CBSE Class 4 Subject Mathematics
NCERT Solutions
Chapter -14
SMART CHARTS

Read the following passage and answer the questions that follow:

1. How many Hours?

(a) How much time do we spend on this?

Ans. We spend about one hour per day watching television (TV) or listening to the radio.

(b) Note the time you spend in front of a TV or radio everyday. Do this for one week. The time spent in a week is 11 hours. So in a month you spend 30✕ 11 = 330 hours.

Find out from the friends the time they spend in a week.

Ans. The given table is completed after asking my friends as under:

How many hours they watch TV or listen to the radio?	Number of children
More than 6 hours	8
Six hours	10
Five hours	12
Four hours	17
Three hours	13
Two hours	8
One hours	5
Zero hour (do not watch)	2

(c). From your table:

Watch TV/ listening to the radio.

Ans.(i) 8 children spend more than 6 hours in a weak.

(ii) 2 children spend no time at all.

(iii) Most children spend four hours in a week.

(iv) 47 children spend more than 3 hours.

2. Ask people in your family to name one programme they like and one programme they dislike. Make a table.

Ans. The required table is as follows:

Family Member	Programme they like	Programme they dislike
Mother	Movie	Sports
Father	Sports	Serials
Grandmother	Religious	Serials
Grandfather	Religious	Sports
Uncle	Religious	Plays
Brother	Cartoons	Plays
Sister	Serials	Sports

 Most of the family member like religious programme. Most of the family members dislike sports.

3. Find out from friends the programmes they like and dislike, and write in a table.

Ans. The required table is as under:

Kind of Programme	Number of children liking it	Number of children disliking it
News	3	17
Serials	5	15
Cartoons	19	1
Comedy	14	6
Sports	18	2

(a) Which kind of programme is liked by most children?

Ans. Cartoons is liked by most of the children.

(b) Which kind of programme is disliked by the least number of children?

Ans. Cartoons is disliked by the least number of children.

(c) How many children like sports programme?

Ans. 18 children like sports programmes.

(d) Is there any kind of programme not liked by anyone? Yes/No. If yes, which one?

Ans. There is no such programme which is not liked by anyone.

4. Who is my friend?

Read the poem carefully and answer these questions:

(a) Which word comes most often in the poem?

Ans. Let us prepare the following table to answer the questions:

Letter	Tally Marks	No. of letters	Letter	Tally Marks	No. of letters
A	IIIIIIIII	10	N	IIIIIIIIIIIII	13
B	I	1	O	IIIIII	6
C	II	2	P		-
D	IIIIIII	7	Q		-
E	IIIIIIIIII IIIIIIIIII	20	R	IIIIII	6
F	II	2	S	IIIIIIIIII	10
G	II	2	T	IIIIIIIIII	10
H	IIIIIIIIIIIIIII	15	U	IIII	4
I	IIIIIIIIIIIIII	14	V	I	1
J		-	W	IIIIIII	7
K	II	2	X		-

L	II	2	Y	III	3
M	IIIIIII	7	Z		-

The word 'I' is used most often in the poem.

(b) Which letter has been used most?

Ans. 'E' has been used most.

(c) Which comes the least?

Ans. 'B' and 'V' comes the least apart from P, Q, J, X and Z which never come.

5. Take a paragraph you like from your language textbook. Read carefully and find out:

(a) Which word comes most often? How many times?

Ans. Consider the paragraph:

"He picked up a large bag and filled it with the most beautiful jewels. At least, when the bag was full, he went back to the cave door."

The word 'the' comes most often in the paragraph. It comes three times.

(b) Which word comes least often?

Ans. Picked up, large, filled .. are some of the many words which come only once in the paragraph.

(c) The letter used more often is ...

Ans. The letter 'E' is used more often.

(d) The letter used more often is ..

Ans. The letter 'J, M, V' are used least often.

6. Find out from your classmates and fill the table:

Ans. The table is filled as under:

Main food	Number of persons
Rice	15
Wheat	20
Maize	10
Barely	5
Ragi	8

7. Look at the table and tell:

Main food	Number of persons
Rice	15
Wheat	20
Maize	10
Barely	5
Ragi	8

(a) Most children eat food more from ...

Ans. Most children eat wheat.

(b) Compared to children who eat rice, those who eat wheat are more/less equal.

