



पुर्णा International School

Shree Swaminarayan Gurukul, Zundal

Class -III

MATH-MAGIC

Explanation &

Exercise Corners

Year: 2020-2021



Chapter 4

Long and Short

❖ Summary

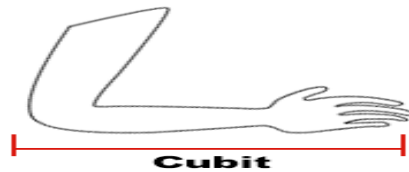
- **Introduction: Units of measurement.**
- **Find the length of given objects using non-standard units of measurement.**
- **Find the length of given objects using standard units of measurement.**
- **Conversions.**
- **Activity.**

❖ Introduction

• Units of measurement

There are types of units of measurement.

1) Non standard units of measurement: - Non standard units of measurement are handspan, cubit, footspan.



2) Standard units of measurement : - The standard units of measurement are centimetre, metre and kilometre.

1 metre = 100 centimetres

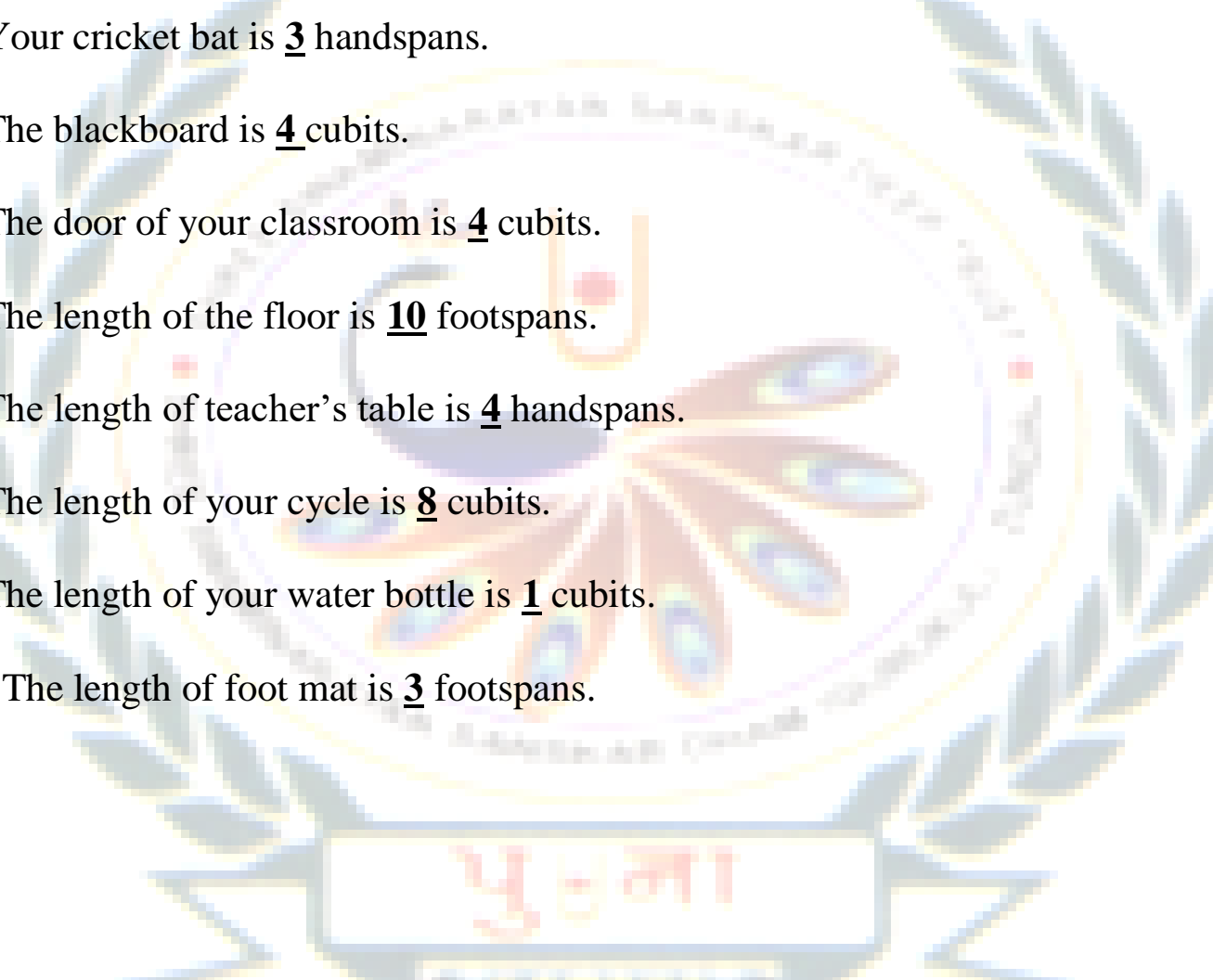
1 kilometre = 1000 metres

Centimeter is denoted by cm.

Metre is denoted by m.

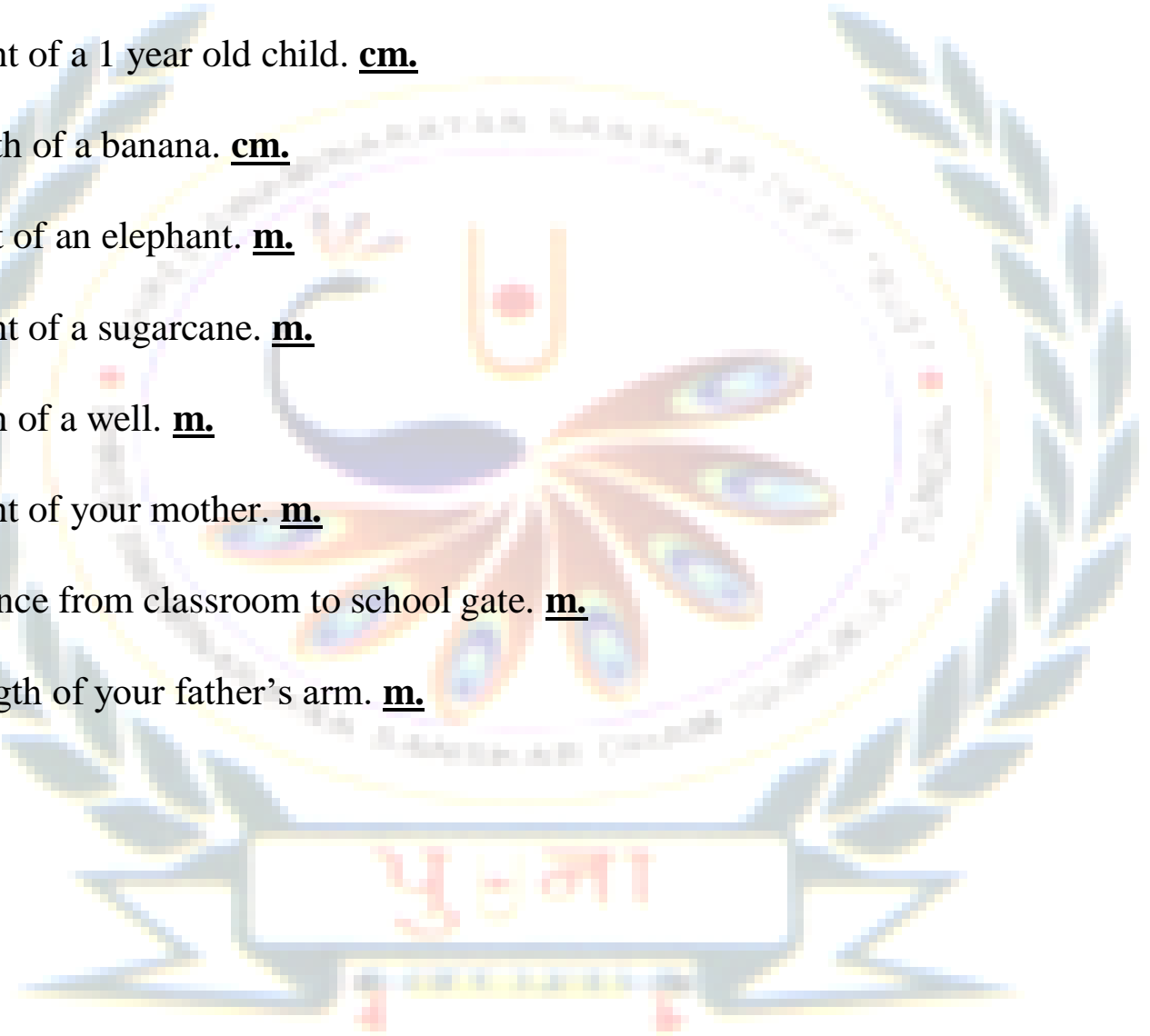
Kilometer is denoted by km.

