



Skillment

MATHEMATICS

A Multi-skill Activity Book on Mathematics



FS-1
Nursery

PMP Planet[®]
Multimedia Publishers
The Ultimate Resource

PM PUBLISHERS PVT. LTD.

Skillment Mathematics – FS 1 (Nursery)

PMP Editorial Team

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Preface

With a vision of making quality education accessible to all from the Foundational Stage to Secondary Stage of schooling, the **National Education Policy (NEP) 2020** has issued a new pedagogical and academic structure. The new pedagogical and academic structure has been divided into four stages as mentioned below:

Foundational Stage (5 years): Nursery, LKG, UKG, Std. 1 and Std. 2	(3-8 years)
Preparatory Stage (3 years): Std. 3, Std. 4 and Std. 5	(8-11 years)
Middle Stage (3 years): Std. 6, Std. 7 and Std. 8	(11-14 years)
Secondary Stage (4 years): Std. 9, Std. 10, Std. 11 and Std. 12	(14-18 years)

In the new 5+3+3+4 structure, a strong base of **Early Childhood Care and Education (ECCE)** from age 3 is also included.

The overall aim of Early Childhood Care and Education (ECCE) is to attain optimal outcomes in the following domains:

- ✓ Physical and motor development
- ✓ Cognitive development
- ✓ Social-emotional-ethical development
- ✓ Cultural/Artistic development
- ✓ Development of communication and early language, literacy, and numeracy

Our new series, **Skillment**, is properly graded and contains age-appropriate course material for the learners of Foundational Stage to achieve the aims and objectives outlined in the **National Curriculum Framework (NCF) for Foundational Stage 2022**. The series covers different subjects which are classified under the following categories:

FS 1 (3+ years): Maths, English, EVS, Hindi, Art and Craft, Kavitayen aur Kahaniyan, Rhymes and Stories

FS 2 (4+ years): Maths, English, EVS, Hindi, Art and Craft, Kavitayen aur Kahaniyan, Rhymes and Stories

FS 3 (5+ years): Maths, English, EVS, Hindi, Art and Craft, Kavitayen aur Kahaniyan, Rhymes and Stories

FS 4 (6+ years): Maths, English, EVS, Hindi, English Grammar, Art and Craft, Computer and GK

FS 5 (7+ years): Maths, English, EVS, Hindi, English Grammar, Art and Craft, Computer and GK

Apart from the main books, we are also providing **Workbooks** with Maths, English, EVS and Hindi to learners for extra practice.

The whole set of books for each class also carries a **Teacher's Resource Kit** which contains various kinds of relevant and interesting teaching aid that teachers may use in the classroom.

A **booklet on Social and Emotional Learning (SEL)** including lesson plans is provided for the teachers to inculcate SEL skills in the learners.

Skillment App is for skill building and joyful teaching and learning for teachers and learners.

Web Support

Our web portal pmponline.co.in provides a vital web support to teachers and learners. It includes the following:

- ◆ **Multimedia ebooks:** consist of animation, audio, video, and interactive exercises
- ◆ **Additional worksheets:** printable worksheets for extra practice
- ◆ **Teacher's resource:** comprises lesson plans
- ◆ **Virtual lessons:** consist of pre-recorded video lessons
- ◆ **AR (Augmented Reality) App both for android and iOS:** turns books into smart books with better visualisation and concept clarity

It is a concerted attempt to make the series more useful for the teachers, parents and kids. We hope this series will be quite helpful in achieving the goals set by the NEP 2020. However, we shall appreciate valuable and constructive feedback from teachers and parents to improve the books with every new edition.

—Publishers



Features of Skillment Mathematics

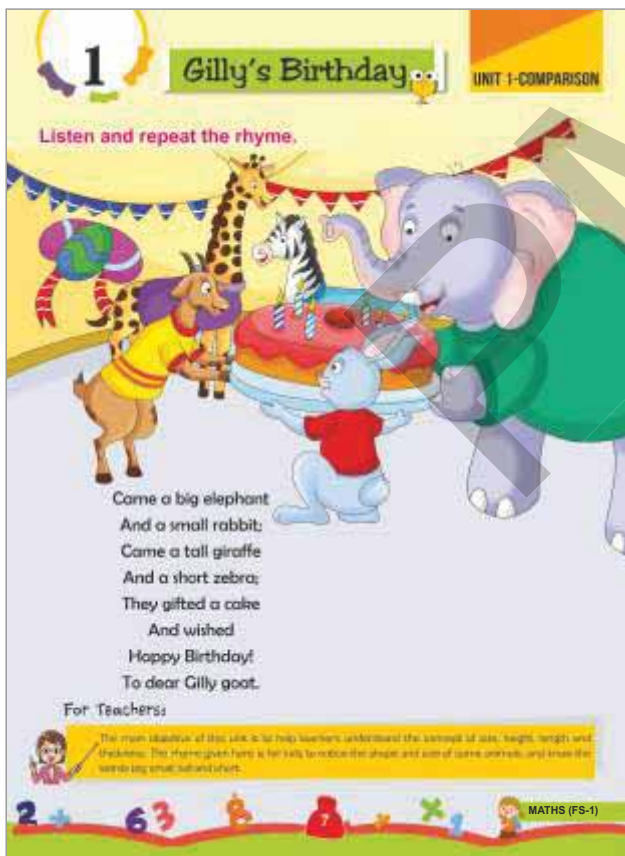


Skillment Mathematics series adheres to the guidelines issued under Early Childhood Care and Education mentioned in the National Education Policy 2020 and subsequently in the National Curriculum Framework (NCF) for Foundational Stage 2022.

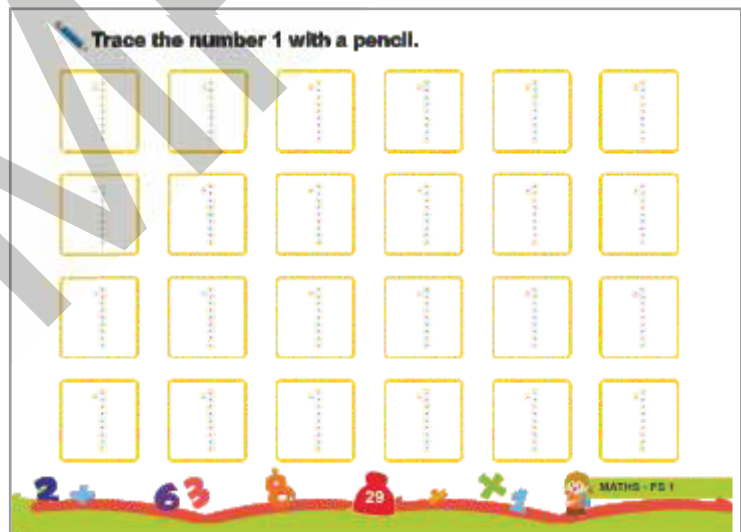
Aims of Early Childhood Care and Education (ECCE)

- ✓ Physical and motor development
- ✓ Cognitive development
- ✓ Social-emotional and ethical development
- ✓ Cultural/artistic development
- ✓ Development of communication and early language, literacy, and numeracy

Important Features to meet the aims and objectives of ECCE

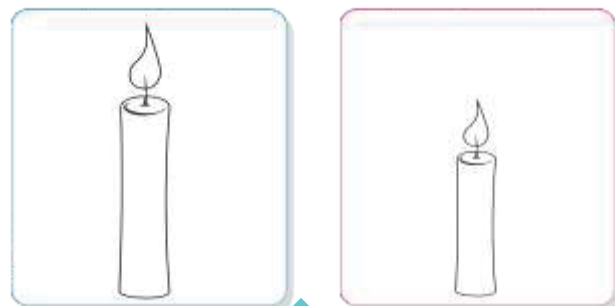


Child-friendly and interactive approach to get the learners remain engaged during the learning process



Tracing of numbers and objects for motor development.

B. Colour the tall candle Blue and the short candle Pink.



Art integration to develop creativity skill as well as fine motor skill

6 **Beetly Bee** **UNIT-2 LINES AND PATTERNS**

Listen and repeat the rhyme.

Up and down,
Left and right,
Beetly Bee flies,
In day light!
From one flower,
To another,
Sucks nectar,
From all in the row!



For Teachers


The objective of this activity is to help learners understand the concept of lines and patterns. The teacher may use the rhyme to introduce the concept of lines and patterns. The teacher may also use the rhyme to introduce the concept of lines and patterns. The teacher may also use the rhyme to introduce the concept of lines and patterns.

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Concept-based rhymes to create interest of learners in the topic as well as to enhance their literacy skill

MIND BENDERS

Spot six differences between these two pictures.



For Teachers

The objective of this activity is to help learners develop critical thinking skills. The teacher may use the pictures to introduce the concept of differences. The teacher may also use the pictures to introduce the concept of differences. The teacher may also use the pictures to introduce the concept of differences.

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Problem based activities to develop critical thinking skill of the learners

29 **The Eleven Dwarfs**

Listen to the story.

There were 10 dwarfs. They lived happily in an old house. It was the birthday of Molu Dwarf. All the other dwarfs wished him 'Happy Birthday'. They decided to celebrate the birthday in the evening.



3 dwarfs went to the market and bought a big cake. They also bought 5 candles, 8 buns and 2 packets of toffees.




For Teachers


The objective of this activity is to help learners understand the concept of number 11. The teacher may use the story to introduce the concept of number 11. The teacher may also use the story to introduce the concept of number 11. The teacher may also use the story to introduce the concept of number 11.

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Golu Dwarf decorated the room with 6 blue ribbons and 4 red ribbons. Boly Dwarf decorated the room with 7 balloons. Dolu Dwarf hanged 9 stars.



Molu Dwarf invited his dwarf friend. In the evening, all the 11 dwarfs enjoyed the birthday party.



For Teachers

The objective of this activity is to help learners understand the concept of number 11. The teacher may use the story to introduce the concept of number 11. The teacher may also use the story to introduce the concept of number 11. The teacher may also use the story to introduce the concept of number 11.

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Double spread story-based concept to introduce number 11.

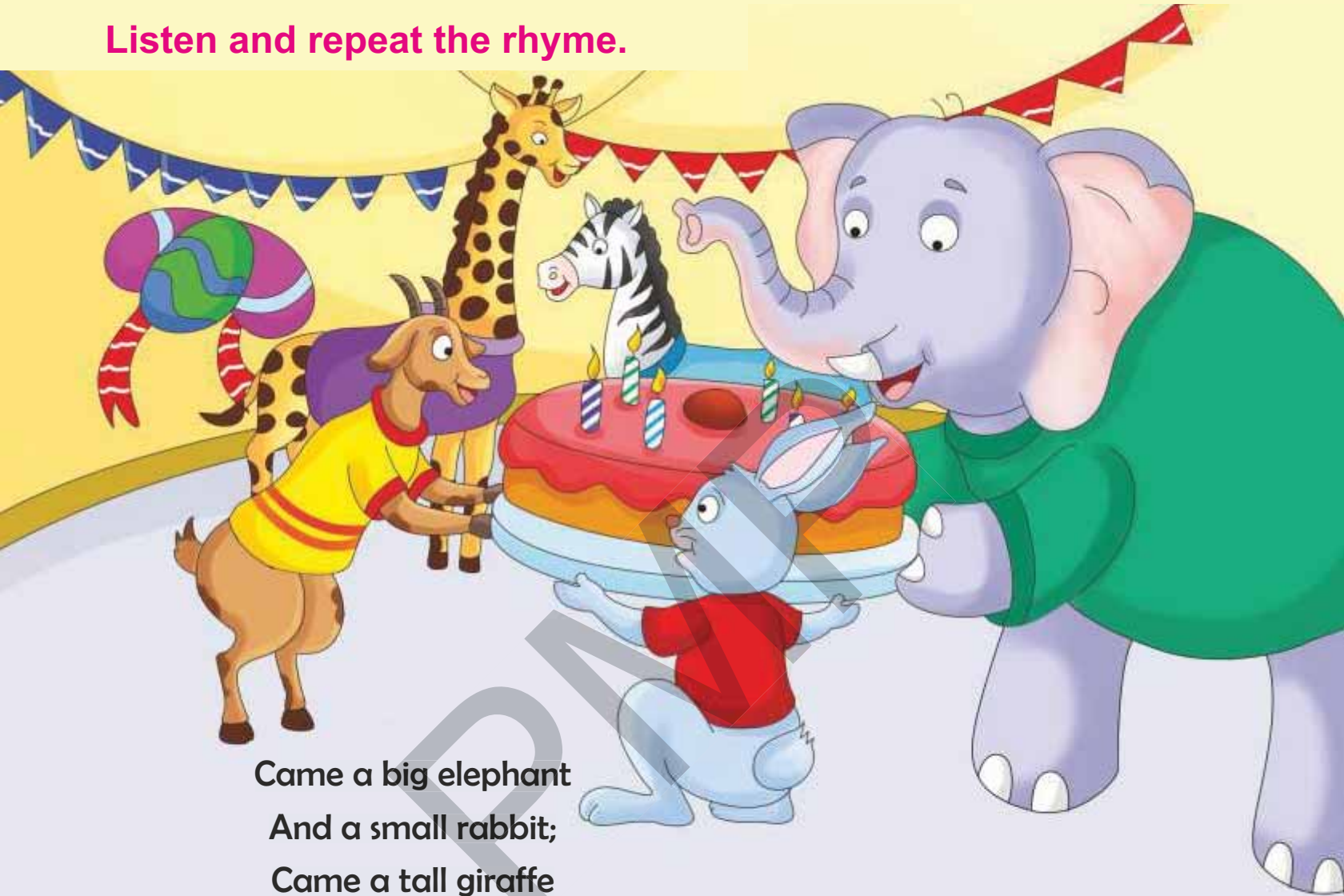
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Listen and repeat the rhyme.



Came a big elephant
And a small rabbit;
Came a tall giraffe
And a short zebra;
They gifted a cake
And wished
Happy Birthday!
To dear Gilly goat.

For Teachers:

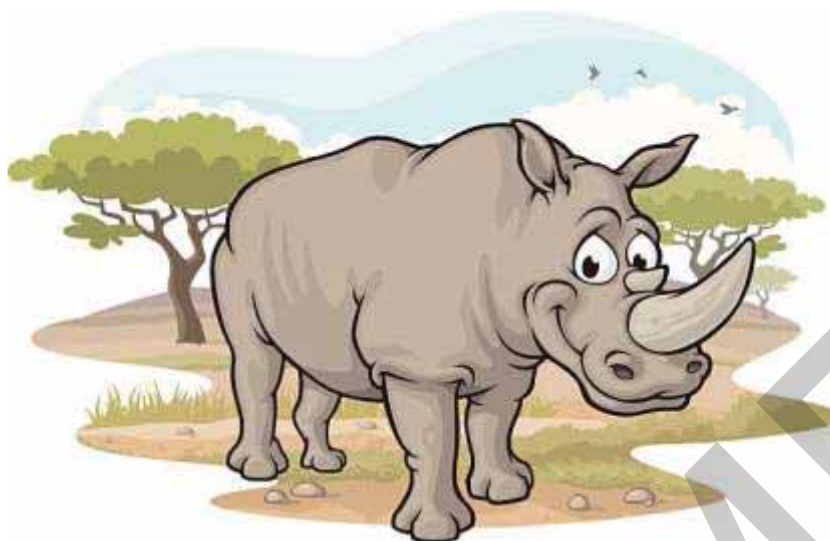


The main objective of this unit is to help learners understand the concept of size, height, length and thickness. The rhyme given here is for learners to notice the shape and size of some animals, and know the words big, small, tall and short.





Point at the pictures and say **Big** and **Small**.



Big



Small

A. Circle the big ball.



For Teachers:



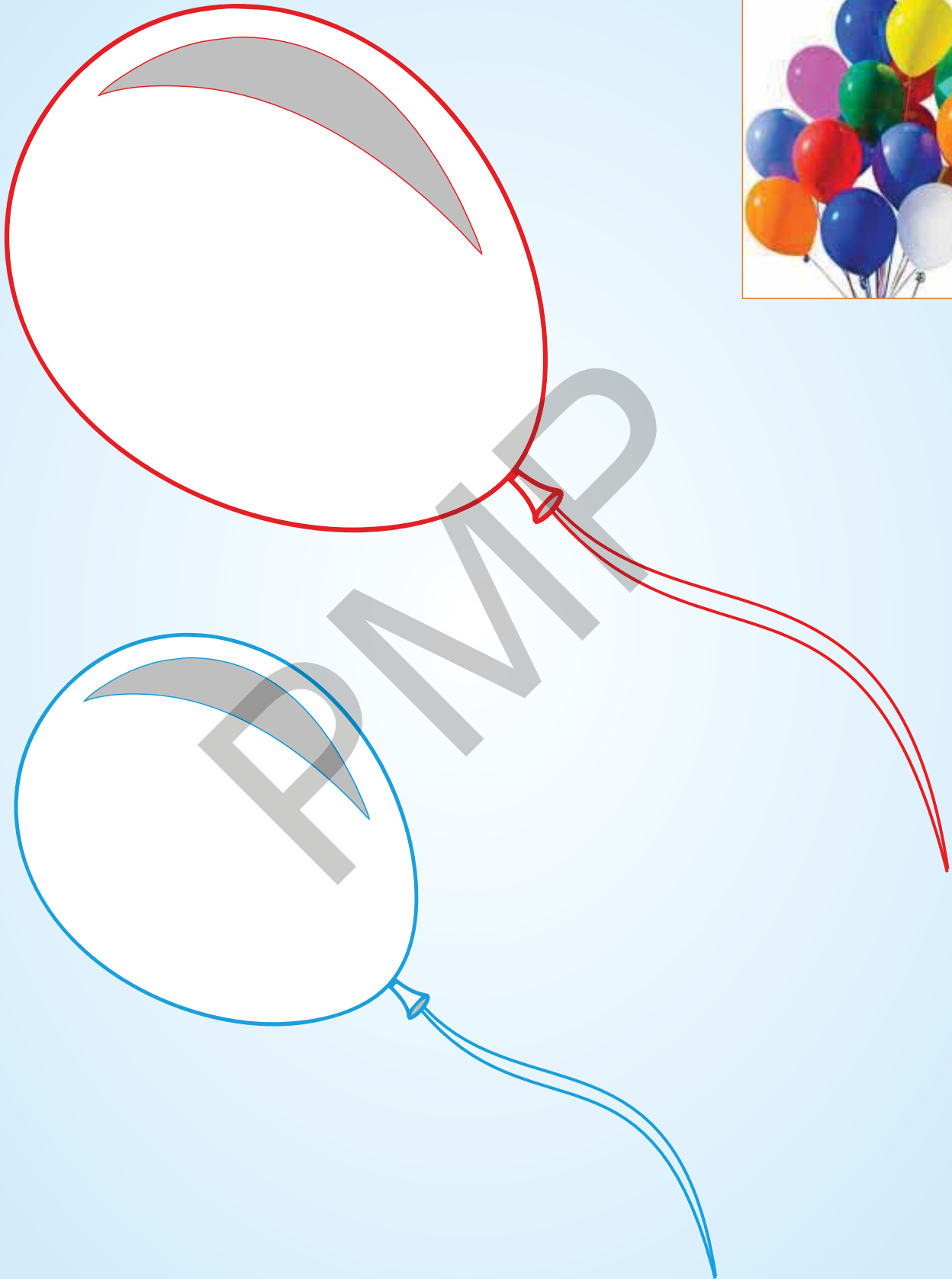
This chapter will help learners understand the concept of size. You may help them compare two different things on the basis of their sizes.

For Parents:

You may show two bowls of different sizes to your child and discuss the terms big and small.



B. Colour the big balloon **Red** and the small balloon **Blue**.



2 +

6 3

8

9

+

+ 1





Point at the pictures and say **Tall** and **Short**.



Tall



Short

A. Circle the short plant.



For Teachers:



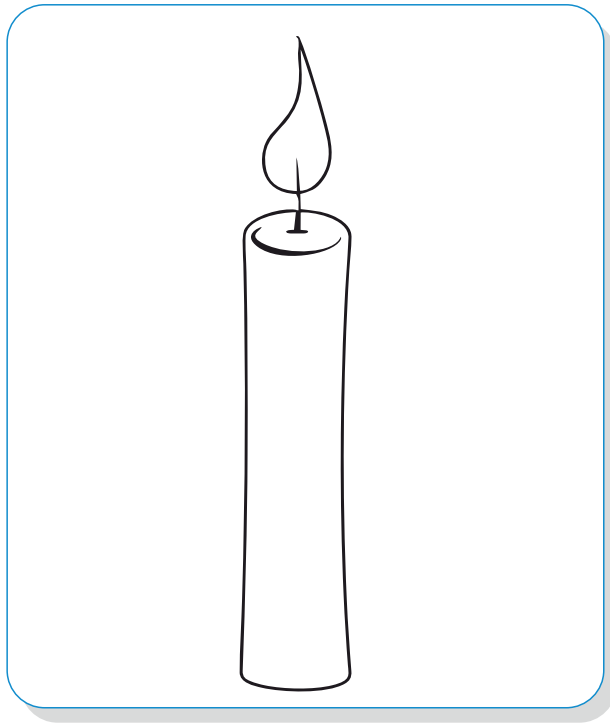
The objective of this chapter is to help learners understand the concept of height. You may show the learners two objects of different heights.

For Parents:

You may take a walk in your society with your child. Show him/her tall and short trees, buildings, etc. and discuss the terms.



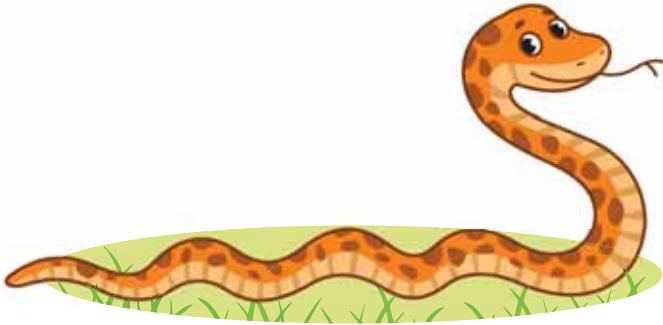
B. Colour the tall candle **Blue** and the short candle **Pink**.



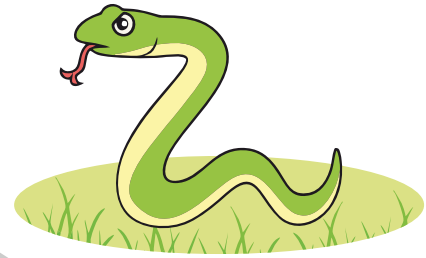
C. Circle the odd one.



Point at the pictures and say **Long** and **Short**.



Long



Short

A. Cross out (✕) the long stick.



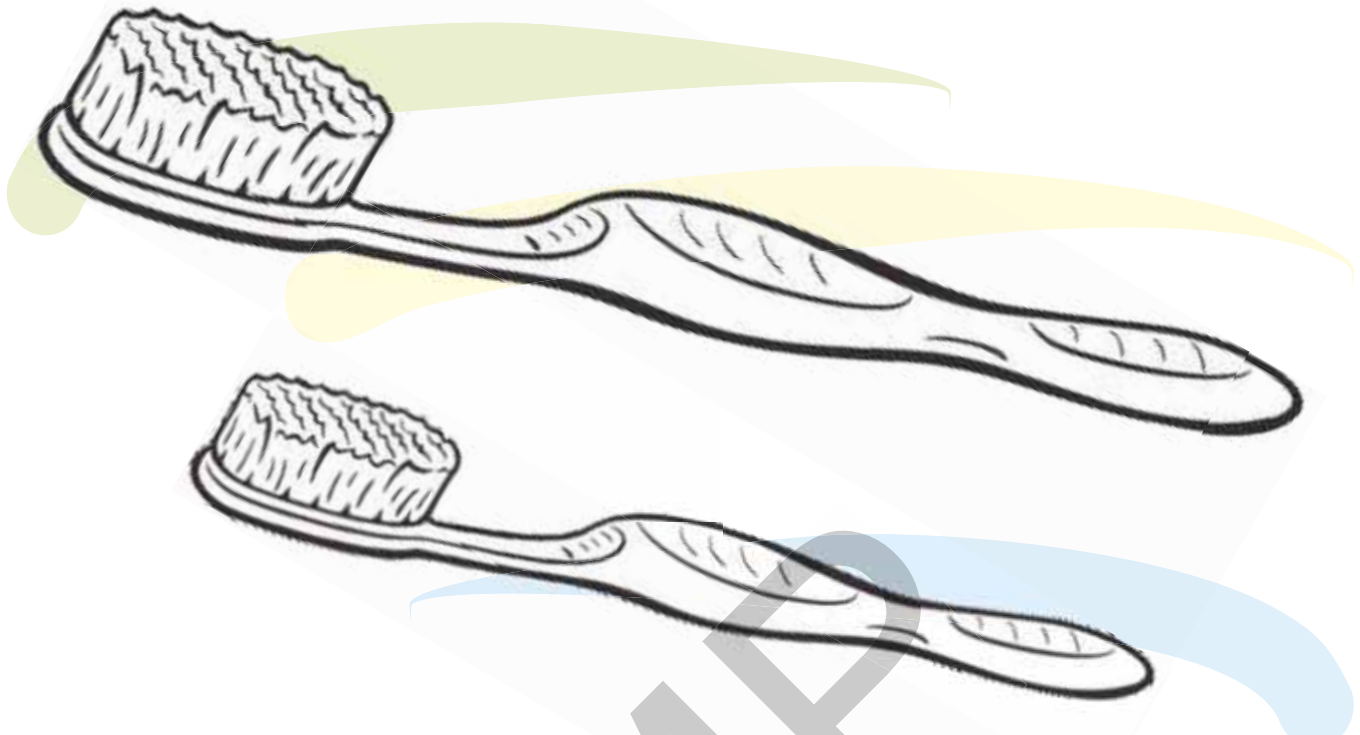
For Teachers:



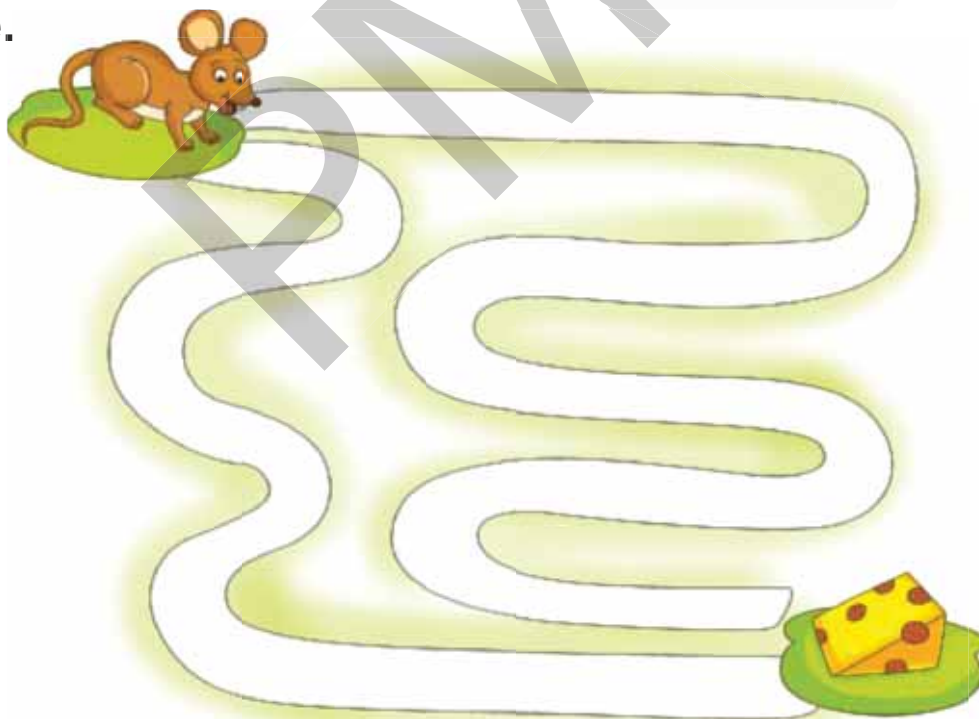
The objective of this chapter is to clear the concept of length. You may show the learners two objects of different lengths and ask them to compare. Also, help them understand the difference between height and length because they may get confused by the same word 'short' used with height and length.