Ans. The children who eat rice are less than those who eat wheat.

(c) Compared to those eat wheat, children who eat ragi are more/less.

Ans. The children who eat wheat are more than those eating ragi.

8. Preparing for the Class Drama:

The Drama Chart

(a) How many children are acting in a drama?

Ans. The number of children acting in a drama are $3 \times 3 = 9$.

(b) Which are more children making the sets or those acting?

Ans. Number of children making the sets are $2 \times 3 = 6$ and, those who are acting= $3 \times 3 = 9$. Clearly, 9 > 6. Thus, the number of children acting are more than those making the sets.
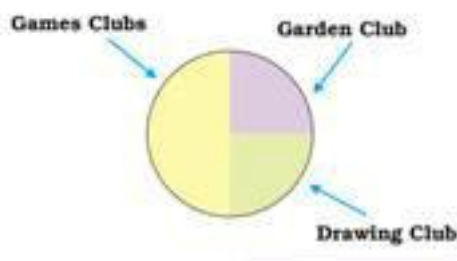
(c) What is being done by most of the children?

Ans. Most of the children are playing music.

(d) How many children are collecting dresses?

Ans. Number of children collecting dresses are $2 \times 3 = 6$.

9. From the picture (given in the book) we can see that:

 (a) Half of the children in the class take part in Games Club.

 (b) One fourth of the children are members of the Garden Club.

 (c) The Drawing Club has one-fourth children of the class.

If there are 200 students in the school, look at the above Chapati Chart and tell the number of members in each club:

(A) The Games Club has ____ members.

Ans. Number of students in the school = 200

Half of the children are in the Games Club.

So, the Games Club has $\left(200 \times \dfrac{1}{2}\right)$ = 100 children.

The Games Club has 100 members.

(B) The Garden Club has ___ members.

Ans. One-fourth of the children are in the Garden Club.

So, the Garden Club ha $\left(200 \times \dfrac{1}{4}\right)$ = 50 children. The Garden Club has 50 members.
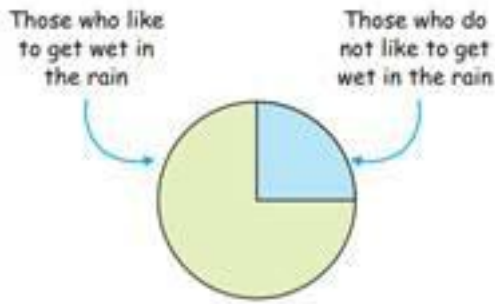
(C) There are __ members in the Drawing Club.

Ans. One-fourth of the children are in the Drawing Club.

So, the Drawing Club has $\left(200 \times \dfrac{1}{4}\right)$ = 50 children.

There are 50 members in the Drawing Club.

10. Getting Wet in the Rain:

See the Chapati (in the book) chart and tell:

Those who like to get wet in the rain

Those who do not like to get wet in the rain

(a) How many children like to get wet in the rain?

(i) Half(ii) One-fourth (iii) three-fourth

Ans. Three-fourth of children like to get wet in the rain. Thus (iii) is the answer.

(b) How many children do not like to get wet in the rain?

(i) Half(ii) one-fourth (iii) three-fourth

Ans. One-fourth of children do not like to get wet in the rain. Thus, (ii) is the answer.

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11. If the children in the class are 28 then tell the number of children.

(a) Who like to get wet in the rain.

Ans. Number of children in the class is 28.

Who like to get wet in the rain = $28 \times \dfrac{3}{4}$ = 7 $\times$ 3 = 21

(b) Who do not like to wet in the rain.

Ans. Who do not like to wet in the rain = $28 \times \dfrac{1}{4}$ = 7

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12. Some children were asked which of these they like the most – Tea, Coffee and Milk.

The drink they like	Number of children
Milk	20
Coffee	10

Tea	10
Total Number of children	40

Find out from the children:

(a) Children who like milk are $\frac{1}{2} / \frac{1}{4}$ of the total children.

Ans. Children who like milk are = $\frac{1}{2}$ of the total children.

(b) Children who like coffee are $\frac{1}{2} / \frac{1}{4}$ of the total children.

Ans. Children who like coffee are $\frac{10}{40} = \frac{1}{4}$ of the total children.