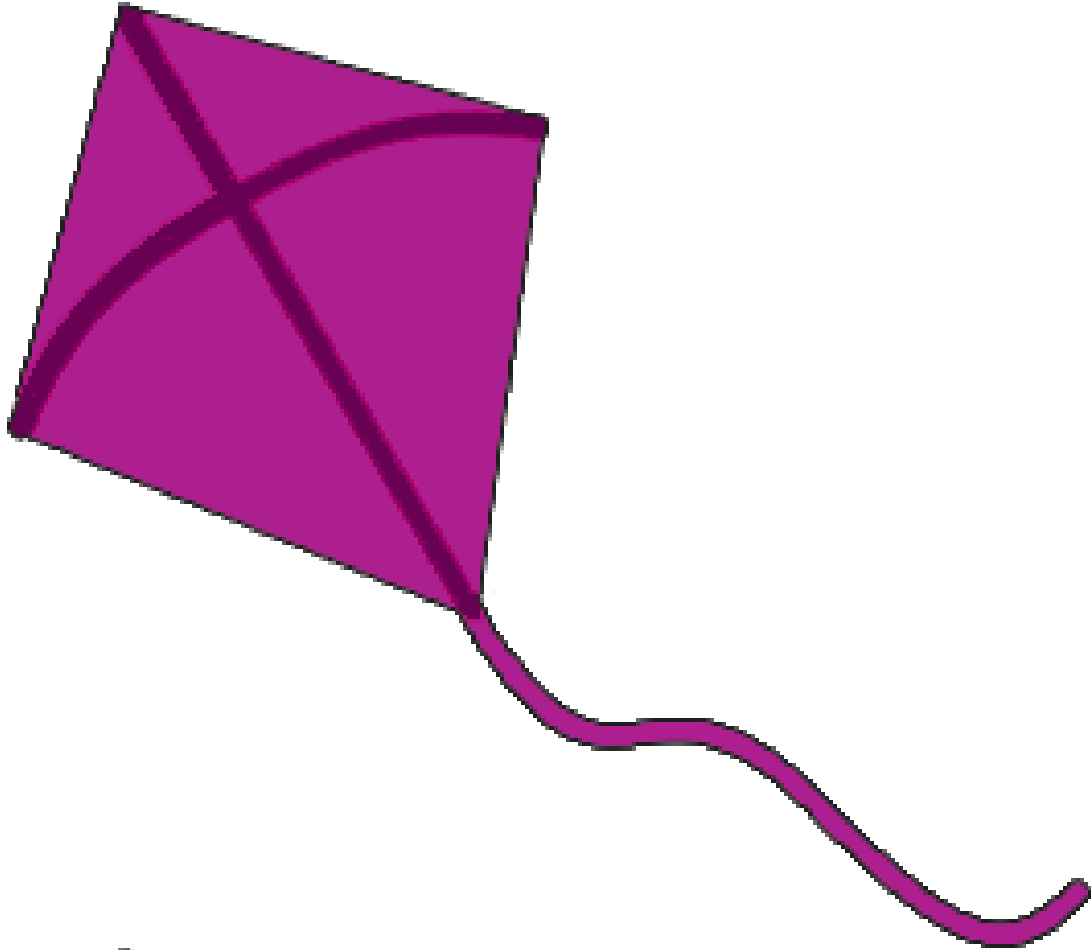
Module 1 - Activity 3 - ● Above - Below







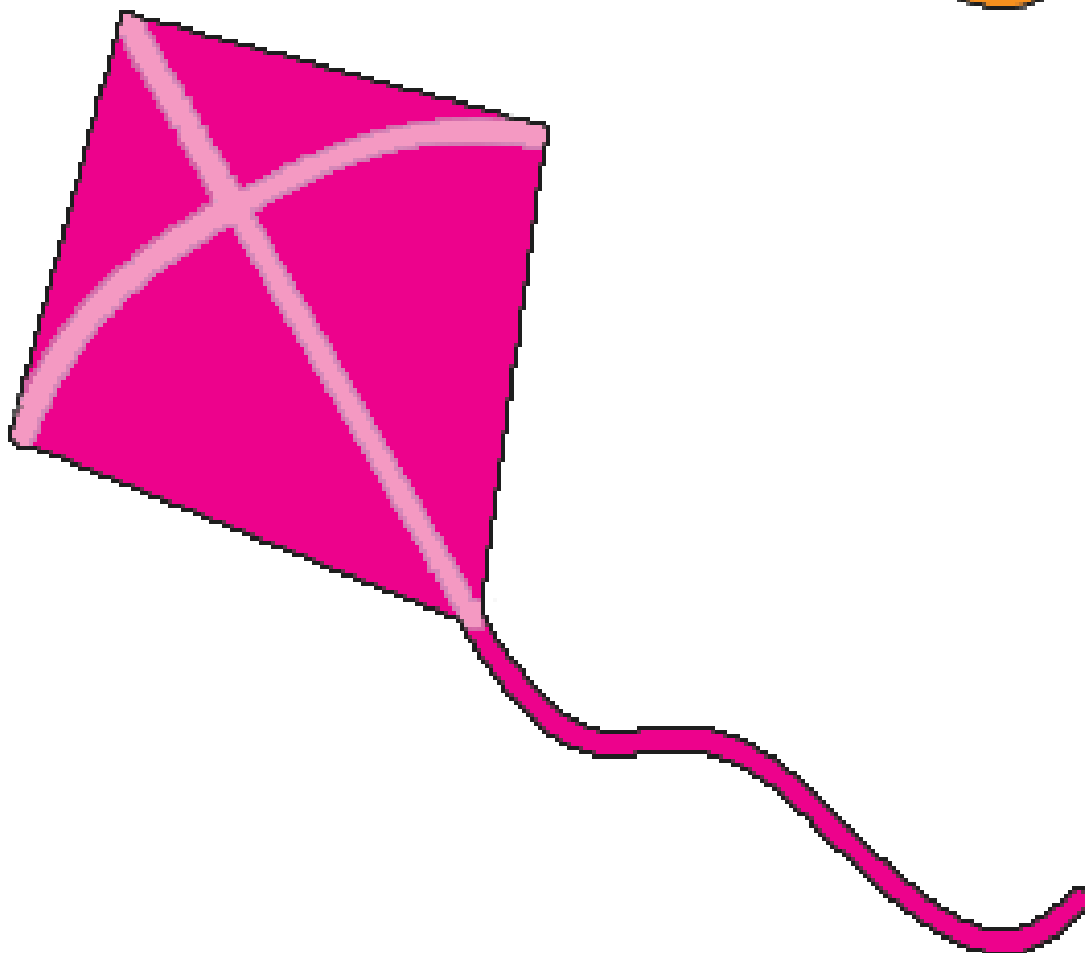
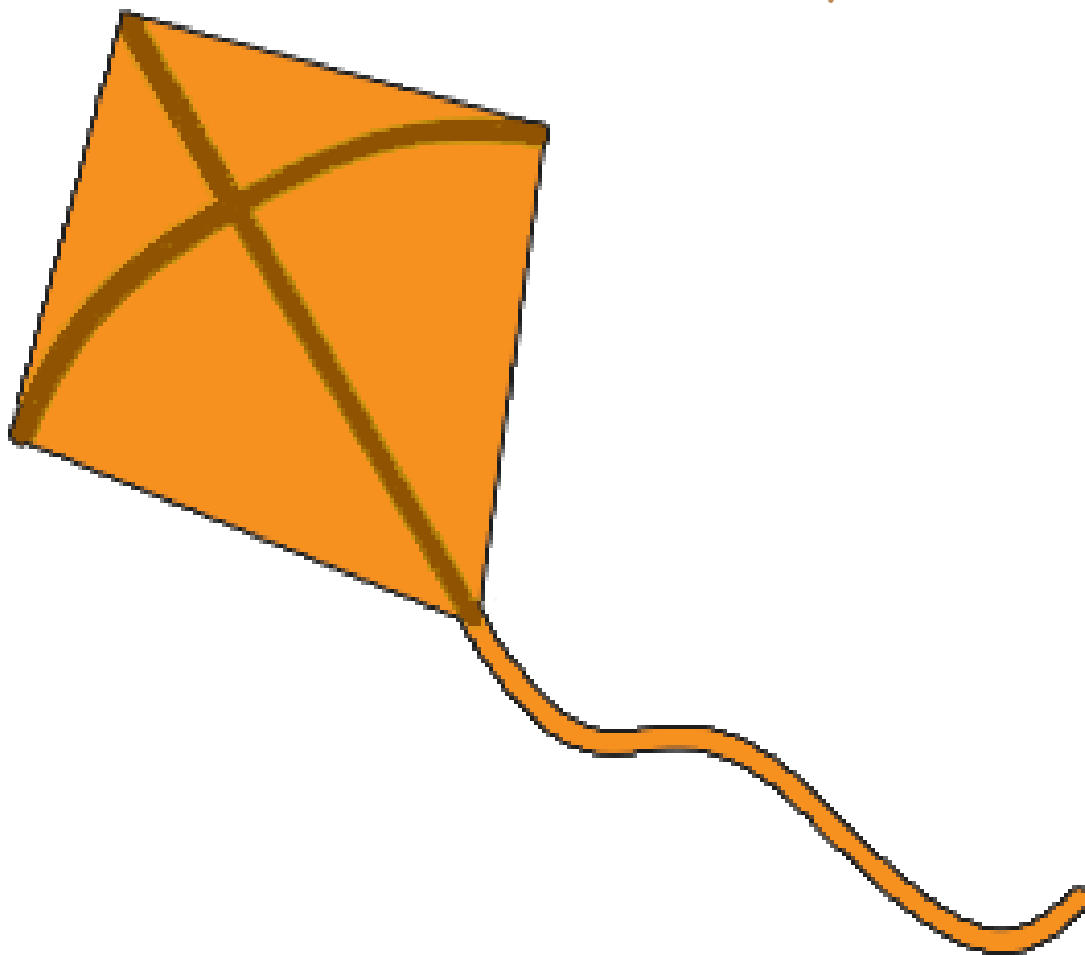
Module 1 - Activity 3 - ● Above - Below







Module 1 - Activity 3 - ● Above - Below







# Module 1 Family - Activity 1 - ● I Saw! I Knew!