B. Colour the long tooth brush **Green** and the short one **Red**.



C. Colour the short route to help the mouse reach the piece of cheese.



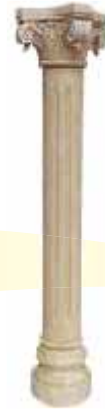
For Parents:

You may take a piece of string and cut it into two pieces— one long and the other short. Ask your child to indicate the short and the long piece.

Point at the pictures and say **Thick** and **Thin**.

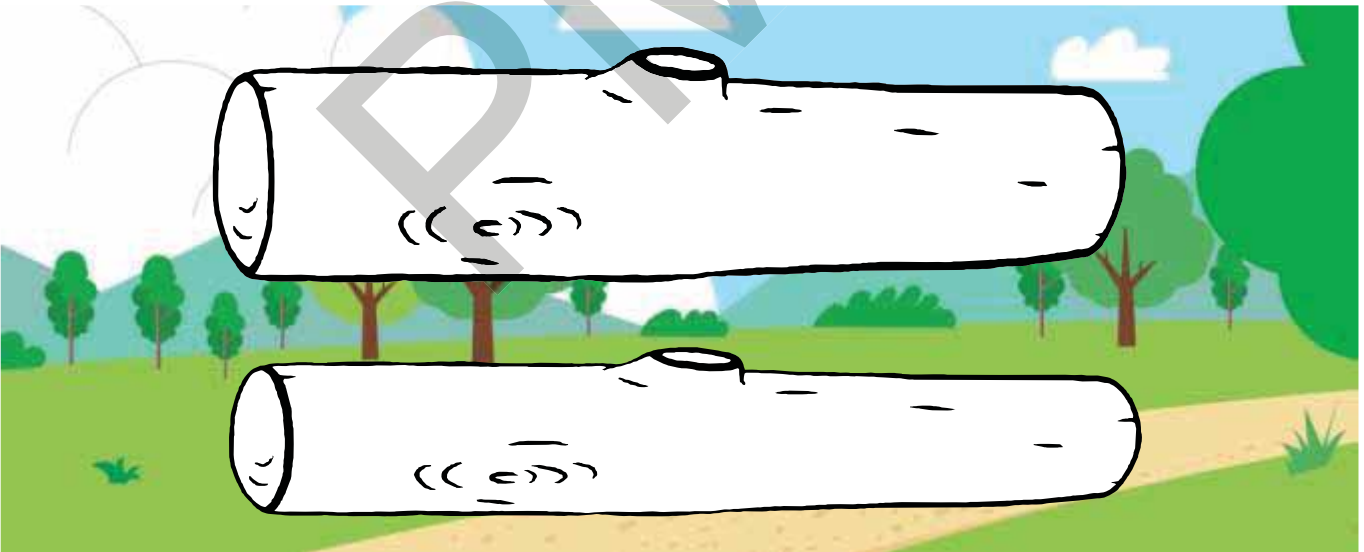


Thick



Thin

A. Colour the thick log.



For Teachers:



The objective of this chapter is to clear the concept of thickness. You may show the learners two objects of different thickness and ask them to compare their thickness.



B. Colour the thick tree **Green**.



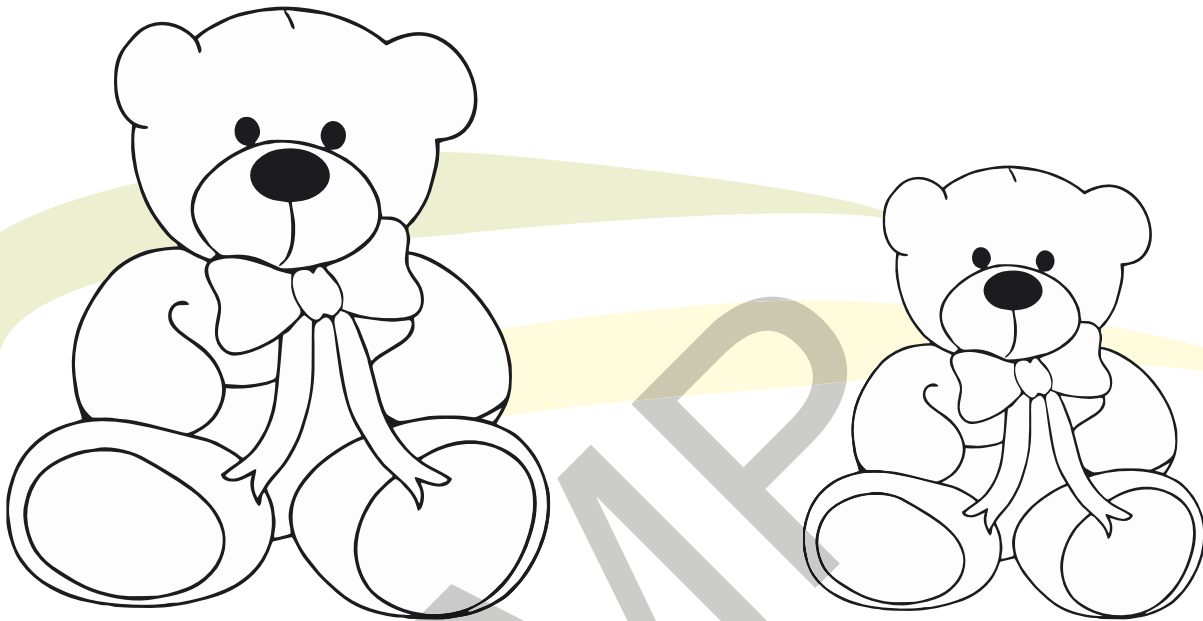
C. Circle the two poles which are of same thickness.



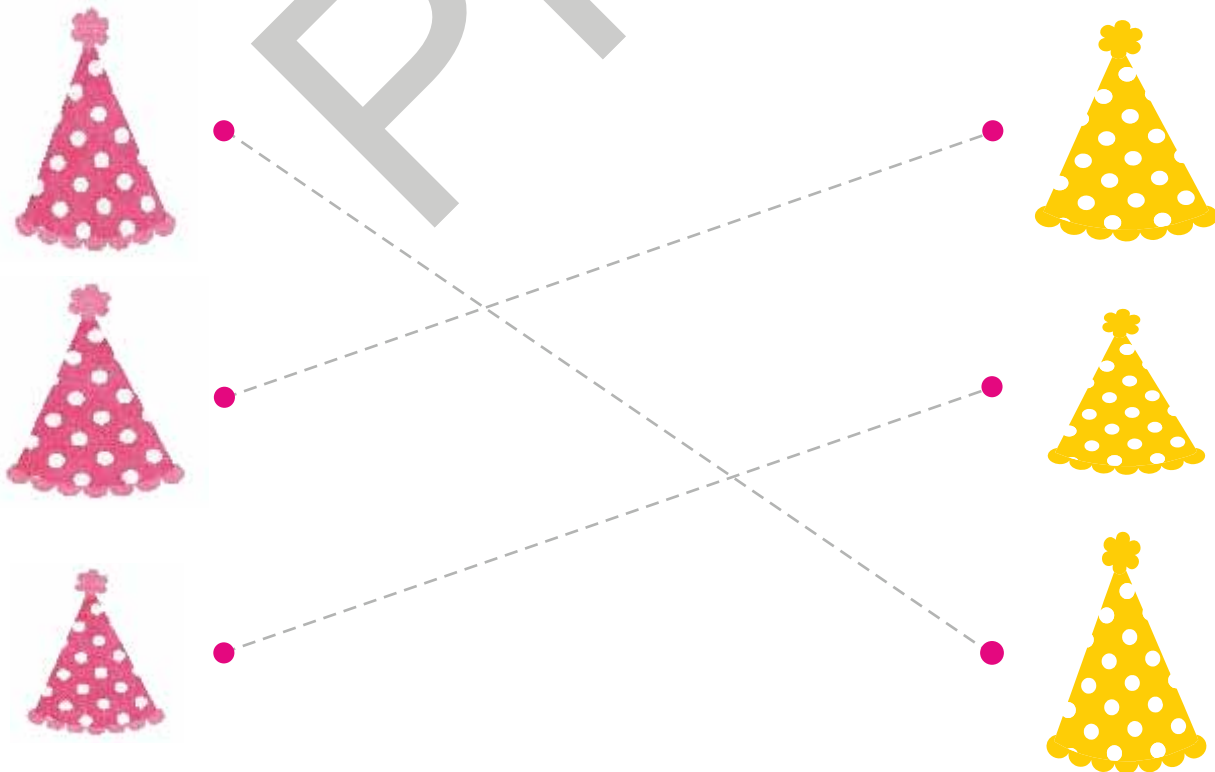
For Parents:

You may compare your fingers with those of your child and discuss the terms thick and thin. You may use other objects as well for this purpose.

A. Colour the big teddy Red and the small one Green.



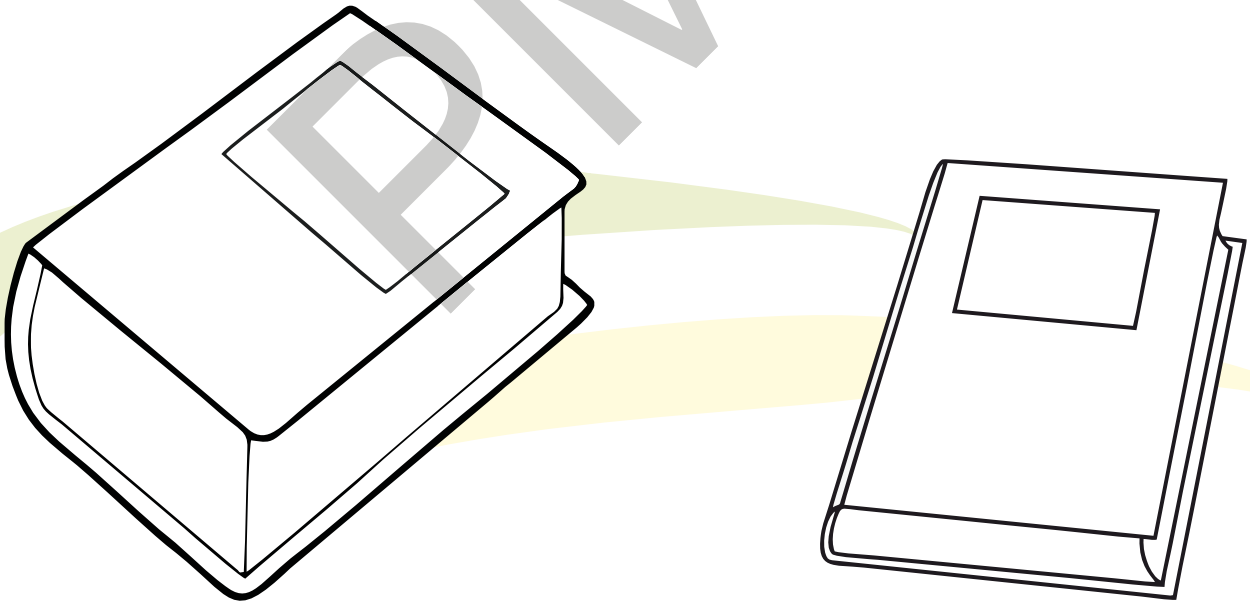
B. Match the birthday caps of the same height.



C. Tick (✓) two sticks which are of same height.



D. Colour the thick book **Yellow** and the thin book **Blue**.



For Parents:

You may help your child hold the pencil properly. You may demonstrate how to hold and trace a line.



MIND BENDERS

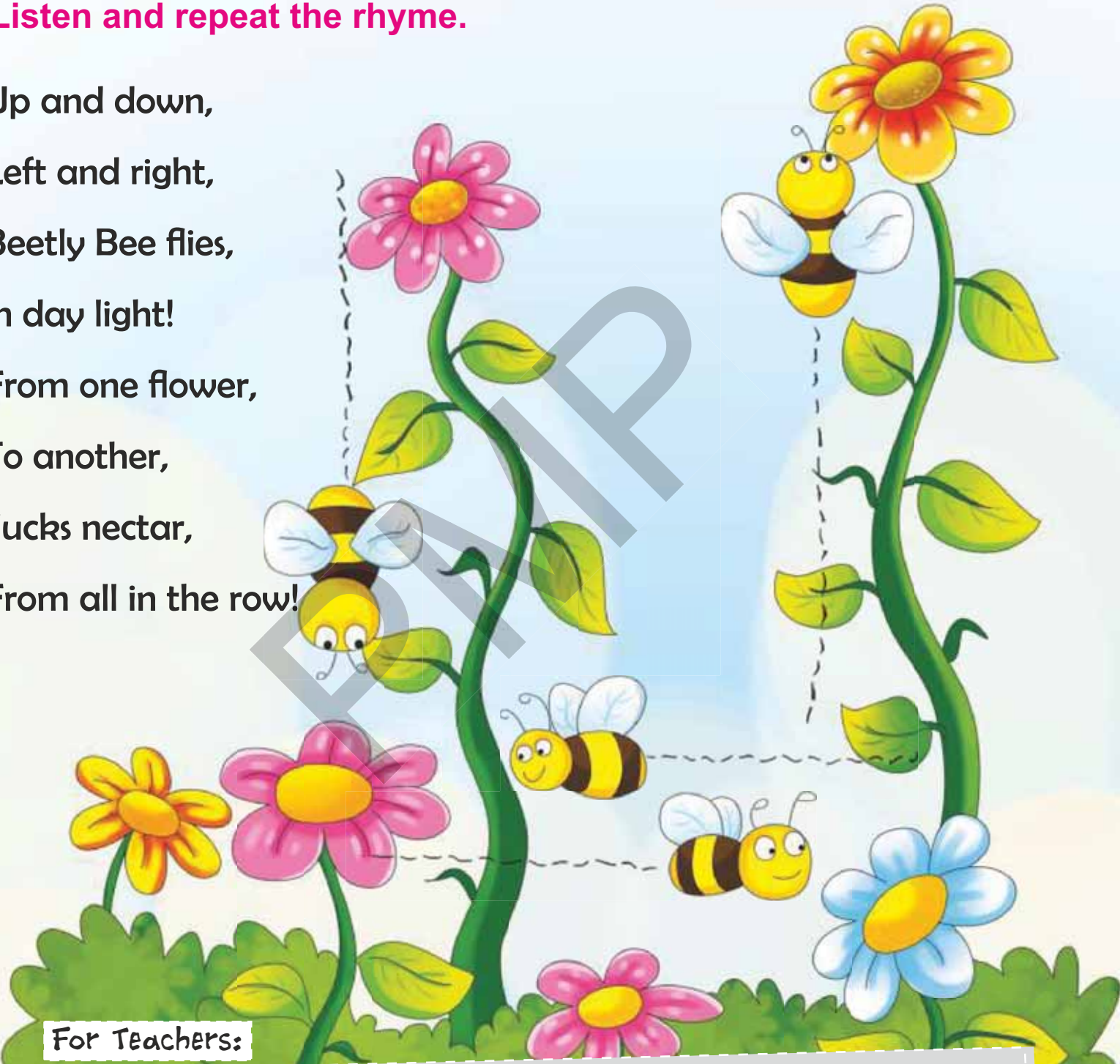
Spot six differences between these two pictures.





Listen and repeat the rhyme.

Up and down,
Left and right,
Beetly Bee flies,
In day light!
From one flower,
To another,
Sucks nectar,
From all in the row!



For Teachers:

The objective of this unit is to help learners know the different types of lines—standing, sleeping, slanting and curved. Tracing practice of these lines will develop fine motor skill as well as help them learn writing the numbers. Pattern tracing will develop fine motor skill as well as critical thinking skill.

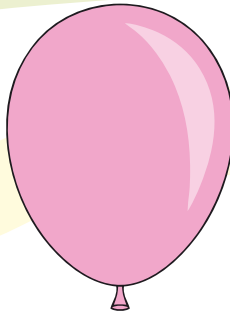




Standing Lines



Join O to O to draw standing lines.



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For Parents:

You may use a stick to demonstrate standing, sleeping and slanting lines. You can bend a stick a little to demonstrate a curved line.



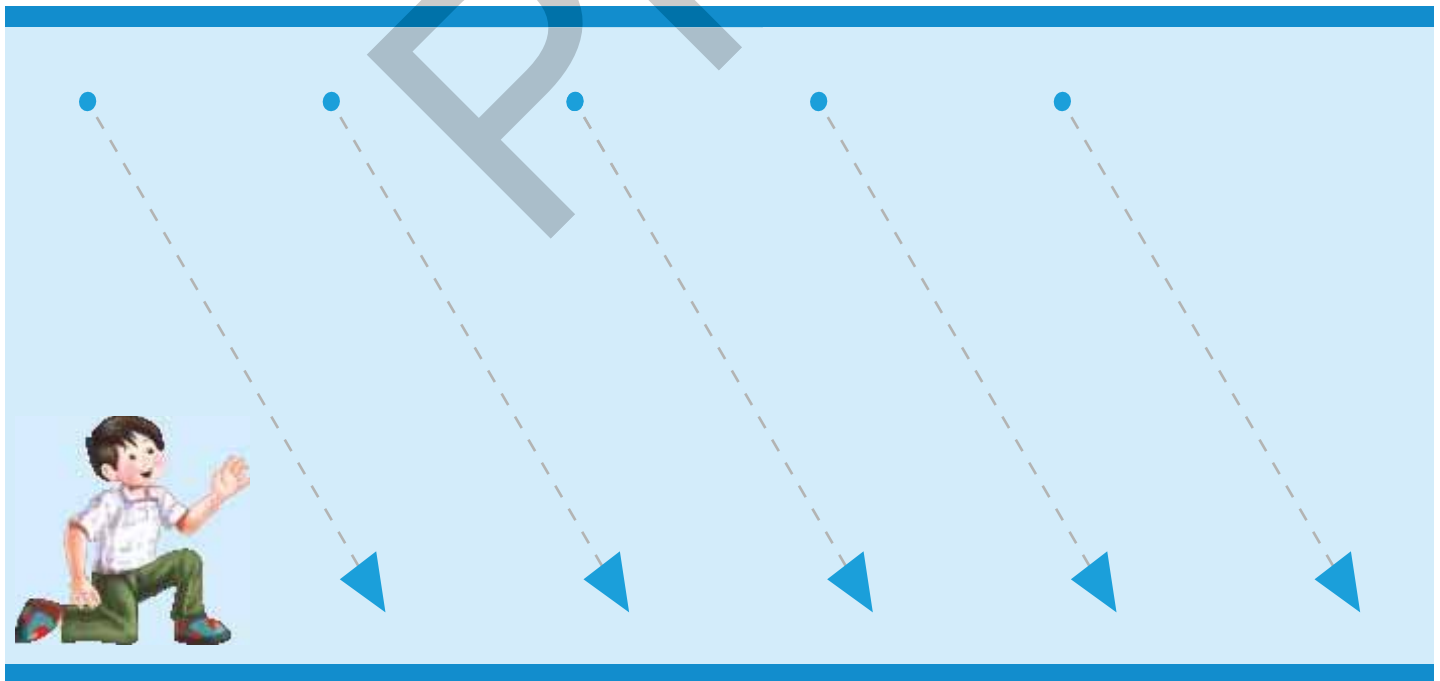
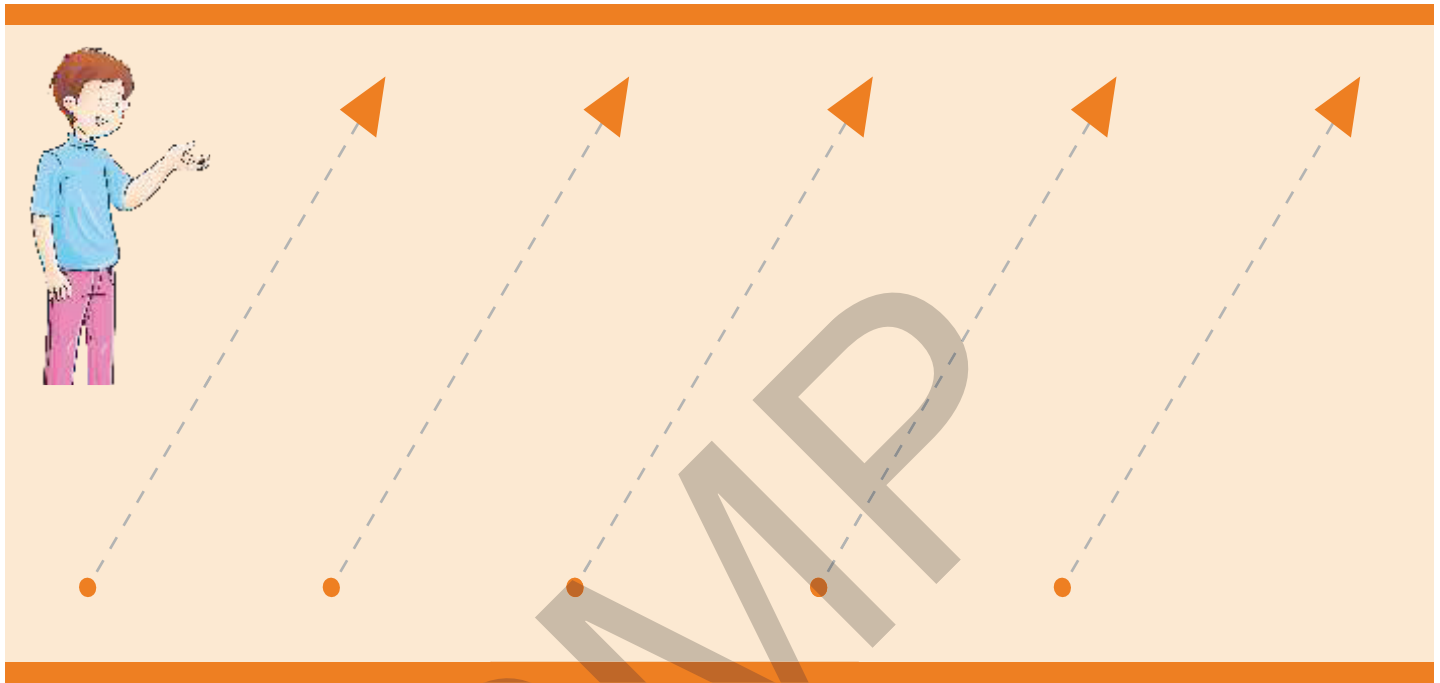


Trace the sleeping lines.



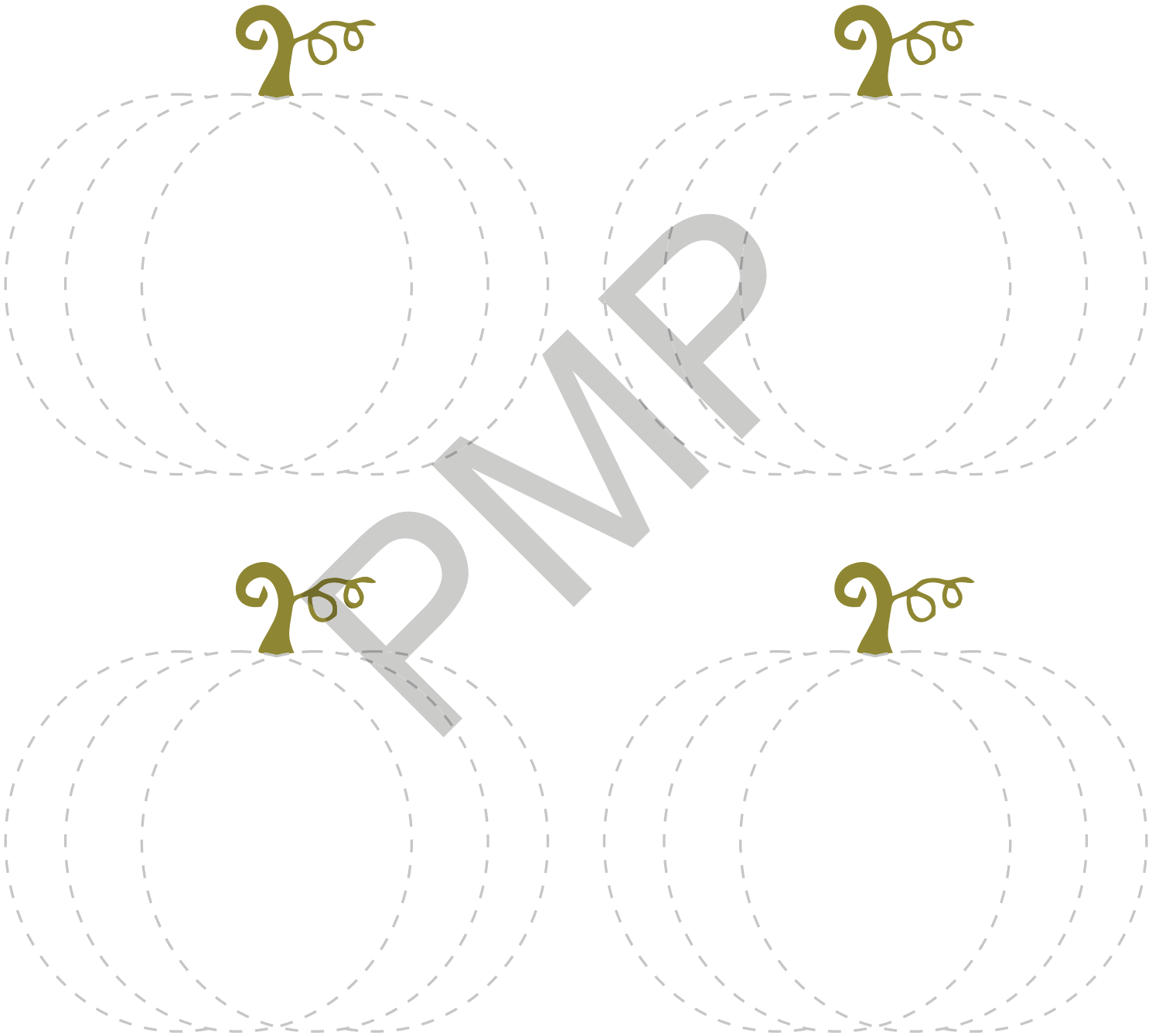


Trace the slanting lines.



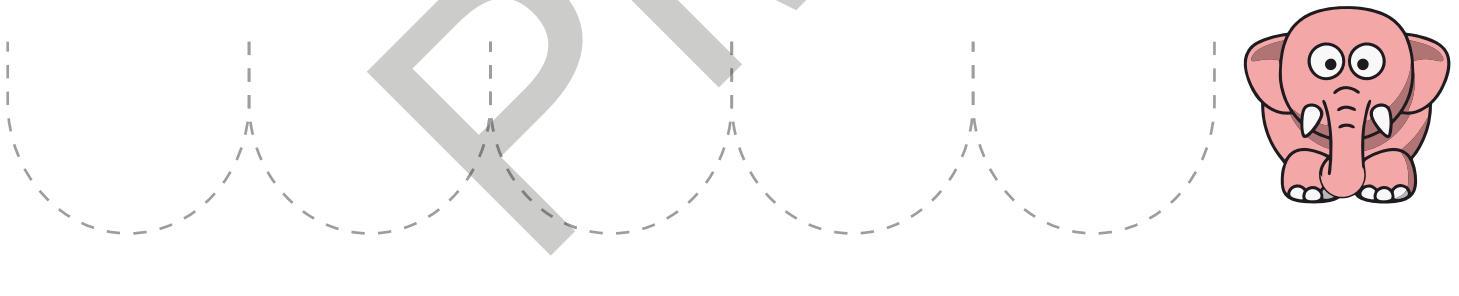
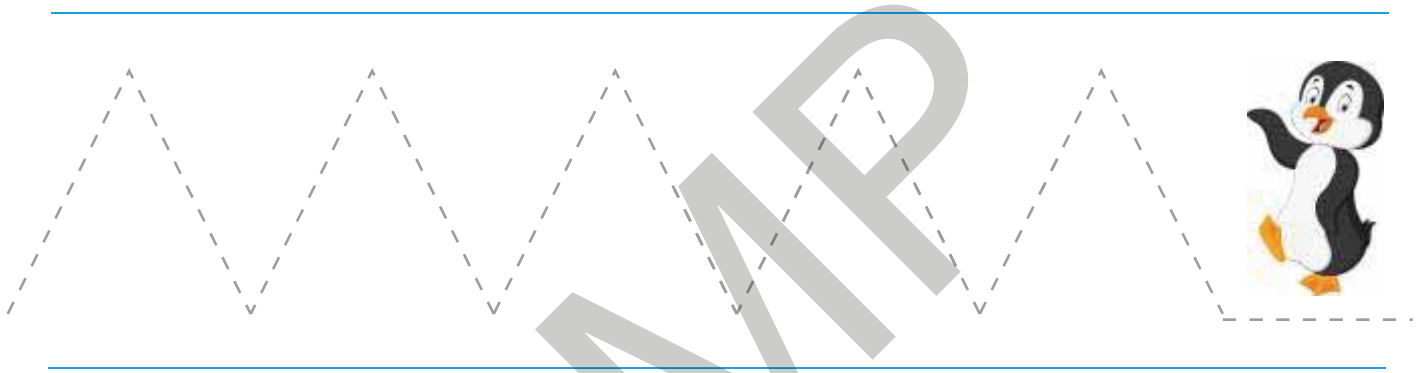
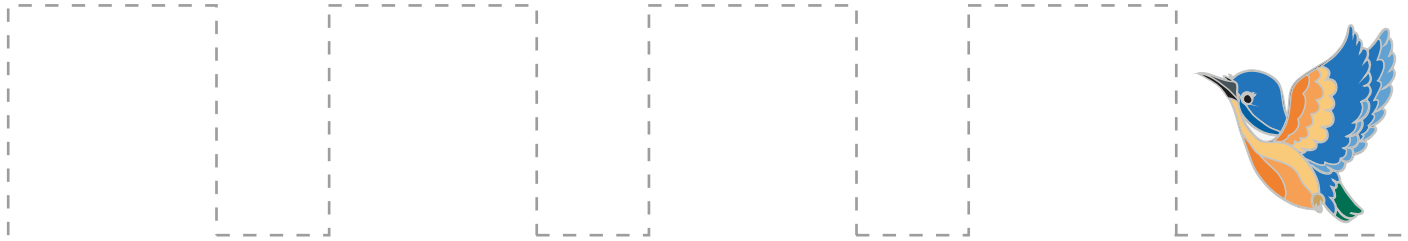


Trace the curved lines.





