



Math

Primer

Foundation of Numbers

Hands-on Learning



Little Steps into the World of Math!



Observing this series in the form of the National Curriculum Framework (NCF) 2023 for the fundamental stages

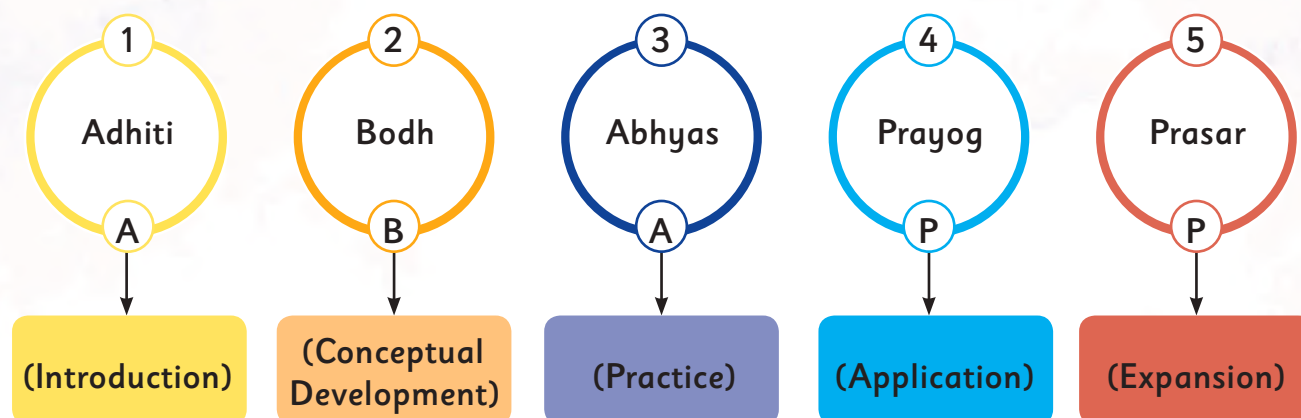
We have prepared this new series based on the directions and guidelines of the National Curriculum Framework (NCF) 2023. It focuses on play-based, activity-based, and experience-based learning while keeping teaching at the center and preparing the material accordingly.

Five-step teaching process – For early years:

Keeping in mind the five-step teaching process, we have presented each lesson and activity in the following order:

- Introduction (Adhiti) – Introducing children to the topic with stories, songs, and poems.
- Conceptual Development (Bodh) – Understanding concepts through simple language and activities.
- Practice (Abhyas) – Engaging children in activities based on repetition, recognition, and identification.
- Application (Prayog) – Giving children opportunities to express what they have learned through their environment.
- Expansion (Prasar) – Group discussions, storytelling, or showing pictures to enhance children's expressive ability.

Panchaadi: (A Five Step Learning Process)



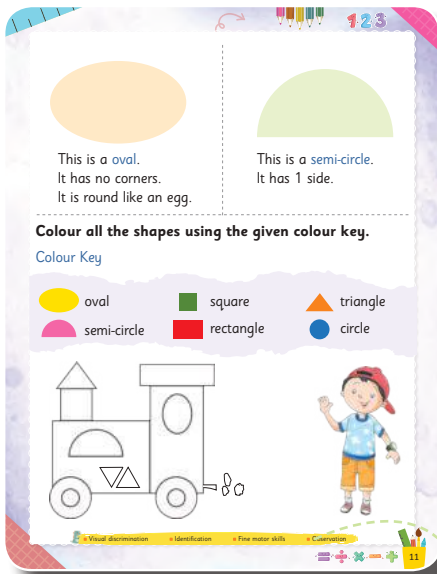
Based on five domains of development

According to NCF 2023, this series pays special attention to children's five main development areas:

- **Physical development** – Developing motor skills through running, jumping, climbing, throwing, catching, and playing activities.
- **Mental development** – Developing emotional stability, cooperation, and social skills.
- **Cognitive development** – Enhancing the ability to think, recognize, and ask questions.
- **Moral development** – Showing moral values through stories with ethical messages.
- **Aesthetic development** – Understanding nature, compassion, beauty, and art.

Our aim is that children not only learn Hindi language but also develop morally, cognitively, and emotionally, building confidence to maintain a bright future.

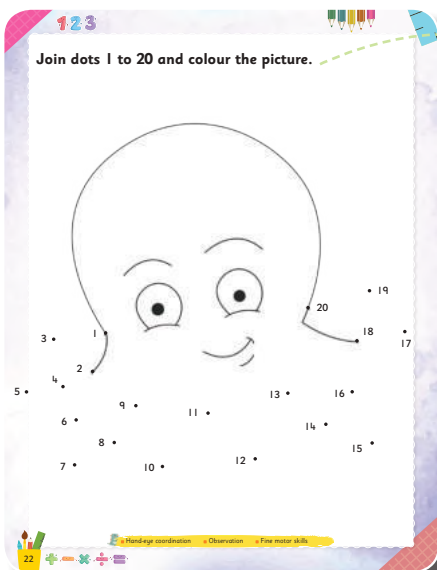
Key Features



Interactive and engaging practice sheets designed to reinforce learning through varied exercises.



Develops specific skills through targeted and engaging learning exercises.



Fun activity where children connect numbered dots to form shapes or pictures, enhancing number recognition and fine motor skills.

An engaging activity where children navigate through numbers in sequence, promoting counting skills and problem-solving abilities.



Play-way Method: Uses games, puzzles, and fun activities to teach math concepts, fostering a joyful learning environment and making math enjoyable and easy to grasp for young learners.



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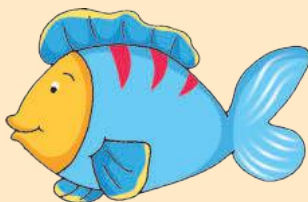
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Big, Bigger, Biggest

Look and learn.



Big

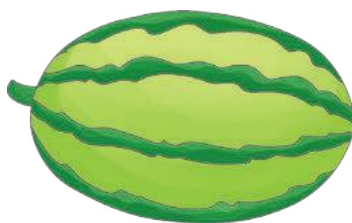


Bigger



Biggest

Circle the biggest object in each group.



Identification

Critical thinking

Fine motor skills

Observation



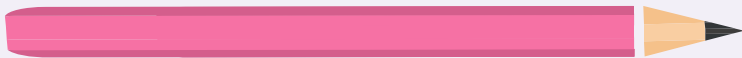


Long, Longer, Longest

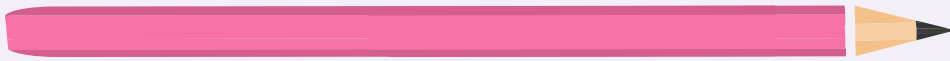
Look and learn.



Long

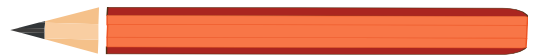


Longer



Longest

Write number 1, 2 and 3 to show which one is long, longer, and longest in each group.









Identification

Critical thinking

Fine motor skills

Observation



Tall, Taller, Tallest

Look and learn.



tall

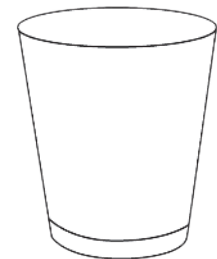
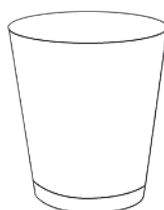
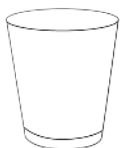
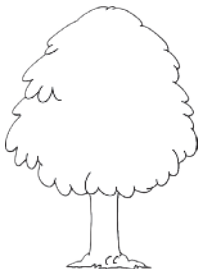
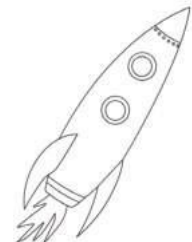
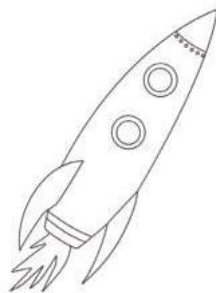


taller



tallest

Colour the tallest object in each group.



■ Identification

■ Visual discrimination

■ Fine motor skills

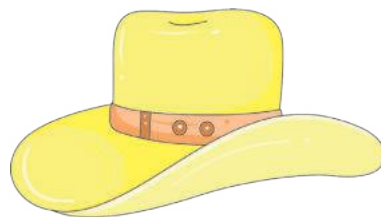
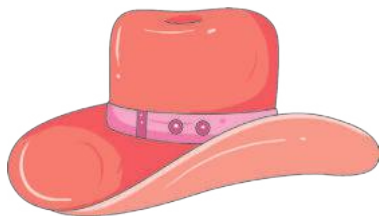
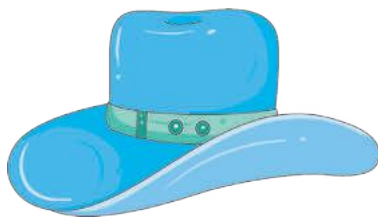
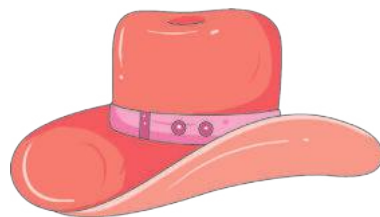
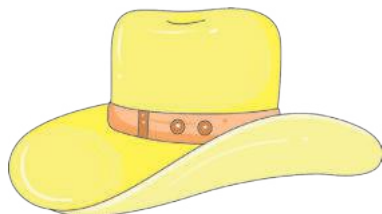
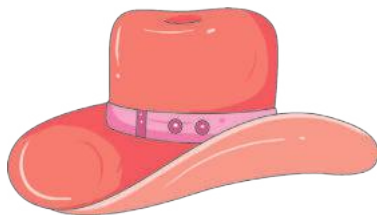
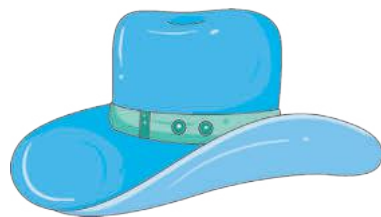
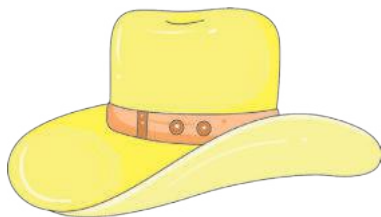
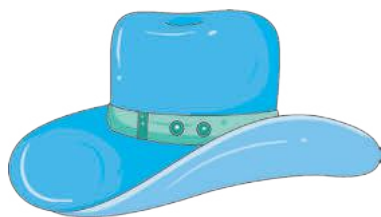
■ Comparison





Sorting

Circle the red hats with a red crayon, yellow hats with a yellow crayon and blue hats with a blue crayon.



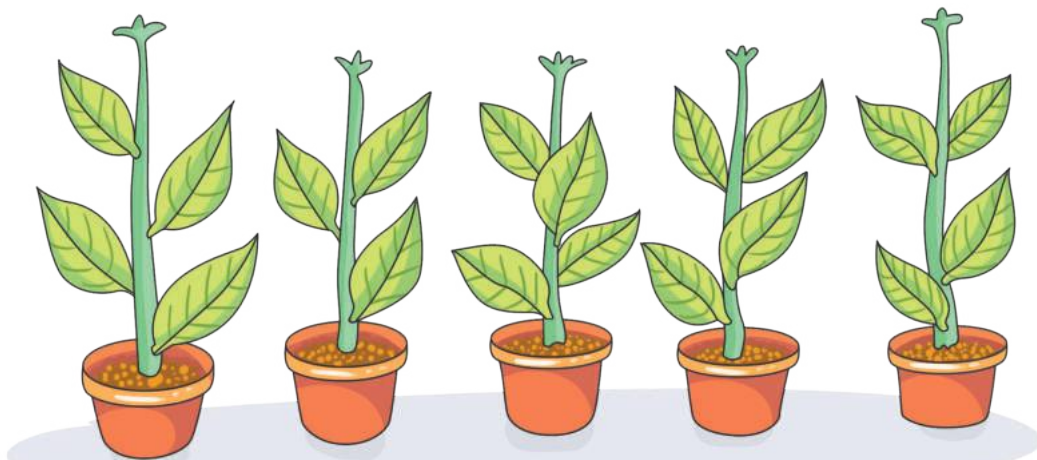


One-to-One Correspondence

Draw a balloon in each child's hand.



Draw a flower on each stalk.



Visual discrimination

Identification

Fine motor skills

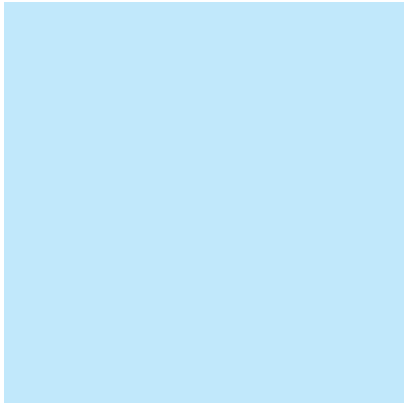
Observation





Shapes

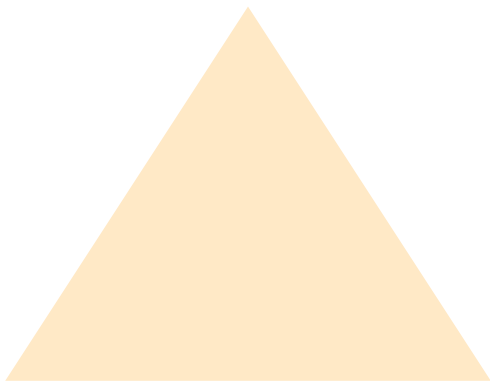
Look and learn.