❖ Find the length of given objects using non-standard units of measurement

- 1) Your notebook is 4 fingers.
 - 2) Your lunch box is 3 fingers.
 - 3) Your cricket bat is 3 handspans.
 - 4) The blackboard is 4 cubits.
 - 5) The door of your classroom is 4 cubits.
 - 6) The length of the floor is 10 footspans.
 - 7) The length of teacher's table is 4 handspans.
 - 8) The length of your cycle is 8 cubits.
 - 9) The length of your water bottle is 1 cubits.
 - 10) The length of foot mat is 3 footspans.
- 

❖ **Find the length of given objects using standard units of measurement(cm or m).**

- 1) Width of a computer screen. **cm.**
- 2) Length of a pagdi worn by Sikhs. **m.**
- 3) Height of a 1 year old child. **cm.**
- 4) Length of a banana. **cm.**
- 5) Waist of an elephant. **m.**
- 6) Height of a sugarcane. **m.**
- 7) Depth of a well. **m.**
- 8) Height of your mother. **m.**
- 9) Distance from classroom to school gate. **m.**
- 10) Length of your father's arm. **m.**



❖ Conversion

I) Convert meter to centimeter.

Given $1 \text{ m} = 100 \text{ cm}$

1) $6\text{m} = \underline{6 \times 100 = 600 \text{ cm.}}$

2) $22\text{m} = \underline{22 \times 100 = 2200 \text{ cm.}}$

3) $61\text{m} = \underline{61 \times 100 = 6100 \text{ cm.}}$

4) $44\text{m} = \underline{44 \times 100 = 4400 \text{ cm.}}$

5) $28\text{m} = \underline{28 \times 100 = 2800 \text{ cm.}}$

II) Convert centimeter to meter.

Given $100\text{cm} = 1\text{m}$

1) $500 \text{ cm} = \underline{500 \div 100 = 5\text{m.}}$

2) $4400 \text{ cm} = \underline{4400 \div 100 = 44\text{m.}}$

3) $2600 \text{ cm} = \underline{2600 \div 100 = 26\text{m.}}$

4) $1200 \text{ cm} = \underline{1200 \div 100 = 12\text{m.}}$

5) $8600 \text{ cm} = \underline{8600 \div 100 = 86\text{m.}}$

Activity

❖ Use a metric ruler to draw the lines with the following measurement.

a) 10cm =

b) 8 cm =

c) 6 cm =

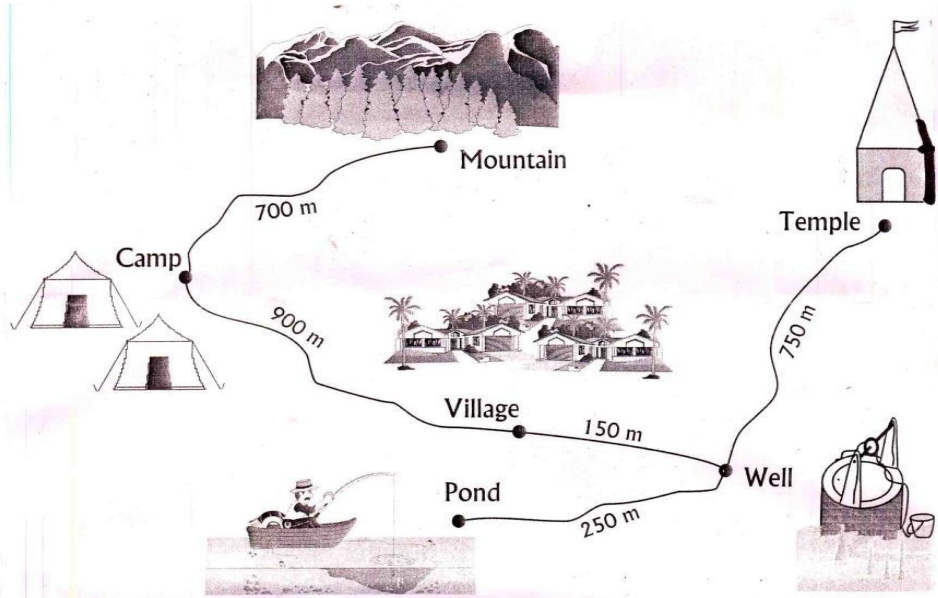
d) 12 cm =

e) 3 cm =



Exercise corners:

Q1. Look at the picture and answer the below questions.



- What is the distance from the camp to the pond? _____
- Which is farther from the camp, the pond or temple? _____
- Which is closer to the well, the pond or village? _____
- What is the distance between the mountain and the temple? _____

















Q2. Convert meters to centimeters.

- 61 m = _____ cm.
- 48 m = _____ cm.
- 94 m = _____ cm.
- 32 m = _____ cm.
- 19 m = _____ cm.

Q3. Convert centimeters to meters.

- a) 6700 cm = _____ m.
- b) 9000 cm = _____ m.
- c) 2600 cm = _____ m.
- d) 9100 cm = _____ m.
- e) 8200 cm = _____ m.

Q4. Find the length using non standard units of measurement.

| | | | |
|------------------|---|-------|--|
| meter stick |  | _____ |  |
| Rug |  | _____ |  |
| Ruler |  | _____ |  |
| Shoe |  | _____ |  |
| Glue stick |  | _____ |  |
| Pencil |  | _____ |  |
| Across the table |  | _____ |  |
| A friends arm |  | _____ |  |



पुर्णा International School

Shree Swaminarayan Gurukul, Zundal

Class -III

MATH-MAGIC

Explanation &

Exercise Corners

Year: 2020-2021



Chapter 5 Shapes and Designs

❖ Summary

- How many triangles are there.
- Find faces, edges and corners of shapes.
- Fill in the blanks.
- Tangram.
- Activity.

❖ How many triangles are there in the following figures

a)



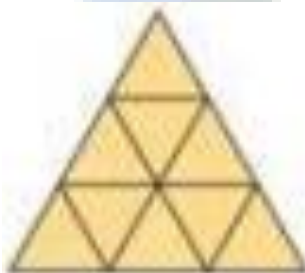
Ans: 12 triangles.

b)



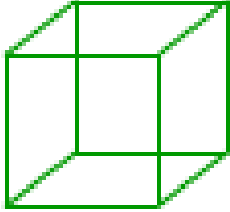
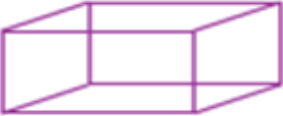

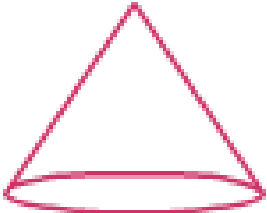
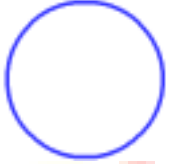
Ans: 15 triangles.

c)