Trace the pattern.



For Parents:

First, you should help your child move his/her index finger on the lines. Then you may hold the hand of your child to help him/her trace the given patterns with a crayon or pencil.



Trace the given lines as mentioned.

Standing Lines



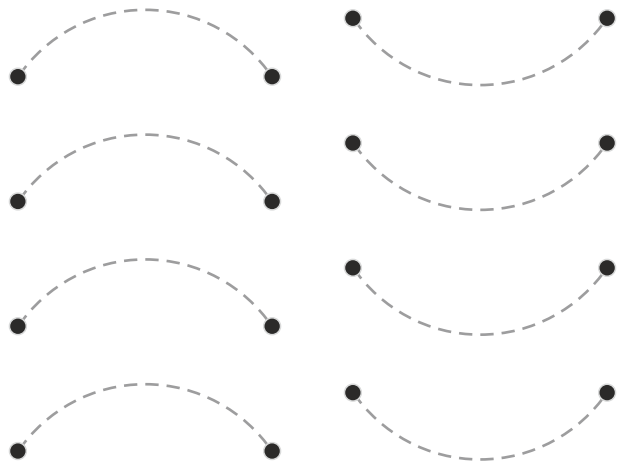
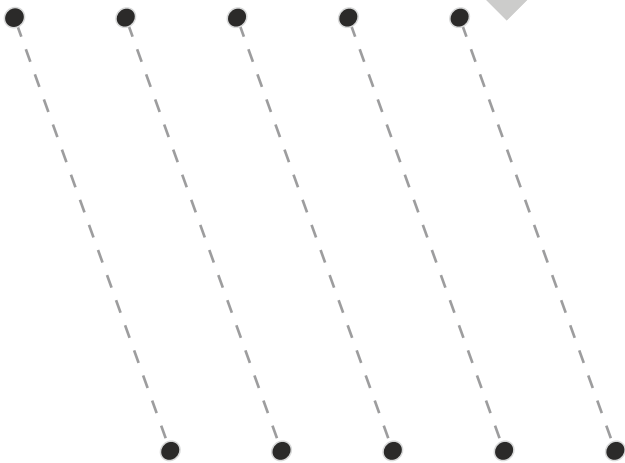
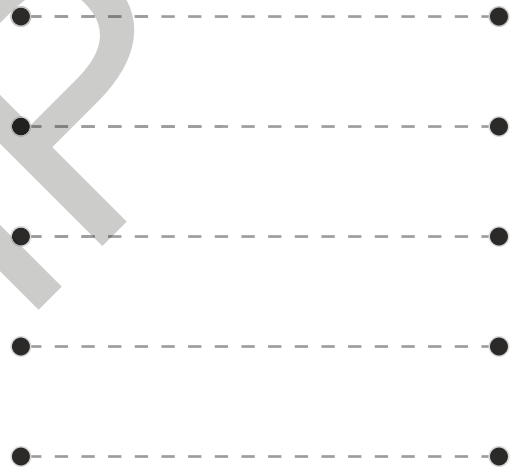
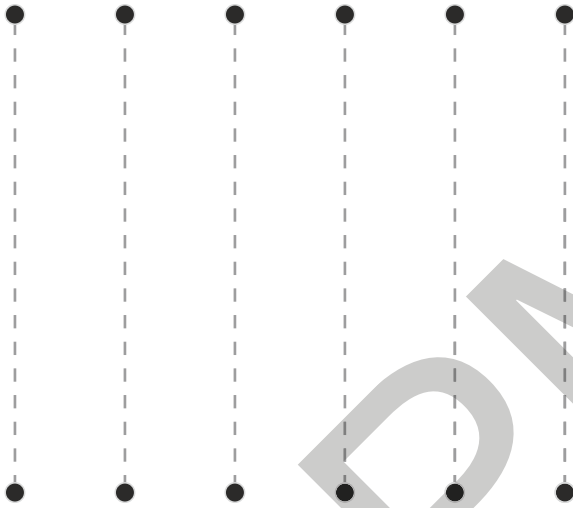
Sleeping Lines



Slanting Lines



Curved Lines

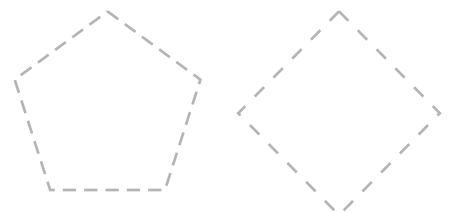
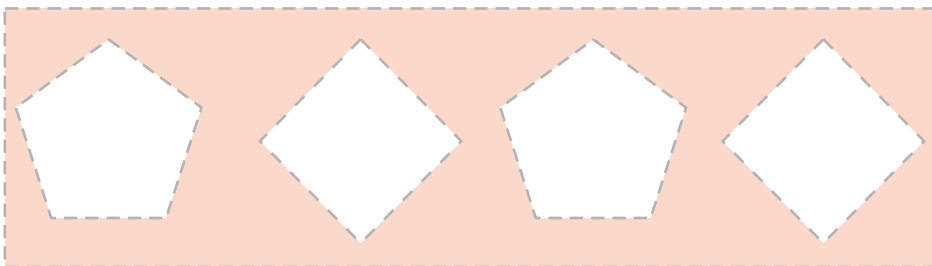
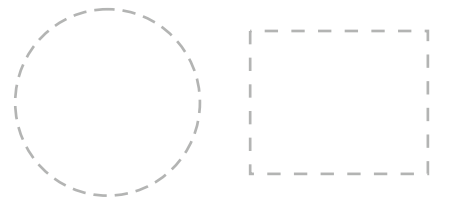
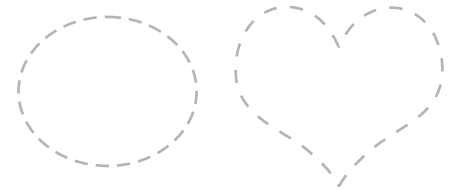
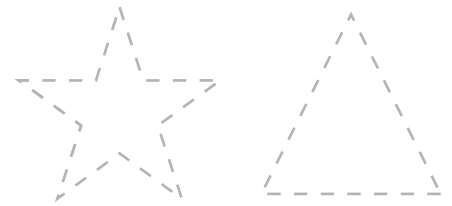
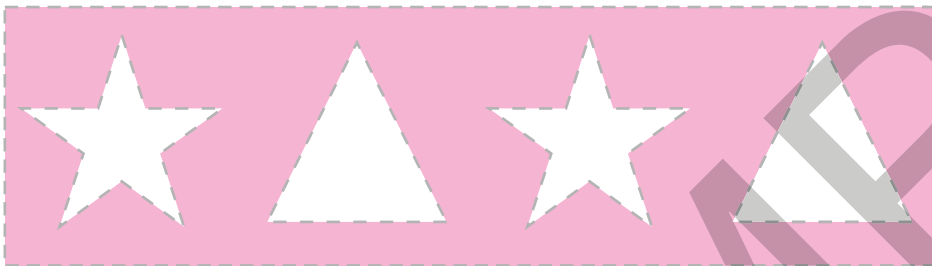
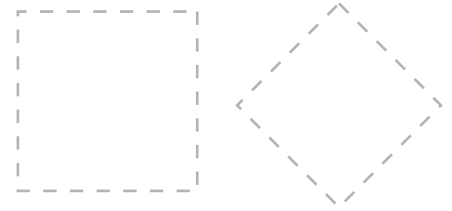
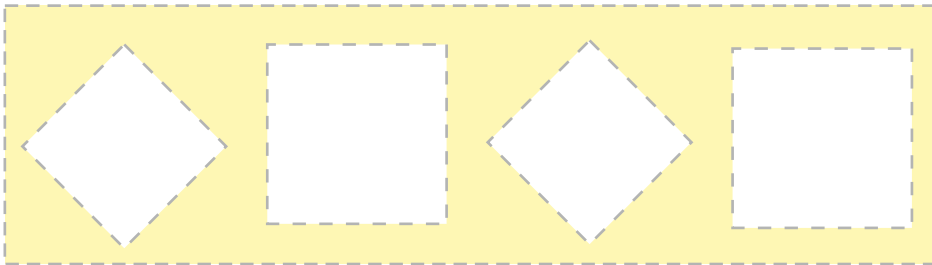




MIND BENDERS



Trace the figure that will come next.



One is me
 You are two,
 One, two, three
 We all are three;
 Can you count,
 The number of frogs?
 Four, four, four
 Wow, so nice!
 Now count the hives
 One, two, three
 Four and five
 Yes, five.

For Teachers:

The objective of this unit is to help learners understand the concept of numbers 1 to 5. You may use beads or other objects for the demonstration of counting. Similarly, you may form five groups of learners consisting of one learner, two learners, three learners, four learners, and five learners respectively; and ask the other learners to count the number of learners in each group.

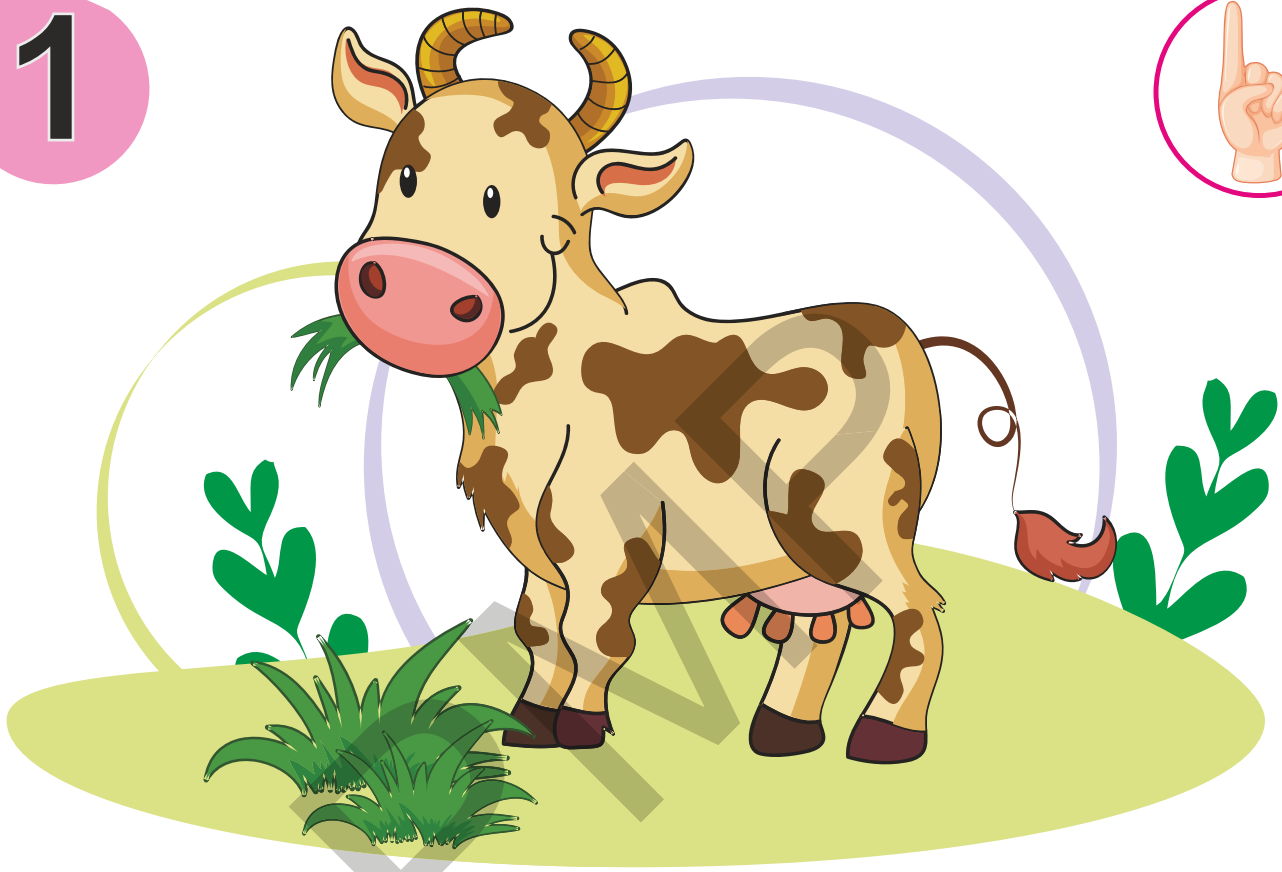
For Parents:

You may ask your child to pick 1, 2, 3, 4 or 5 bananas one by one from some bananas placed on a table. You may also use other objects instead of bananas.

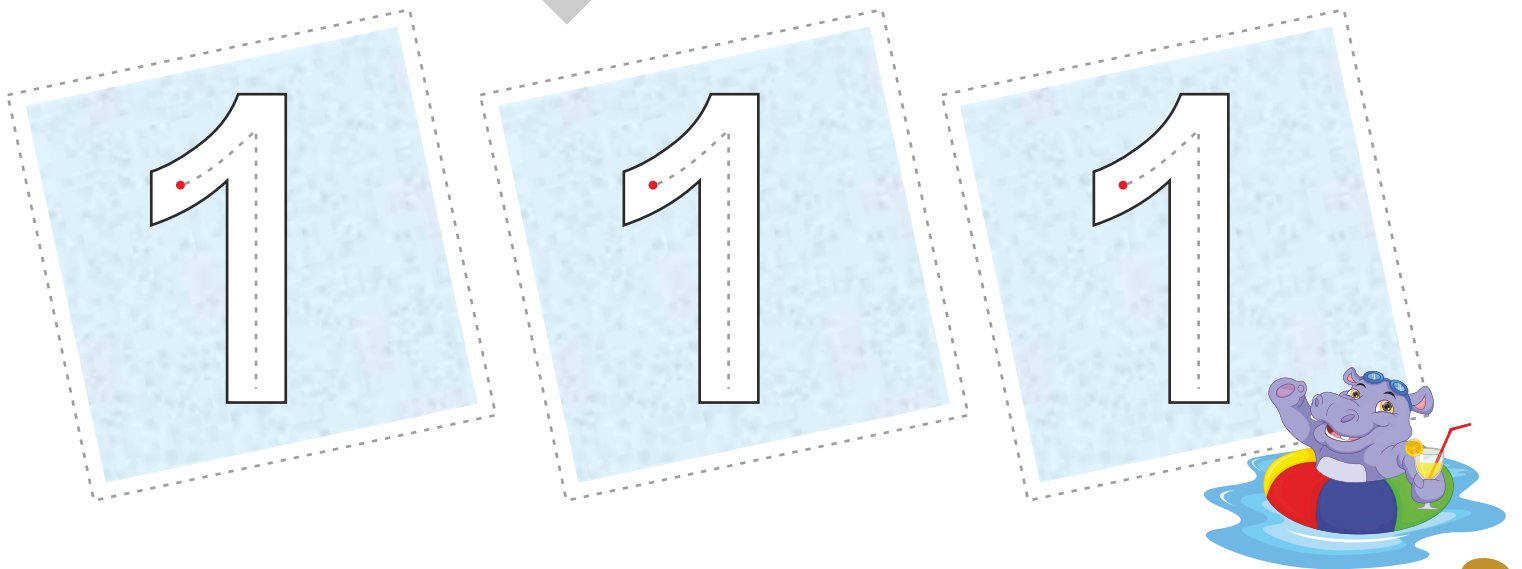


Point and say aloud.

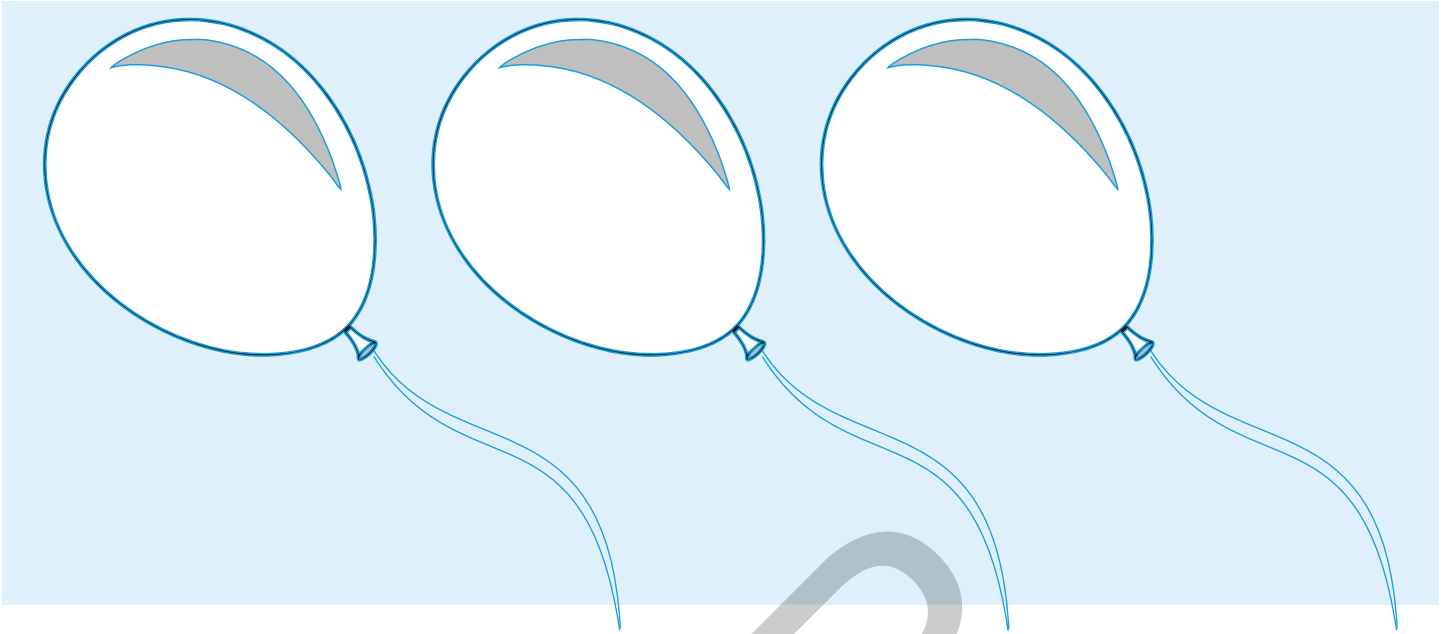
1



Trace with your finger and then with a crayon.



Colour 1 balloon.



Trace the number 1 with a pencil.

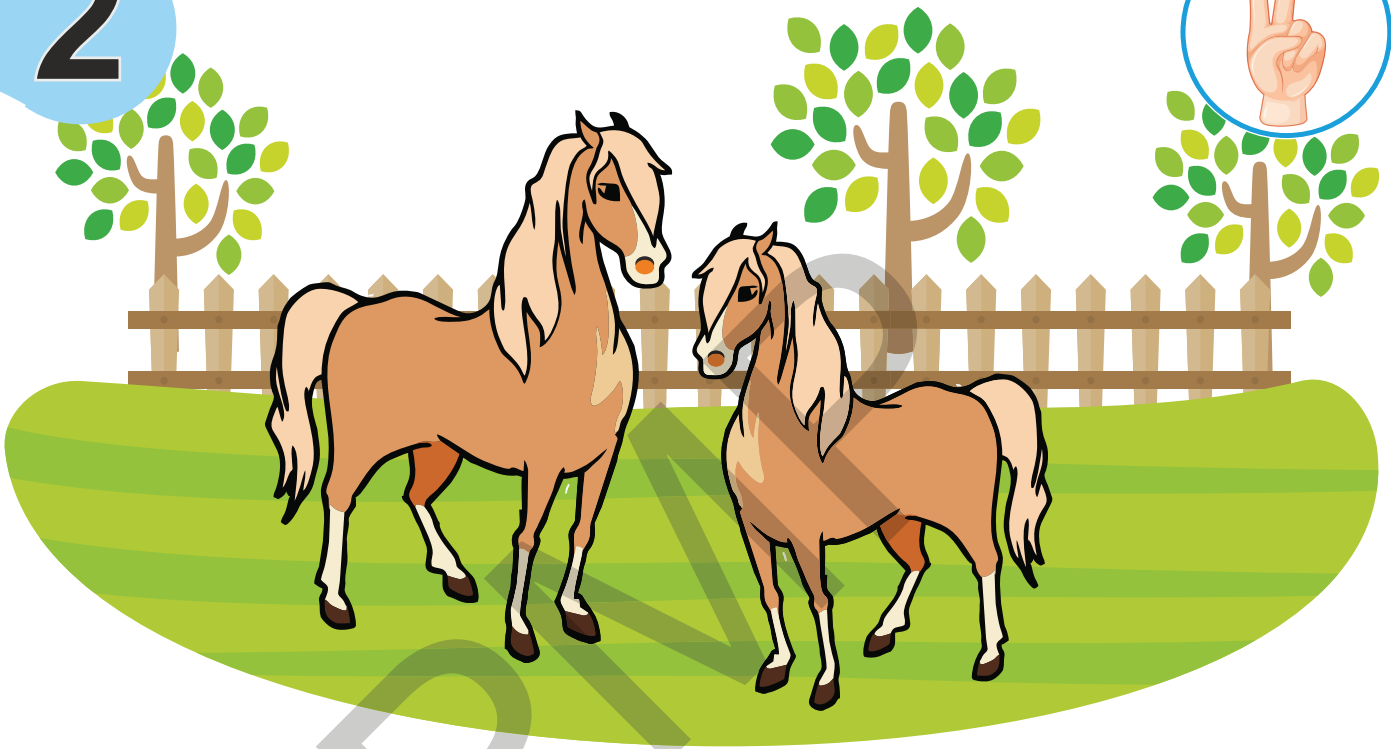
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1





Point and say aloud.

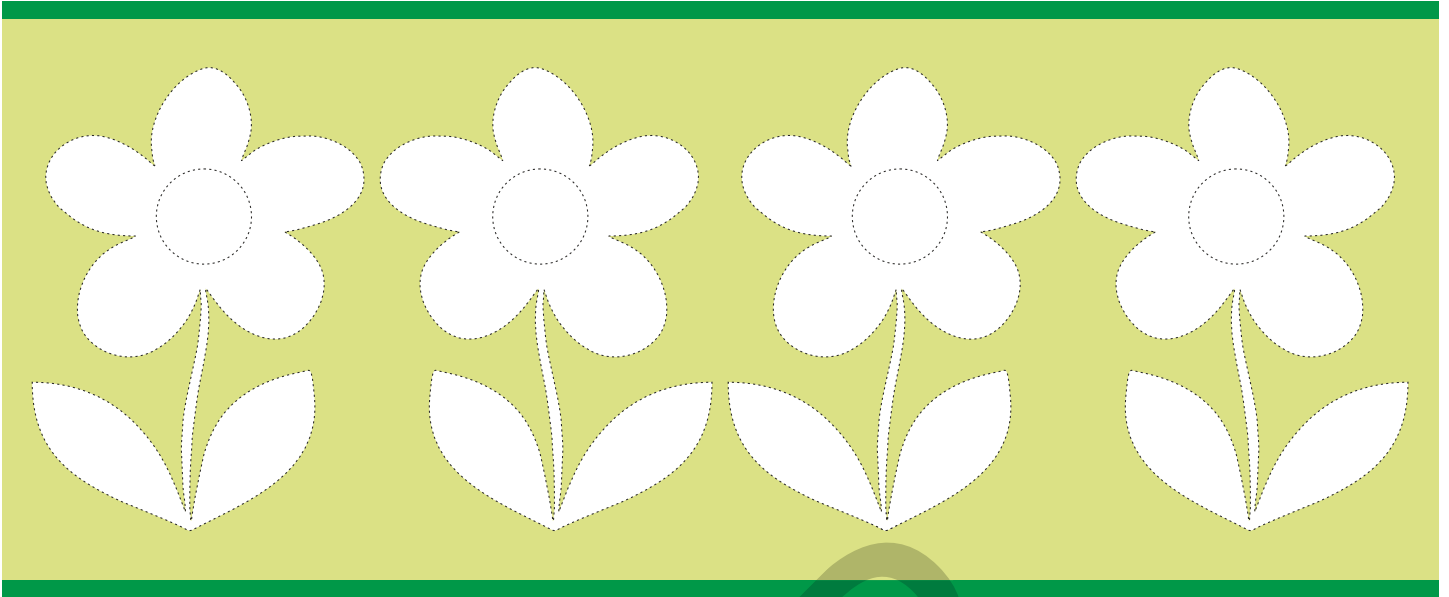
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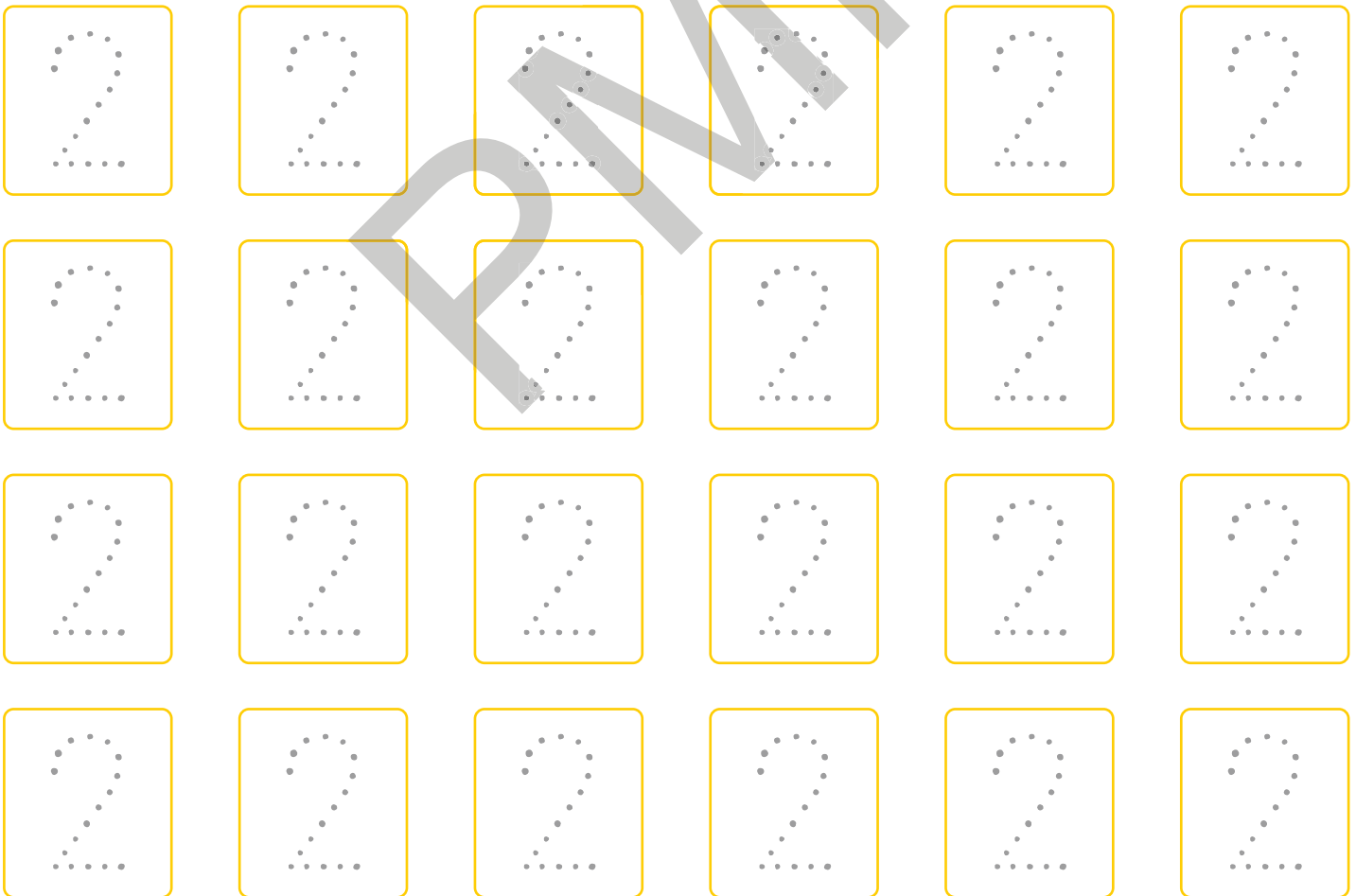
Trace with your finger and then with a crayon.