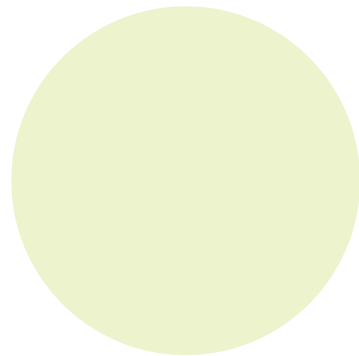
This is a **square**.
It has four equal sides
and four corners.



This is a **rectangle**.
It has four sides—two long
sides and two short sides.
It has four corners.



This is a **triangle**.
It has three sides
and three corners.



This is a **circle**.
It has no corners.



Visual discrimination

Identification

Fine motor skills

Observation





This is a **oval**.
It has no corners.
It is round like an egg.



This is a **semi-circle**.
It has 1 side and 2
corners.

Colour all the shapes using the given colour key.

Colour Key



oval



square



triangle



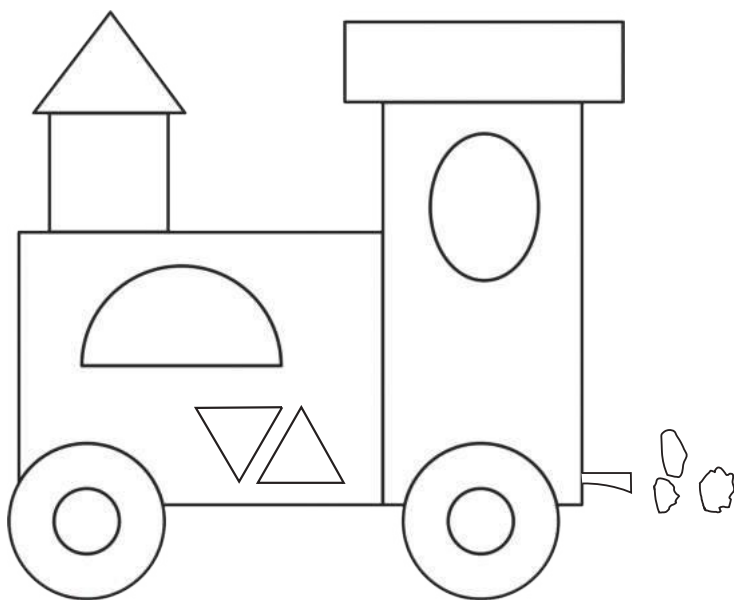
semi-circle



rectangle



circle



Visual discrimination

Identification

Fine motor skills

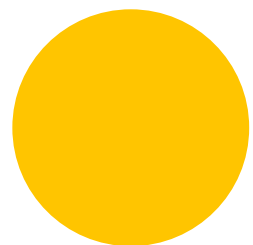
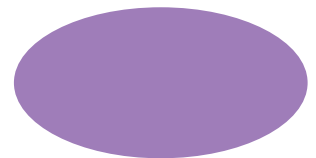
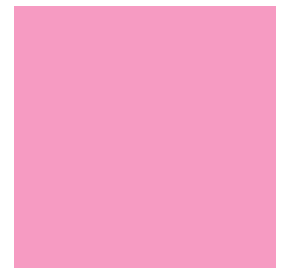
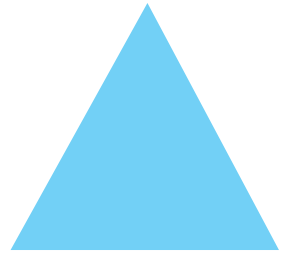
Observation





Activity

Match the object with its corresponding shape.



Visual discrimination

Identification

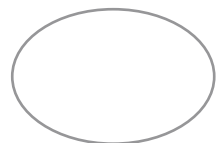
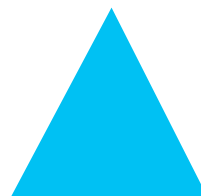
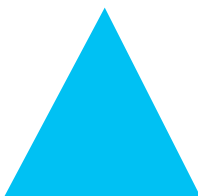
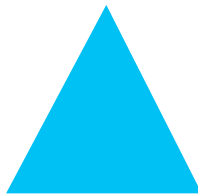
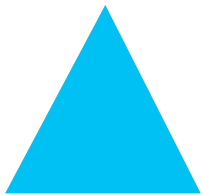
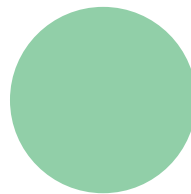
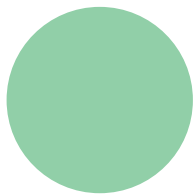
Fine motor skills

Observation



Patterns

Look at the colour pattern. Colour the shape to continue the patterns.



Visual discrimination

Identification

Fine motor skills

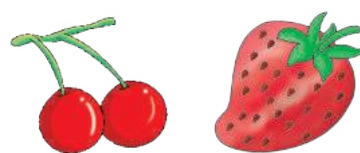
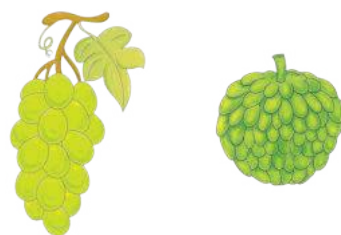
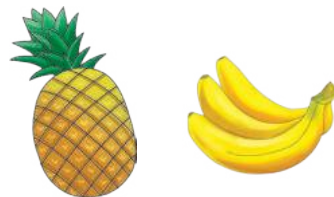
Observation





Activity

Look at the pattern and circle what comes next?



Identification

Critical thinking

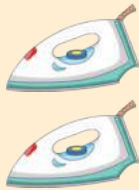
Fine motor skills

Observation



Zero (0)

Look and learn. 'Zero' means 'nothing'.



0

zero

1

one

2

two

3

three

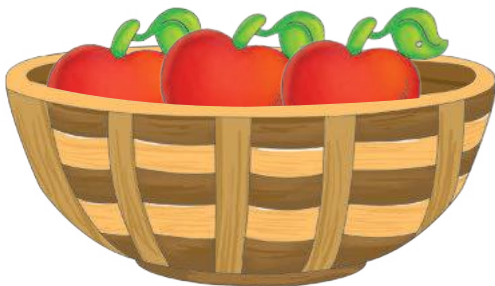
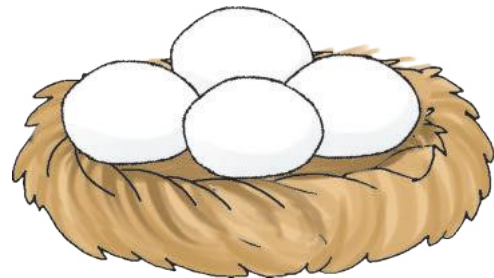
4

four

5

five

Circle the pictures that show zero (0).



Identification

Visual discrimination

Fine motor skills

Observation





Numbers 1 to 10

Look and learn.

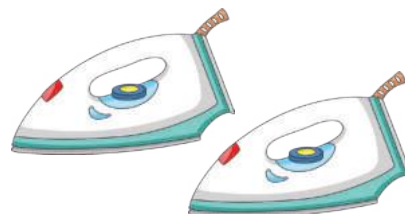
1

one



2

two



3

three



4

four



5

five



6

six



7

seven



8

eight



9

nine



10

ten



Activity

Count and match the picture with correct number.



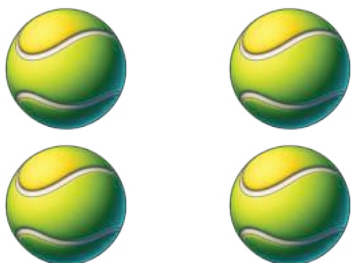
1



2



3



4



5



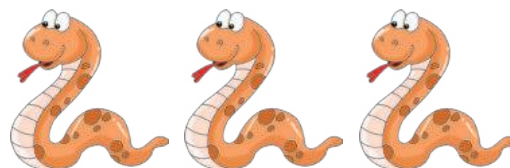
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7



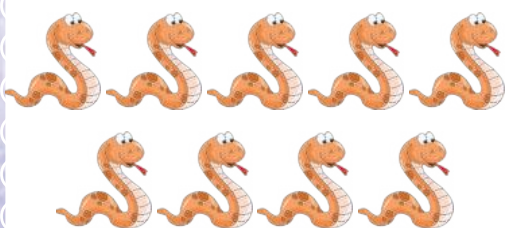
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9



10



Identification

Visual discrimination

Fine motor skills

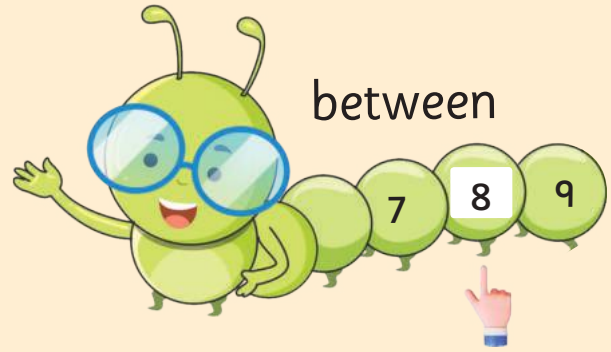
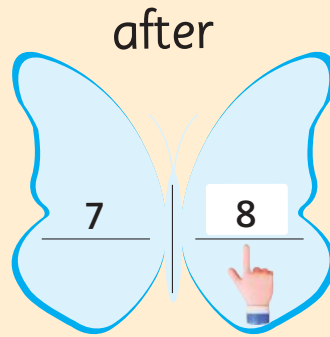
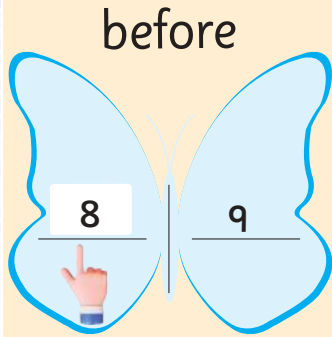
Observation





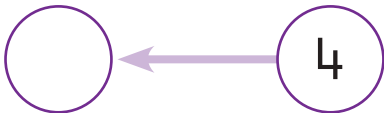
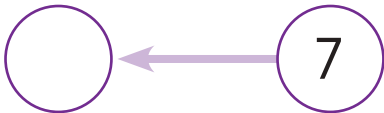
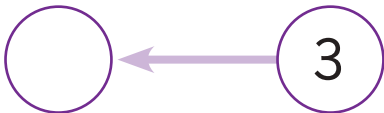
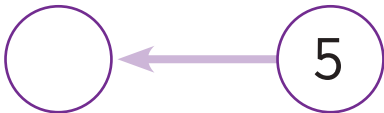
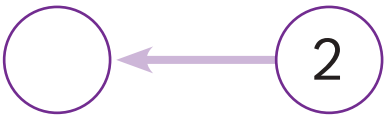
Before, After and Between

Look and learn.

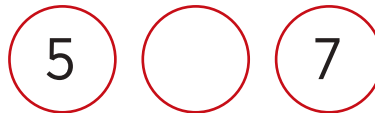
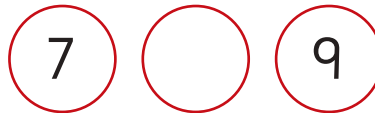
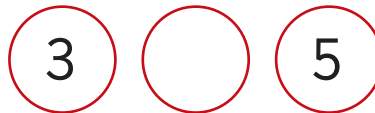
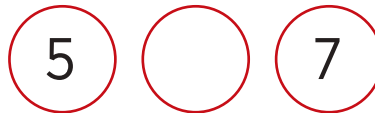
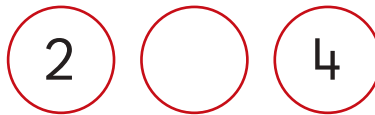


What comes before, after and between.

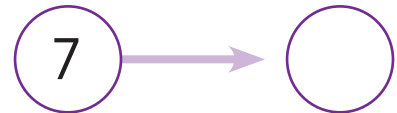
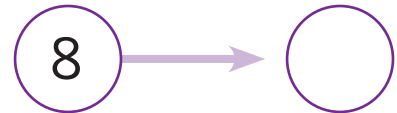
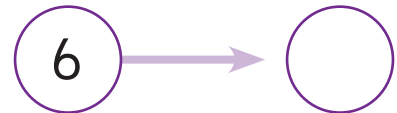
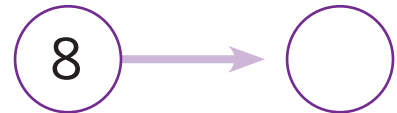
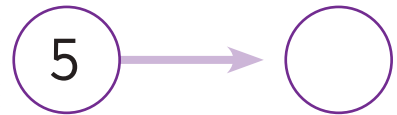
before