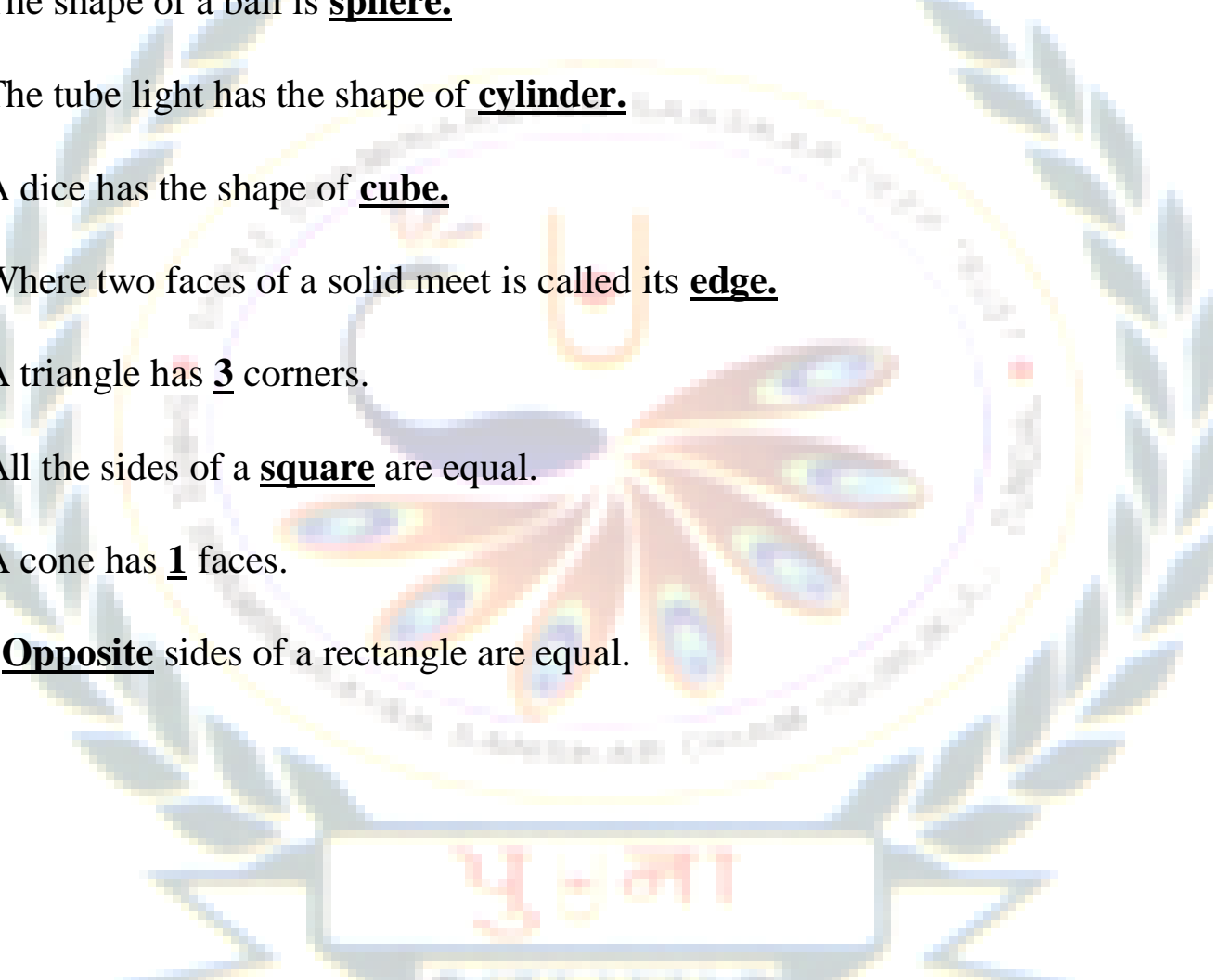


Ans: 12 triangles.

❖ Find faces, edges and corners of shapes

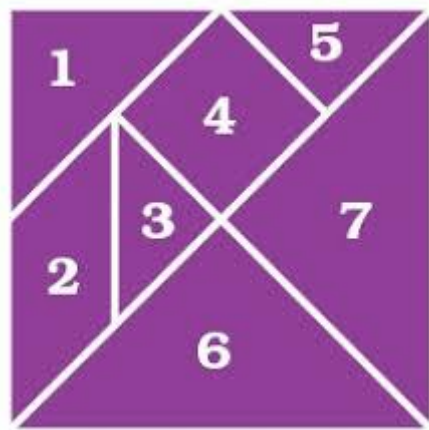
| Names | Shapes | Faces | Corners | Edges |
|-----------------|---|--------------|----------------|--------------|
| Cube |  | 6 | 8 | 12 |
| Cuboid |  | 6 | 8 | 12 |
| cylinder |  | 2 | 0 | 2 |
| Cone |  | 1 | 1 | 1 |
| Sphere |  | 0 | 0 | 0 |

❖ Fill in the blanks

- 1) A cone ice-cream has the shape of cone.
 - 2) An eraser has the shape of cuboid.
 - 3) The shape of a ball is sphere.
 - 4) The tube light has the shape of cylinder.
 - 5) A dice has the shape of cube.
 - 6) Where two faces of a solid meet is called its edge.
 - 7) A triangle has 3 corners.
 - 8) All the sides of a square are equal.
 - 9) A cone has 1 faces.
 - 10) Opposite sides of a rectangle are equal.
- 

❖ Tangram

- The tangram is an old Chinese puzzle. From the pieces of the tangram, we can make many shapes of animals, people and things.
- Use the below 7 piece tangram and answer the following questions that follow.



a) Which piece is in the shape of square?

Ans) **4**

b) Which pieces are in the shape of triangle?

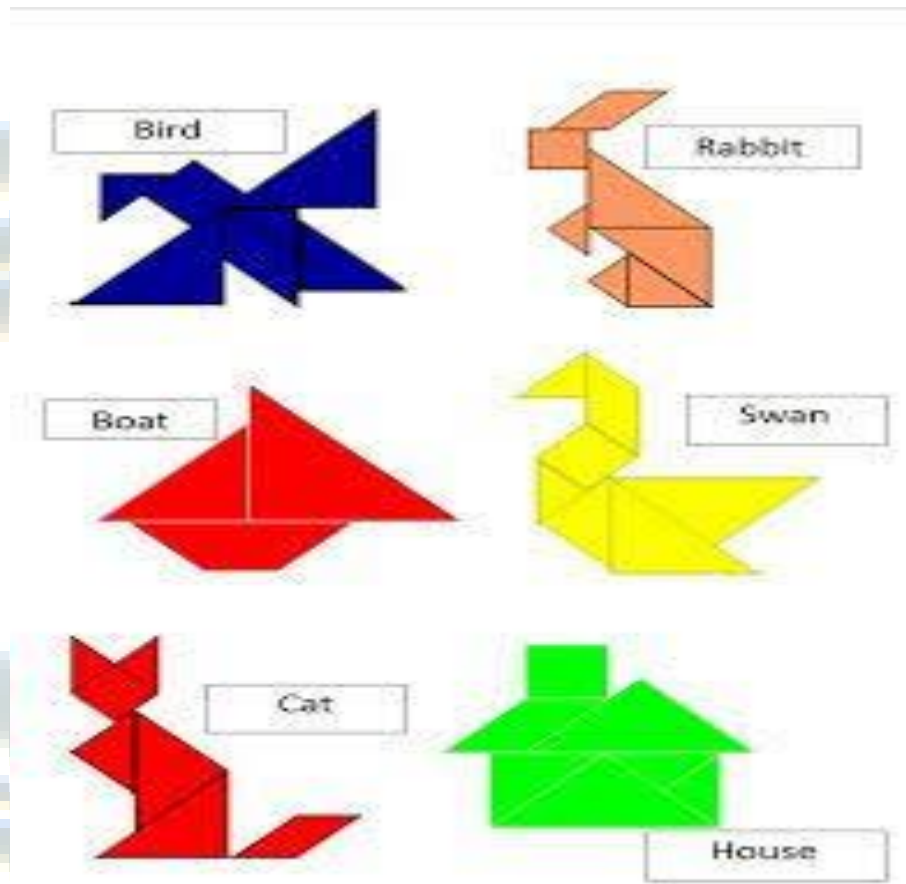
Ans) **1, 3, 5, 6 and 7**

c) How many triangles are there in the set?

Ans) **5 triangles**

Activity

❖ Draw a tangram using different shapes.