Colour any 2 flowers.



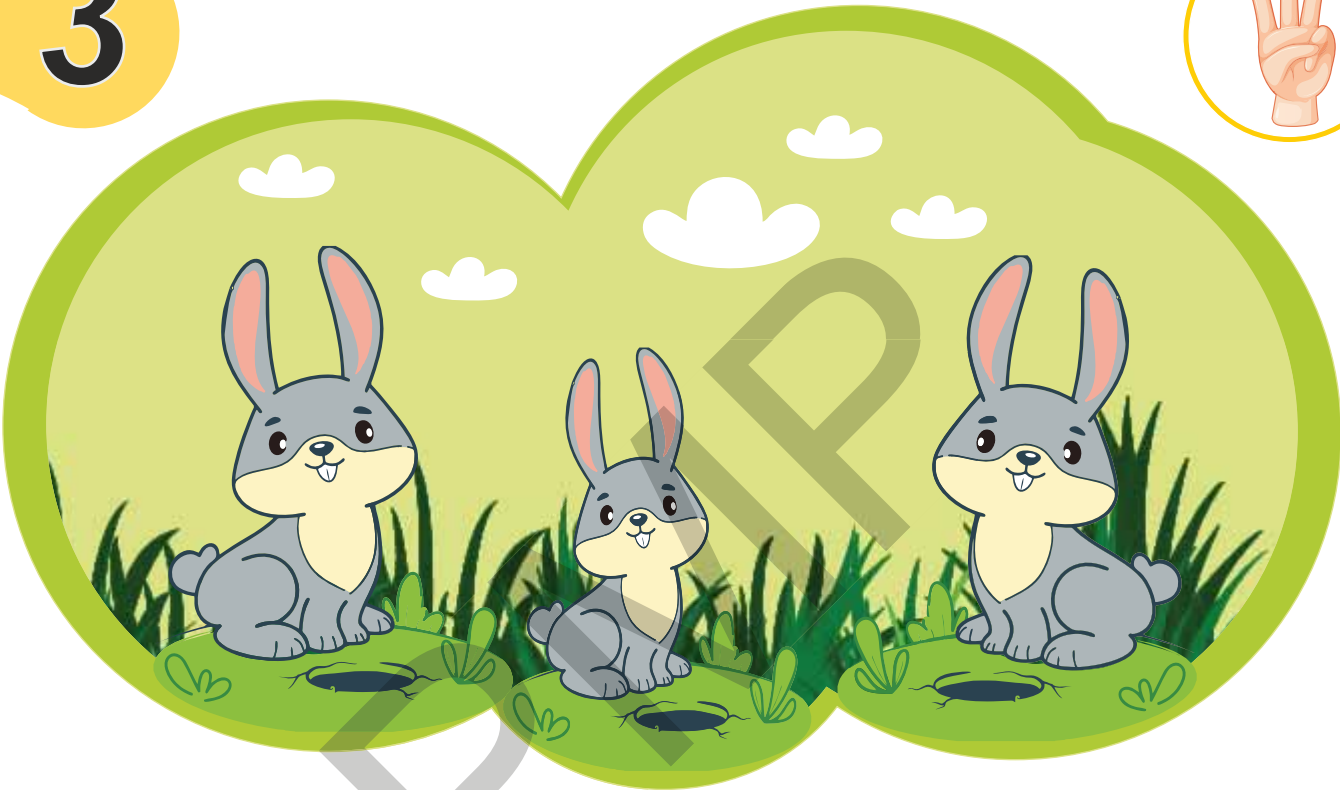
 Trace the number 2 with a pencil.





Point and say aloud.

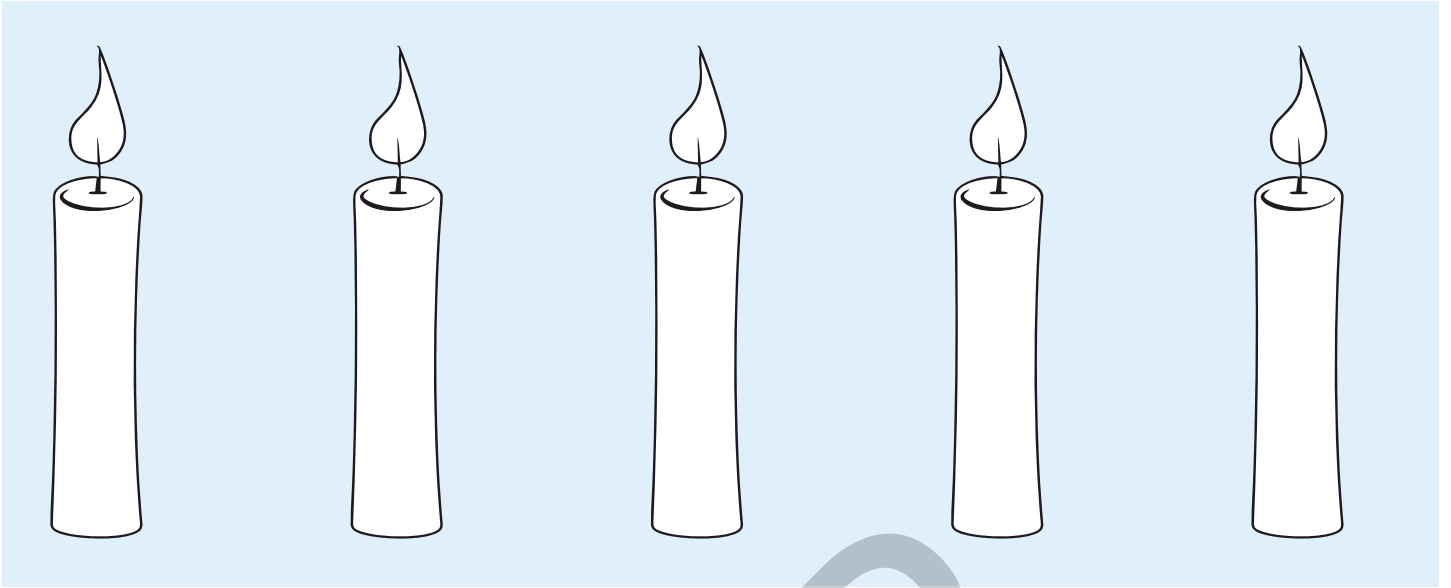
3



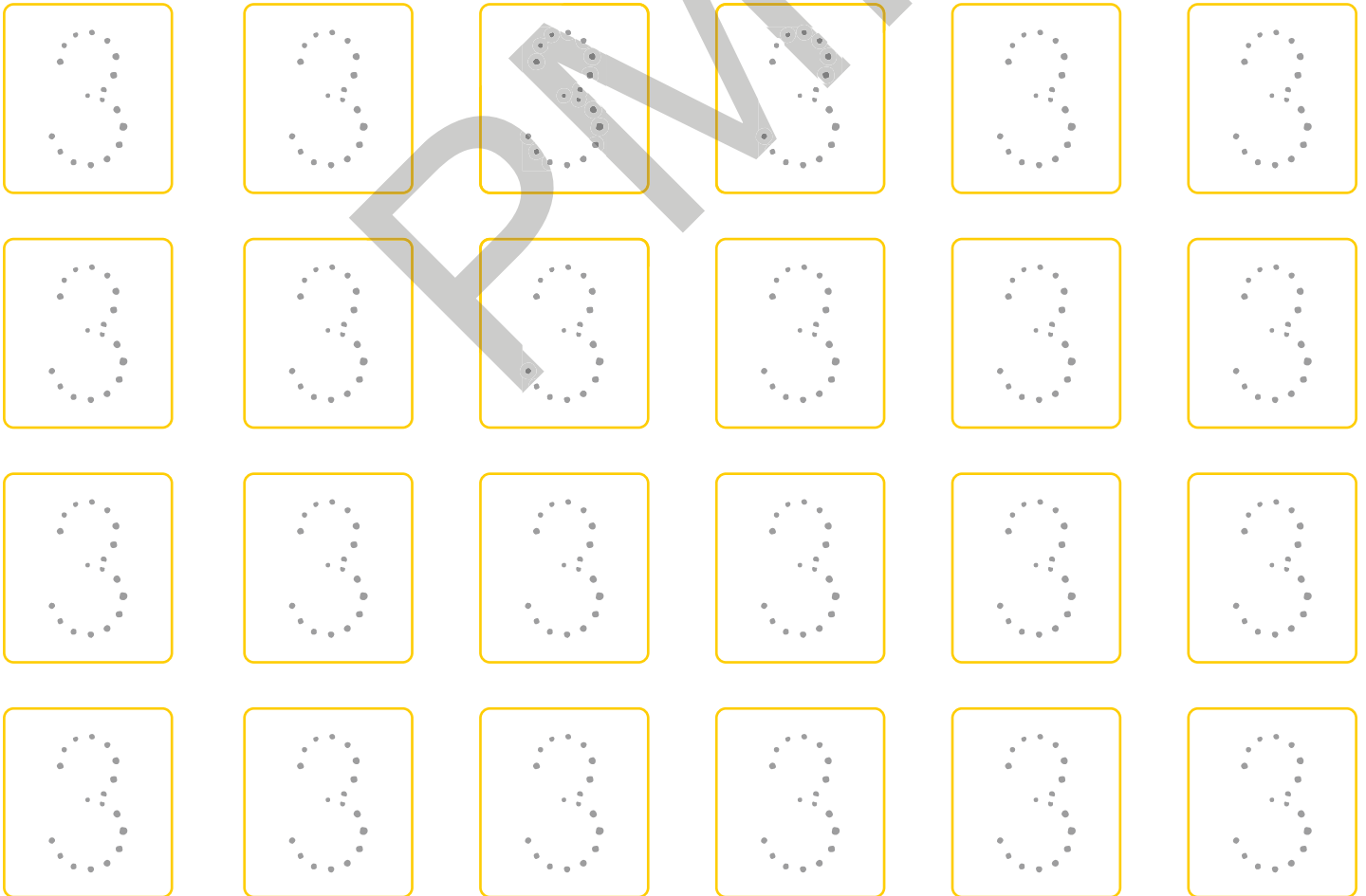
Trace with your finger and then with a crayon.



Colour 3 candles.



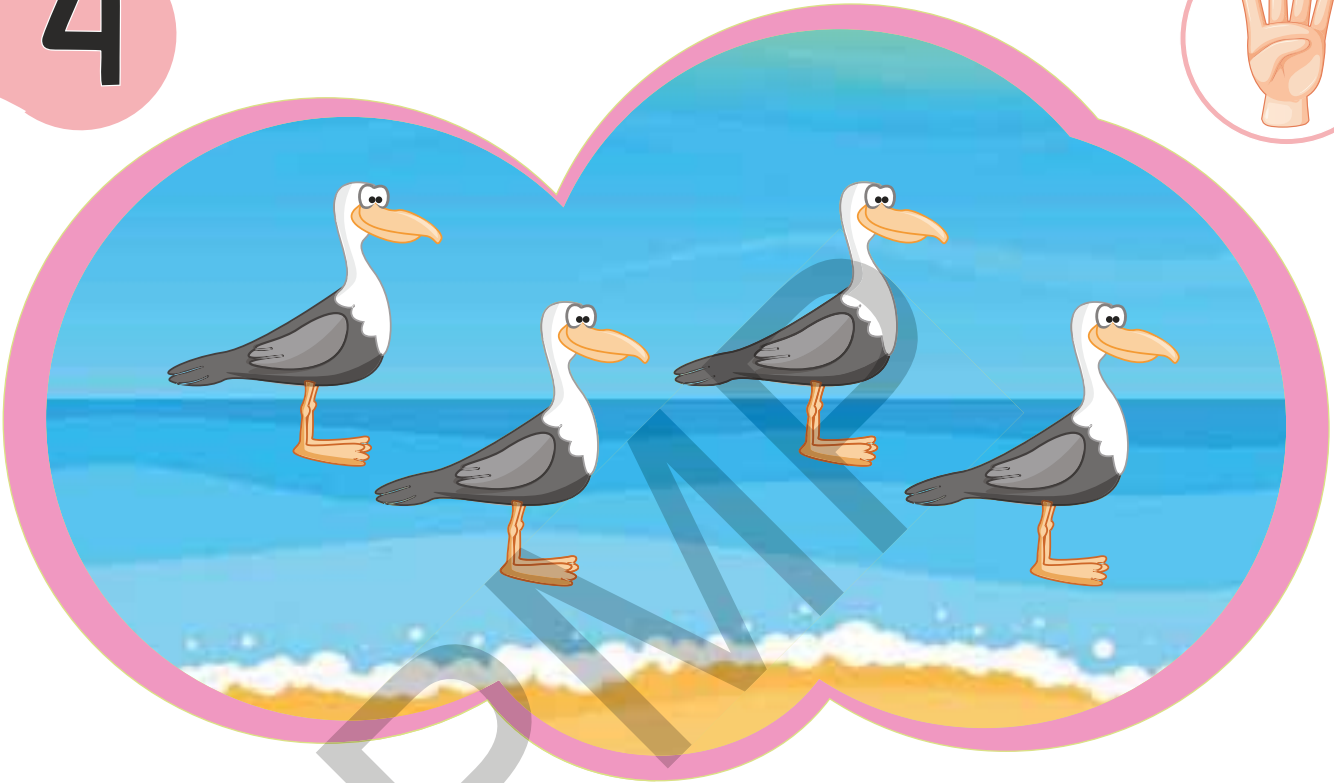
Trace the number 3 with a pencil.



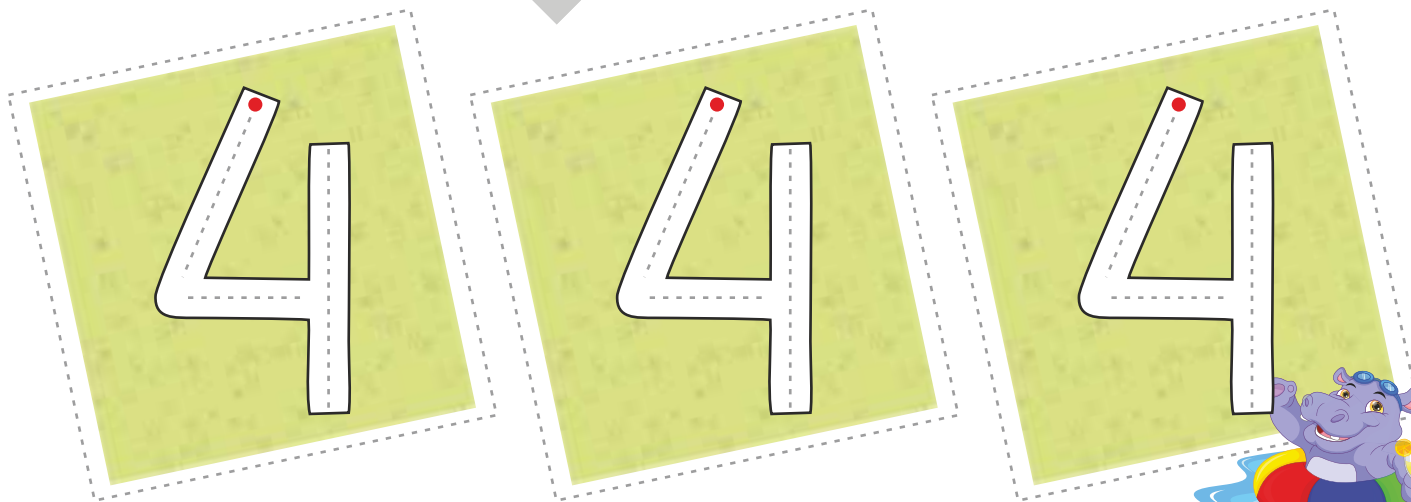


Point and say aloud.

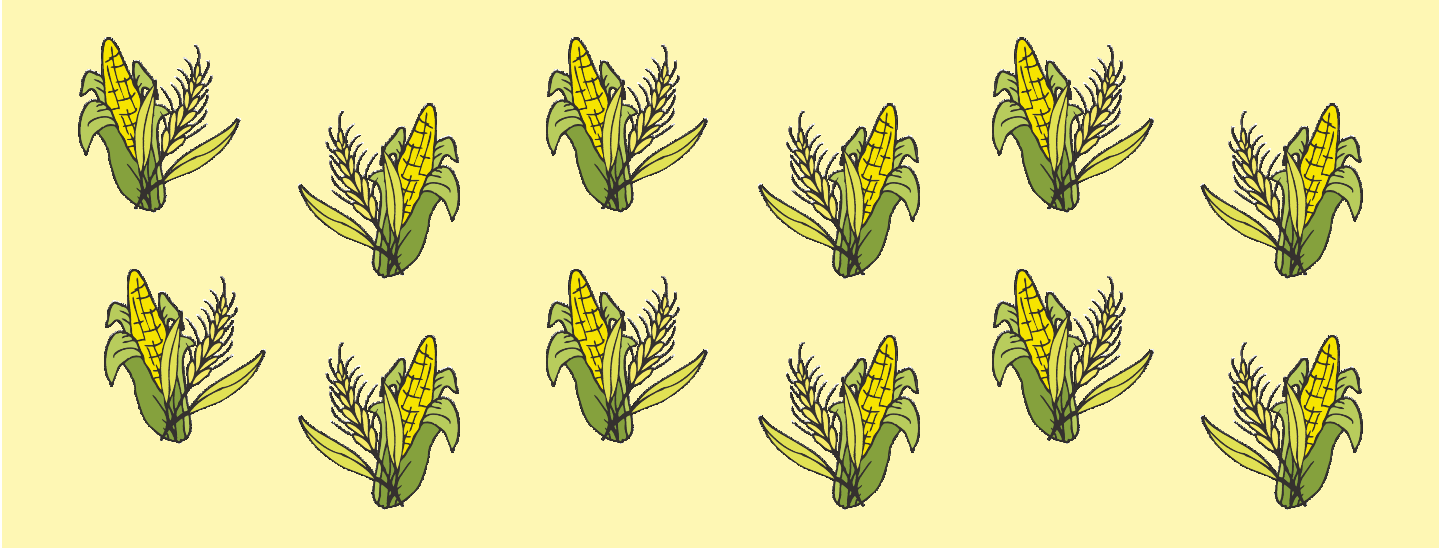
4



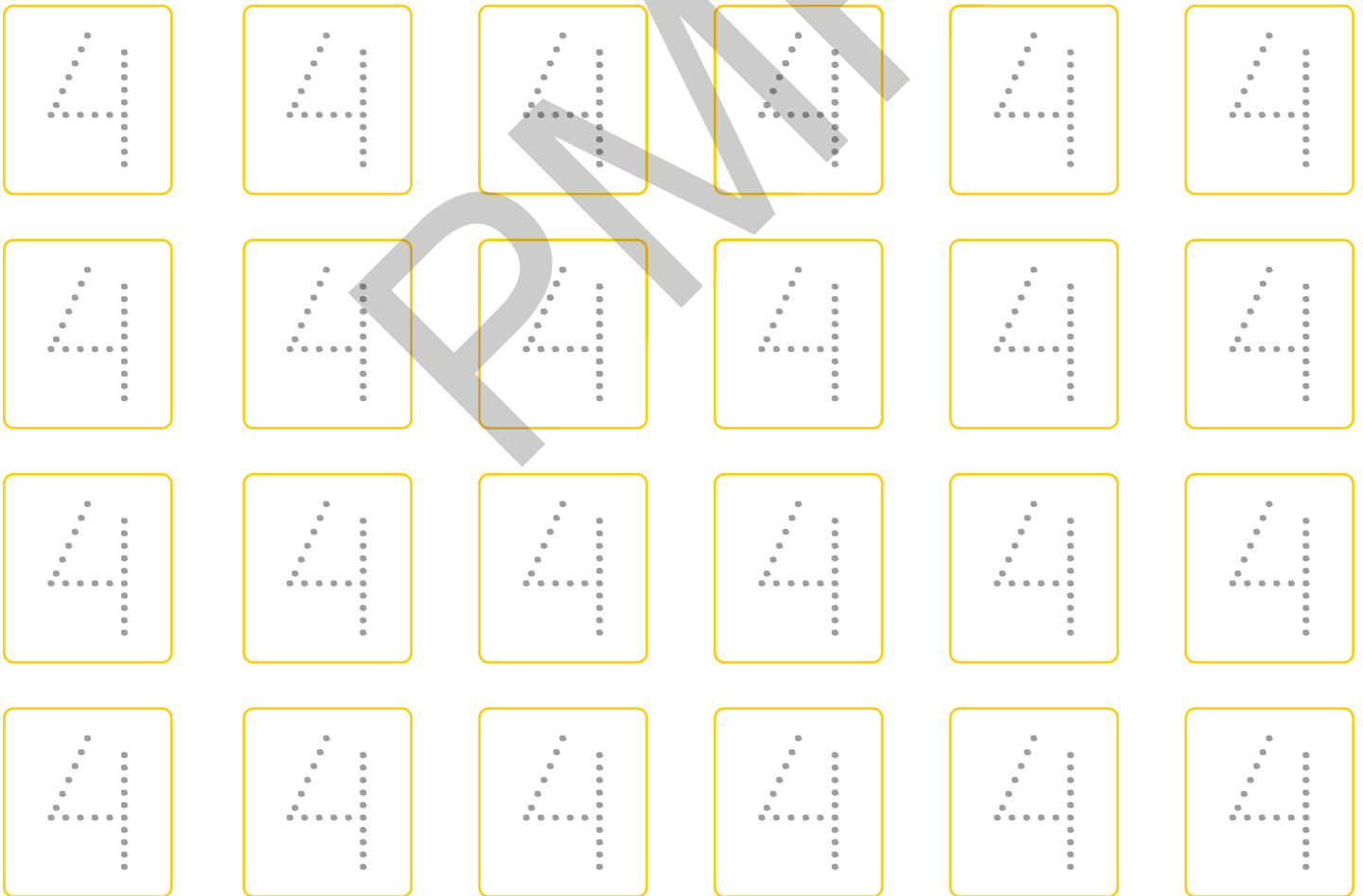
Trace with your finger and then with a crayon.



Circle any 4 corn cobs.



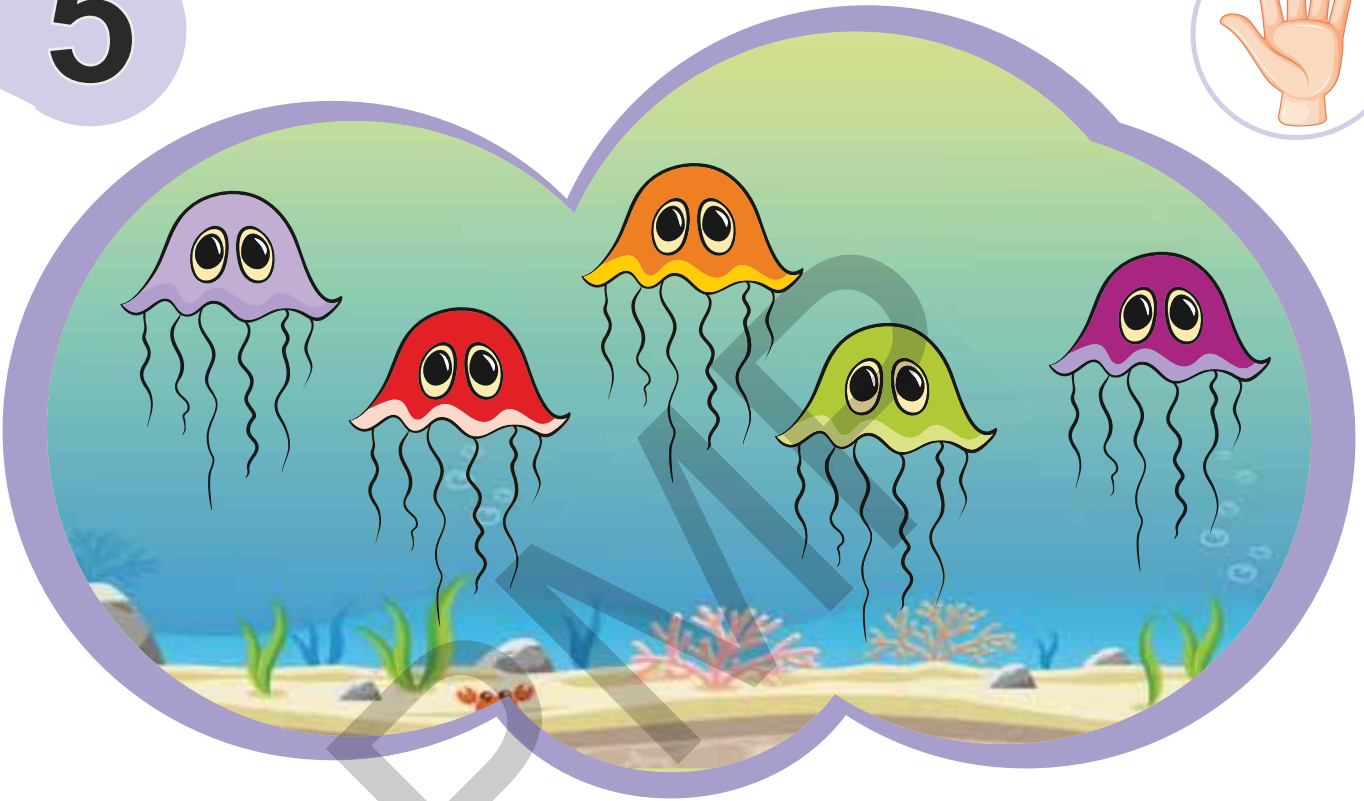
Trace the number 4 with a pencil.





Point and say aloud.