between

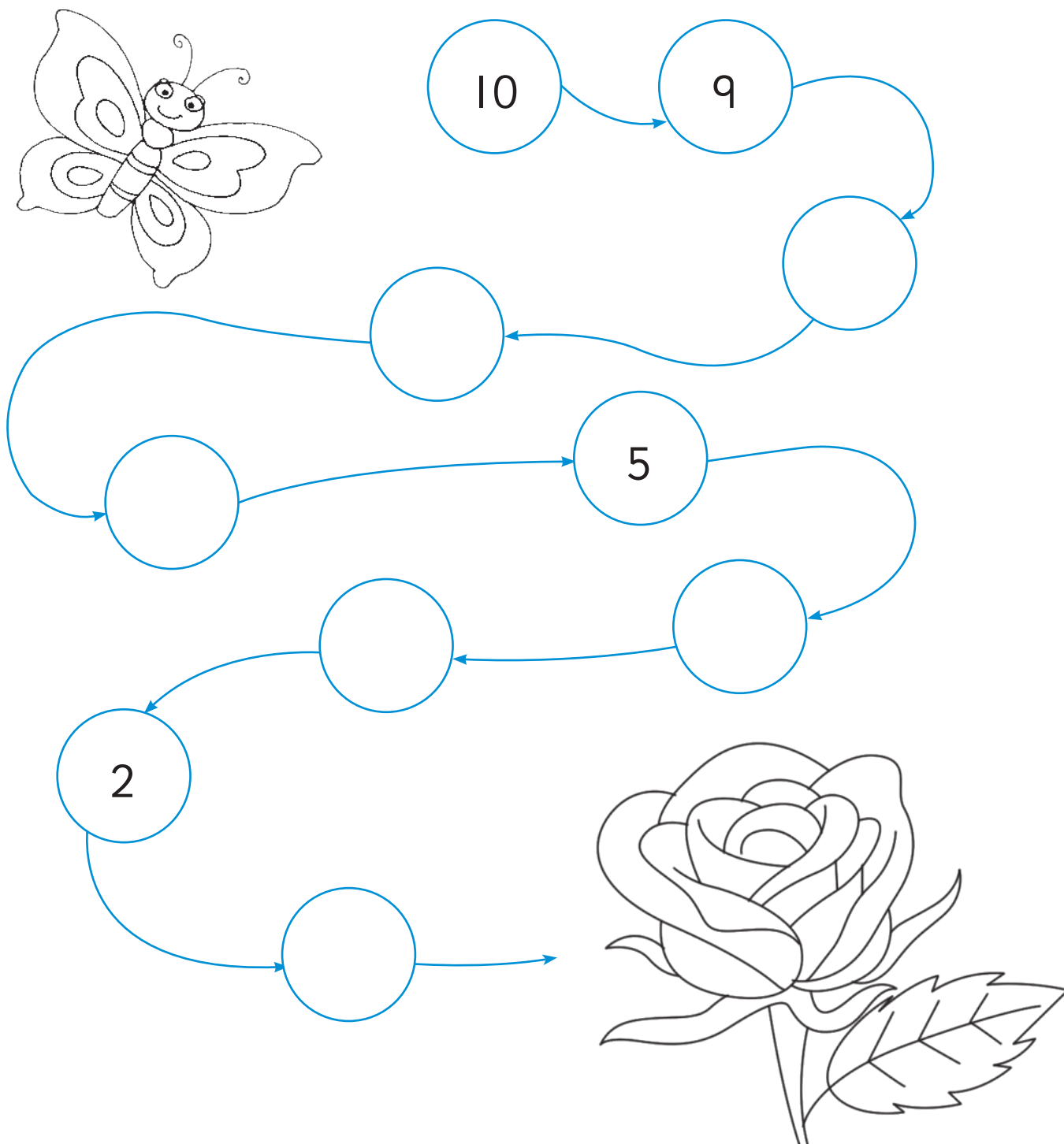


after



Backward Counting (10 to 1)

Help the butterfly find the flower. Count backwards. Fill in the missing numbers. Also colour the pictures.



■ Identification

■ Visual discrimination

■ Fine motor skills

■ Comparison





Number Names 1 to 10

Write the number names 1 to 10.

1	one
2	two
3	three
4	four
5	five
6	six
7	seven
8	eight
9	nine
10	ten



Numbers 11 to 20

11	Eleven	
12	Twelve	
13	Thirteen	
14	Fourteen	
15	Fifteen	
16	Sixteen	
17	Seventeen	
18	Eighteen	
19	Nineteen	
20	Twenty	



Observation

Visual discrimination

Identification

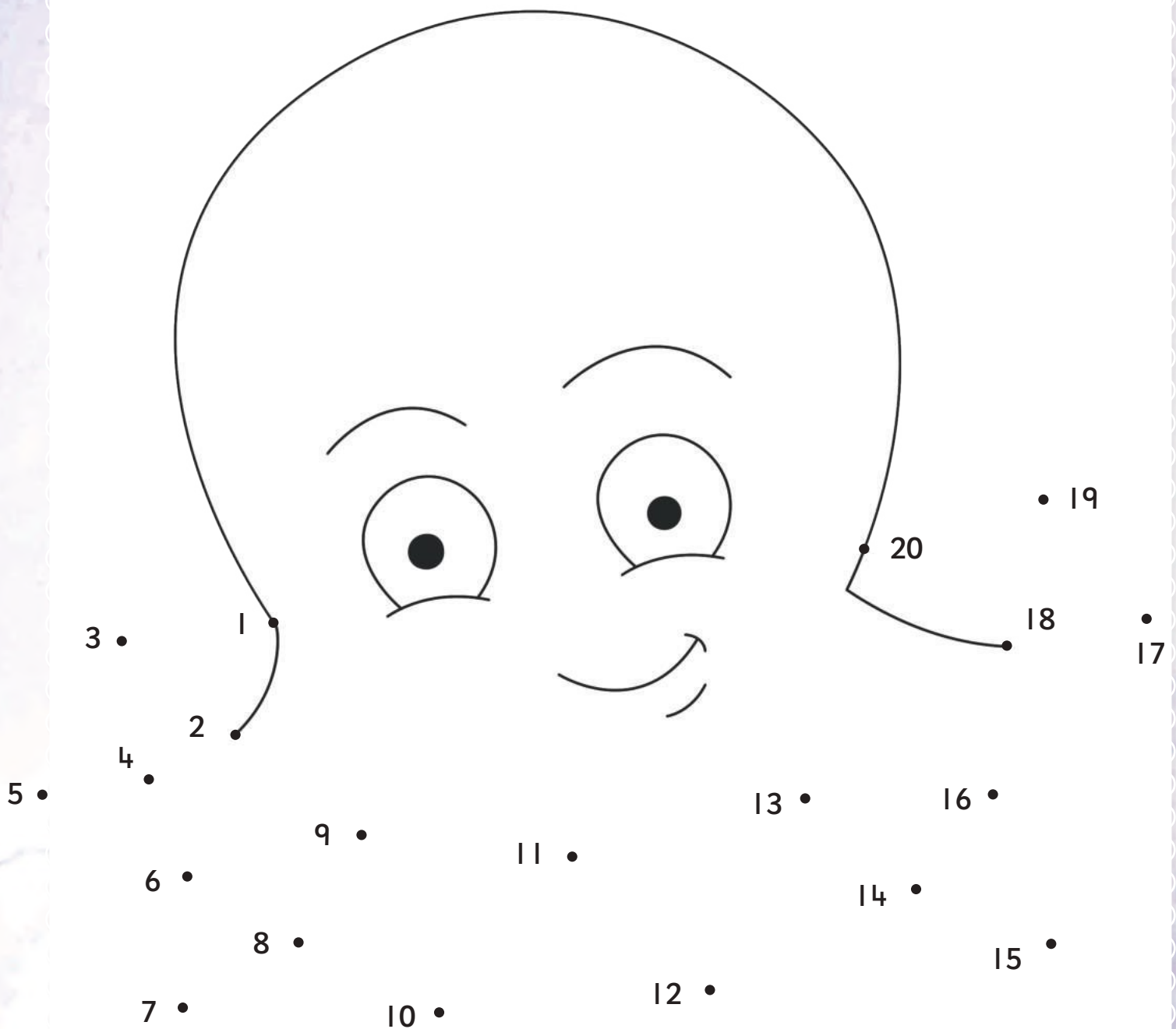
Reading skills





Activity

Join dots from 1 to 20 and colour the picture.



Backward Counting (20 to 1)

Count backward and write the missing numbers.

The grid consists of 20 apple outlines arranged in 5 rows and 4 columns. Dashed arrows indicate the sequence of counting backward from 20 to 1. The numbers are placed in the following positions:

- Row 1: Apple 1 (leftmost) contains the number 20.
- Row 2: Apple 3 (third from left) contains the number 15.
- Row 3: Apple 2 (second from left) contains the number 11.
- Row 4: Apple 1 (leftmost) contains the number 5.
- Row 5: Apple 3 (third from left) contains the number 2.

The sequence of counting is as follows: Row 1 (left to right), then a vertical jump down to Row 2 (right to left), then a vertical jump down to Row 3 (left to right), then a vertical jump down to Row 4 (right to left), and finally a vertical jump down to Row 5 (left to right).



Number Names 11-20

Trace the numbers and number names 11 to 20.

11	11	Eleven
12	12	Twelve
13	13	Thirteen
14	14	Fourteen
15	15	Fifteen
16	16	Sixteen
17	17	Seventeen
18	18	Eighteen
19	19	Nineteen
20	20	Twenty



Numbers 21 to 30

Trace the numbers and number names 21 to 30.

21	21	Twenty-one
22	22	Twenty-two
23	23	Twenty-three
24	24	Twenty-four
25	25	Twenty-five
26	26	Twenty-six
27	27	Twenty-seven
28	28	Twenty-eight
29	29	Twenty-nine
30	30	Thirty



Identification

Observation

Fine motor skills

Association





Numbers 31 to 40

Trace the numbers and number names 31 to 40.

31	31	Thirty-one
32	32	Thirty-two
33	33	Thirty-three
34	34	Thirty-four
35	35	Thirty-five
36	36	Thirty-six
37	37	Thirty-seven
38	38	Thirty-eight
39	39	Thirty-nine
40	40	Forty



Numbers 41 to 50

Trace the numbers and number names 41 to 50.

41	41	Forty-one
42	42	Forty-two
43	43	Forty-three
44	44	Forty-four
45	45	Forty-five
46	46	Forty-six
47	47	Forty-seven
48	48	Forty-eight
49	49	Forty-nine
50	50	Fifty



■ Identification

■ Observation

■ Fine motor skills

■ Association





Activity

Match the numeral with the number name.

15



Forty-three



24



Thirty-seven



37



Twenty-four



48



Thirteen



50



Fifteen



13



Forty-eight



29



Forty



32



Fifty



43



Twelve



14



Thirty-five



40



Thirty-two



35



Fourteen



12



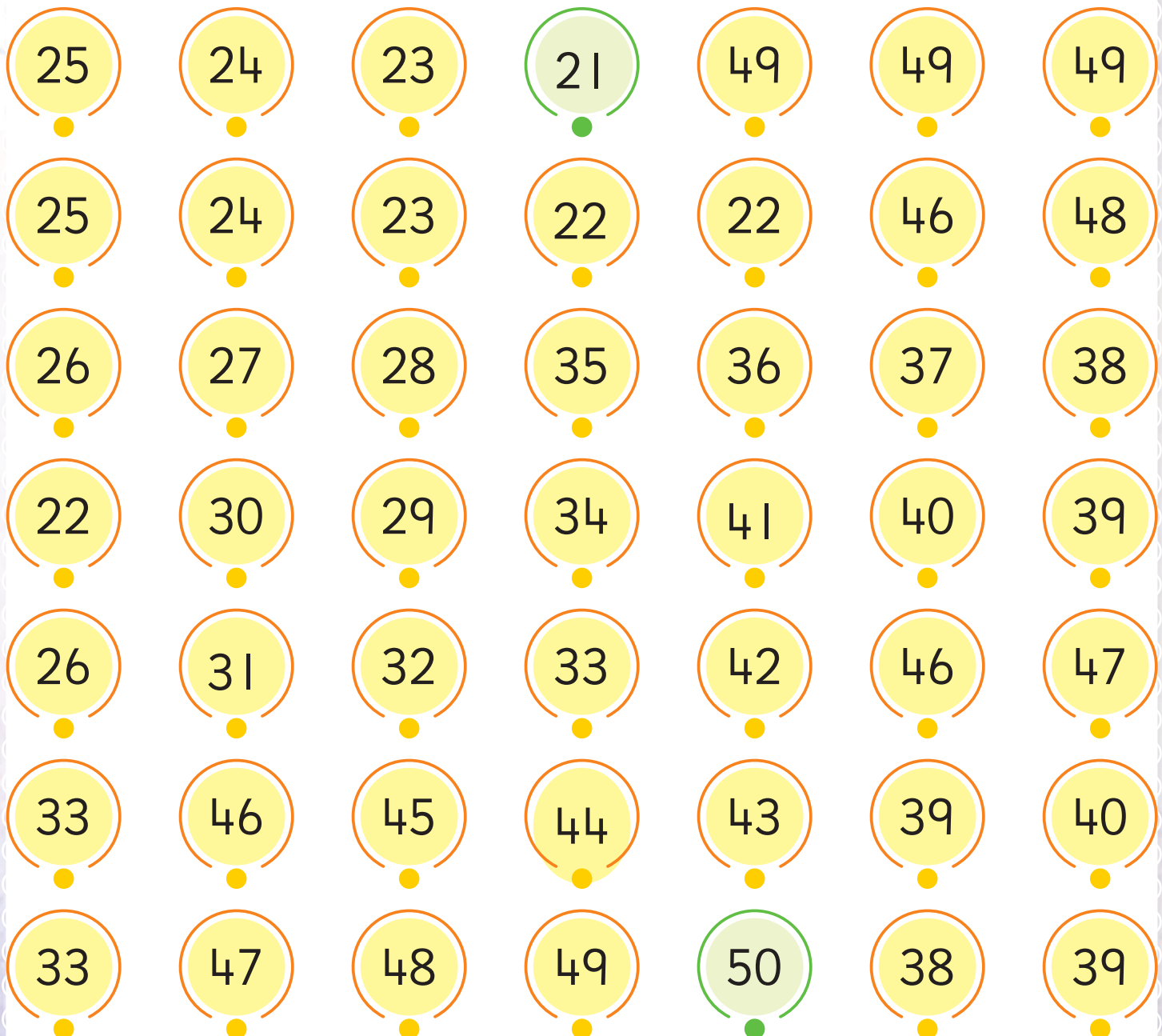
Twenty-nine



Number Maze Puzzle

Find the path from 21 to 50 by connecting the dots.

Start



Finish



■ Critical thinking ■ Observation ■ Fine motor skills ■ Visual discrimination





Missing Numbers

Write the missing numbers.



1



11



21



31



41

3

13

23

33

43

5

15

25

35

45

7

17

27

37

47

9

29

49



■ Association

■ Identification

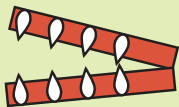
■ Fine motor skills

■ Observation

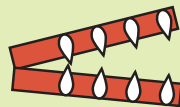


Comparing Numbers

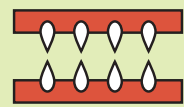
Look and learn.