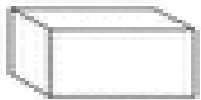
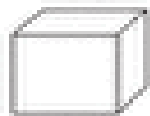
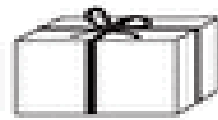
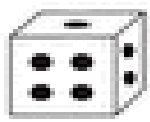
3 5 0 7 1 1

3 5 0 7 1 1

Exercise corners:

Q1. Using the word bank, write the name of each shape below.

| | | | |
|-----------|--------|----------|----------|
| circle | cube | sphere | cone |
| rectangle | square | cylinder | triangle |

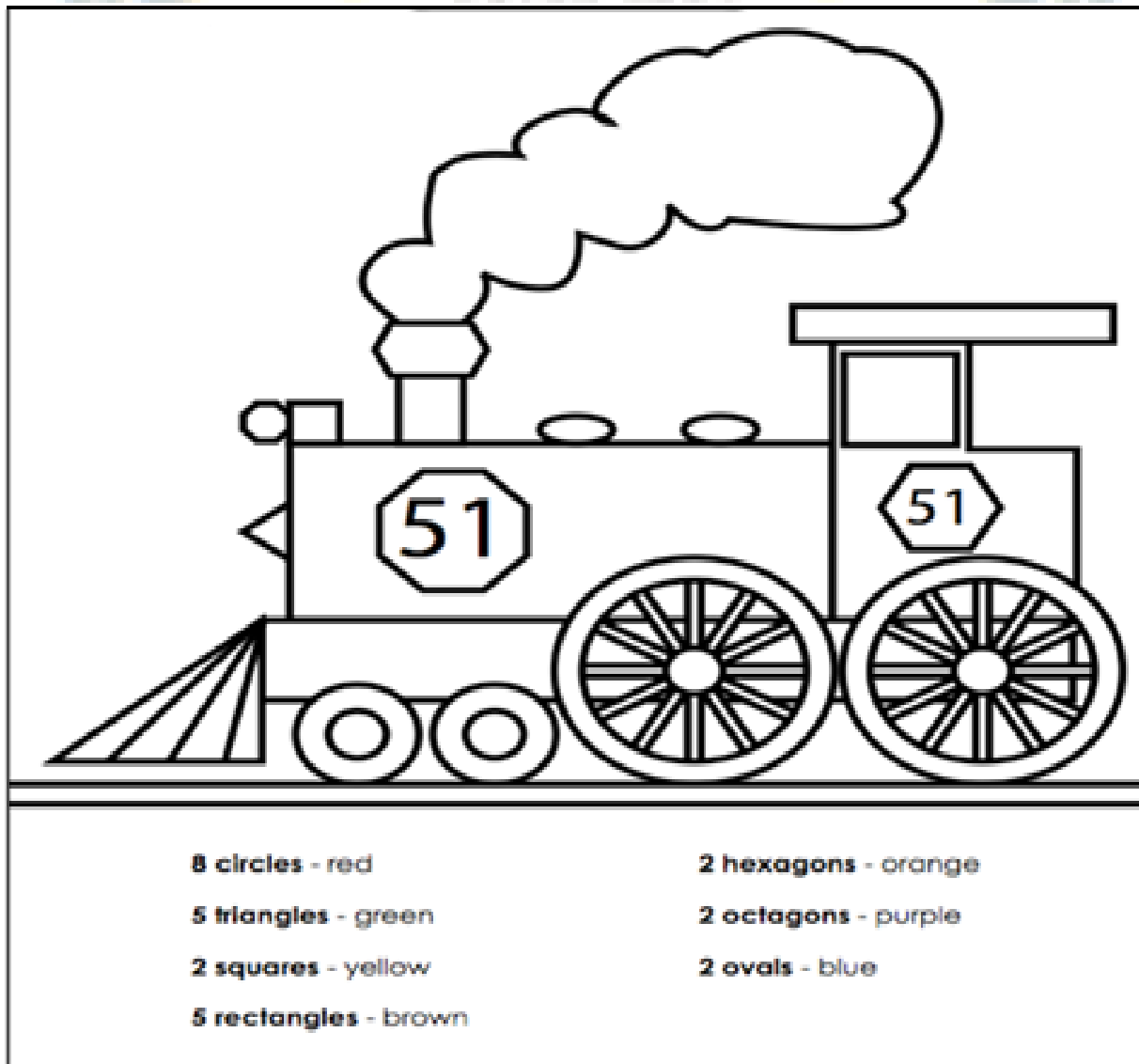


Q2. Fill in the blanks

- Where two faces of solid meet is called its _____.
- What shape you will get if you trace the outline of a dice? _____.
- All the sides of a _____ are equal.
- A circle has _____ vertices.

- e) Top view of a cylinder is a _____.
- f) _____ sides of a rectangle are equal.
- g) Solids are also called as _____ figures.
- h) A triangle has _____ sides.

Q3. Colour the shapes.





पुर्णा International School

Shree Swaminarayan Gurukul, Zundal

Class -III

MATH-MAGIC

Explanation &

Exercise Corners

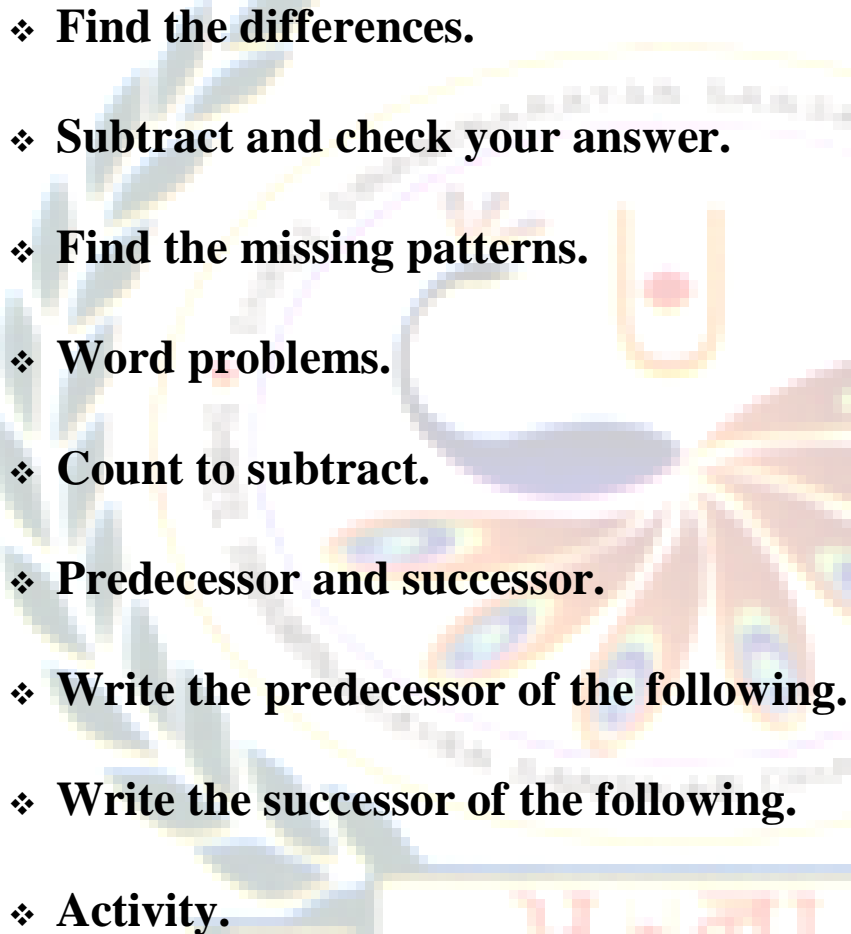
Year: 2020-2021



Chapter 6

Fun with Give and Take

➤ Summary

- ❖ Find the differences.
 - ❖ Subtract and check your answer.
 - ❖ Find the missing patterns.
 - ❖ Word problems.
 - ❖ Count to subtract.
 - ❖ Predecessor and successor.
 - ❖ Write the predecessor of the following.
 - ❖ Write the successor of the following.
 - ❖ Activity.
- 