5



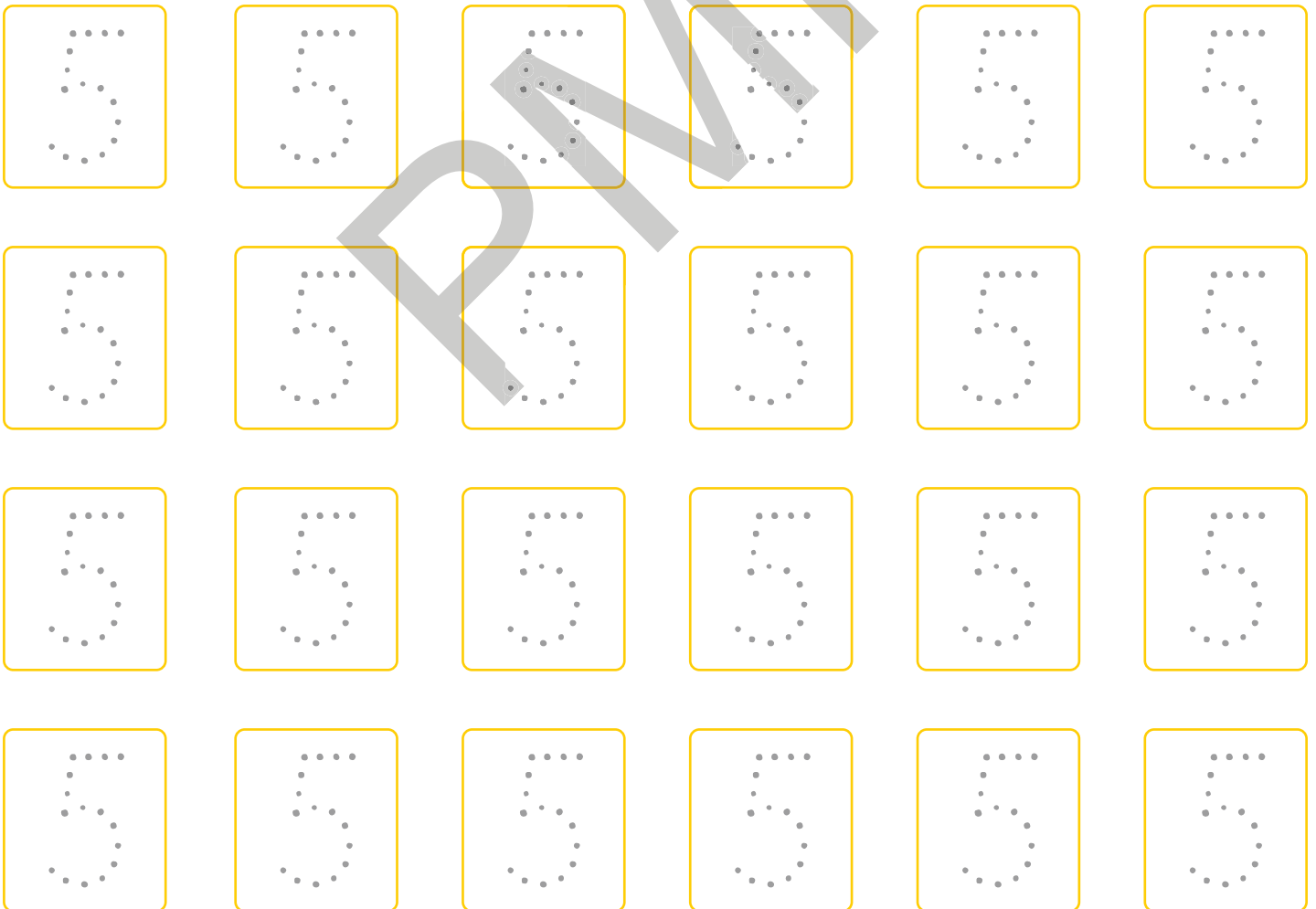
Trace with your finger and then with a crayon.



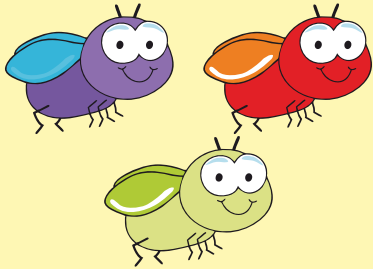
Cross out (x) 5 sad faces.



 Trace the number 5 with a pencil.

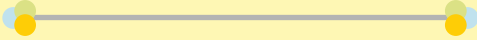


A. Count the animals in each picture and match them with the correct number.



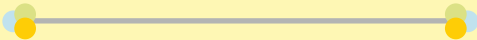
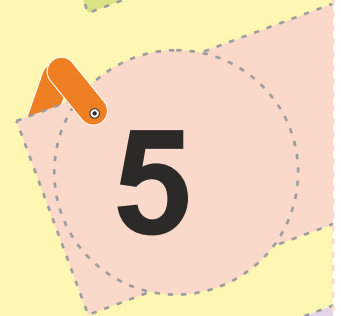
○

○



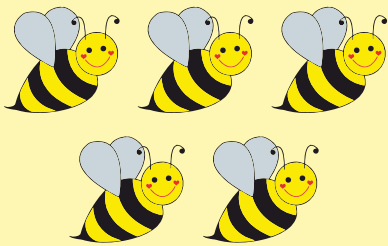
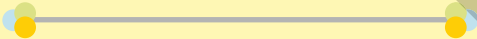
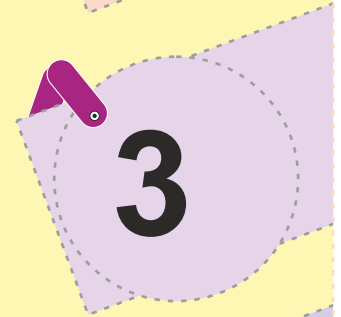
○

○



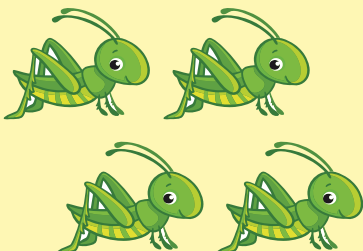
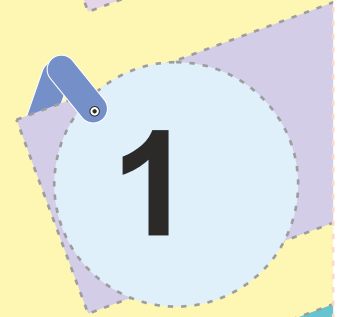
○

○



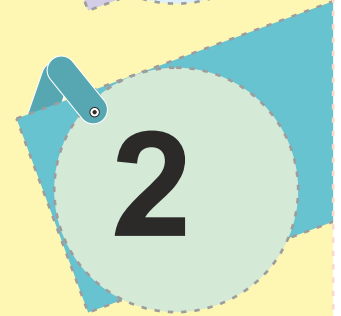
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○

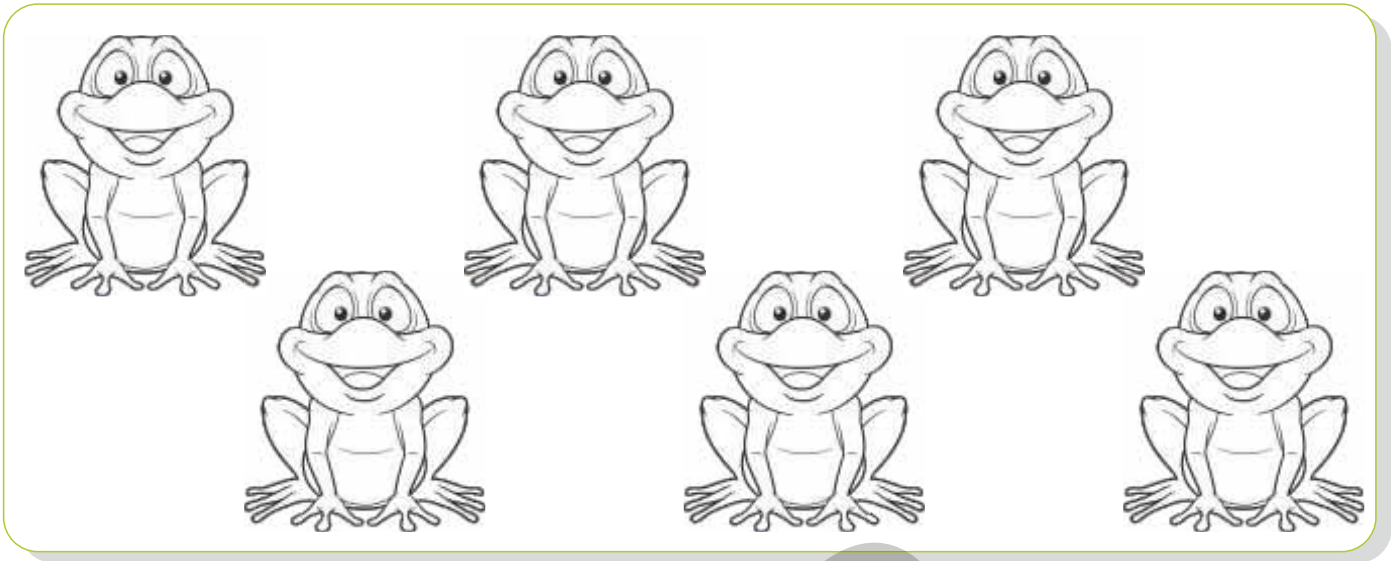


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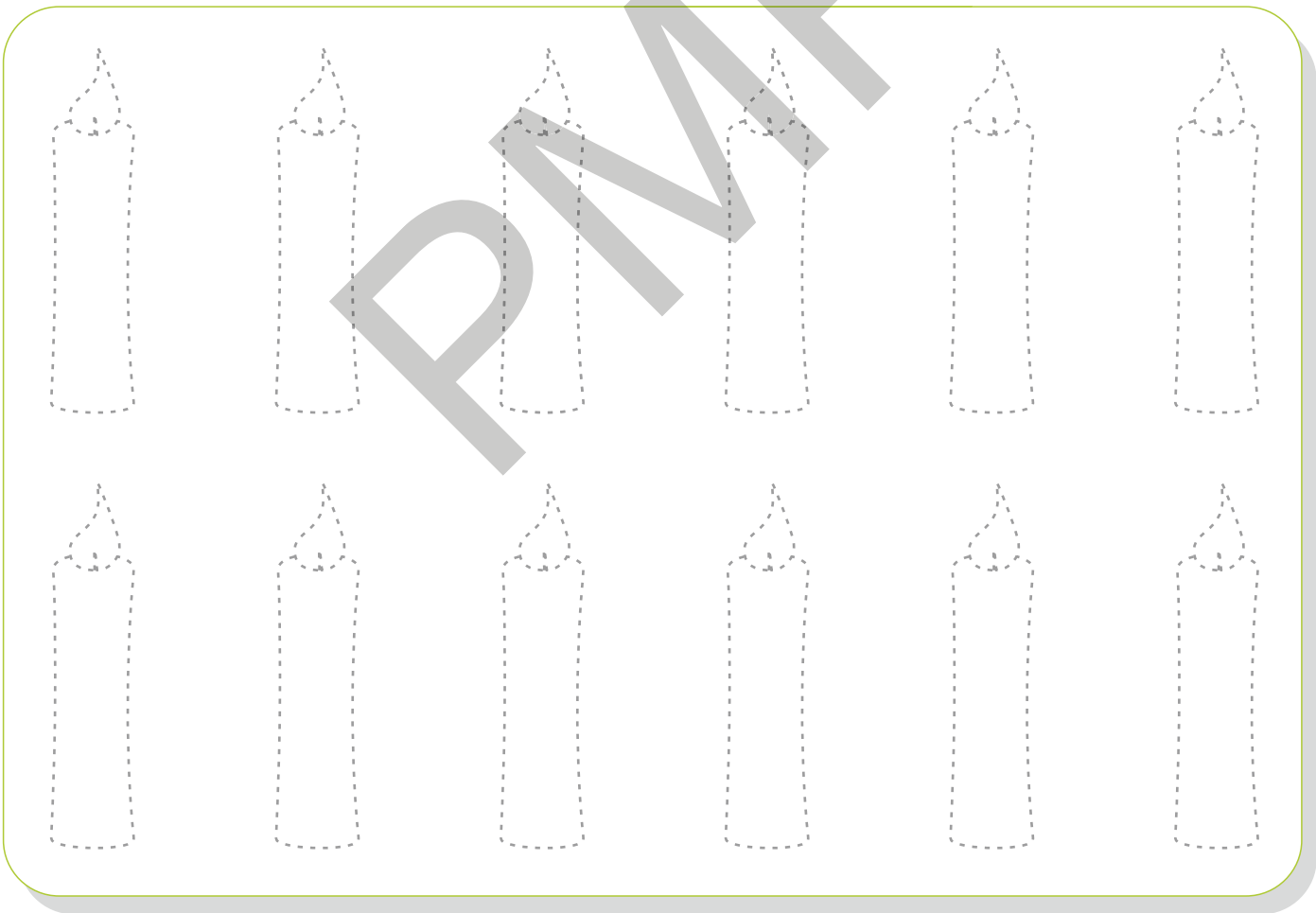
○



B. Colour only four frogs.



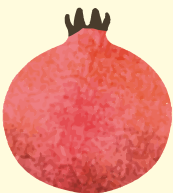
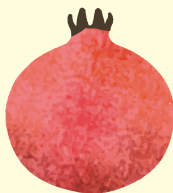
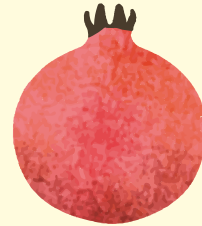
C. Trace and colour as many candles as your age is.





MIND BENDERS

Count how many of each of the fruits are there in the picture.



Once I Caught a Fish Alive



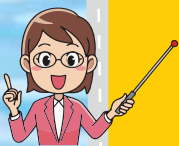
UNIT-4 NUMBERS
6 TO 10 AND 0

Listen and repeat the rhyme.

One, Two, Three, Four, Five,
Once I caught a fish alive.
Six, Seven, Eight, Nine, Ten,
But I let it go again.
Why did you let it go?
Because it bit my finger so.
Which finger did it bite?
The little finger on the right.

For Teachers:

The objective of this unit is to help learners understand the concept of numbers 6 to 10. You may use the same method for demonstration of numbers 6 to 10 as you did for numbers 1 to 5. For the concept of zero, you may put some beads into a box, and then remove the beads one by one to make the box empty.



For Parents:

You may show your child six fingers and say the number 6 aloud. Ask your child to do the same. Repeat this activity up to number 10.



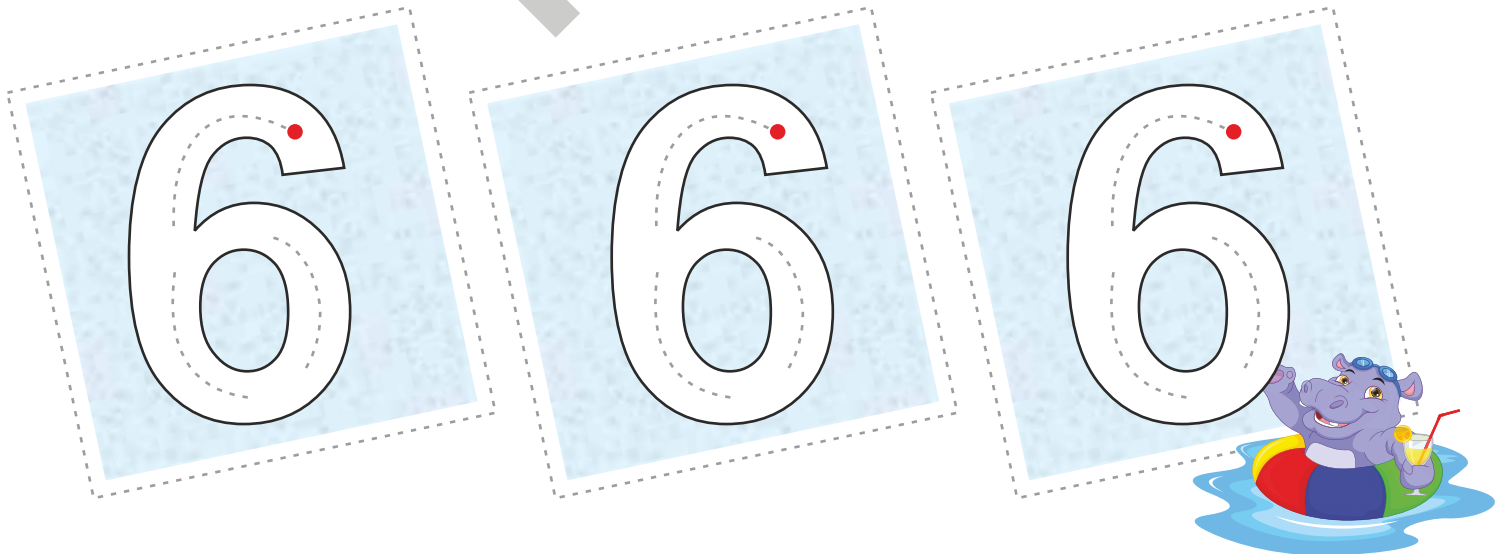


Point and say aloud.

6



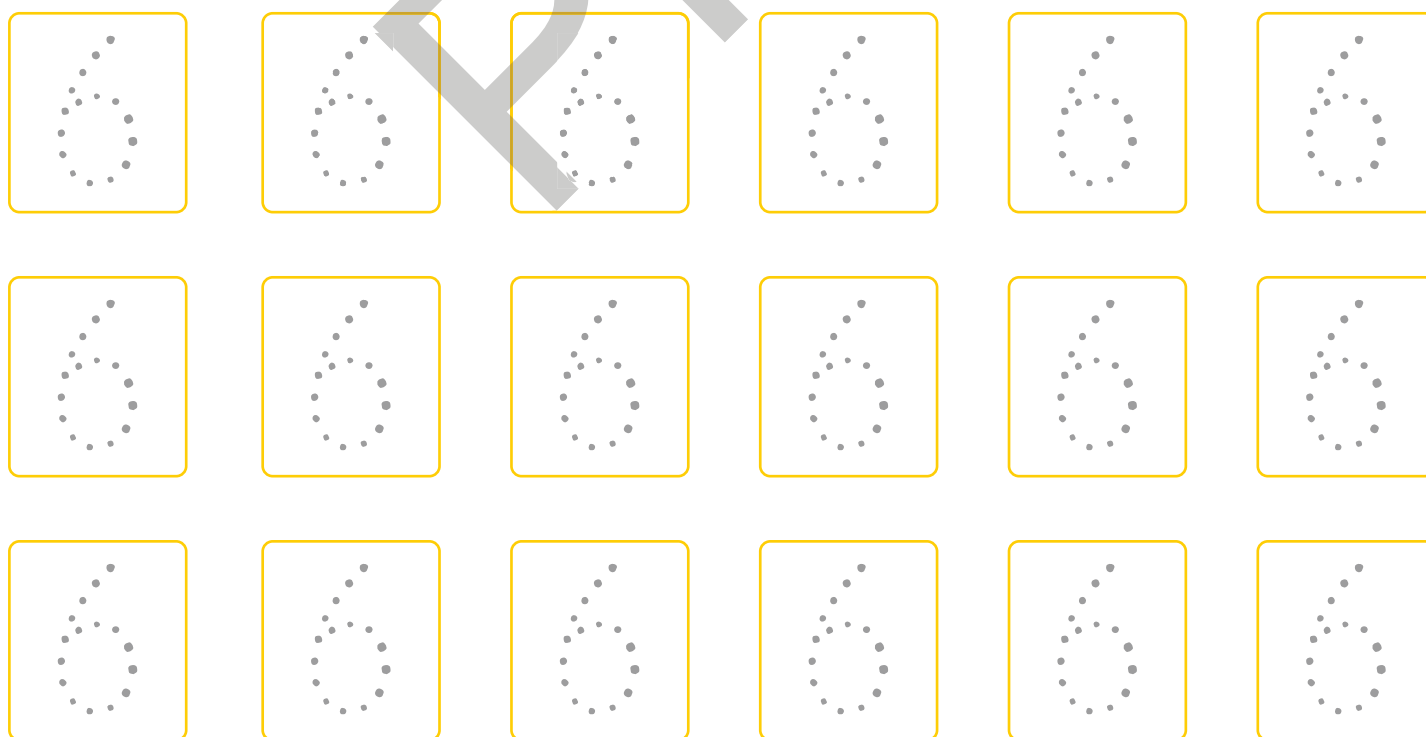
Trace with your finger and then with a crayon.



Paste 6 stars in the night sky.



 Trace the number 6 with a pencil.





Point and say aloud.

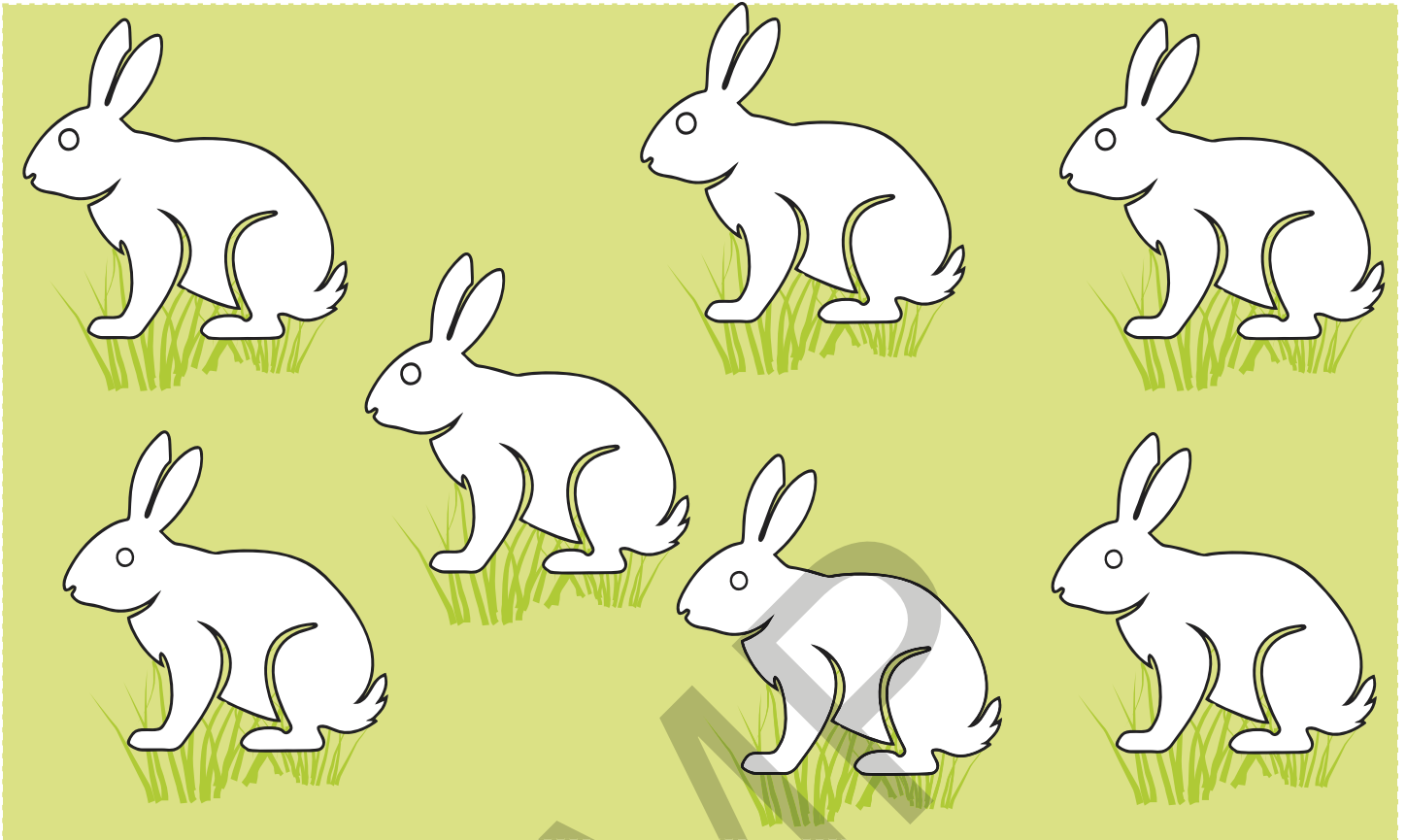
7



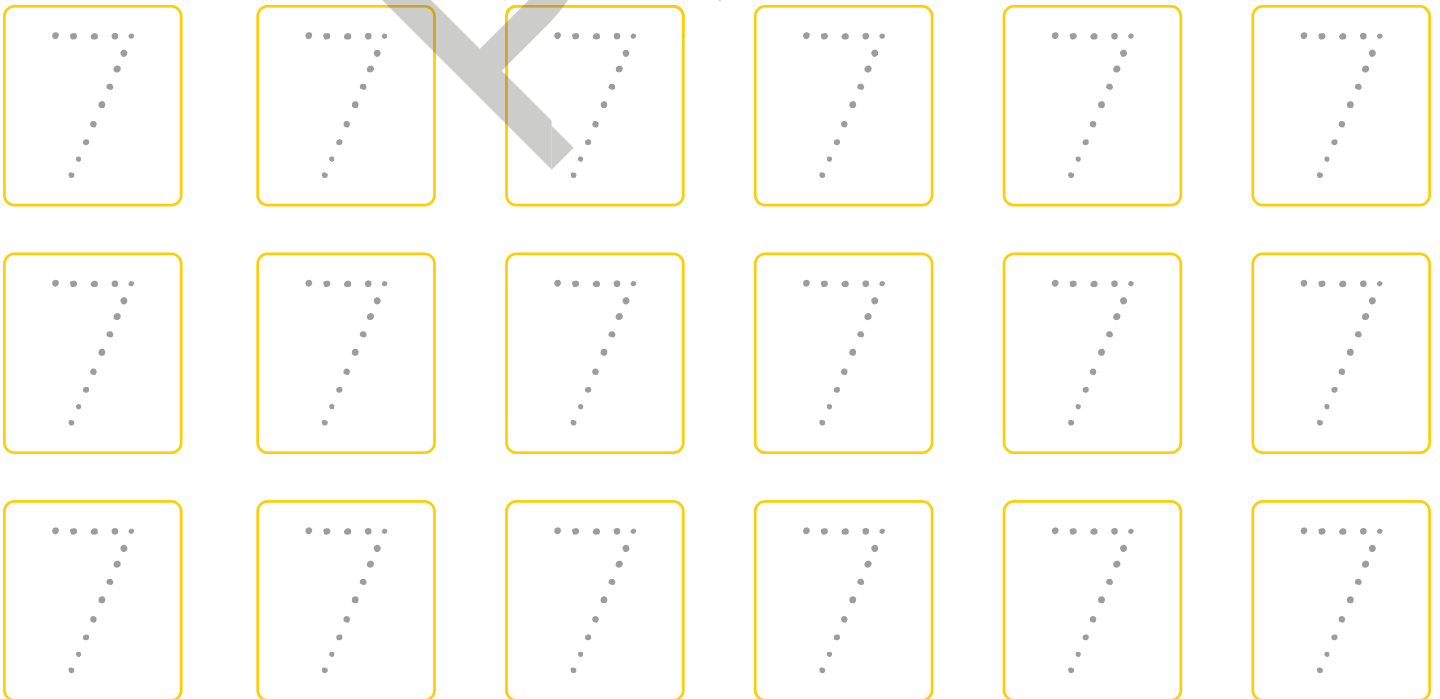
Trace with your finger and then with a crayon.



Paste cotton on all the 7 rabbits.



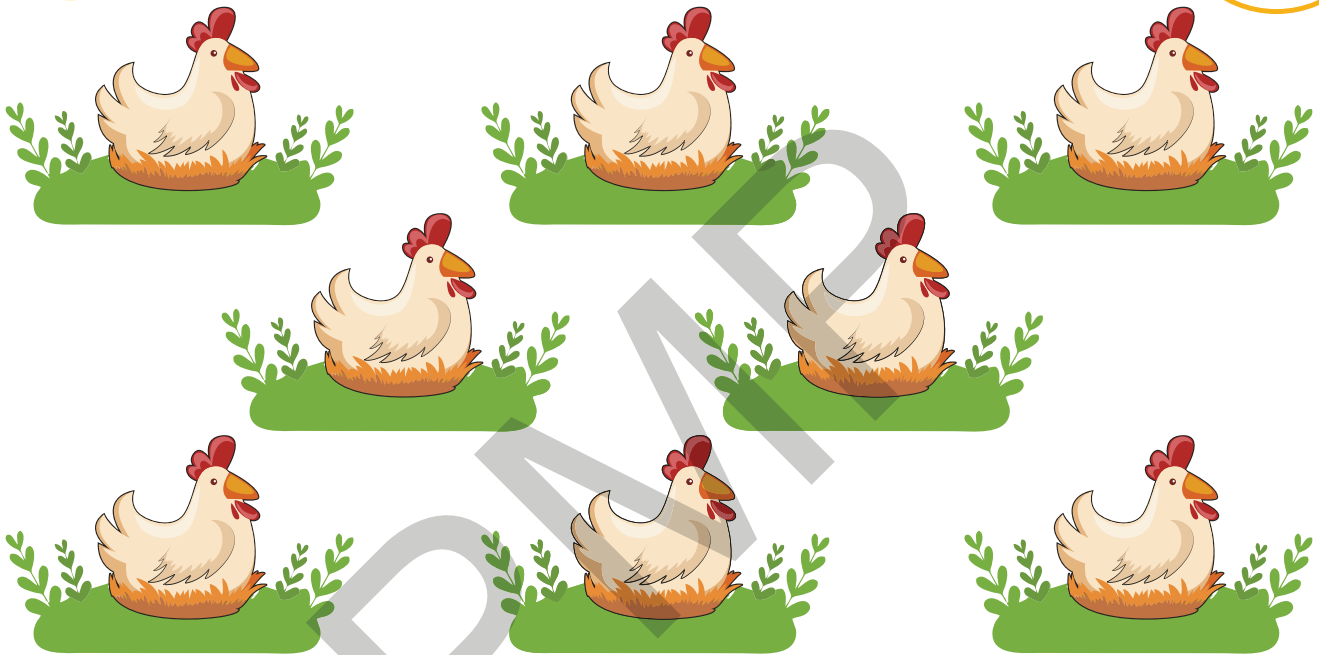
 Trace the number 7 with a pencil.