5 is greater than 2
 $5 > 2$

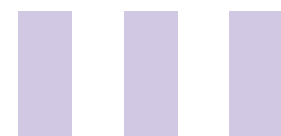
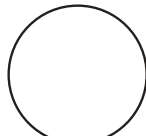
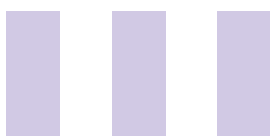
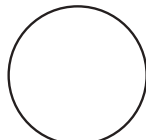
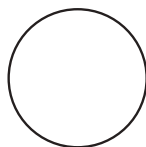
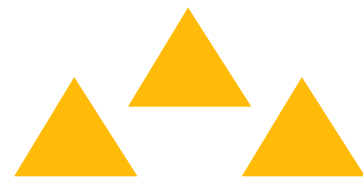
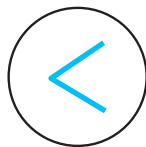


2 is less than 7
 $2 < 7$



6 is Equal to 6
 $6 = 6$

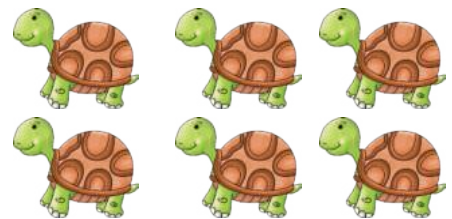
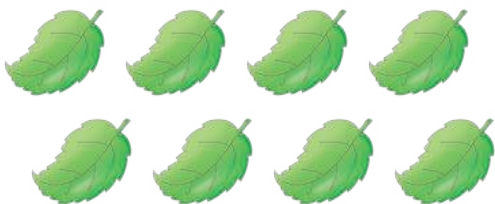
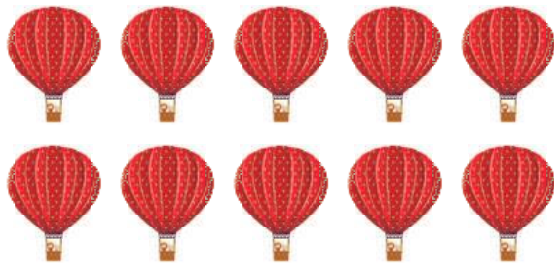
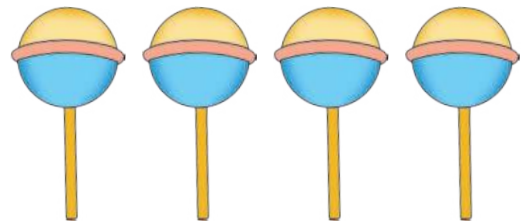
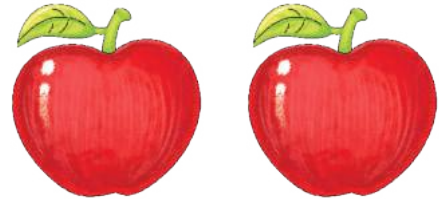
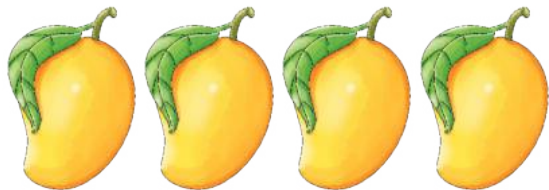
Count and compare each group of shapes. Write the correct symbol: less than (<), greater than (>) or equal (=).





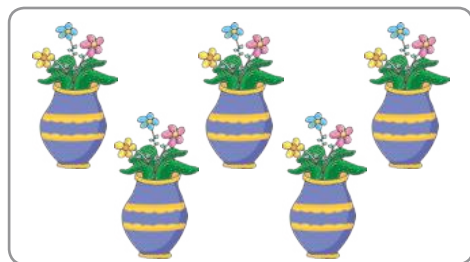
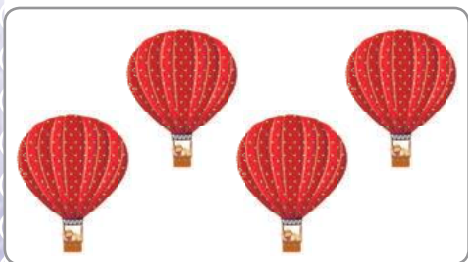
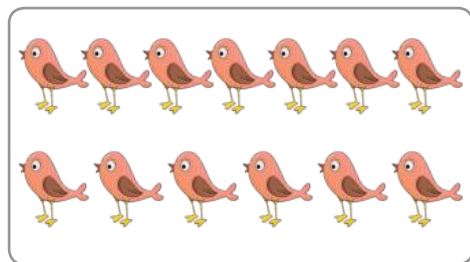
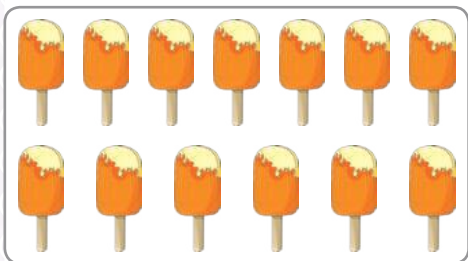
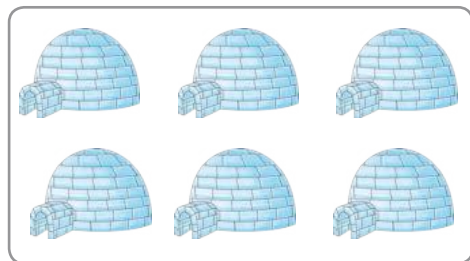
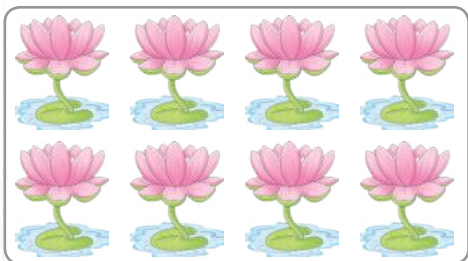
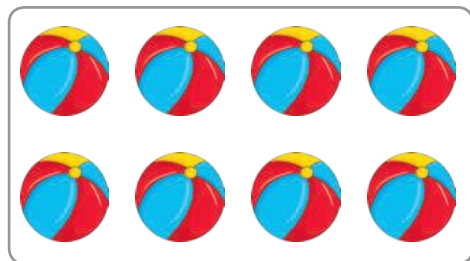
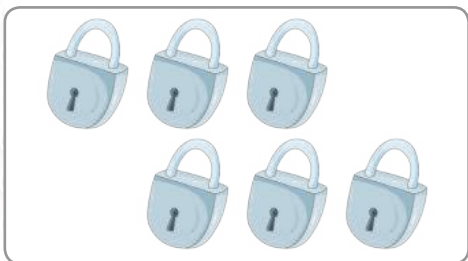
Activity

Count the items in each set and compare them using $<$, $>$ or $=$.





Count, compare and match the sets of the same count.



■ Association

■ Observation

■ Fine motor skills

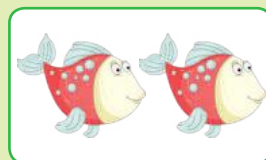
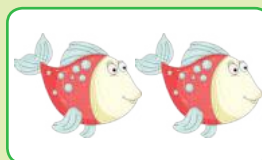
■ Identification



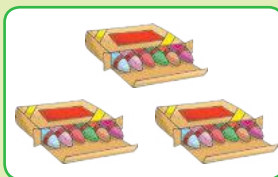
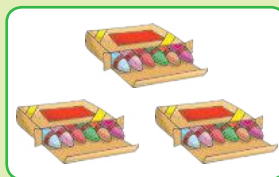
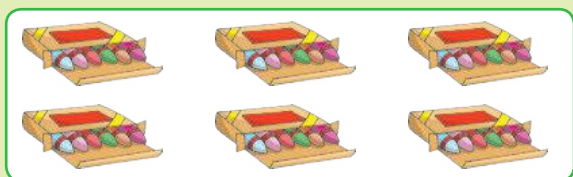


Grouping

Look and learn.

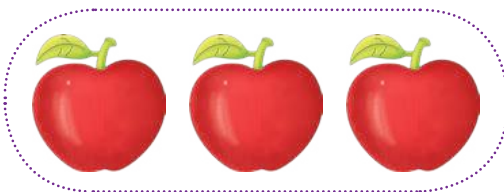
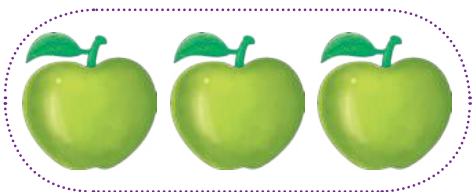


groups of 2



groups of 3

Circle the objects in groups of 3. Write how many groups are there in each set.



2



Visual discrimination

Observation

Fine motor skills

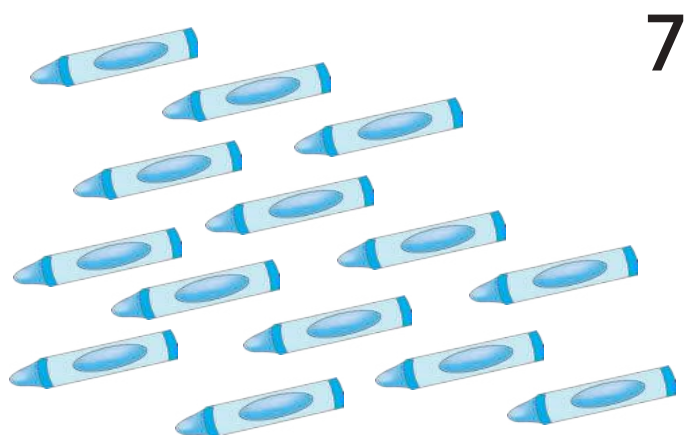
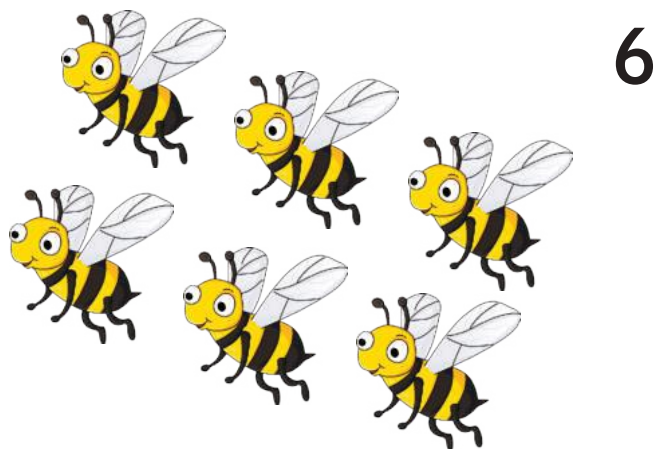
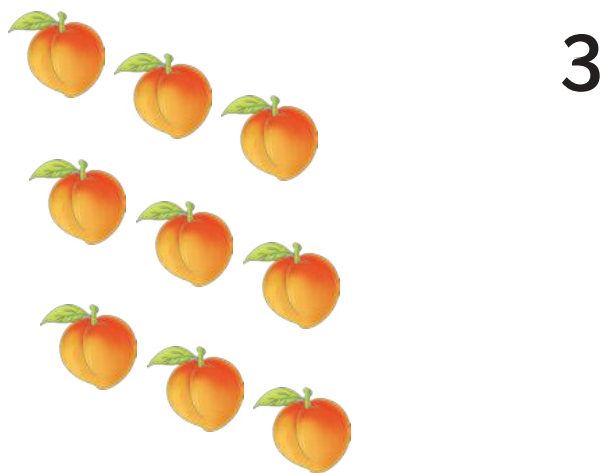
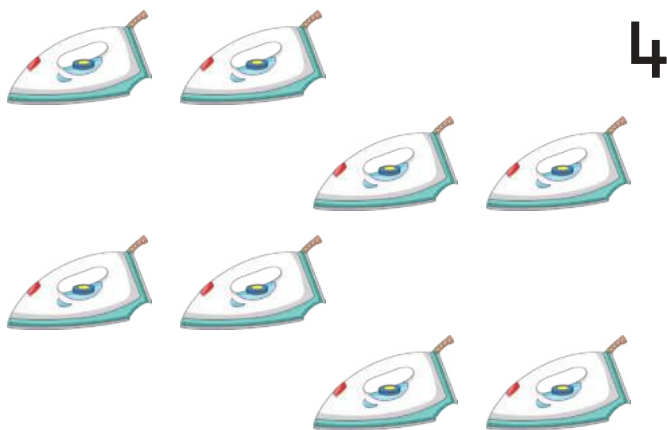
Counting





Activity

Form a group for the given number by circling the objects.



Visual discrimination

Observation

Fine motor skills

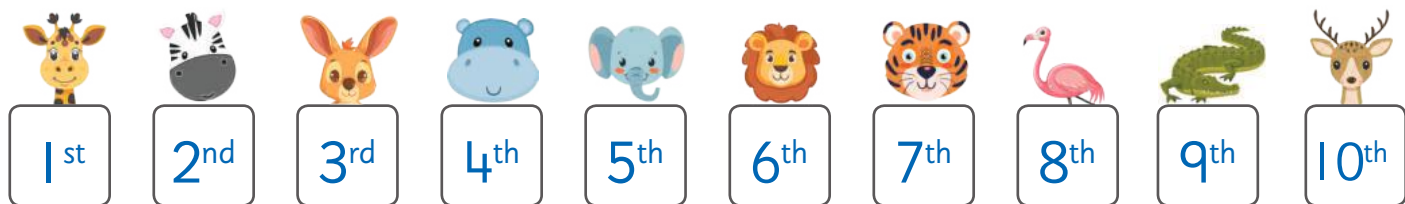
Counting





Position

Look and learn.



Write the position under each animal.