➤ Find the differences

| | | | |
|---|---|---|---|
| $\begin{array}{r} 926 \\ - 658 \\ \hline \underline{268} \end{array}$ | $\begin{array}{r} 835 \\ - 368 \\ \hline \underline{467} \end{array}$ | $\begin{array}{r} 925 \\ - 466 \\ \hline \underline{459} \end{array}$ | $\begin{array}{r} 771 \\ - 457 \\ \hline \underline{314} \end{array}$ |
| $\begin{array}{r} 956 \\ - 598 \\ \hline \underline{358} \end{array}$ | $\begin{array}{r} 932 \\ - 778 \\ \hline \underline{154} \end{array}$ | $\begin{array}{r} 678 \\ - 593 \\ \hline \underline{085} \end{array}$ | $\begin{array}{r} 836 \\ - 567 \\ \hline \underline{269} \end{array}$ |

➤ Subtract and check your answer

| | | |
|--|--|--|
| $\begin{array}{r} 236 \\ - 114 \\ \hline \underline{122} \end{array} \quad \begin{array}{l} \rightarrow \\ \downarrow \end{array} \quad \begin{array}{r} 122 \\ + 114 \\ \hline \underline{236} \end{array}$ | $\begin{array}{r} 340 \\ - 028 \\ \hline \underline{312} \end{array} \quad \begin{array}{l} \rightarrow \\ \downarrow \end{array} \quad \begin{array}{r} 312 \\ + 028 \\ \hline \underline{340} \end{array}$ | $\begin{array}{r} 860 \\ - 621 \\ \hline \underline{239} \end{array} \quad \begin{array}{l} \rightarrow \\ \downarrow \end{array} \quad \begin{array}{r} 239 \\ + 621 \\ \hline \underline{860} \end{array}$ |
| $\begin{array}{r} 756 \\ - 547 \\ \hline \underline{209} \end{array} \quad \begin{array}{l} \rightarrow \\ \downarrow \end{array} \quad \begin{array}{r} 209 \\ + 547 \\ \hline \underline{756} \end{array}$ | $\begin{array}{r} 468 \\ - 139 \\ \hline \underline{329} \end{array} \quad \begin{array}{l} \rightarrow \\ \downarrow \end{array} \quad \begin{array}{r} 329 \\ + 139 \\ \hline \underline{468} \end{array}$ | $\begin{array}{r} 448 \\ - 244 \\ \hline \underline{204} \end{array} \quad \begin{array}{l} \rightarrow \\ \downarrow \end{array} \quad \begin{array}{r} 204 \\ + 244 \\ \hline \underline{448} \end{array}$ |

➤ **Find the missing patterns**

a) 100, 200, 300, 400, 500, 600, 700.

b) 900, 800, 700, 600, 500, 400, 300.

c) 50, 100, 150, 200, 250, 300, 350, 400.

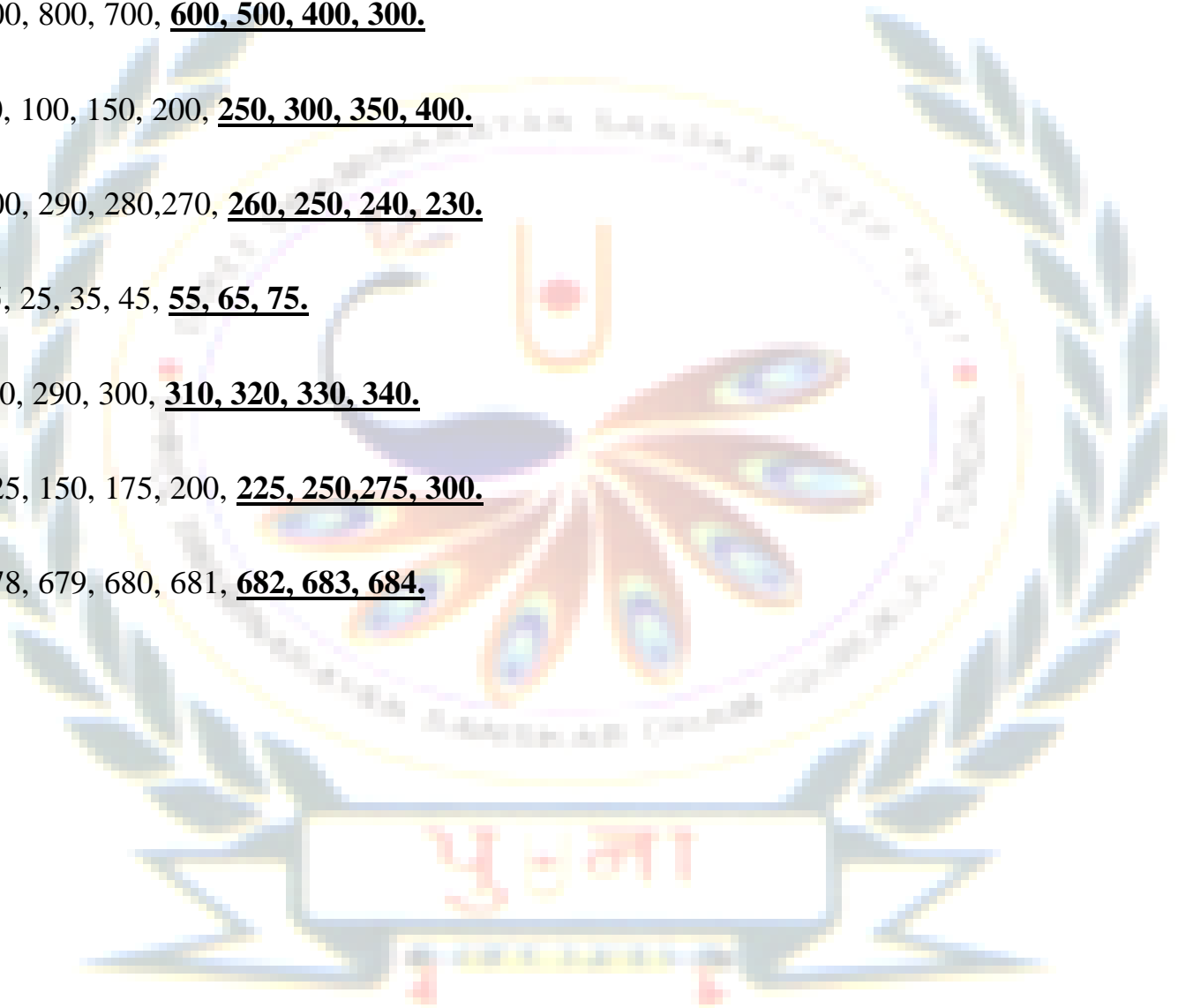
d) 300, 290, 280, 270, 260, 250, 240, 230.

e) 15, 25, 35, 45, 55, 65, 75.

f) 280, 290, 300, 310, 320, 330, 340.

g) 125, 150, 175, 200, 225, 250, 275, 300.

h) 678, 679, 680, 681, 682, 683, 684.



➤ Word problems

- 1) Arvind has read 69 pages of a story book. Gouri has read 95 pages of that story book.
Who has read more pages and how many more?

Sol:

$$\begin{array}{r} 95 \text{ pages} \\ - 69 \text{ pages} \\ \hline 26 \text{ pages} \end{array}$$

- Gouri has read more pages and are 26 pages.

- 2) Reena noted the electricity meter reading of her house. Last month's reading was 118 units. This month's reading is 193 units. How much electricity did she use in one month?

Sol:

$$\begin{array}{r} 193 \text{ this month's reading} \\ - 118 \text{ last month's reading} \\ \hline 075 \text{ units} \end{array}$$

- She has used 75 units of electricity.

- 3) Khusboo bought a shirt for Rs 125 and trousers for Rs165. How much money did she spend altogether?