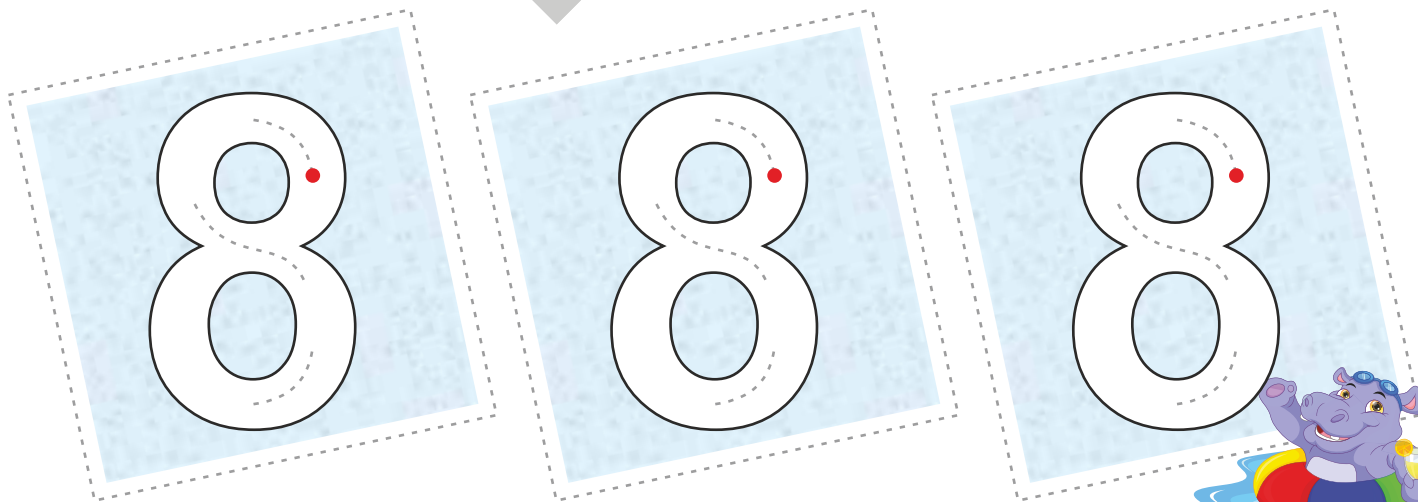


Point and say aloud.

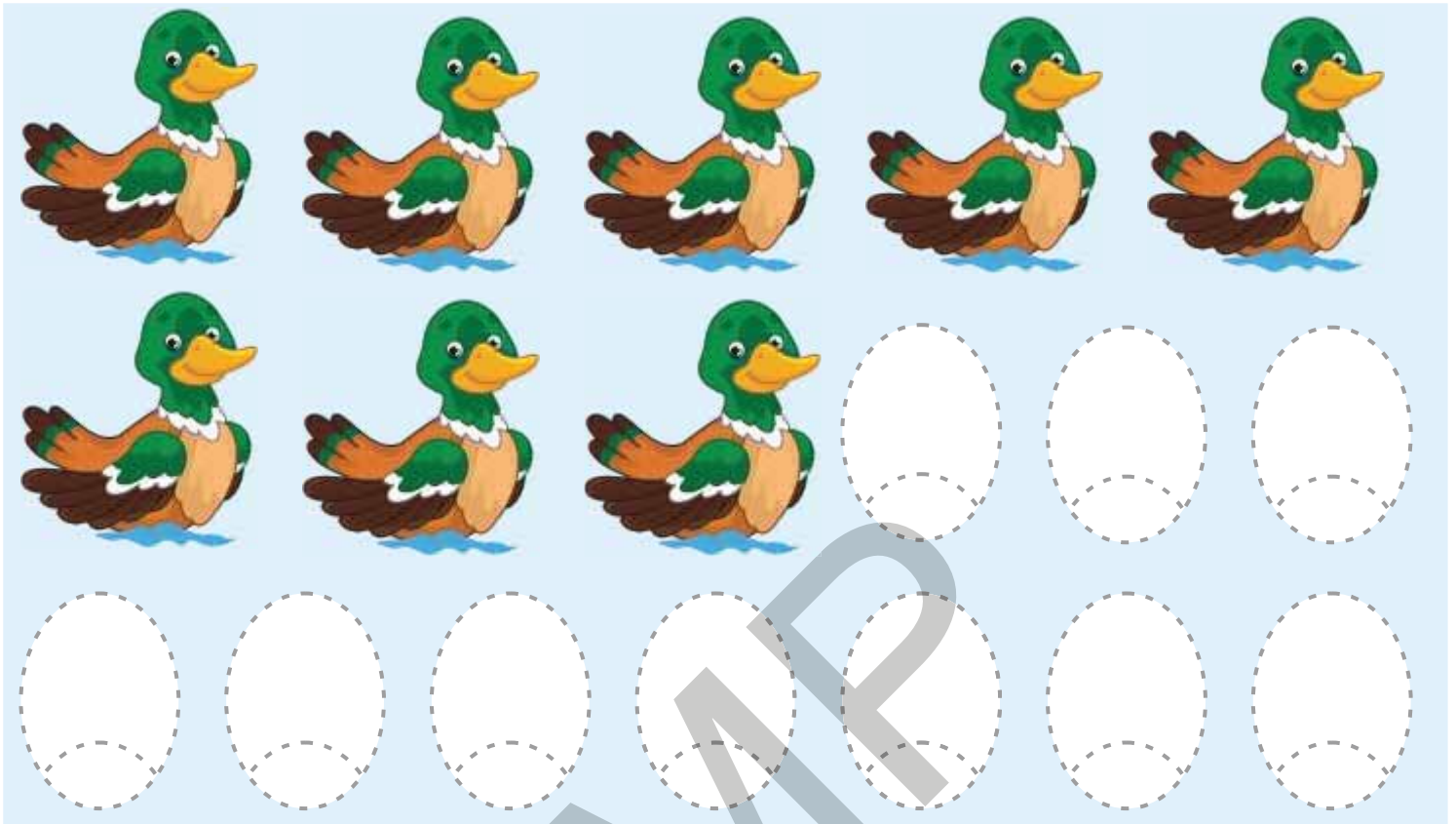
8



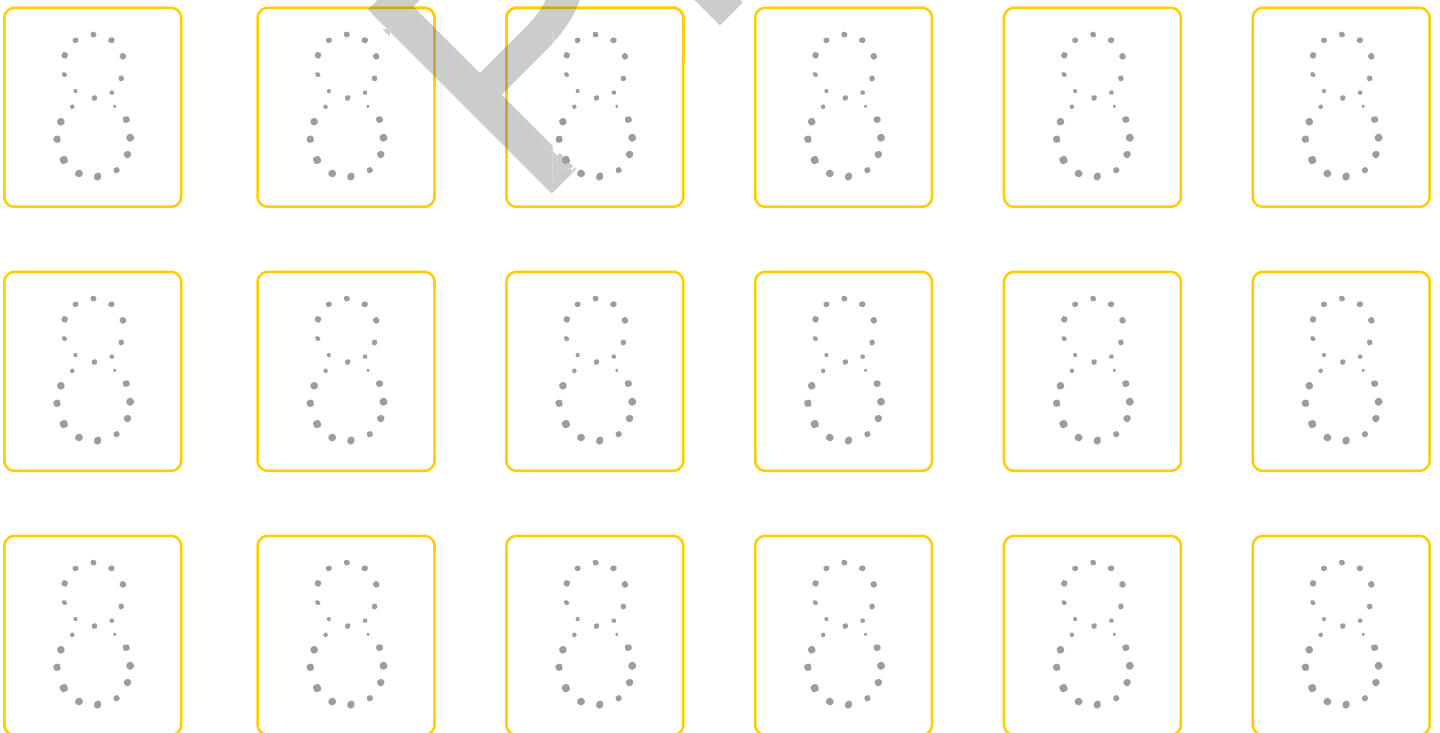
Trace with your finger and then with a crayon.



Trace as many eggs as the ducks are shown.



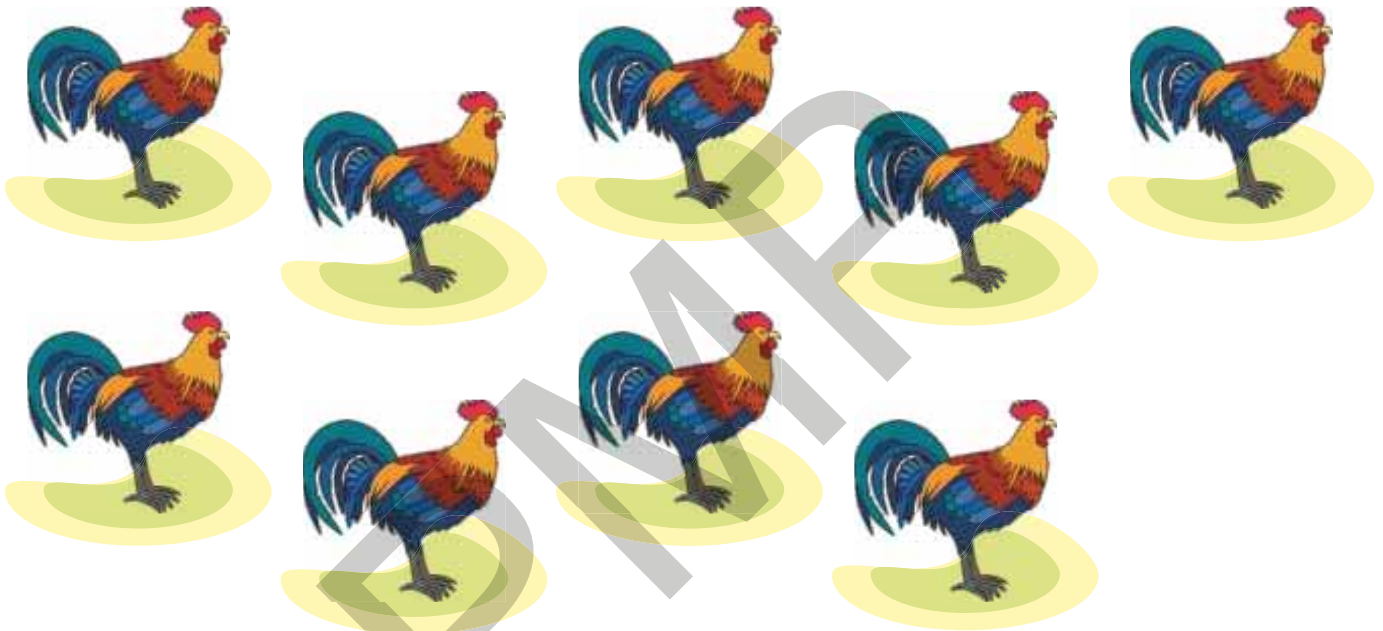
 Trace the number 8 with a pencil.



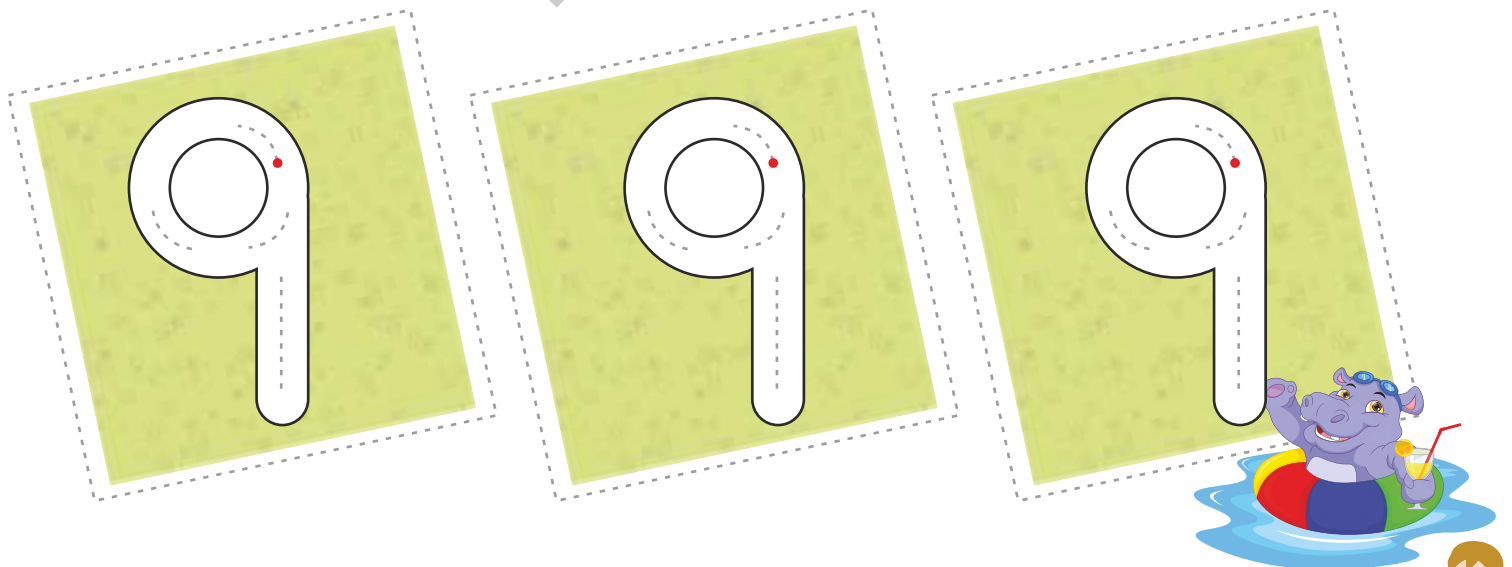


Point and say aloud.

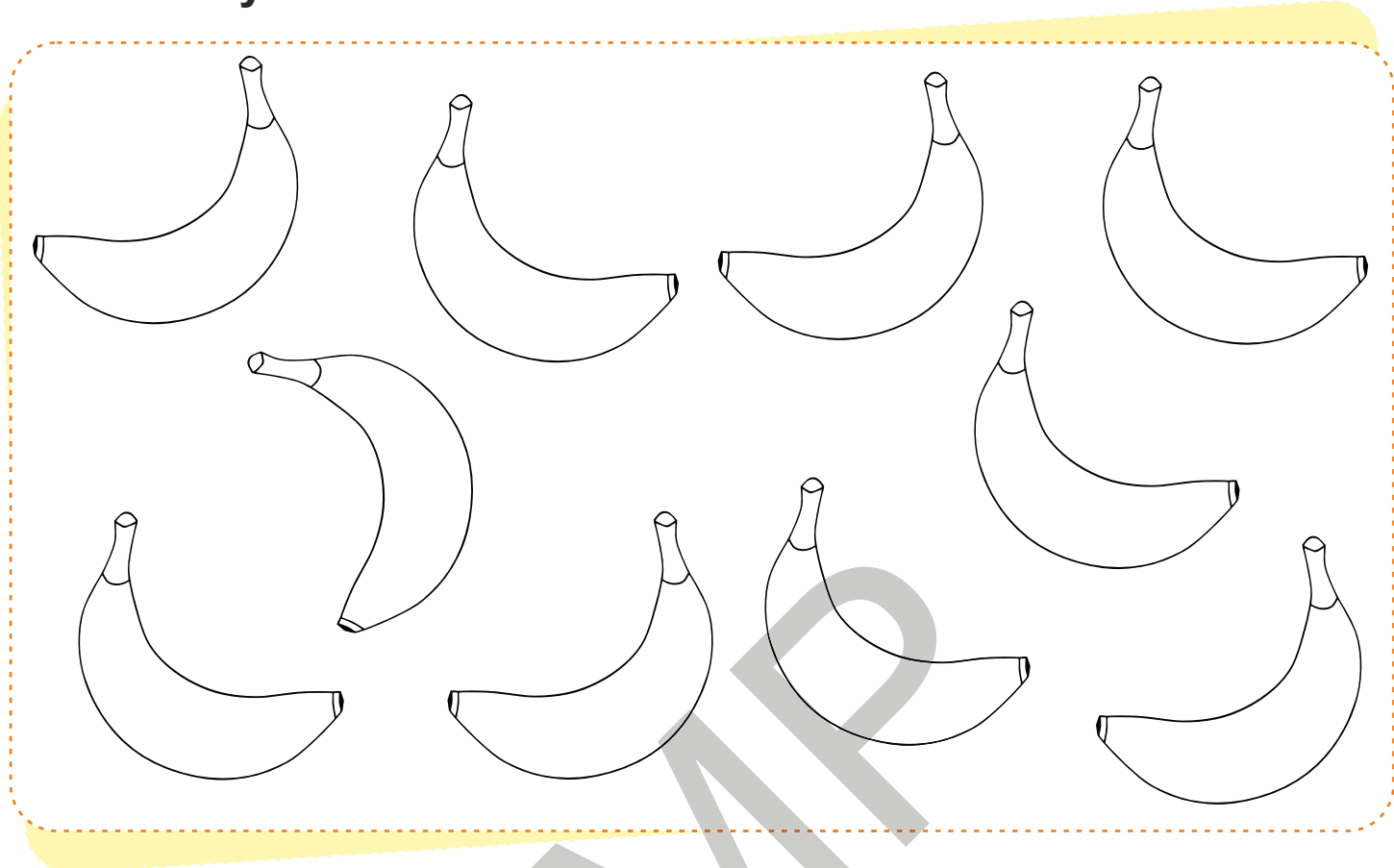
9



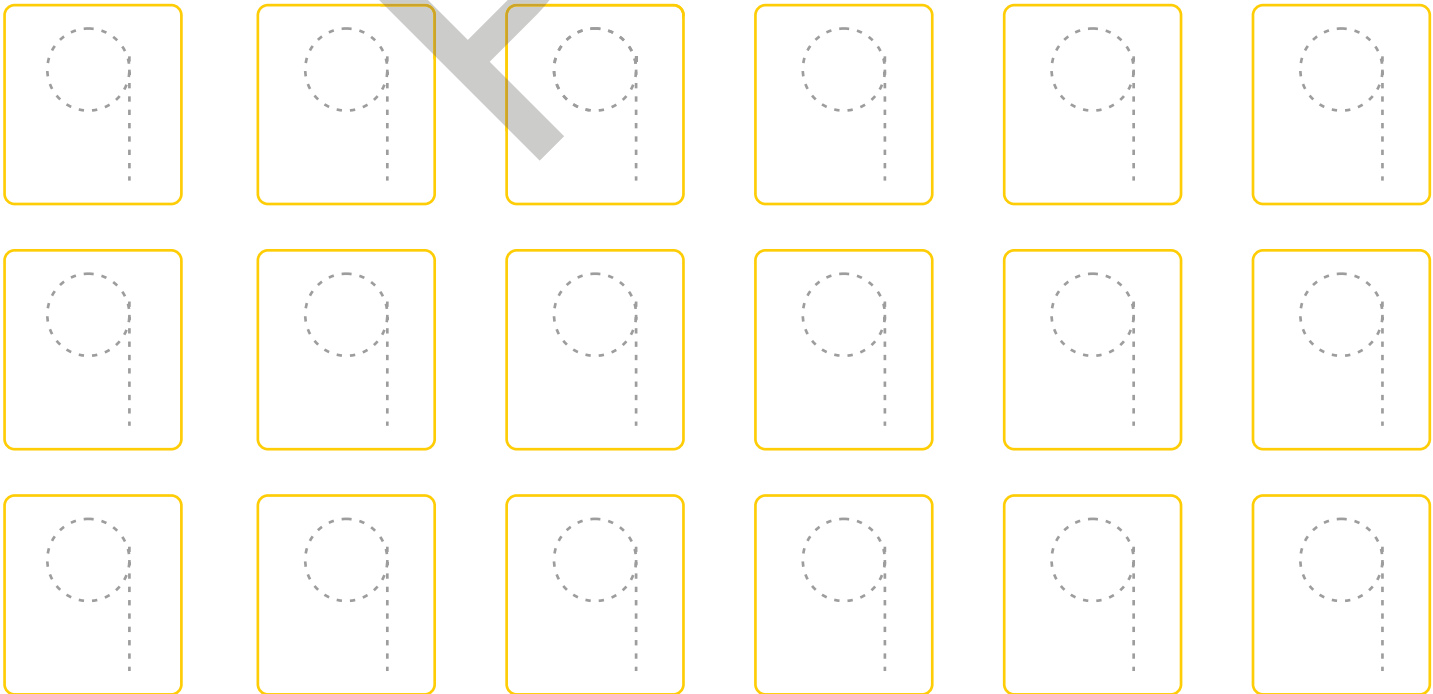
Trace with your finger and then with a crayon.



Colour only 9 bananas.



 Trace the number 9 with a pencil.





Look at the pictures.



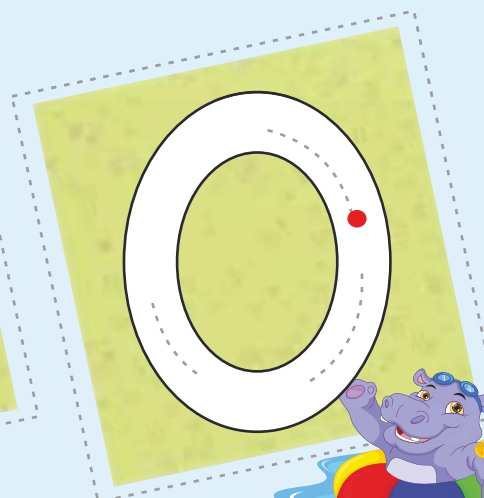
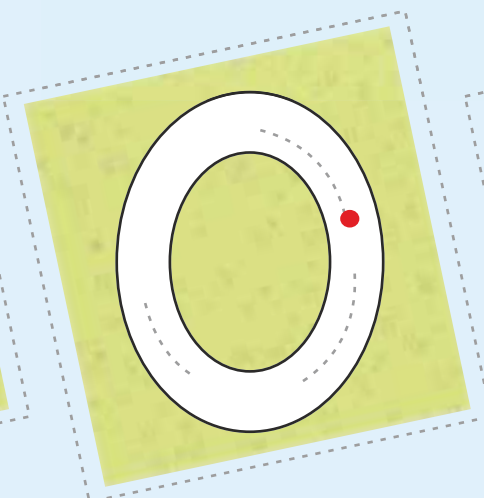
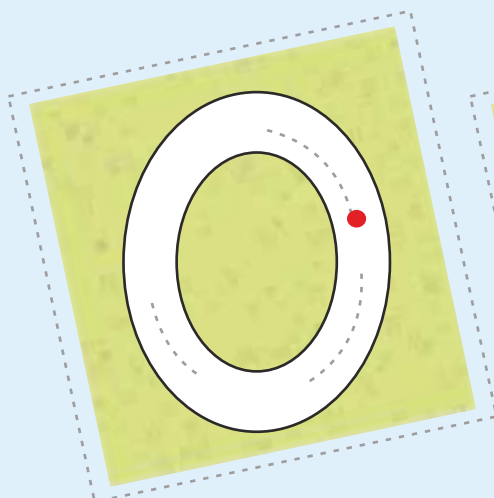
There were 2 birds on the tree.
1 bird flew away.



1 bird was left on the tree.
It also flew away.

0 birds are left on the tree.

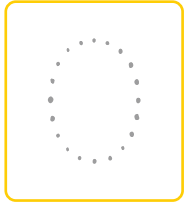
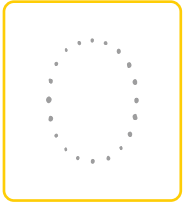
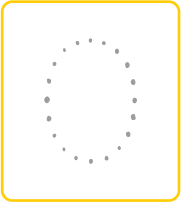
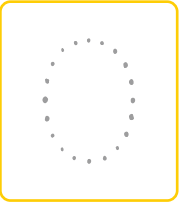
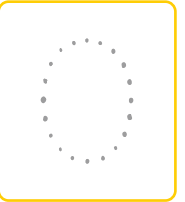

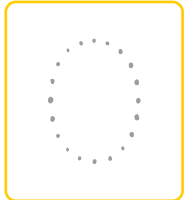
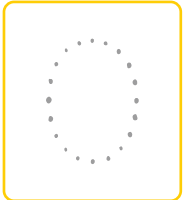
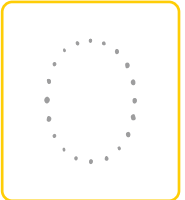



Trace with your finger and then with a crayon.



How many birds are left in the cage? Should we keep birds in a cage?



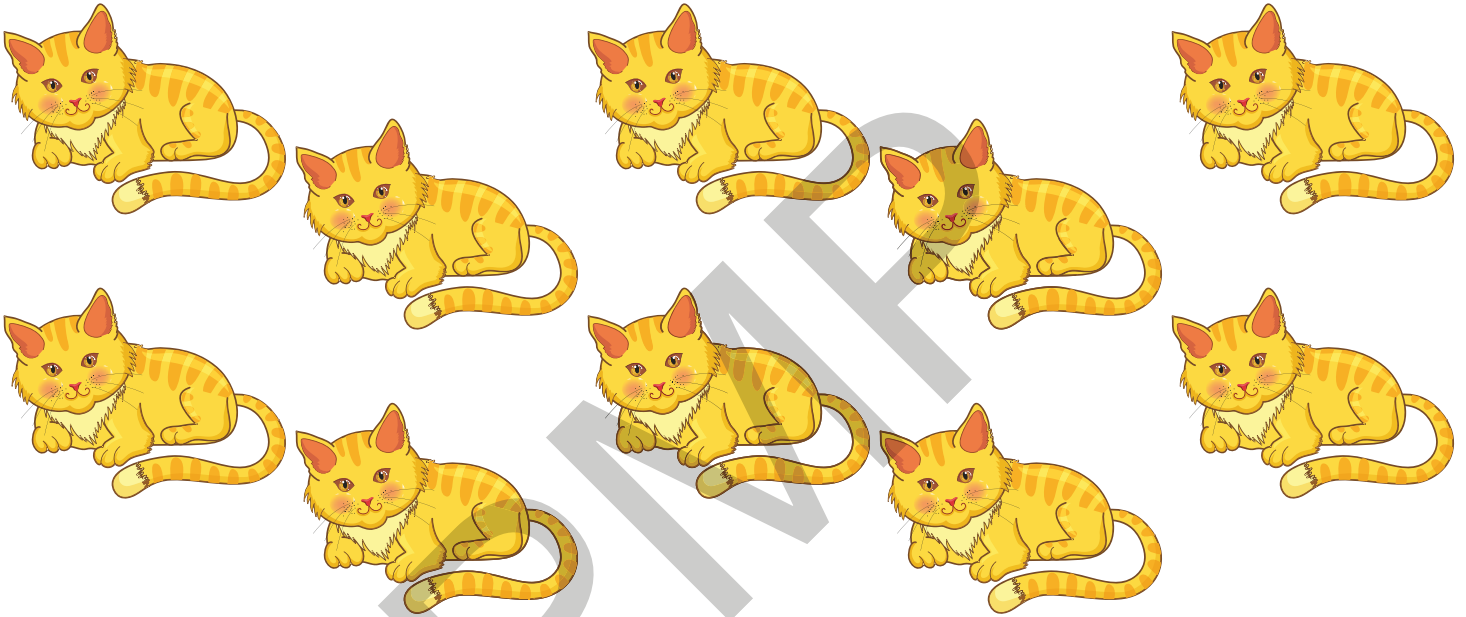
 Trace the number 0 with a pencil.