Visual discrimination

Observation

Fine motor skills

Counting



Activity

Help our friend obedient  Owl to write the position that tells what place each item is in.

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
									

1. The  is in place.
2. The  is in place.
3. The  is in place.
4. The  is in place.
5. The  is in place.
6. The  is in place.
7. The  is in place.
8. The  is in place.
9. The  is in place.
10. The  is in place.



Numbers 51 to 60

Trace the numbers and number names 51 to 60.

51	51	Fifty-one
52	52	Fifty-two
53	53	Fifty-three
54	54	Fifty-four
55	55	Fifty-five
56	56	Fifty-six
57	57	Fifty-seven
58	58	Fifty-eight
59	59	Fifty-nine
60	60	Sixty



■ Identification

■ Fine motor skills

■ Observation

■ Association





Numbers 61 to 70

Trace the numbers and number names 61 to 70.

61	61	Sixty-one
62	62	Sixty-two
63	63	Sixty-three
64	64	Sixty-four
65	65	Sixty-five
66	66	Sixty-six
67	67	Sixty-seven
68	68	Sixty-eight
69	69	Sixty-nine
70	70	Seventy



■ Identification

■ Fine motor skills

■ Observation

■ Association





Numbers 71 to 80

Trace the numbers and number names 71 to 80.

71	71	Seventy-one
72	72	Seventy-two
73	73	Seventy-three
74	74	Seventy-four
75	75	Seventy-five
76	76	Seventy-six
77	77	Seventy-seven
78	78	Seventy-eight
79	79	Seventy-nine
80	80	Eighty



■ Identification

■ Fine motor skills

■ Observation

■ Association



Numbers 81 to 90

Trace the numbers and number names 81 to 90.

81	81	Eighty-one
82	82	Eighty-two
83	83	Eighty-three
84	84	Eighty-four
85	85	Eighty-five
86	86	Eighty-six
87	87	Eighty-seven
88	88	Eighty-eight
89	89	Eighty-nine
90	90	Ninety



■ Identification

■ Fine motor skills

■ Observation

■ Association





Numbers 91 to 100

Trace the numbers and number names 91 to 100.

91	91	Ninety-one
92	92	Ninety-two
93	93	Ninety-three
94	94	Ninety-four
95	95	Ninety-five
96	96	Ninety-six
97	97	Ninety-seven
98	98	Ninety-eight
99	99	Ninety-nine
100	100	One Hundred



■ Identification

■ Fine motor skills

■ Observation

■ Association



Numbers Maze 51 to 100

Help the fireman find his way by drawing a path, starting at 51 and counting up to 100.



	51	52	53	54	55	56	8	9	10
52	53	54	60	59	58	57	18	19	20
59	63	62	61	25	26	27	28	29	30
60	64	65	66	67	68	66	67	68	69
81	80	72	71	70	69	75	74	73	70
82	85	73	74	88	89	75	34	72	71
83	77	76	75	91	90	51	92	93	34
71	78	79	80	81	82	83	84	85	86
81	82	83	93	92	91	90	89	88	87
61	52	23	94	95	96	97	98	99	100



Hand-eye coordination

Visual discrimination





Activity

Write the missing numbers to complete each number chain.



51



61



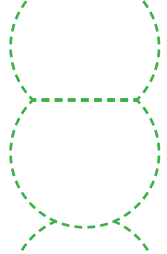
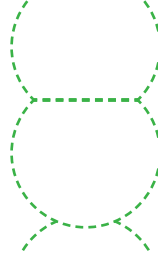
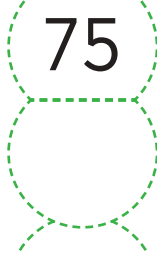
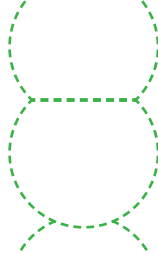
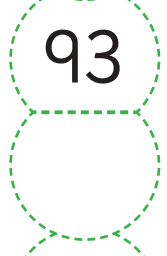
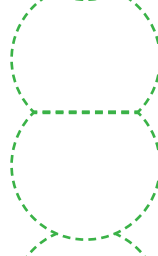
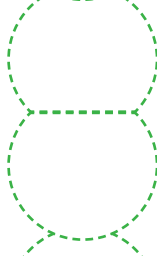
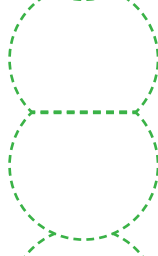
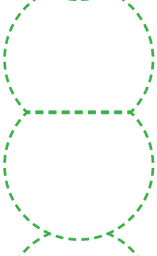
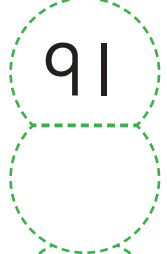
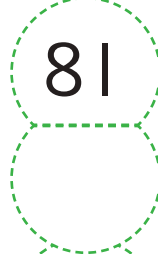
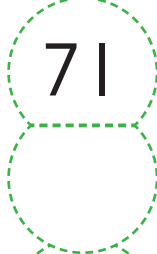
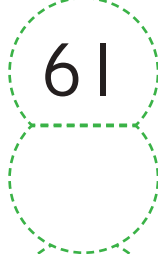
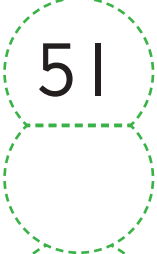
71



81



91

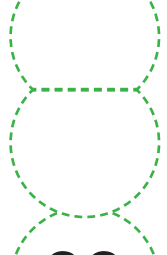
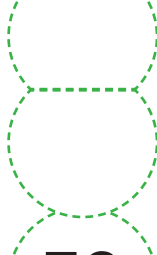
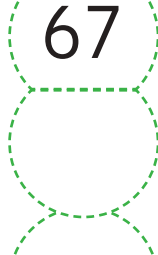


55

75

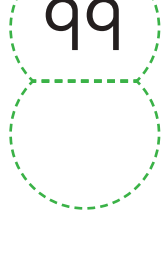
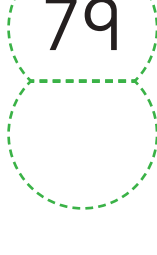
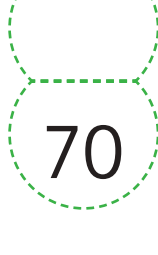
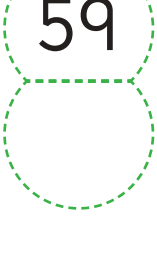
85

95



67

87



59

79

89

99

70

90



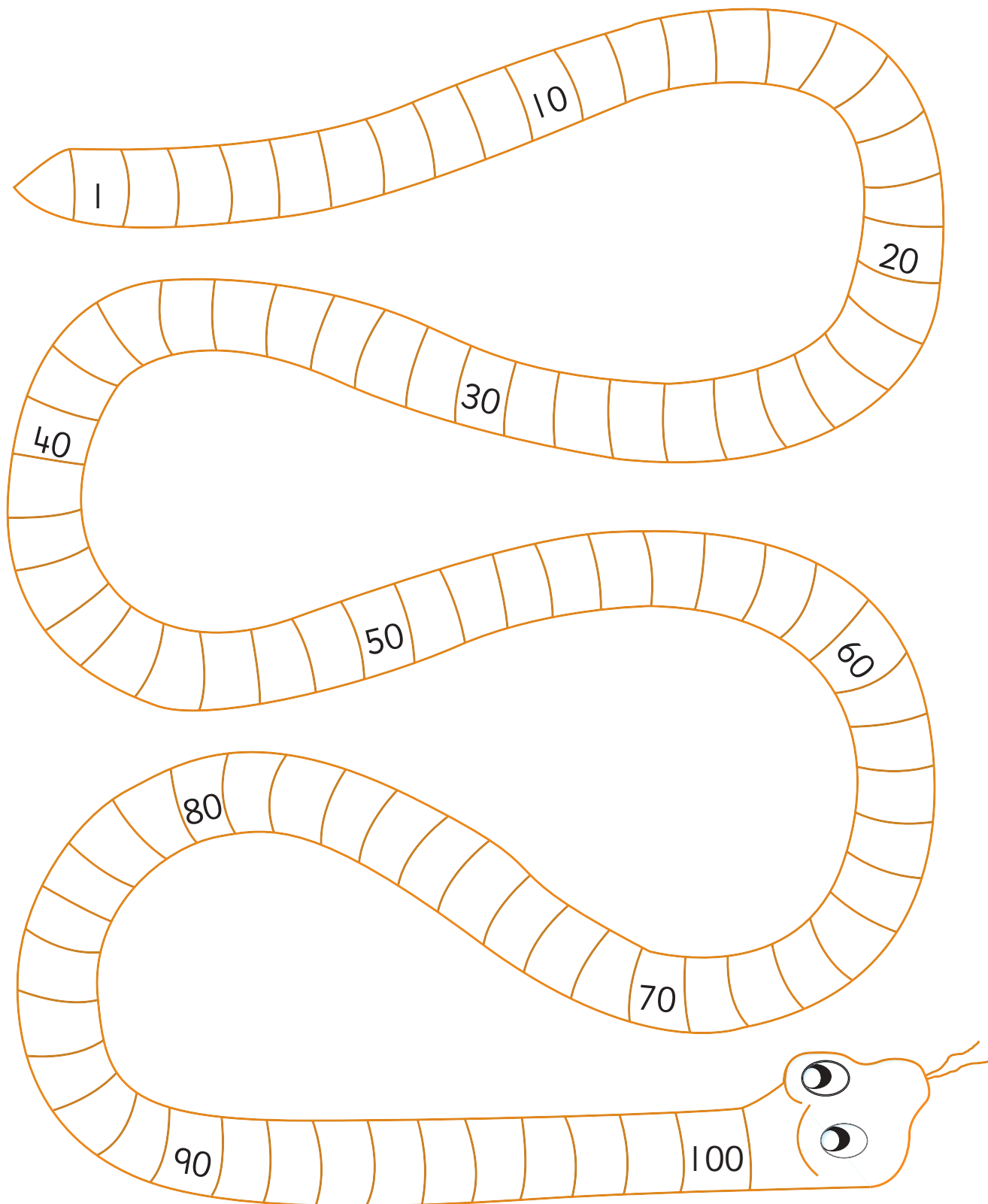
■ Hand-eye coordination

■ Visual discrimination

■ Observation



Write the missing numbers.



■ Hand-eye coordination

■ Visual discrimination





Addition by Counting Objects

Look and learn.


 $+$

 $=$
 3
 2 1 = 3

When you combine two or more numbers to get a sum, it is called **addition**. '+' is the symbol used to show addition.

Count and add.


 $+$


 =


 $+$


 =



Addition by Drawing Lines

Let's Add by Drawing Lines!

We can add numbers by drawing lines — like a fun game!
Let's try adding 2 and 6.

Step 1: Think of the first number

The first number is 2. Draw 2 lines: ||

Step 2: Think of the second number

The second number is 6. Draw 6 more lines: |||||

Step 3: Count all the lines

Let's count them all together: 1, 2, 3, 4, 5, 6, 7, 8

So, $2 + 6 = 8$

Draw lines for the numbers and add them. One has been done for you.

$$\begin{array}{rcl} 2 & + & 4 = \boxed{6} \\ || & & ||||| \end{array}$$

$$\begin{array}{rcl} 2 & || & \\ + 4 & |||| & \\ = 6 & ||||| & \end{array}$$

$$\begin{array}{rcl} 5 & + & 3 = \boxed{} \\ ||||| & & ||| \end{array}$$

$$\begin{array}{rcl} 5 & & \\ + 3 & & \\ \hline & & \end{array}$$

$$\begin{array}{rcl} 2 & + & 3 = \boxed{} \\ || & & ||| \end{array}$$

$$\begin{array}{rcl} 2 & & \\ + 3 & & \\ \hline & & \end{array}$$

$$\begin{array}{rcl} 3 & + & 6 = \boxed{} \\ ||| & & ||||| \end{array}$$

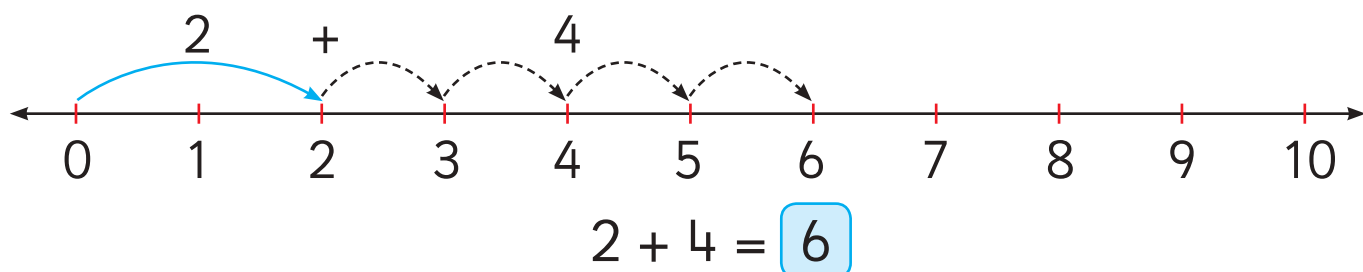
$$\begin{array}{rcl} 3 & & \\ + 6 & & \\ \hline & & \end{array}$$