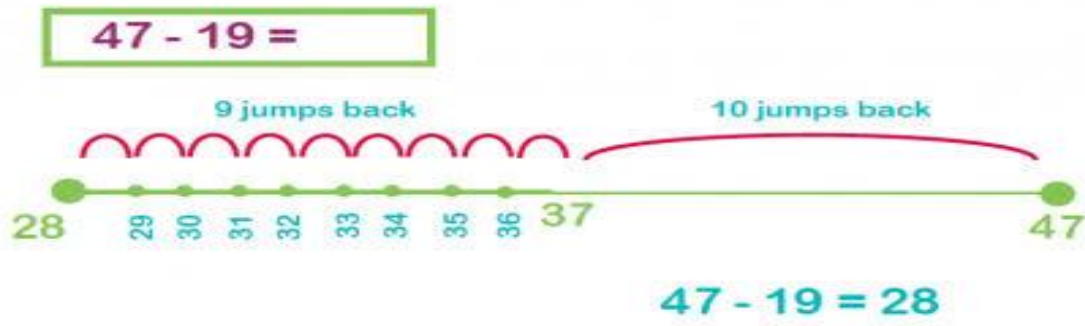
Sol:

$$\begin{array}{r} \text{Rs } 125 \text{ bought a shirt} \\ + \text{Rs } 165 \text{ bought a trousers} \\ \hline \text{Rs } 290 \end{array}$$

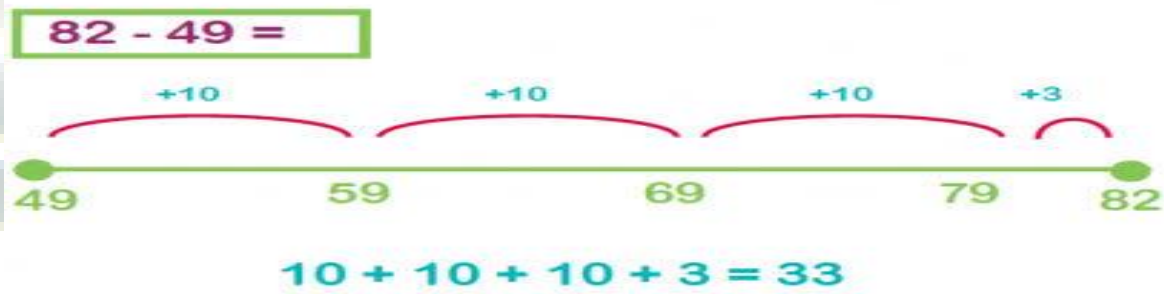
- She has spent Rs 290 altogether.

➤ **Count to subtract**

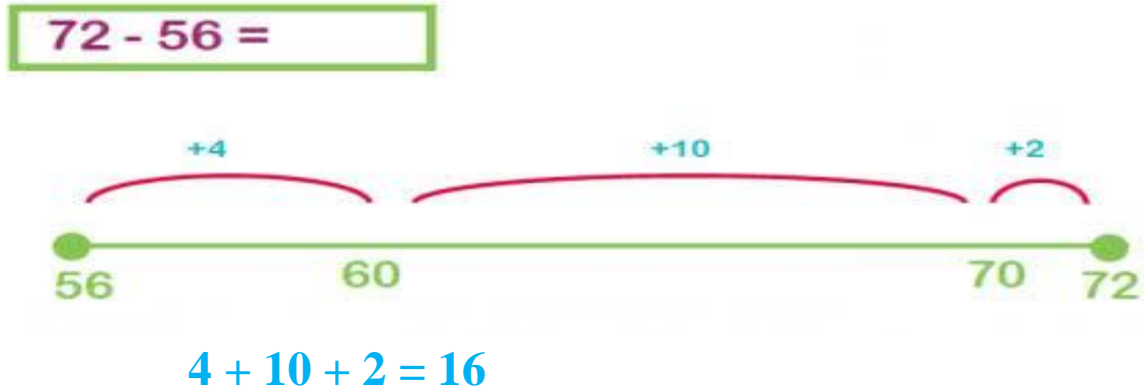
a)



b)



c)



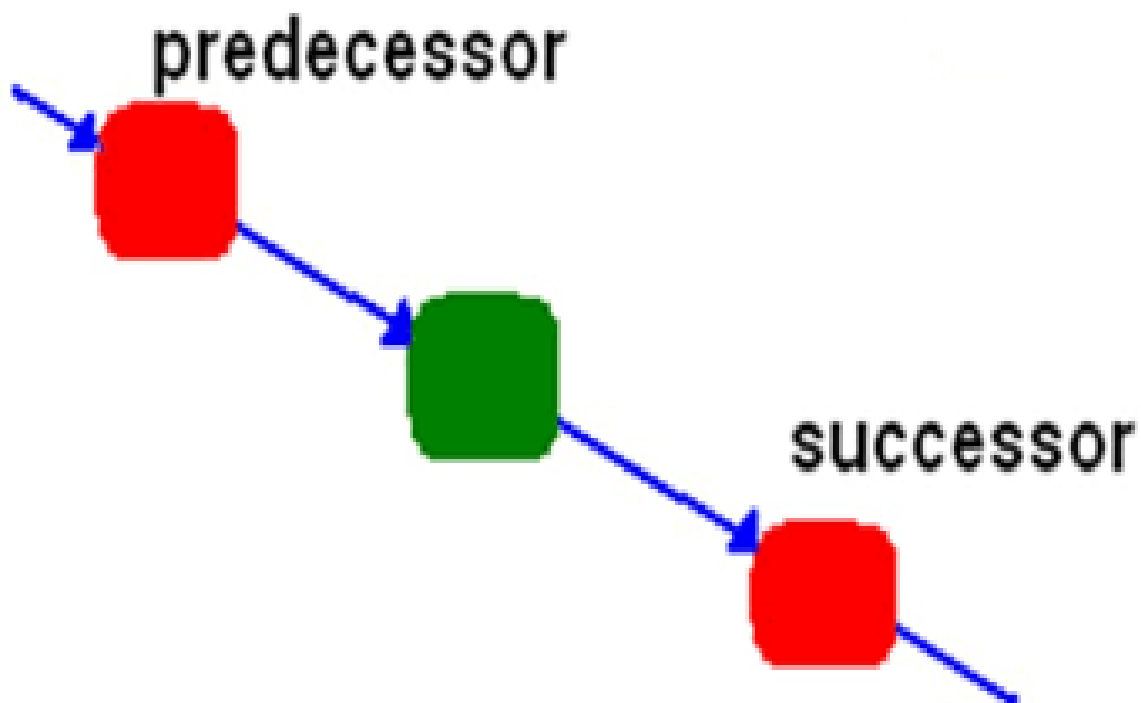
➤ Predecessor and successor

Predecessor: Predecessor of any whole number is the number obtained by subtracting one from it.

Example: The predecessor of 7879 is **7878**.

Successor: successor of any whole number is the number obtained by adding one to it.

Example: The successor of 7686 is **7687**.



➤ **Write the predecessor of the following**

- 1) The Predecessor of 5665 is **5664**.
- 2) The Predecessor of 4321 is **4320**.
- 3) The Predecessor of 8909 is **8908**.
- 4) The Predecessor of 1288 is **1287**.
- 5) The Predecessor of 3222 is **3221**.

➤ **Write the successor of the following**

- 1) The successor of 5665 is **5664**.
- 2) The successor of 6447 is **6448**.
- 3) The successor of 9088 is **9089**.
- 4) The successor of 4677 is **4678**.
- 5) The successor of 7431 is **7432**.