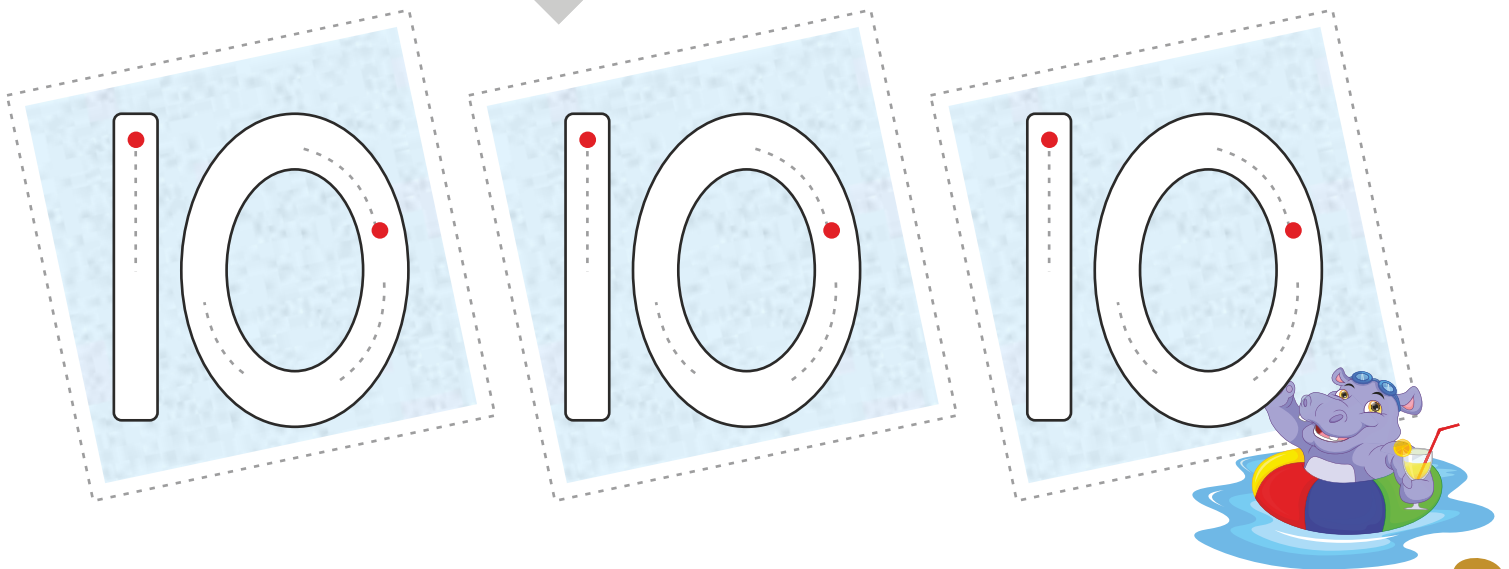


Point and say aloud.

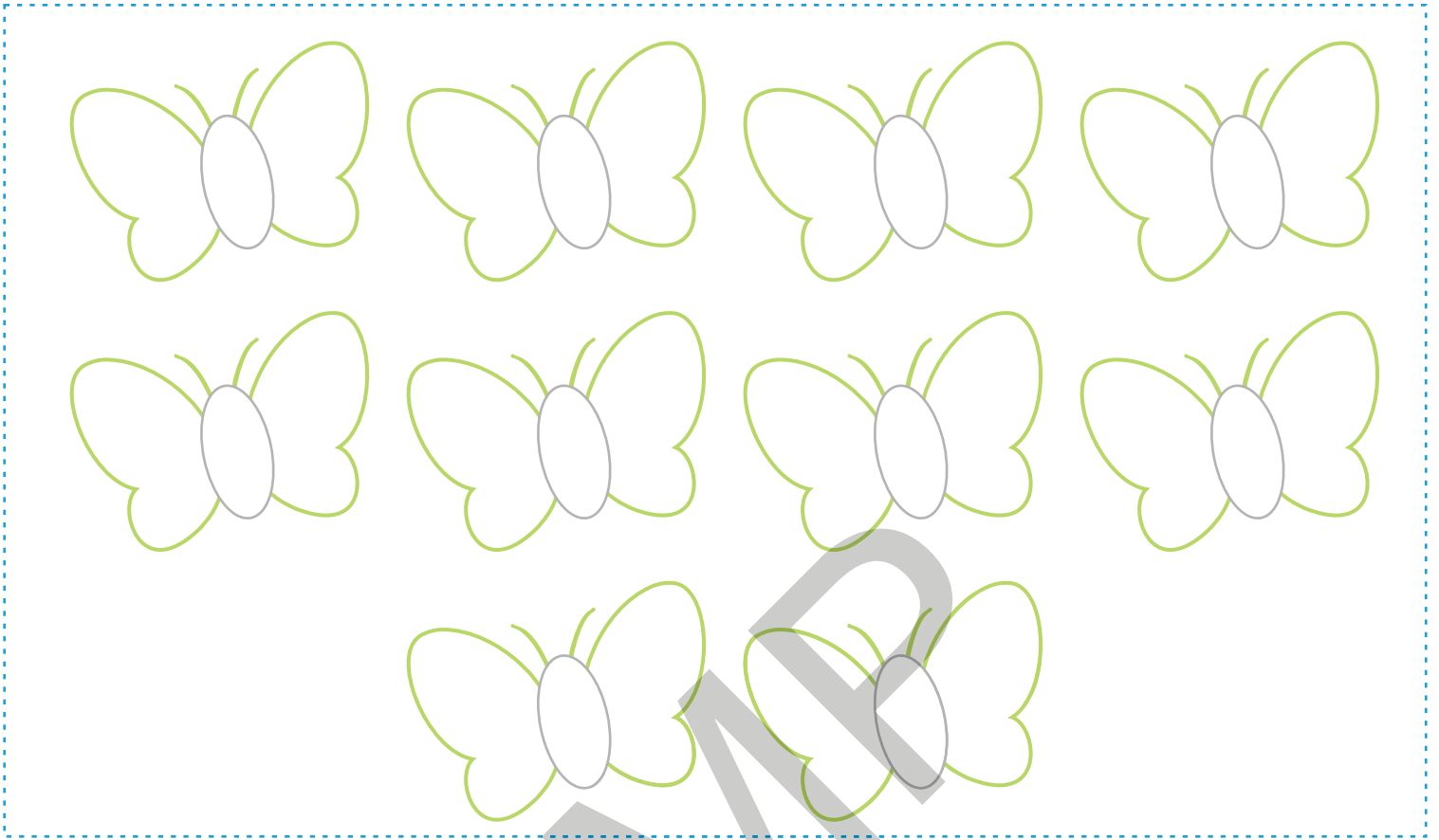
10



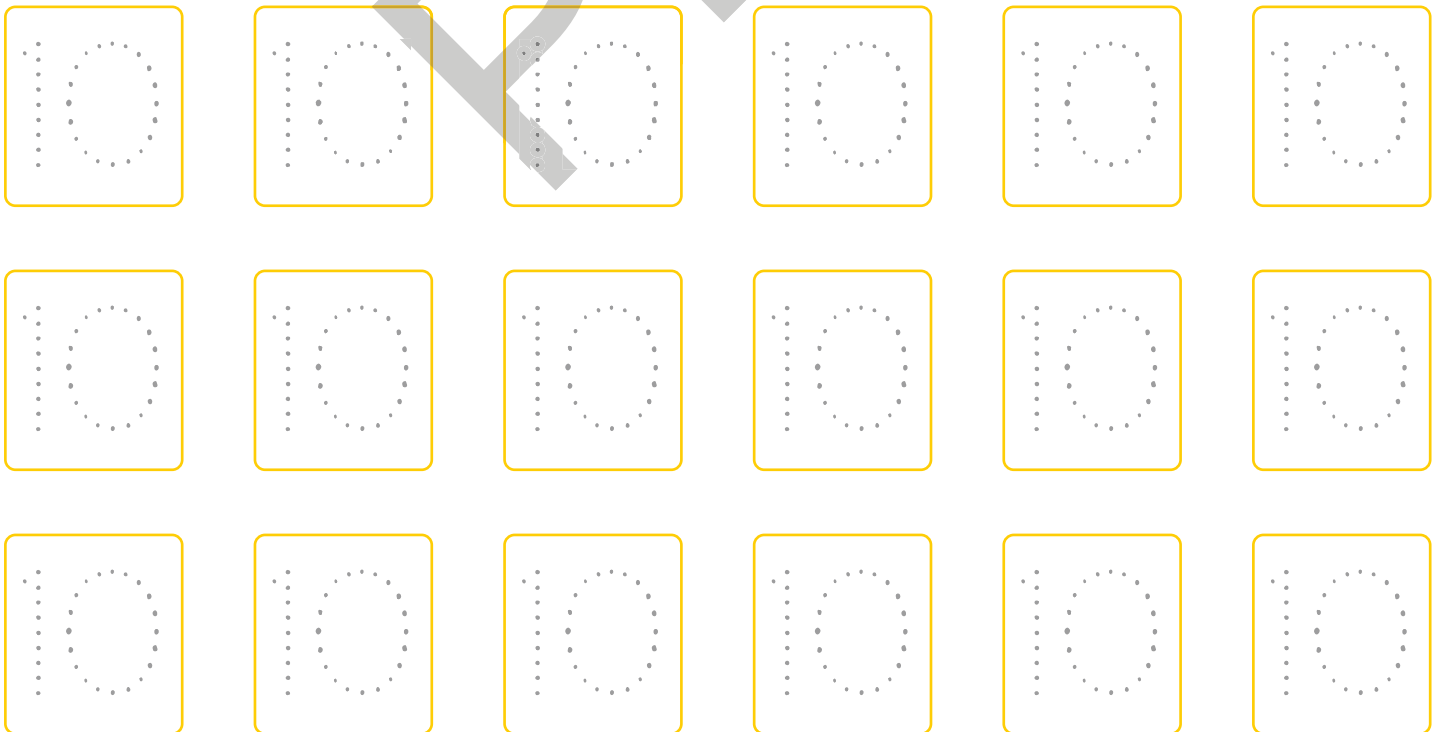
Trace with your finger and then with a crayon.



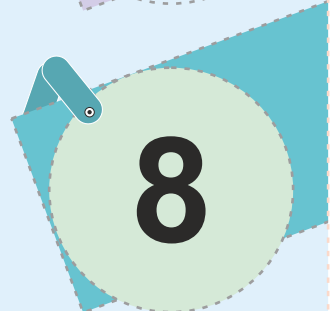
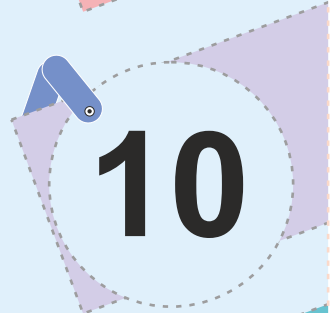
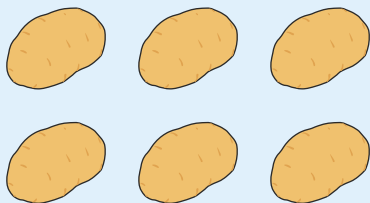
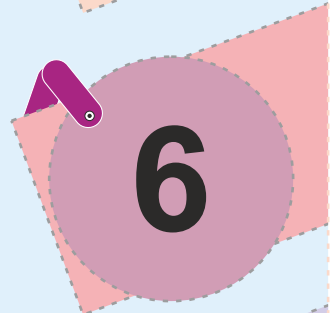
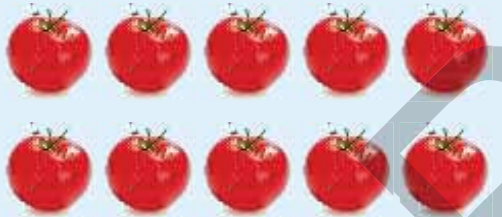
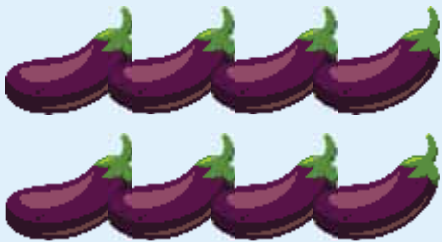
Colour all the 10 butterflies.



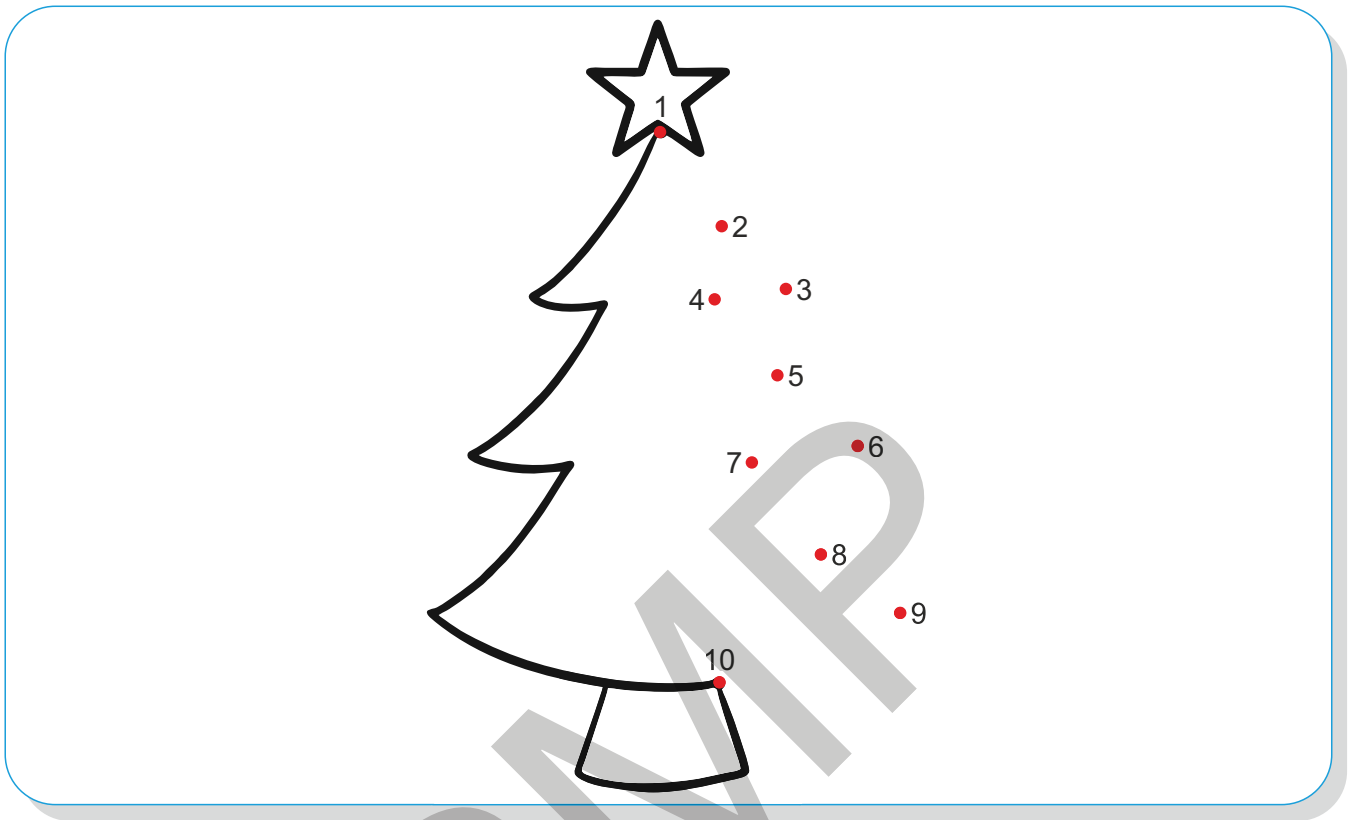
 Trace the number 10 with a pencil.



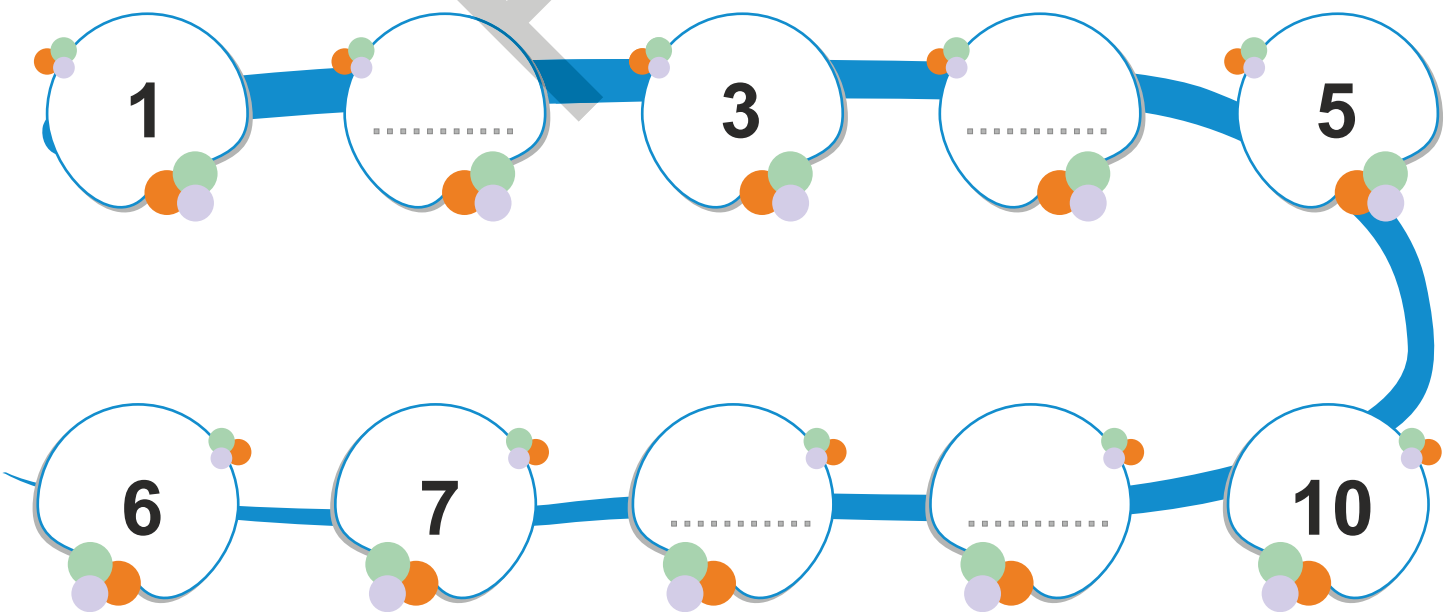
A. Count the picture and match.



**B. Join numbers 1 to 10 to complete the picture of Christmas Tree.
Also, colour it.**



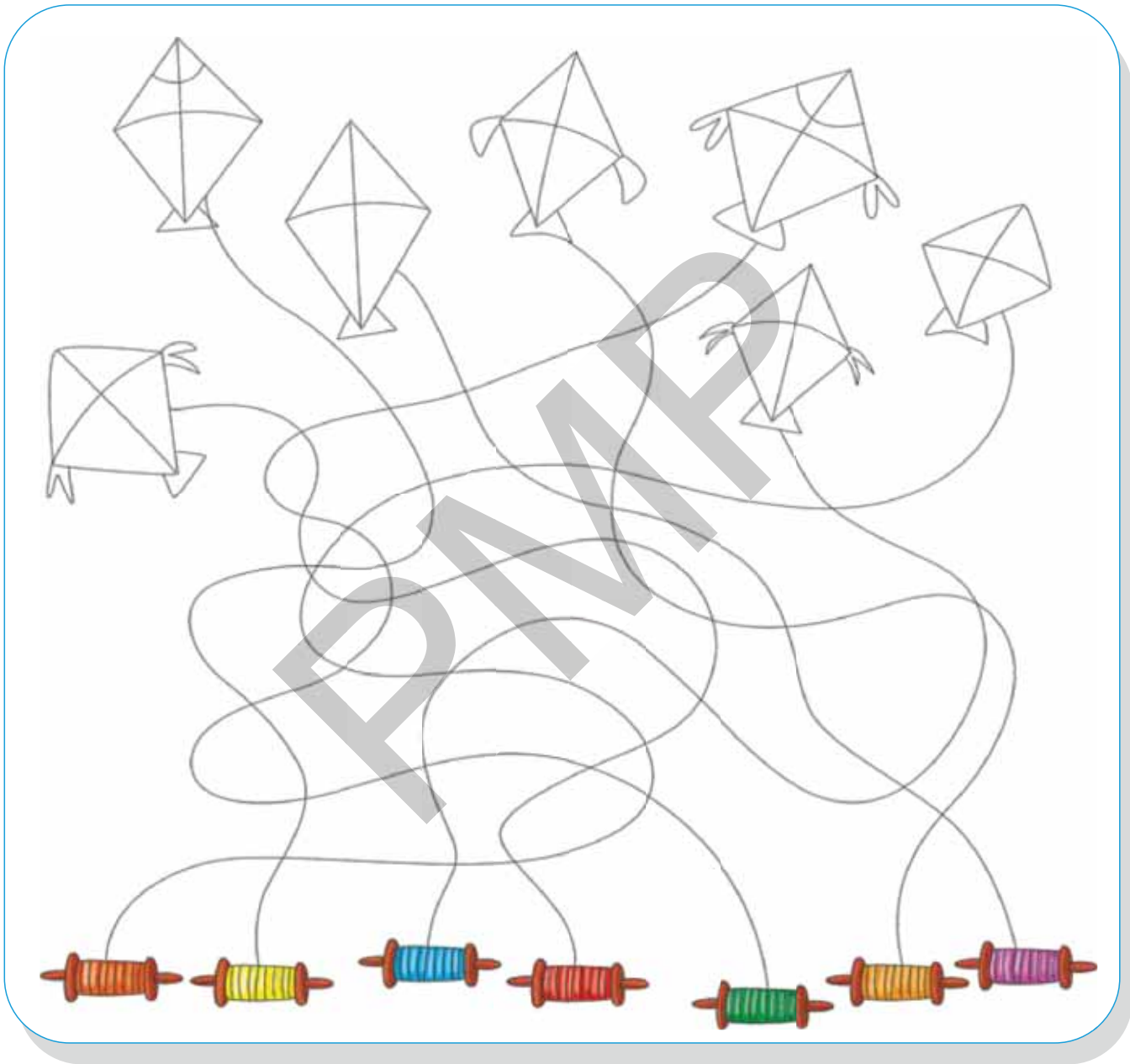
C. Fill in the missing numbers.





MIND BENDERS

Colour the kites with the same colour as the kite spools connected to them.



For Teachers:



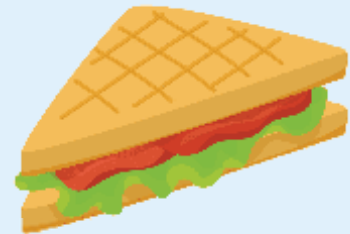
The teacher should show a kite spool to learners and tell them how it is used.



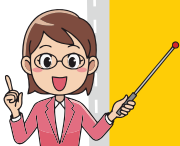


Listen and repeat the rhyme.

I am a chessboard,
I look like a square,
I am a sandwich,
What shape is mine?
Yes you are right,
I look like a triangle!
Guess who I am,
I am a wheel,
Round and round,
Just like a circle!



For Teachers:



The objective of this unit is to help learners understand basic shapes—square, circle and triangle. Tracing practice of these shapes also develops fine motor skills. You may take the learners to the ground and divide them into three groups and then help each group form a shape.

For Parents:

You may show objects of different shapes such as chessboard, sandwich, bangle, etc. and help your child know the shapes—square, triangle and circle.





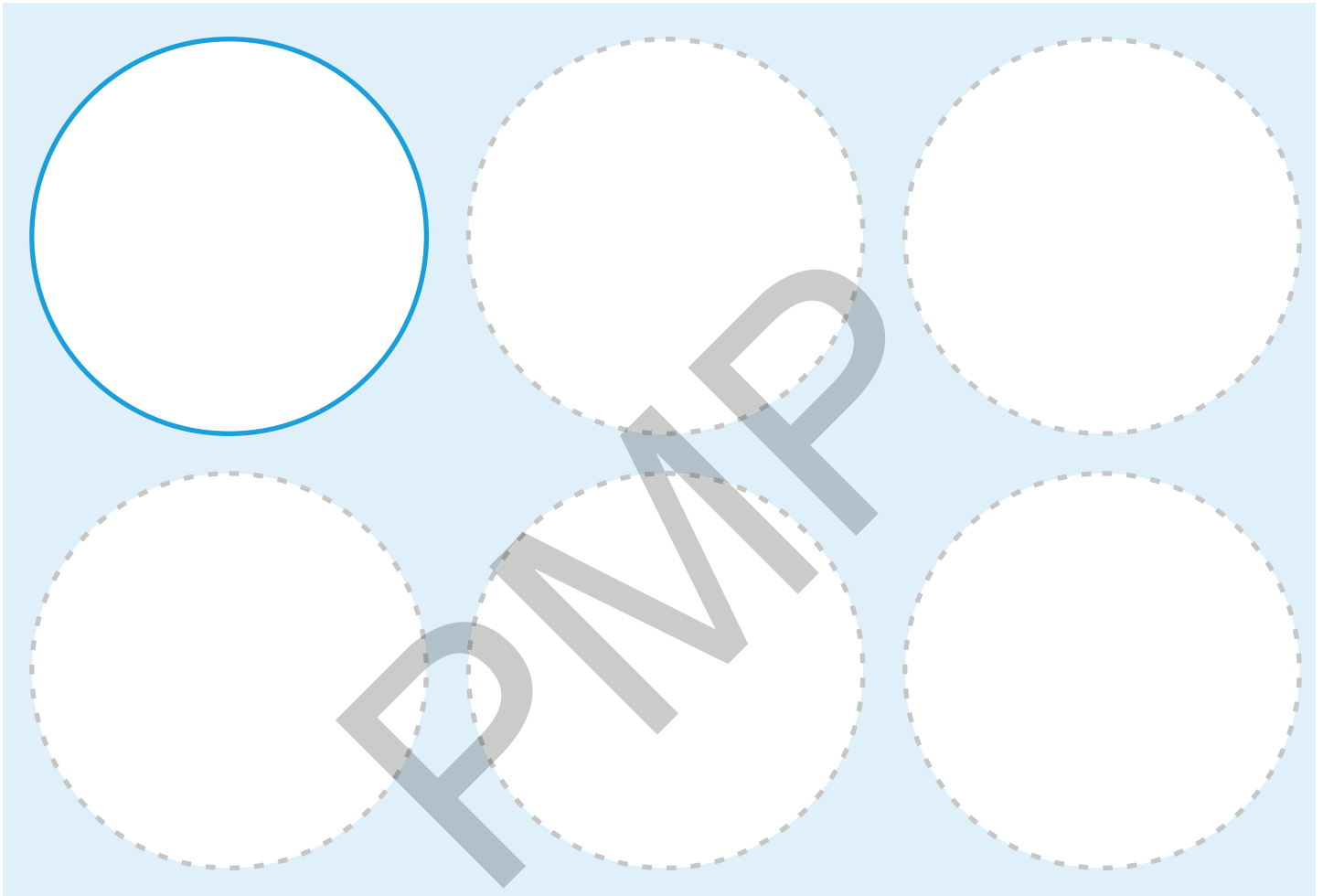
Fill colour in the first square and trace the others.

Circle the shapes that are squares.





Fill colour in the first circle and trace the others.