Addition on a Number Line

Example: Add $2 + 4$

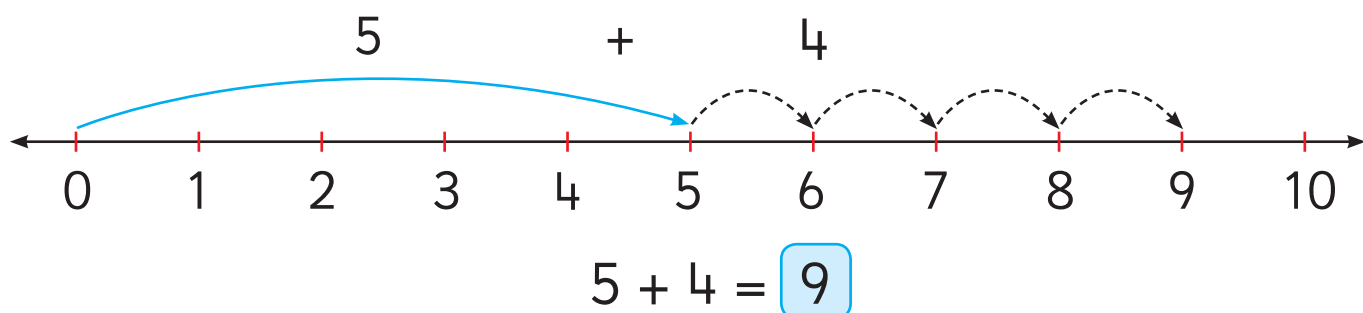
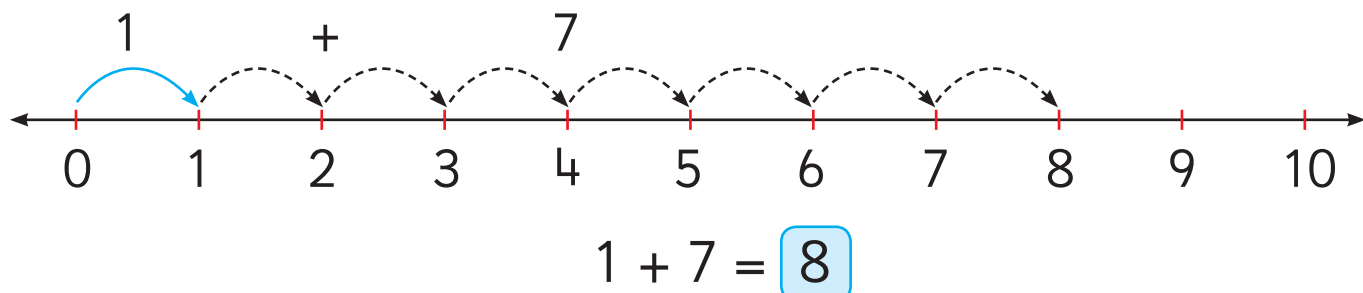
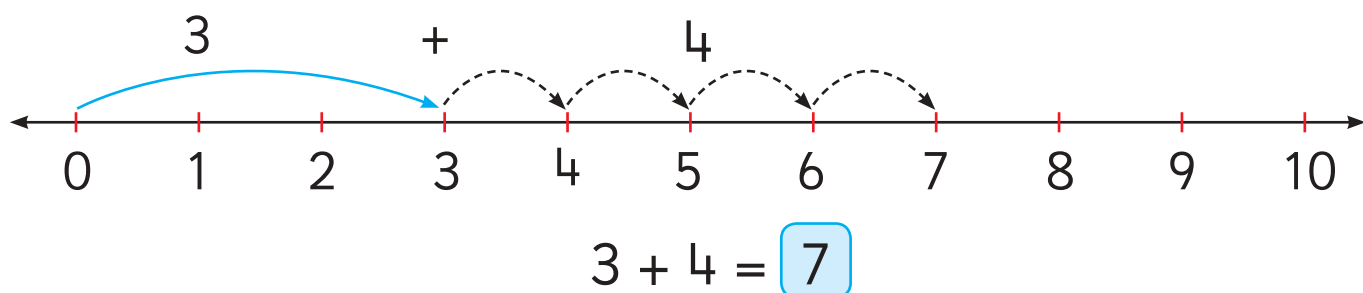


Understand the method:

Start from 0 and jump to 2. Again jump 4 places forward and you have arrived at 6 (answer.)

Therefore, $2 + 4 = 6$

Let's see another examples:



Now, add using the number line.



$$3 + 3 = \square$$



$$2 + 2 = \square$$



$$6 + 4 = \square$$



$$5 + 1 = \square$$



$$2 + 6 = \square$$



Addition of 2-digit Numbers

Drawing 55 lines or making 55 hops is not a good method. So, for two-digit numbers, we perform addition based on place value method.

Place-Value Method

In a two digit number, the digit at right is at ones place and digit at left is at tens place.

We add both ones place digits and both tens place digits and get the answer as shown.

	T	O
	5	5
+	4	2
	9	7

	T	O
	5	5
+	4	2
	9	7

Add 5 and 2 at ones place = 7

Add 5 and 4 at tens place = 9

We get 7 at ones place and 9 at tens place.





Activity

Add the following numbers.

$$\begin{array}{r} 20 \\ + 30 \\ \hline \end{array}$$

$$\begin{array}{r} 55 \\ + 11 \\ \hline \end{array}$$

$$\begin{array}{r} 71 \\ + 12 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \\ + 23 \\ \hline \end{array}$$

$$\begin{array}{r} 73 \\ + 14 \\ \hline \end{array}$$

$$\begin{array}{r} 44 \\ + 33 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \\ + 12 \\ \hline \end{array}$$

$$\begin{array}{r} 46 \\ + 32 \\ \hline \end{array}$$

$$\begin{array}{r} 88 \\ + 11 \\ \hline \end{array}$$

$$\begin{array}{r} 80 \\ + 16 \\ \hline \end{array}$$

$$\begin{array}{r} 48 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ + 12 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \\ + 36 \\ \hline \end{array}$$

$$\begin{array}{r} 37 \\ + 22 \\ \hline \end{array}$$

$$\begin{array}{r} 62 \\ + 14 \\ \hline \end{array}$$

$$\begin{array}{r} 75 \\ + 12 \\ \hline \end{array}$$



Identification

Addition

Observation

Fine motor skills





Addition with Carry Over

Tens	Ones
2	5
+	2 7
5	12

Diagram showing a red arrow from the 1 in the ones place to the 2 in the tens place, indicating a carry over.

Answer is 52

Tens	Ones
3	9
+	2 6
6	15

Diagram showing a red arrow from the 1 in the ones place to the 3 in the tens place, indicating a carry over.

Answer is 65



Tens	Ones
2	5
+	1 6

Tens	Ones
3	3
+	2 9

Tens	Ones
2	8
+	1 5

Tens	Ones
2	7
+	2 7

Tens	Ones
4	5
+	2 8

Tens	Ones
4	4
+	3 9

Tens	Ones
3	6
+	4 7

Tens	Ones
7	7
+	1 1

Tens	Ones
2	9
+	4 3

Tens	Ones
5	4
+	1 8

Tens	Ones
6	7
+	4 2

Tens	Ones
7	5
+	2 0

Tens	Ones
2	9
+	2 9

Tens	Ones
8	8
+	0 3

Tens	Ones
3	4
+	4 8





123

Tens	Ones
2	7
+	2 8

Tens	Ones
3	5
+	3 5

Tens	Ones
1	9
+	1 9

Tens	Ones
0	8
+	8 3

Tens	Ones
4	4
+	4 8

Tens	Ones
6	1
+	2 9

Tens	Ones
4	9
+	2 9

Tens	Ones
2	7
+	3 5

Tens	Ones
2	8
+	4 4

Tens	Ones
1	9
+	6 8

Tens	Ones
3	8
+	2 7

Tens	Ones
2	9
+	2 8

Tens	Ones
4	5
+	3 9

Tens	Ones
2	7
+	5 3

Tens	Ones
8	2
+	0 9

Tens	Ones
3	8
+	5 4

Tens	Ones
4	8
+	1 2

Tens	Ones
1	7
+	2 3

Tens	Ones
4	5
+	4 5

Tens	Ones
1	8
+	7 2



Identification

Addition

Observation

Fine motor skills

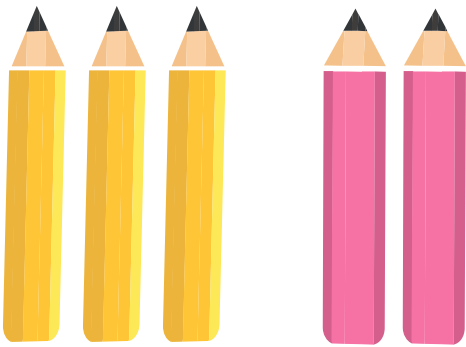




Word Problems (Addition)

Look and learn.

Ravi has 3 yellow pencils and 2 pink pencils. How many pencils does he have in all?



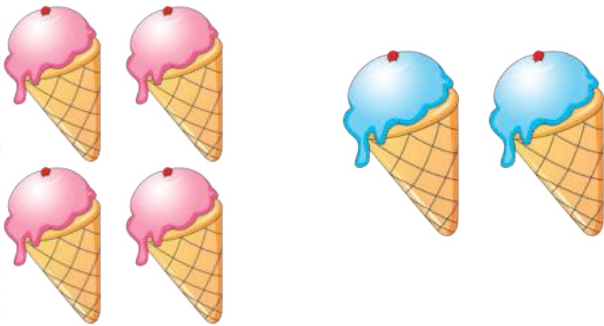
$$\boxed{} + \boxed{} = \boxed{}$$

There are 4 roses and 2 sunflowers in a garden. How many flowers are there in all?



$$\boxed{} + \boxed{} = \boxed{}$$

Mini has 4 ice-creams. Sam has 2 ice creams. How many ice creams they have in all?



$$\boxed{} + \boxed{} = \boxed{}$$

Jack has 5 candies. Jill has 4 candies. How many candies do they have in all?

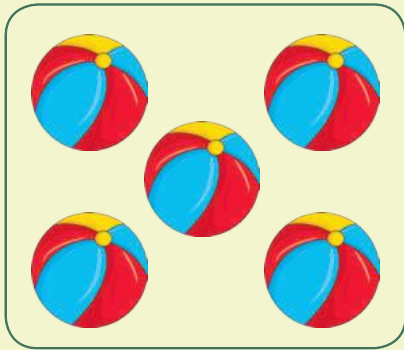


$$\boxed{} + \boxed{} = \boxed{}$$

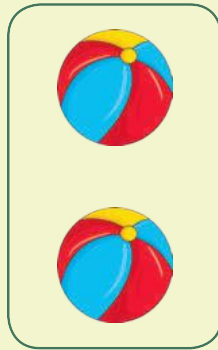


Subtraction by Counting Objects

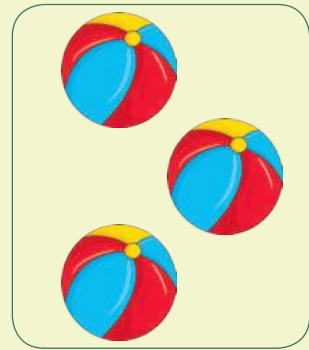
Look and learn.



—

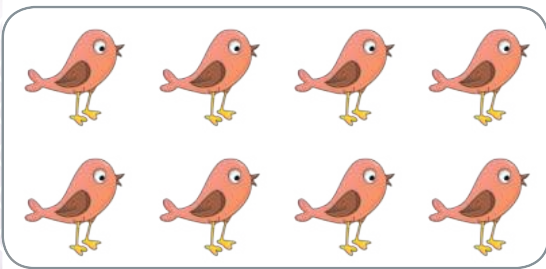


=

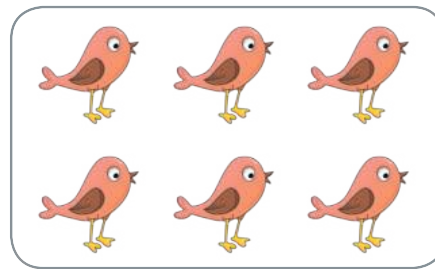


When you take away one number from another to get a difference, it is called **subtraction**. '—' is the symbol used to show subtraction.

Count the objects and subtract.



—



=



—



=



Identification

Subtraction

Observation

Fine motor skills





Subtraction by Drawing Lines

We can subtract by drawing lines and crossing some out.

Let's try $7 - 3$.

Step 1: Draw 7 lines

|||||||

Step 2: Cross out 3 lines

Cross out 3 of them: ||||~~|||~~

Step 3: Count the lines that are left

1, 2, 3, 4

So, $7 - 3 = 4$

Draw lines for the number and subtract them. One has been done for you.

$$3 - 2 = \boxed{1}$$

$$||| \rightarrow ||\cancel{||} \quad \boxed{1}$$

3	
- 2	
1	

$$4 - 2 = \boxed{}$$

$$|||| \rightarrow ||\cancel{||} \quad \boxed{}$$

4	
- 2	

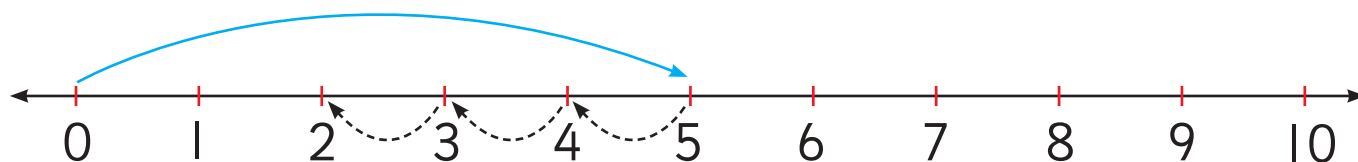
$$5 - 1 = \boxed{}$$

$$||||| \rightarrow |||\cancel{||} \quad \boxed{}$$

5	
- 1	

Subtraction by Number Line

Example: Subtract $5 - 3$



$$5 - 3 = 2$$

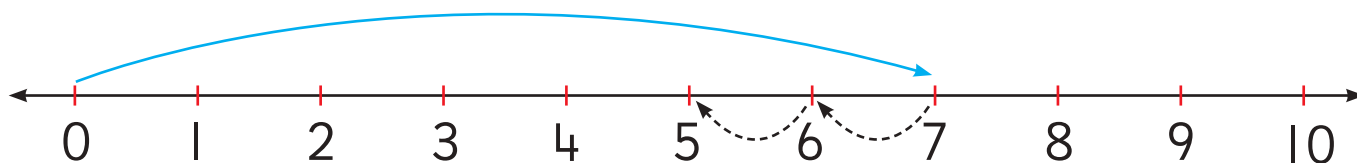
From 5 take away 3, left over is 2.