Activity

- Fill in the missing numbers in the puzzles below.



| | | |
|----------------------------|----------------------------|----------------------------|
| <p>33 + - 45</p> | <p>28 + - 17</p> | <p>32 + - 47</p> |
|----------------------------|----------------------------|----------------------------|

Exercise corners:

Q1. Subtraction with borrow. One example is given below.

| | | |
|--|--|--|
| $\begin{array}{r} 6 \\ \color{red}{6} \\ \color{red}{15} \\ \underline{-3 \ 2 \ 8} \\ 3 \ 4 \ 7 \end{array}$ | $\begin{array}{r} 5 \ 8 \ 2 \\ \underline{-1 \ 5 \ 3} \end{array}$ | $\begin{array}{r} 8 \ 6 \ 7 \\ \underline{-5 \ 0 \ 8} \end{array}$ |
| $\begin{array}{r} 5 \ 8 \ 0 \\ \underline{-3 \ 2 \ 1} \end{array}$ | $\begin{array}{r} 7 \ 7 \ 7 \\ \underline{-1 \ 6 \ 8} \end{array}$ | $\begin{array}{r} 6 \ 7 \ 2 \\ \underline{-2 \ 2 \ 3} \end{array}$ |
| $\begin{array}{r} 4 \ 9 \ 0 \\ \underline{-1 \ 7 \ 7} \end{array}$ | $\begin{array}{r} 8 \ 6 \ 6 \\ \underline{-3 \ 3 \ 7} \end{array}$ | $\begin{array}{r} 6 \ 6 \ 6 \\ \underline{-3 \ 0 \ 7} \end{array}$ |
| $\begin{array}{r} 4 \ 6 \ 4 \\ \underline{-2 \ 1 \ 5} \end{array}$ | $\begin{array}{r} 9 \ 3 \ 3 \\ \underline{-6 \ 2 \ 6} \end{array}$ | $\begin{array}{r} 6 \ 9 \ 1 \\ \underline{-4 \ 2 \ 2} \end{array}$ |
| $\begin{array}{r} 5 \ 8 \ 0 \\ \underline{-1 \ 0 \ 8} \end{array}$ | $\begin{array}{r} 2 \ 5 \ 2 \\ \underline{-2 \ 4 \ 7} \end{array}$ | $\begin{array}{r} 6 \ 1 \ 2 \\ \underline{-1 \ 0 \ 4} \end{array}$ |

Q2. Which numbers add to make more than 500?

- a. 152 and 241
- b. 99 and 299
- c. 401 and 91

Q3. Fill in the blanks:

$$\begin{array}{r} 1. \quad 2 \square 56 \\ + \quad 2 \square 1 \\ \hline \square 597 \end{array}$$

$$\begin{array}{r} 2. \quad \square 86 \\ - \quad 34\square \\ \hline 3\square 9 \end{array}$$

$$\begin{array}{r} 3. \quad 796 \\ + \quad 3\square\square \\ \hline 1\square 80 \end{array}$$

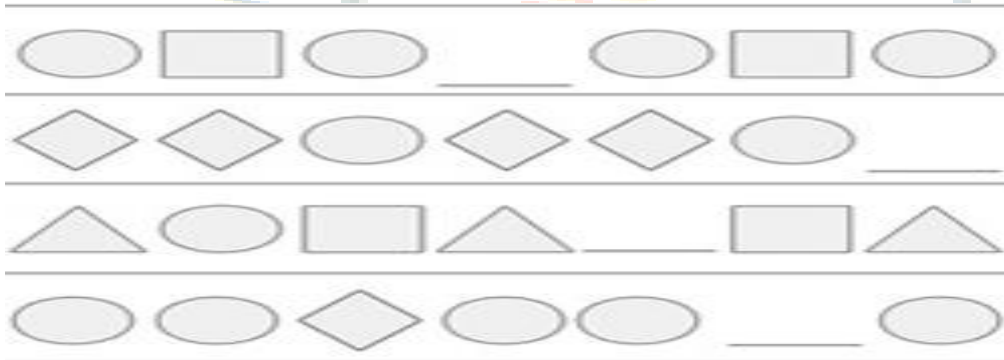
$$\begin{array}{r} 4. \quad 372 \\ - \quad 5\square \\ \hline 3\square 6 \end{array}$$

$$\begin{array}{r} 5. \quad 4\square\square \\ + \quad 39\square \\ \hline \square 70 \end{array}$$

Q4. Find the total number of children in class I to V.

| Class | Number of children |
|--------------|--------------------|
| I | 34 |
| II | 52 |
| III | 56 |
| IV | 60 |
| V | 65 |
| Total | |

Q5. Find the missing patterns.





पुर्णा International School

Shree Swaminarayan Gurukul, Zundal

Class -III

MATH-MAGIC

Explanation &

Exercise Corners

Year: 2020-2021



Chapter 7

Time Goes on

➤ Summary

❖ What is time?

❖ How long does it take?

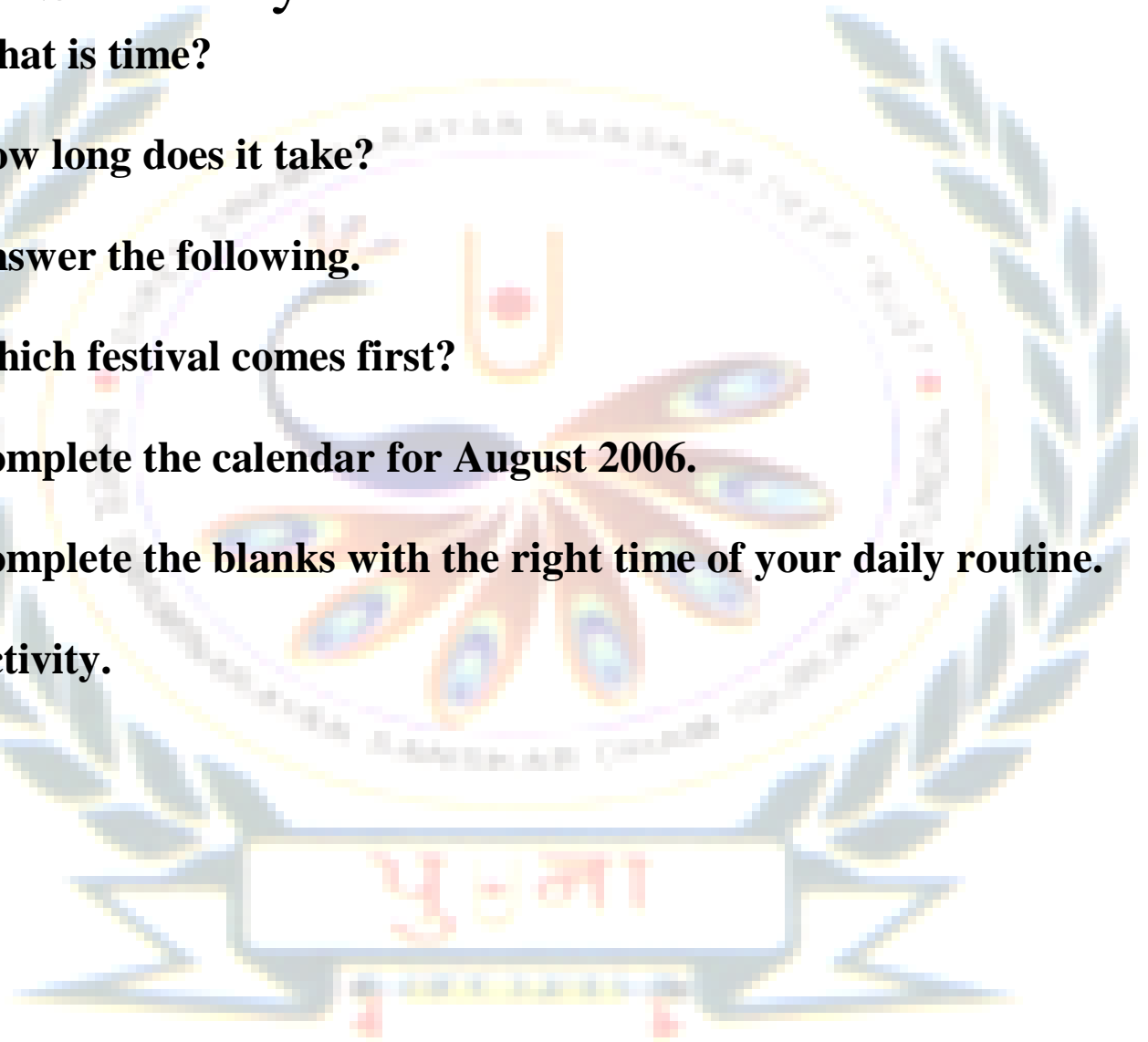
❖ Answer the following.