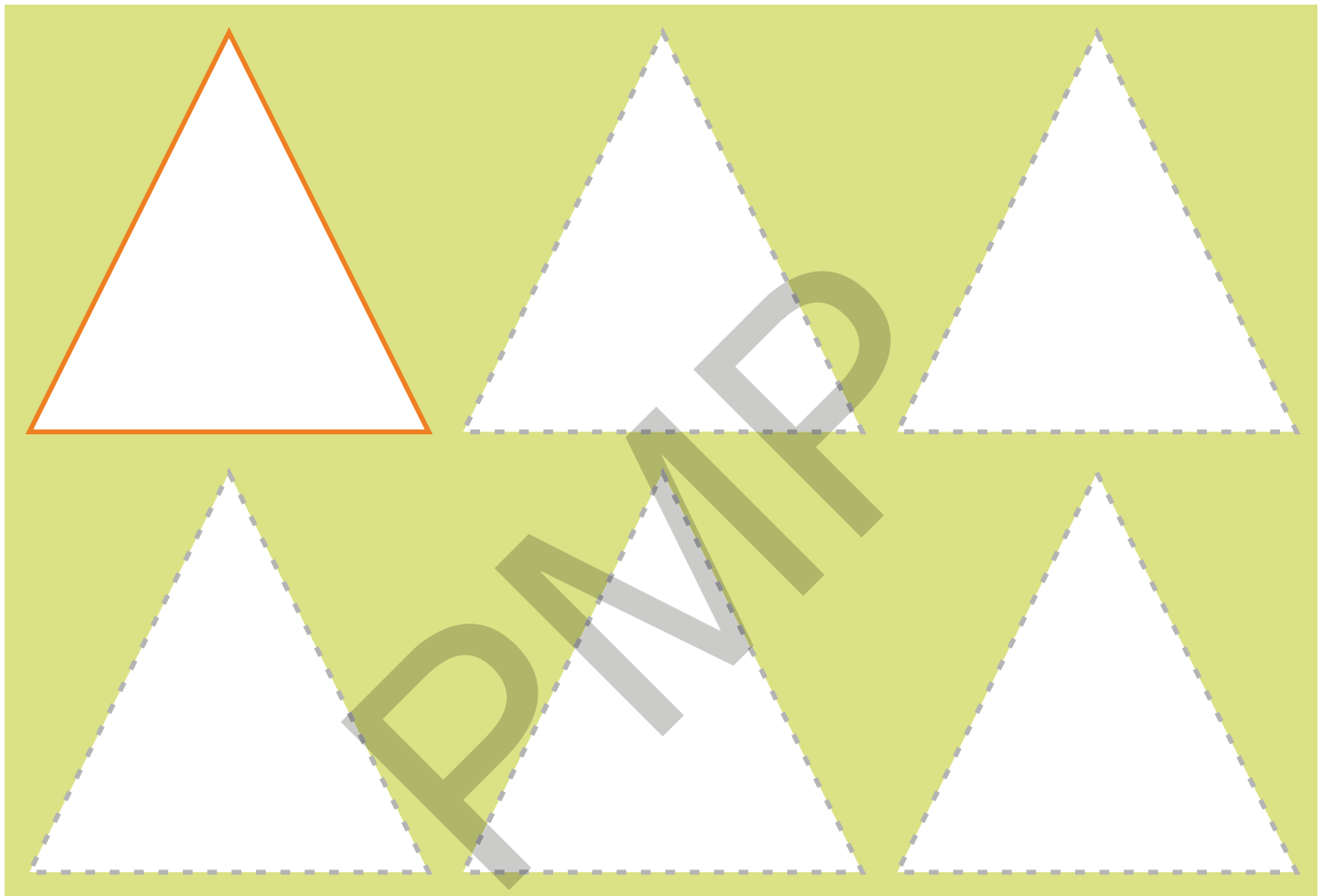


Circle the shapes that are circles.

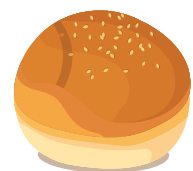
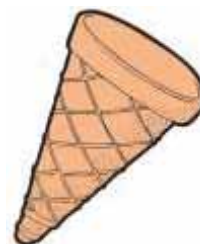




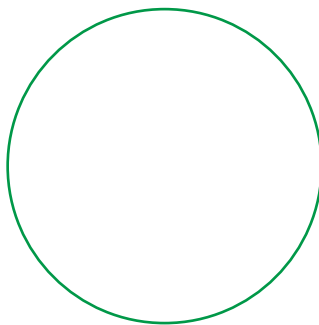
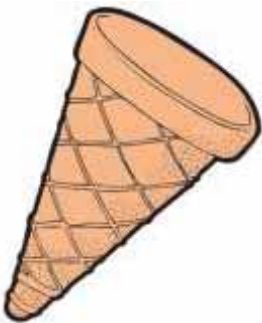
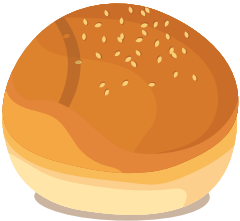
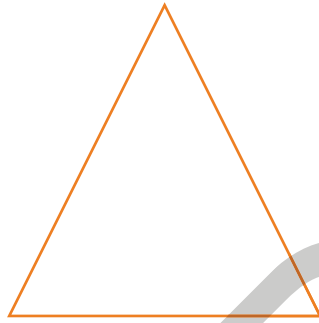
Fill colour in the first triangle and trace the others.



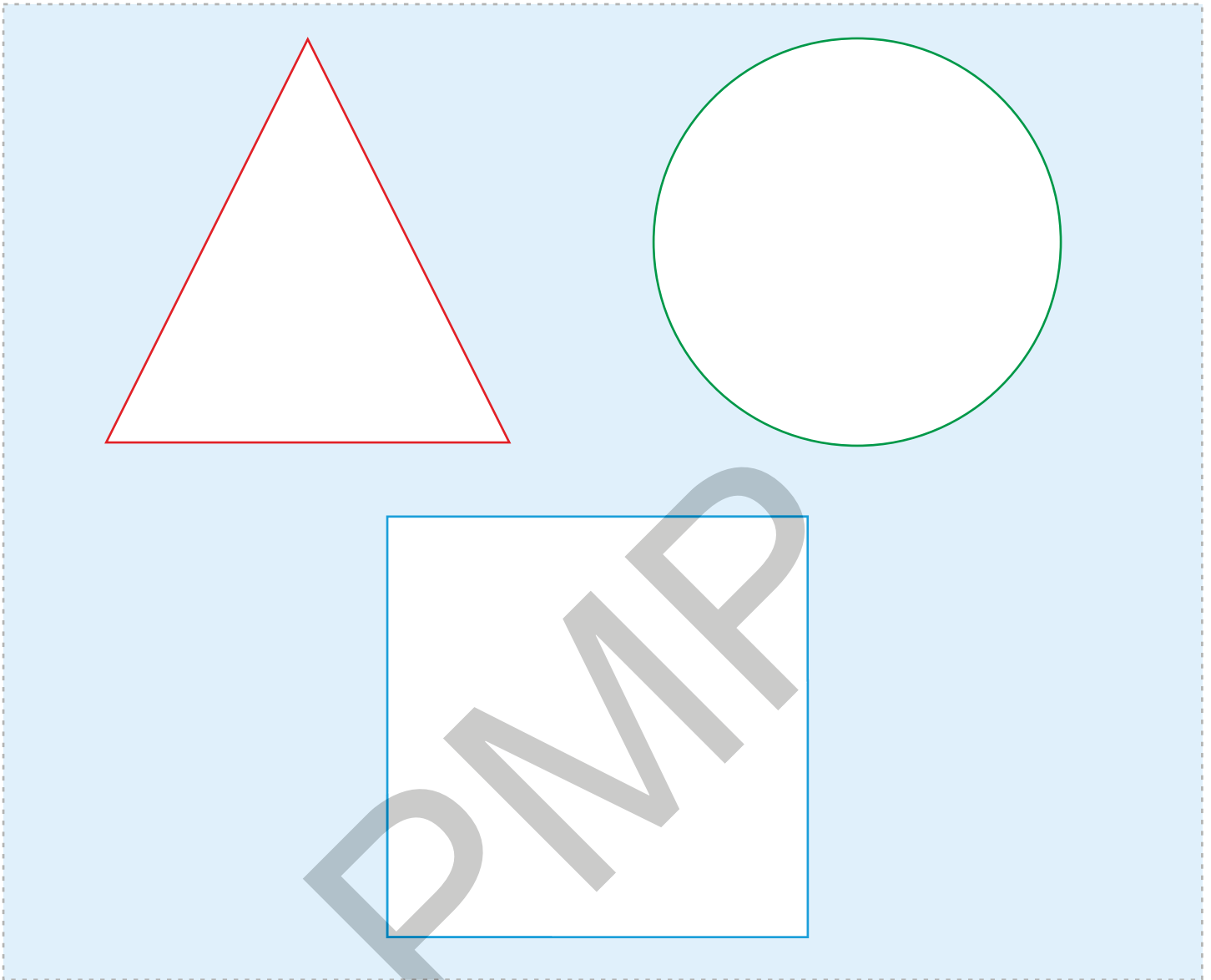
Circle the shapes that are triangles.



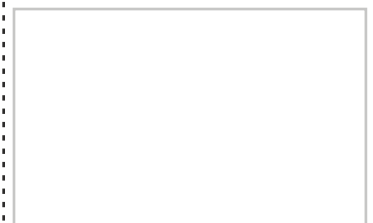
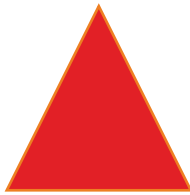
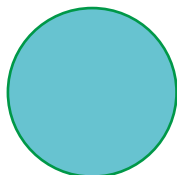
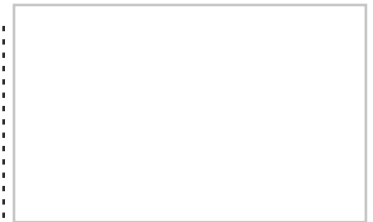
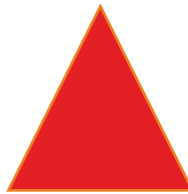
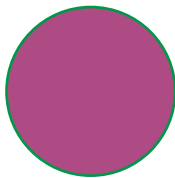
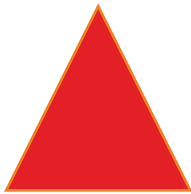
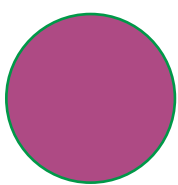
A. Match the objects with correct shapes.



B. Colour the triangle red, square blue and circle green.



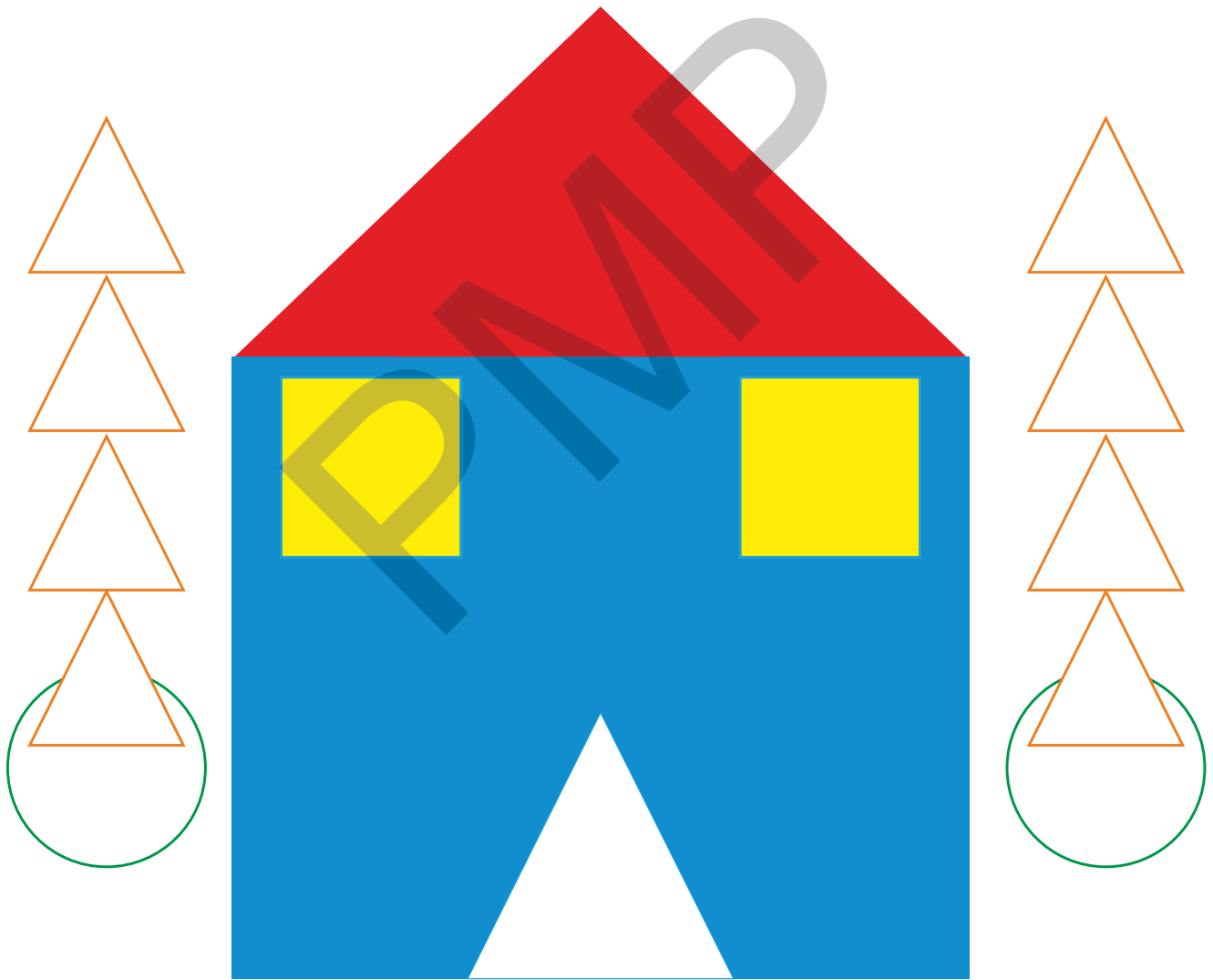
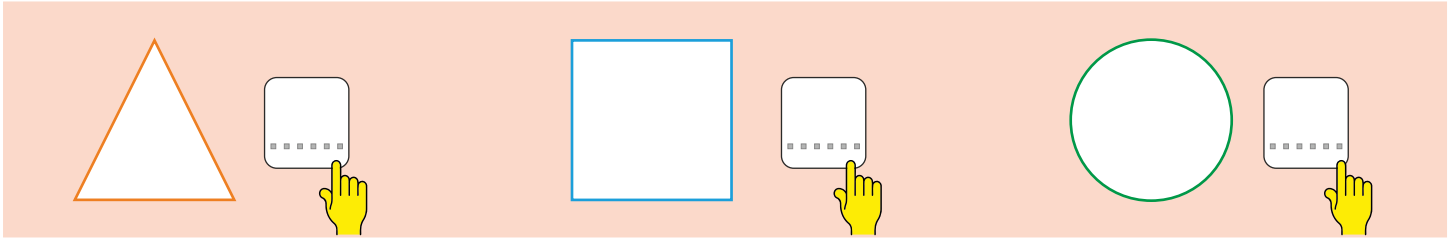
C. What will come next? Draw and colour in the box.





MIND BENDERS

Count how many each of the following are there in the picture.





Listen to the story.

There were 10 dwarfs. They lived happily in an old house. It was the birthday of Molu Dwarf. All the other dwarfs wished him 'Happy Birthday'. They decided to celebrate the birthday in the evening.



3 dwarfs went to the market and bought a big cake. They also bought 5 candles, 8 buns and 2 packets of toffees.



Golu Dwarf decorated the room with 6 blue ribbons and 4 red ribbons. Bolu Dwarf decorated the room with 7 balloons. Dolu Dwarf hanged 9 stars.

Molu Dwarf invited his dwarf friend. In the evening, all the 11 dwarfs enjoyed the birthday party.



For Teachers:



The objective of this unit is to help learners understand the concept of numbers 11 to 20. You may explain the concept using beads. Thereafter, you may show beads in different numbers and ask them to count them. You may also take the learners to the ground and form groups in different numbers one by one, and ask other learners to count the number of learners in the group each time.

$2 +$

$6 3$



65



$\times 1$

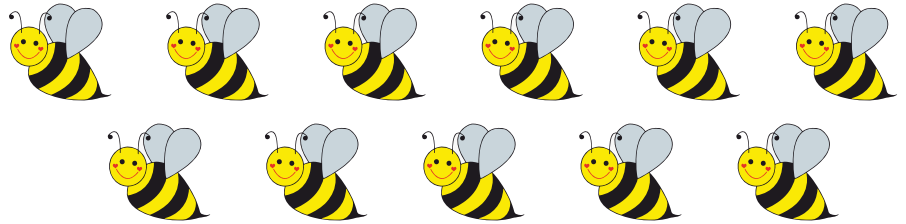




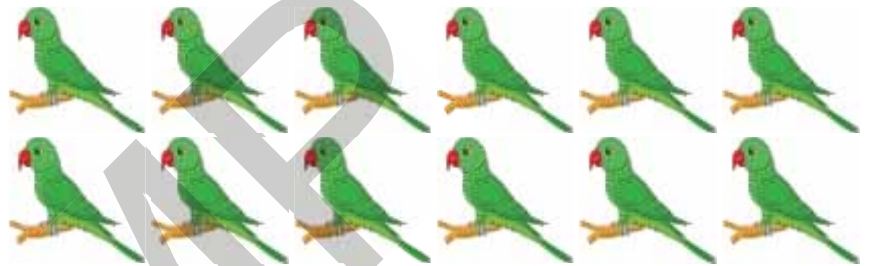
Point and say aloud.



11



12



13



14



15





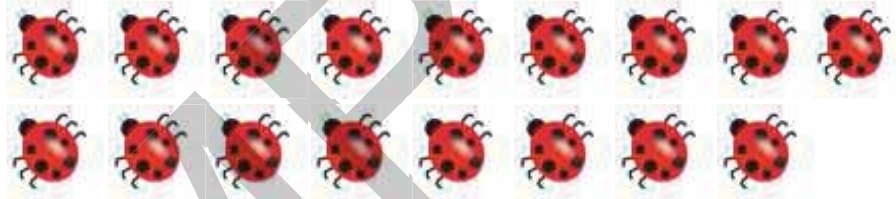
Point and say aloud.



16



17



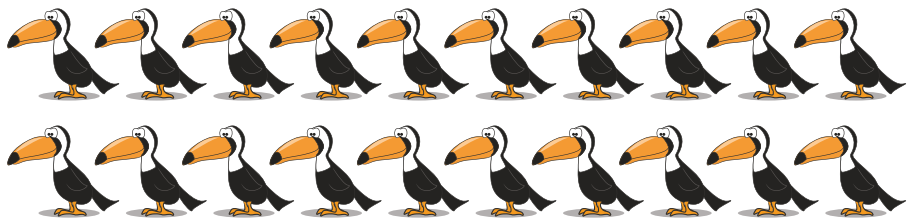
18



19



20



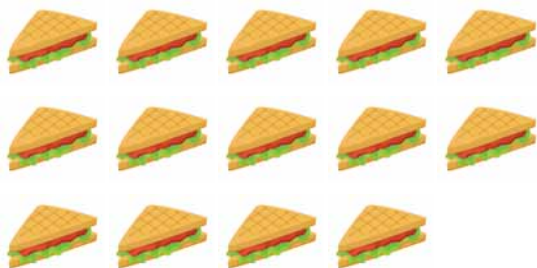
A. Count and colour the box containing correct number.



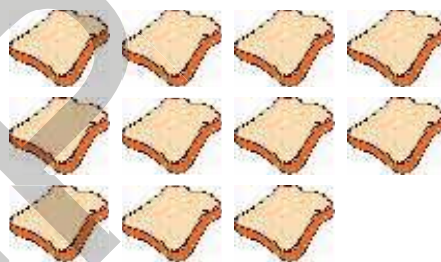
- 12
- 16
- 18



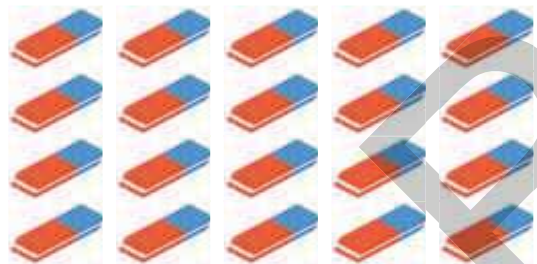
- 14
- 13
- 15



- 14
- 11
- 17



- 11
- 12
- 13



- 18
- 19
- 20



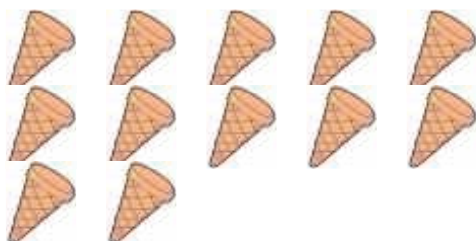
- 15
- 17
- 19



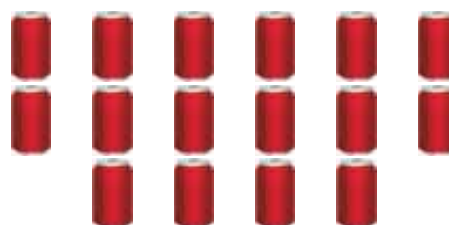
- 17
- 20
- 14



- 17
- 13
- 18



- 11
- 12
- 13



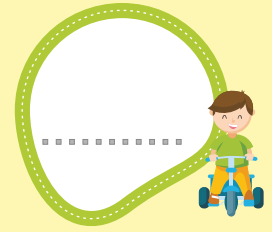
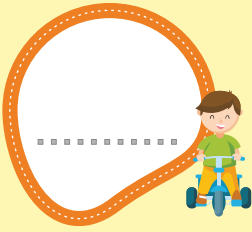
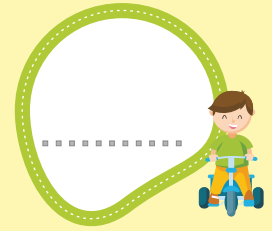
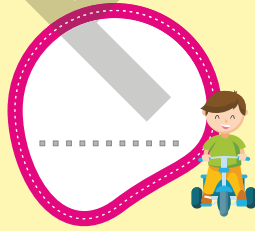
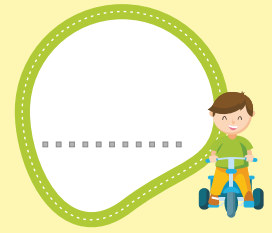
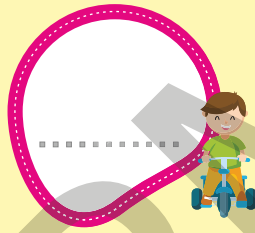
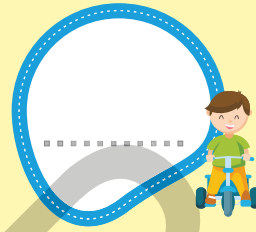
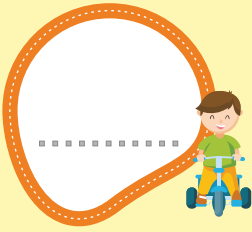
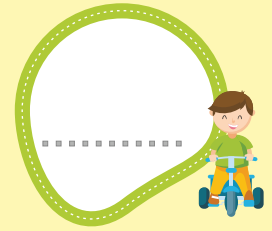
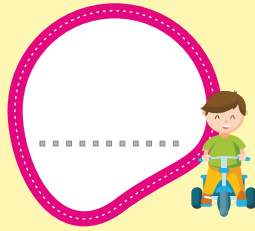
- 18
- 16
- 20



B. Trace the numbers 1 to 20.

1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16
17 18 19 20

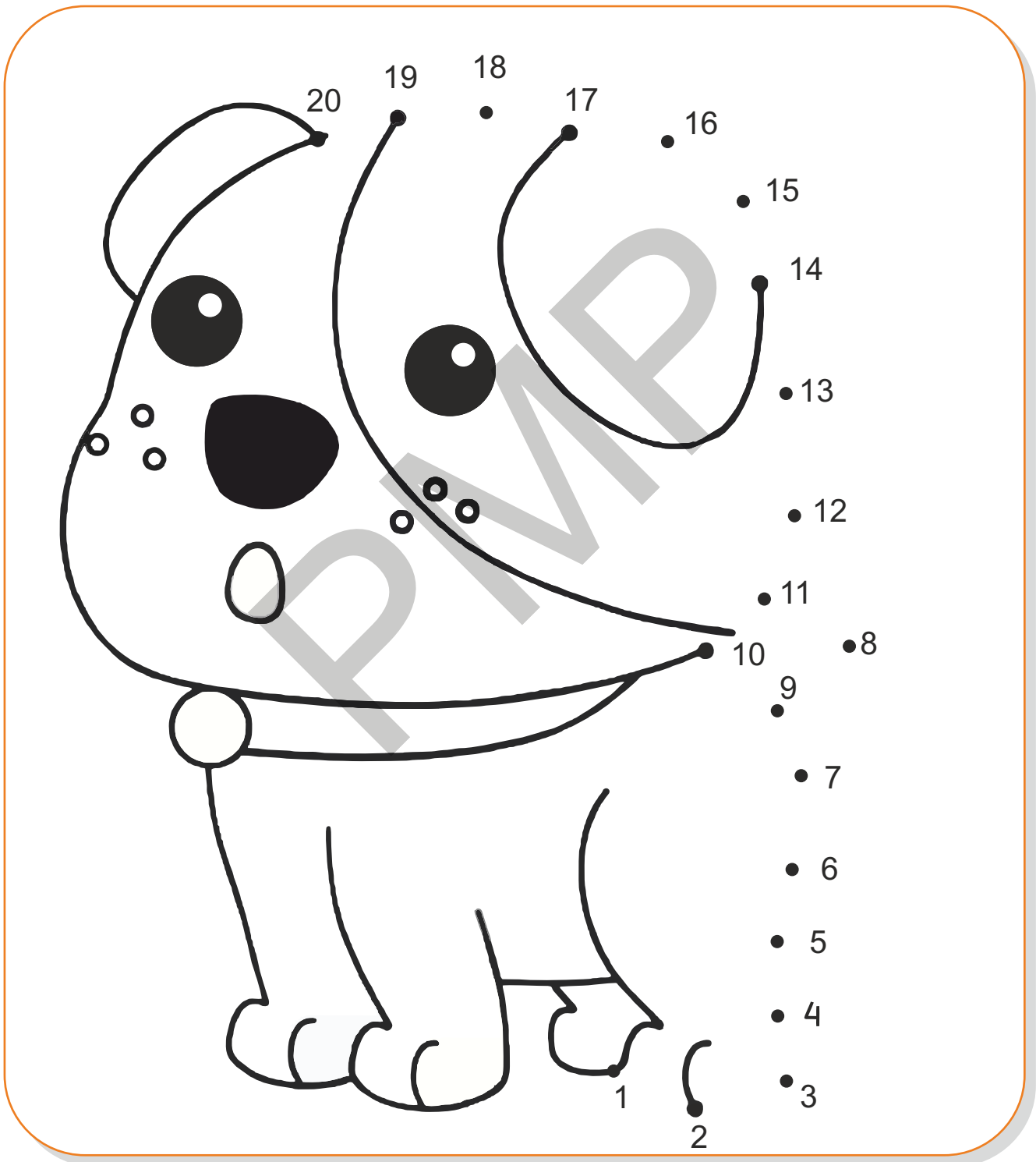
C. Fill in the missing numbers.





MIND BENDERS

Join the numbers from 1 to 20 to get a picture. Name the animal. Also, colour it.



TEACHER'S OBSERVATION REPORT

Continuous observation of children's progress by the teacher is an important aspect of **NIPUN BHARAT**. We can assess a child's development in different skills by closely observing them throughout the academic year. Here is a chart to be filled in by the teacher. The chart will be helpful for the parents also to help and guide their children accordingly.

Sl.No.	Area of Observation	Requires attention/assistance from facilitator	Able to complete tasks with little assistance	Able to complete tasks without assistance	Hard spots	Remarks
1.	Physical and Motor Skill					
2.	Cognitive Skill					
3.	Social-emotional Skill					
4.	Cultural/Artistic Skill					
5.	Communication and Early Language Skill					
6.	Literacy Skill					
7.	Numeracy Skill					