Understand the method:

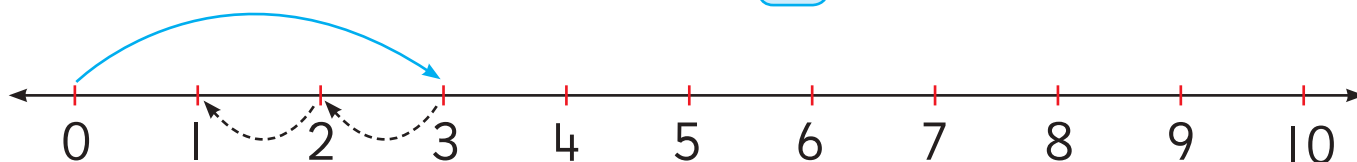
Start from 0 and jump to reach 5. Now from 5, jump 3 backward. You reach at 2 (answer).

Therefore, $5 - 3 = 2$

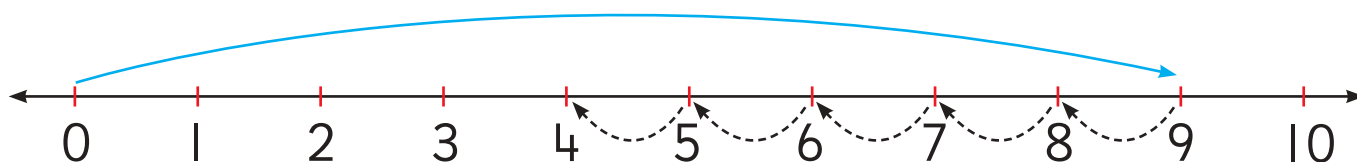
Let's see another examples:



$$7 - 2 = 5$$



$$3 - 2 = 1$$



$$9 - 5 = 4$$



Identification

Subtraction

Observation

Fine motor skills



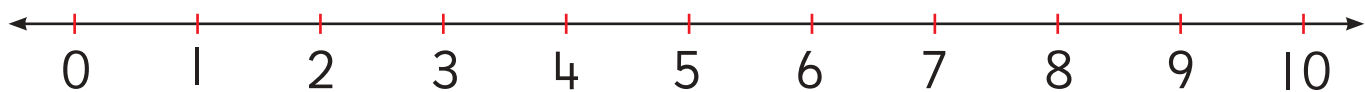


Activity

Now, subtract using the number line.



$$8 - 4 = \square$$



$$10 - 8 = \square$$



$$5 - 4 = \square$$



$$7 - 2 = \square$$



$$8 - 1 = \square$$



Subtraction of 2-digit Numbers

For subtraction of two-digit numbers, we use **Place-Value Method**.

Place-Value Method

In a two-digit number, the digit at right is at ones place and the digit at left is at tens place. We subtract the ones place digit and then we subtract the tens place digit in the manner as shown.

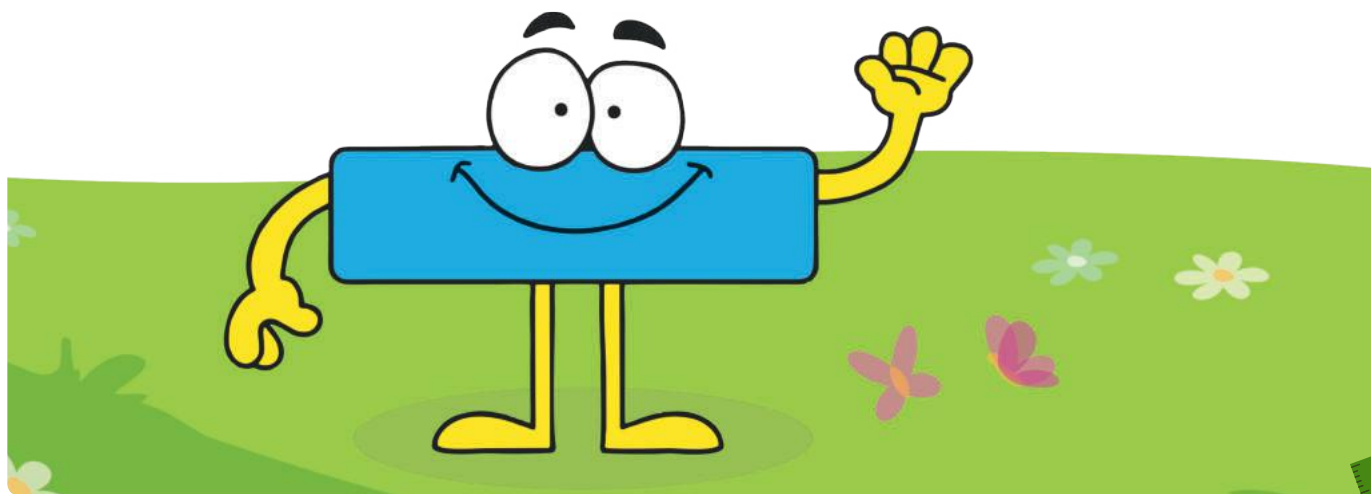
	T	O
	7	8
–	2	4
	5	4

	T	O
	7	8
–	2	4
	5	4

Subtract 4 from 8 at ones place = 4

Subtract 2 from 7 at tens place = 5

Thus, we get 4 at ones place and 5 at tens place.





Activity

Subtract the following numbers.

$$\begin{array}{r} 46 \\ - 12 \\ \hline \end{array}$$

$$\begin{array}{r} 65 \\ - 13 \\ \hline \end{array}$$

$$\begin{array}{r} 34 \\ - 13 \\ \hline \end{array}$$

$$\begin{array}{r} 44 \\ - 42 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 10 \\ \hline \end{array}$$

$$\begin{array}{r} 95 \\ - 80 \\ \hline \end{array}$$

$$\begin{array}{r} 73 \\ - 10 \\ \hline \end{array}$$

$$\begin{array}{r} 85 \\ - 33 \\ \hline \end{array}$$

$$\begin{array}{r} 55 \\ - 33 \\ \hline \end{array}$$

$$\begin{array}{r} 27 \\ - 16 \\ \hline \end{array}$$

$$\begin{array}{r} 78 \\ - 15 \\ \hline \end{array}$$

$$\begin{array}{r} 52 \\ - 11 \\ \hline \end{array}$$

$$\begin{array}{r} 51 \\ - 20 \\ \hline \end{array}$$

$$\begin{array}{r} 65 \\ - 47 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \\ - 10 \\ \hline \end{array}$$

$$\begin{array}{r} 96 \\ - 23 \\ \hline \end{array}$$



Subtraction with Borrowing

$$\begin{array}{r} 4 \quad 10 \\ \cancel{5} \quad \cancel{0} \\ - 3 \quad 5 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 4 \quad 10 \\ \cancel{5} \quad \cancel{0} \\ - 3 \quad 5 \\ \hline 1 \quad 5 \end{array}$$

First, we subtract the digits at ones place. 5 cannot be subtracted from 0. So, we borrow one ten from 5 tens. $10 + 0 = 10$
Now, subtract 5 from 10.
 $10 - 5 = 5$

Now, we subtract the digits at tens place.
 $5 \text{ tens} - 1 \text{ ten (borrowed)}$
 $= 4 \text{ tens}$
Subtract 3 tens from 4 tens we have.
 $4 - 3 = 1$

Tens	Ones	Tens	Ones	Tens	Ones	Tens	Ones	Tens	Ones
3	7	4	5	5	5	5	2	6	5
- 2	8	- 2	8	- 3	7	- 2	6	- 2	8
6	4	5	4	4	2	4	0	5	5
- 2	8	- 3	6	- 1	8	- 1	9	- 2	6
6	5	4	7	5	8	8	8	4	5
- 2	7	- 3	8	- 1	9	- 5	9	- 1	9



$$\begin{array}{r} 52 \\ - 44 \\ \hline \end{array}$$

$$\begin{array}{r} 51 \\ - 24 \\ \hline \end{array}$$

$$\begin{array}{r} 40 \\ - 11 \\ \hline \end{array}$$

$$\begin{array}{r} 65 \\ - 37 \\ \hline \end{array}$$

$$\begin{array}{r} 70 \\ - 53 \\ \hline \end{array}$$

$$\begin{array}{r} 91 \\ - 52 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \\ - 13 \\ \hline \end{array}$$

$$\begin{array}{r} 76 \\ - 38 \\ \hline \end{array}$$

$$\begin{array}{r} 63 \\ - 14 \\ \hline \end{array}$$

$$\begin{array}{r} 83 \\ - 36 \\ \hline \end{array}$$

$$\begin{array}{r} 83 \\ - 27 \\ \hline \end{array}$$

$$\begin{array}{r} 87 \\ - 49 \\ \hline \end{array}$$

$$\begin{array}{r} 34 \\ - 15 \\ \hline \end{array}$$

$$\begin{array}{r} 45 \\ - 19 \\ \hline \end{array}$$

$$\begin{array}{r} 35 \\ - 08 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ - 14 \\ \hline \end{array}$$

$$\begin{array}{r} 75 \\ - 17 \\ \hline \end{array}$$

$$\begin{array}{r} 52 \\ - 37 \\ \hline \end{array}$$

$$\begin{array}{r} 56 \\ - 38 \\ \hline \end{array}$$

$$\begin{array}{r} 56 \\ - 48 \\ \hline \end{array}$$

$$\begin{array}{r} 64 \\ - 47 \\ \hline \end{array}$$

$$\begin{array}{r} 63 \\ - 27 \\ \hline \end{array}$$

$$\begin{array}{r} 72 \\ - 43 \\ \hline \end{array}$$

$$\begin{array}{r} 81 \\ - 54 \\ \hline \end{array}$$

$$\begin{array}{r} 86 \\ - 38 \\ \hline \end{array}$$



Word Problems (Subtraction)

If 3 kids are building a snowman, and 1 goes inside his house, how many kids are still outside?



$$\square - \square = \square$$

If 4 kids are reading and 1 has to go home, how many kids are still reading?



$$\square - \square = \square$$

If 4 dogs are in a basket, and 2 run away, how many dogs are still in the basket?



$$\square - \square = \square$$

If 5 birds are on a tree and 2 of them fly away, how many birds are still on the tree?



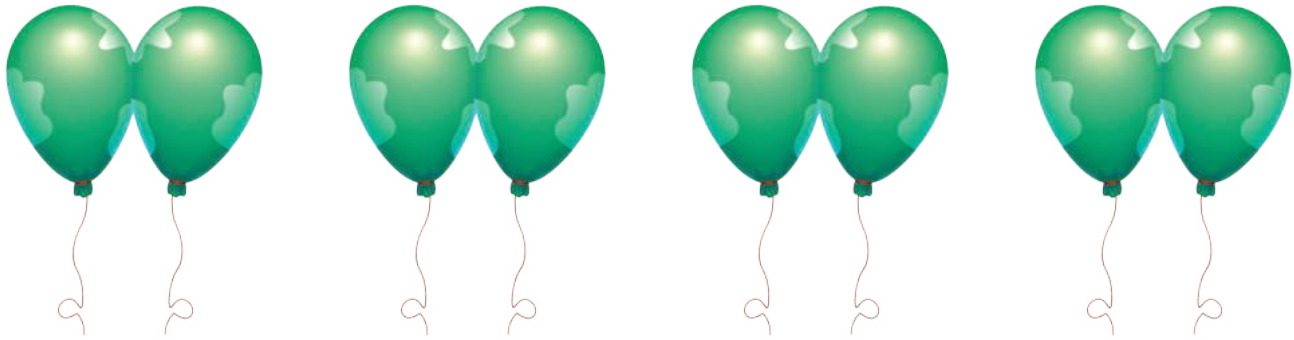
$$\square - \square = \square$$





Multiplication

Consider 4 groups of 2 balloons each.



How many balloons are there in all? $2 + 2 + 2 + 2 = 8$

So, 2 taken 4 times $= 2 + 2 + 2 + 2 = 8$

We can say that 2 multiplied by 4 is equal to 8. ($2 \times 4 = 8$)

Multiplication is the repeated addition of equal numbers.
'X' is the symbol of multiplication.