❖ Which festival comes first?

❖ Complete the calendar for August 2006.

❖ Complete the blanks with the right time of your daily routine.

❖ Activity.



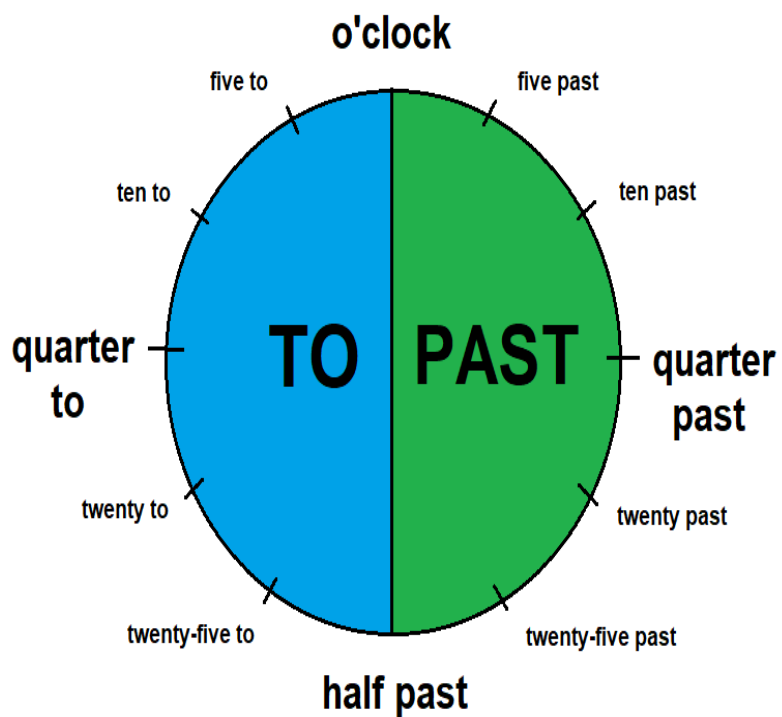
➤ What is time?

Time is a component used to compare the duration of events

A clock is used to measure time.

The short hand is called the hour hand.

The long hand is called the minute hand.



➤ How long does it take?

* How long does the different things that take different time (minutes, hours, days).

| <i>Takes minutes</i> | <i>Takes hours</i> | <i>Takes days</i> |
|------------------------|-----------------------------|-----------------------------|
| A bath | To stitch a shirt | To knit a sweater |
| To boil milk | To set curd | To weave a sari |
| To sharp a pencil | A school day | For a banana to become ripe |
| To blow a balloon | To set ice-cream | For seed to germinate |
| To eat an apple | To draw a scenery | To paint your house |
| To wear shoes | To bake cake | To make furniture. |
| To cook ladyfinger | To change from day to night | |
| To fill petrol in car. | Dusting of house. | |

* Now think of some other things, some faster and some slower. Make a list.

| <i>Takes seconds</i> | <i>Takes months</i> |
|-------------------------------|--|
| To blink my eyes | To grow wheat (from seed to big plant) |
| To snap my fingers | To change from summer to winter |
| To gulp my medicine | For a baby to come out of its mother's stomach |
| For fruit to fall from a tree | To write a book |
| To throw a ball | To construct a house. |
| To take a snap. | |

➤ **Answer the following**

- 1) How many months does a year have? **12 months.**
- 2) How many months have 30 days? **4 months.**
- 3) How many months have 31 days? **7 months.**
- 4) How many days are there in the month of February? **28/29 days.**
- 5) List the months which have 30 days? **April, June, September, November.**
- 6) List the months which have 31 days? **January, March, May, July, August, October, December.**
- 7) In which month did you come to class III? **April.**
- 8) How many days does a week have? **7 days.**

➤ Which festival comes first?

Given below are some festivals we celebrate during the year.

| <i>Name of the festival</i> | <i>Date</i> |
|-----------------------------|-------------|
| Diwali | October 21 |
| Pongal | January 14 |
| Raksha Bandhan | August 9 |
| Gandhi Jayanti | October 2 |
| Milad-UI-Nabi | April 11 |
| Onam | September 5 |
| Guru Nanak's Birthday | November 5 |
| Guru Ravidas's Birthday | February 13 |
| Christmas Day | December 25 |
| Bihu | April 14 |

Now arrange the festivals in the order in which they come in the year.

Answer:

Pongal ,Guru Ravidas's Birthday, Milad-UI- Nabi, Bihu, Raksha Bandhan, Onam, Gandhi Jayanti, Diwali, Guru Nanak's Birthday, Christmas Day.

Q1) Which festival comes in the beginning of the year?

Ans: Pongal.

Q2) Which festival comes at the end of the year?

Ans: Christmas.

➤ **Complete the calendar for August 2006**

| August 2006 | | | | | | |
|-------------|--------|---------|-----------|----------|--------|----------|
| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | | |

- 1) Colour all the Sundays in red.
- 2) On which day does this month end? **Thursday**
- 3) Write the numbered days in this month? **31**
- 4) What day is it on 13th August? **Sunday**
- 5) What is the date on the second Saturday? **12th**
- 6) Is the 21st a Sunday? **No**
- 7) What is the day on the 29th? **Tuesday**
- 8) How many Thursdays are there in this month? **5**

➤ **Complete the blanks with the right time of your daily routine**

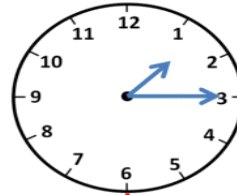
- 1) I wake up at 6 Am.
- 2) I have bath at 7 Am.
- 3) I have breakfast at 7.30 Am.
- 4) I go to school at 7.45 Am.
- 5) School starts at 8 Am.
- 6) I have lunch at 11.45 Am.
- 7) I go to home at 3 Pm.
- 8) I play with my friends 4 Pm.
- 9) I do my homework at 5 Pm.
- 10) I watch T.V at 7 Pm.
- 11) I have my dinner at 8 Pm.
- 12) I go to bed at 9 Pm.

➤ Activity

❖ Write the time below each clock.

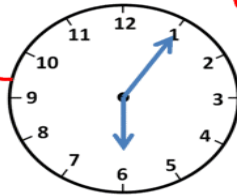


20 to 8

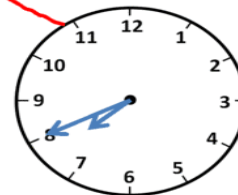
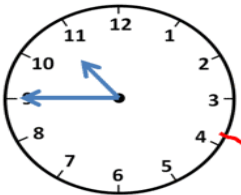


Quarter past 1

5 past 6



10 past 5



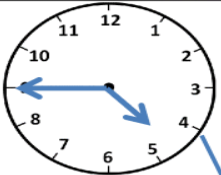




20 past 8



Quarter to 11

Exercise corners:

Q1. Match the times. One is done for you.

| | | |
|---|----------------|-------|
|  | Quarter past 5 | 5:15 |
|  | 3 o'clock | 4:45 |
|  | Quarter to 5 | 3:00 |
|  | 8 o'clock | 10:30 |
|  | Half past 10 | 8:00 |

Q2. Fill in the blanks.

- i. 1 day = _____ hours.
- ii. 1 year = _____ days.
- iii. 1 leap year = _____ days.
- iv. The short hand in the clock is the _____ hand.
- v. The long hand in the clock is the _____ hand.
- vi. The hour hand completes _____ rounds in a day.
- vii. The minutes hand completes _____ rounds in an hour.
- viii. The minutes hand completes _____ rounds in a day.

Q3. Write the correct time.



1. What time is the clock showing?

_____ : _____

2. What time was 1 hour and 20 minutes ago?

_____ : _____



1. What time is the clock showing?

_____ : _____

2. What will be the time after 25 minutes?

_____ : _____



1. What time is the clock showing?

_____ : _____

2. What will be the time after 45 minutes?

_____ : _____



1. What time is the clock showing?

_____ : _____

2. What time was 5 hours ago?

_____ : _____