How many balls are there altogether?



$$\bigcirc + \bigcirc + \bigcirc = \bigcirc$$

$$4 \times 3 = \square$$

How many cars are there altogether?



$$\bigcirc + \bigcirc + \bigcirc + \bigcirc = \bigcirc$$

$$2 \times 4 = \square$$



Tables

Table of 2

Reading way	Writing way
Two ones are two.	$2 \times 1 = 2$
Two twos are four.	$2 \times 2 = 4$
Two threes are six.	$2 \times 3 = 6$
Two fours are eight.	$2 \times 4 = 8$
Two fives are ten.	$2 \times 5 = 10$
Two sixes are twelve.	$2 \times 6 = 12$
Two sevens are fourteen.	$2 \times 7 = 14$
Two eights are sixteen.	$2 \times 8 = 16$
Two nines are eighteen.	$2 \times 9 = 18$
Two tens are twenty.	$2 \times 10 = 20$

Table of 3

Reading way	Writing way
Three ones are three.	$3 \times 1 = 3$
Three twos are six.	$3 \times 2 = 6$
Three threes are nine.	$3 \times 3 = 9$
Three fours are twelve.	$3 \times 4 = 12$
Three fives are fifteen.	$3 \times 5 = 15$
Three sixes are eighteen.	$3 \times 6 = 18$
Three sevens are twenty-one.	$3 \times 7 = 21$
Three eights are twenty-four.	$3 \times 8 = 24$
Three nines are twenty-seven.	$3 \times 9 = 27$
Three tens are thirty.	$3 \times 10 = 30$





Table of 4

Reading way	Writing way
Four ones are four.	$4 \times 1 = 4$
Four twos are eight.	$4 \times 2 = 8$
Four threes are twelve.	$4 \times 3 = 12$
Four fours are sixteen.	$4 \times 4 = 16$
Four fives are twenty.	$4 \times 5 = 20$
Four sixes are twenty-four.	$4 \times 6 = 24$
Four sevens are twenty-eight.	$4 \times 7 = 28$
Four eights are thirty-two.	$4 \times 8 = 32$
Four nines are thirty-six.	$4 \times 9 = 36$
Four tens are forty.	$4 \times 10 = 40$

Table of 5

Reading way	Writing way
Five ones are five.	$5 \times 1 = 5$
Five twos are ten.	$5 \times 2 = 10$
Five threes are fifteen.	$5 \times 3 = 15$
Five fours are twenty.	$5 \times 4 = 20$
Five fives are twenty-five.	$5 \times 5 = 25$
Five sixes are thirty.	$5 \times 6 = 30$
Five sevens are thirty-five.	$5 \times 7 = 35$
Five eights are forty.	$5 \times 8 = 40$
Five nines are forty-five.	$5 \times 9 = 45$
Five tens are fifty.	$5 \times 10 = 50$



Table of 6

Reading way	Writing way
Six ones are six.	$6 \times 1 = 6$
Six twos are twelve.	$6 \times 2 = 12$
Six threes are eighteen.	$6 \times 3 = 18$
Six fours are twenty-four.	$6 \times 4 = 24$
Six fives are thirty.	$6 \times 5 = 30$
Six sixes are thirty-six.	$6 \times 6 = 36$
Six sevens are forty-two.	$6 \times 7 = 42$
Six eights are forty-eight.	$6 \times 8 = 48$
Six nines are fifty-four.	$6 \times 9 = 54$
Six tens are sixty.	$6 \times 10 = 60$

Table of 7

Reading way	Writing way
Seven ones are seven.	$7 \times 1 = 7$
Seven twos are fourteen.	$7 \times 2 = 14$
Seven threes are twenty-one.	$7 \times 3 = 21$
Seven fours are twenty-eight.	$7 \times 4 = 28$
Seven fives are thirty-five.	$7 \times 5 = 35$
Seven sixes are forty-two.	$7 \times 6 = 42$
Seven sevens are forty-nine.	$7 \times 7 = 49$
Seven eights are fifty-six.	$7 \times 8 = 56$
Seven nines are sixty-three.	$7 \times 9 = 63$
Seven tens are seventy.	$7 \times 10 = 70$



Identification

Multiplication

Observation

Fine motor skills





Table of 8

Reading way	Writing way
Eight ones are eight.	$8 \times 1 = 8$
Eight twos are sixteen.	$8 \times 2 = 16$
Eight threes are twenty-four.	$8 \times 3 = 24$
Eight fours are thirty-two.	$8 \times 4 = 32$
Eight fives are forty.	$8 \times 5 = 40$
Eight sixes are forty-eight.	$8 \times 6 = 48$
Eight sevens are fifty-six.	$8 \times 7 = 56$
Eight eights are sixty-four.	$8 \times 8 = 64$
Eight nines are seventy-two.	$8 \times 9 = 72$
Eight tens are eighty.	$8 \times 10 = 80$

Table of 9

Reading way	Writing way
Nine ones are nine.	$9 \times 1 = 9$
Nine twos are eighteen.	$9 \times 2 = 18$
Nine threes are twenty-seven.	$9 \times 3 = 27$
Nine fours are thirty-six.	$9 \times 4 = 36$
Nine fives are forty-five.	$9 \times 5 = 45$
Nine sixes are fifty-four.	$9 \times 6 = 54$
Nine sevens are sixty-three.	$9 \times 7 = 63$
Nine eights are seventy-two.	$9 \times 8 = 72$
Nine nines are eighty-one.	$9 \times 9 = 81$
Nine tens are ninety.	$9 \times 10 = 90$



Table of 10

Reading way	Writing way
Ten ones are ten.	$10 \times 1 = 10$
Ten twos are twenty.	$10 \times 2 = 20$
Ten threes are thirty.	$10 \times 3 = 30$
Ten fours are forty.	$10 \times 4 = 40$
Ten fives are fifty.	$10 \times 5 = 50$
Ten sixes are sixty.	$10 \times 6 = 60$
Ten sevens are seventy.	$10 \times 7 = 70$
Ten eights are eighty.	$10 \times 8 = 80$
Ten nines are ninety.	$10 \times 9 = 90$
Ten tens are hundred.	$10 \times 10 = 100$

Activity

Multiply the following.

$$\begin{array}{r} 7 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$$

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

$$\begin{array}{r} 7 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 9 \\ \hline \end{array}$$



Identification

Multiplication

Observation

Fine motor skills





Let's revise tables.

$2 \times 1 = \square$

$2 \times 3 = \square$

$2 \times 6 = \square$

$3 \times 1 = \square$

$3 \times 9 = \square$

$3 \times 7 = \square$

$3 \times 5 = \square$

$4 \times 3 = \square$

$4 \times 6 = \square$

$4 \times 9 = \square$

$5 \times 2 = \square$

$7 \times 5 = \square$

$6 \times 8 = \square$

$5 \times 10 = \square$

$2 \times 5 = \square$

$2 \times 9 = \square$

$3 \times 8 = \square$

$5 \times 7 = \square$

$4 \times 4 = \square$

$3 \times 10 = \square$

Calendar Year

Months of the Year

Here are the months of year. Say them aloud. Repeat until you remember their order.



1. January

7. July

2. February

8. August

3. March

9. September

4. April

10. October

5. May

11. November

6. June

12. December



Count on your knuckles and remember the days in each of the months.

31 January
28 February
31 March
30 April
31 May
30 June
31 July

31 August
30 September
31 October
30 November
31 December



Left hand



Right hand

Saying things
aloud helps you
to remember
them.



Identification

Visual discrimination

Observation





Days of the Week

A week has 7 days. Say them aloud in the order they come.



Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday



There are days in a week.

Arrange the days in a correct order.

Wednesday

Saturday

Thursday

Tuesday

Monday

Friday

Sunday

The day after today is called tomorrow.





Activity

Fill in the blanks.

1. There are months in a year.
2. is the first month of the year.
3. is the last month of the year.
4. comes before October.
5. comes after June.
6. The day in between Tuesday and Thursday is

Answer the following questions.

1. Which is the first day of the week?
2. Which day comes after Monday?
3. Which is the last day of the week?
4. What is today?
5. What was yesterday?
6. What will be tomorrow?
7. How many days are there in a week?

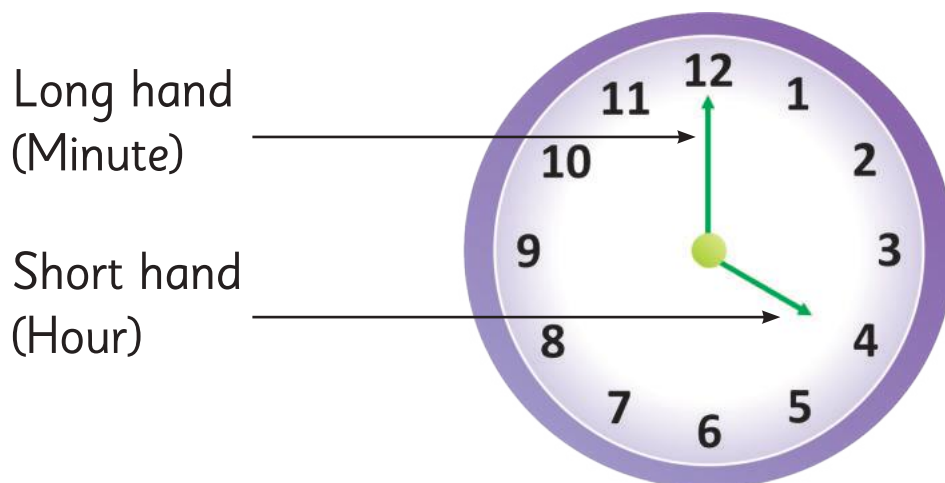


Time

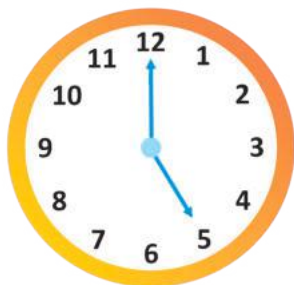
A clock has two hands.

The long hand is the minute hand.

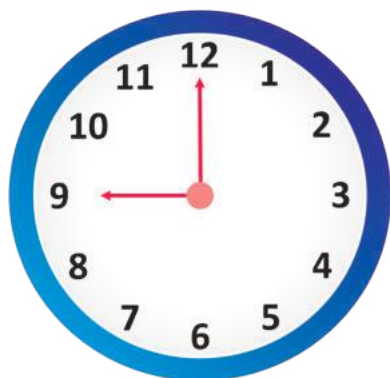
The short hand is the hour hand.



The clock has numbers from 1 to 12 on its face.



Long hand at 12, short hand at 5.
The time is 5 o' clock.



Long hand at 12, short hand at 9.
The time is 9 o' clock.

Position of hour hand at different numbers.



1 o'clock



2 o'clock



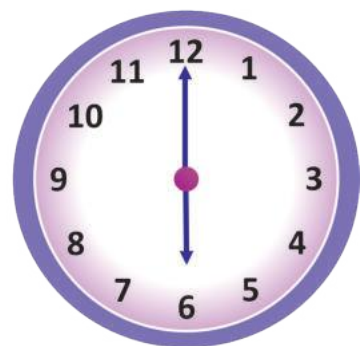
3 o'clock



4 o'clock



5 o'clock



6 o'clock

Read the time from the clocks and write in the blanks provided below the clocks.



_____ o'clock



_____ o'clock



_____ o'clock



_____ o'clock



_____ o'clock



_____ o'clock



Money

Look and learn.

Coins



₹ 1



₹ 2



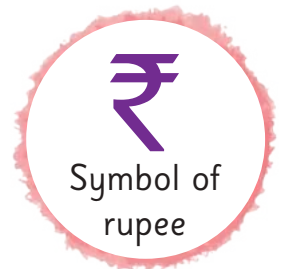
₹ 5



₹ 10



₹ 20



Visual discrimination

Identification

Observation



Look and learn.

Currency Notes



₹ 5



₹ 10



₹ 20



₹ 50



₹ 100



₹ 200



₹ 500



Visual discrimination

Observation

Identification





Activity

Match the currency notes with their value.



₹ 10



₹ 200



₹ 20



₹ 5



₹ 50



₹ 500



₹ 100



Data Handling

Collect data to find out the number of things.



Count and Write.

Name of animals	Number of animals
Lion	
Cat	
Dog	
Rabbit	
Horse	



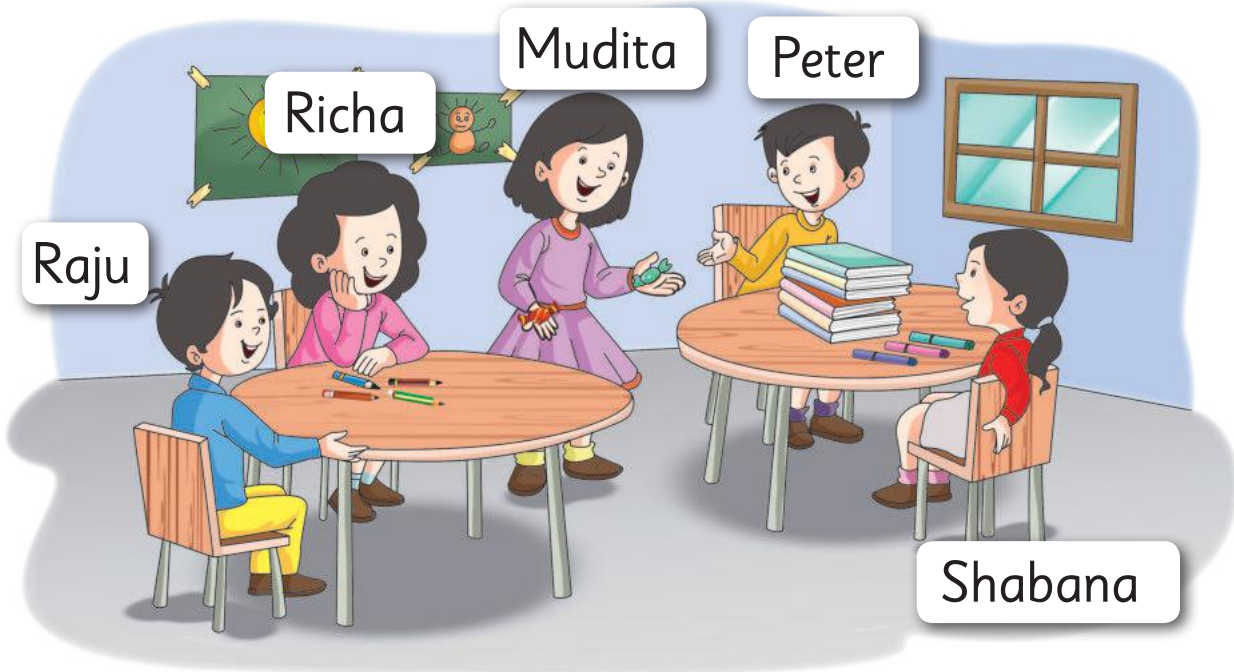
■ Identification ■ Visual discrimination ■ Observation ■ Fine motor skills





Activity

Observe the picture and with the help of this data, fill in the boxes below. One is done for you.



1. Raju has pen.
2. Richa has pencil/pencils.
3. Shabana has pen/pens.
4. Peter has books.
5. Mudita has toffees.
6. Raju has pens than Shabana. (more/less).
7. can give one toffee to each of them. (Richa/Mudita)
8. Peter has books than Richa has pencils. (more/less)