

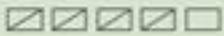
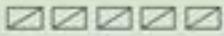
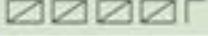
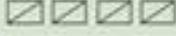
CBSE Class 5 Mathematics

NCERT Solutions

CHAPTER-12

SMART CHARTS

1. Yamini did a project 'Animals and Birds'. She asked each child of her class about one favourite pet animal. She used tally marks to record each answer. For example if someone said cat she put one line in front of cats. When someone said cat again, she added a line. So  means two cats and  means 5 cats. In all 24 children said cat was their favourite animal. Help Yamini complete the table.

Animal	Tally Marks	Number
Cats		24
Dogs		
Rabbits		
Cows		
Parrots		
Goats		
Squirrel		

(a) Look at the tally marks and write the number for each animal in the table. How many children in all did Yamini talk to?

Ans. (a) First of all complete the table:

Animal	Tally Marks	Numbers
Cats		24
Dogs		32
Rabbits		10
Cows		22

Parrots	☑ ☐	8
Goats	☑ ☑ ☑ ☑	20
Squirrel	☑ ☑ ☑	15
Total		131

Yamini talked to 131 children in all.

(b) Which is the most favourite pet animal in this table?

Ans. (b) In this table the most favourite pet animal is dog.

(c) Which pet will you like to have? What will you name it? Which other animals can be kept at home? Discuss.

Ans. (c) The pet which I will take to have is dog. It will be named as BROWNY. The other animals which can be kept at home are horse, camel, buffalo, pigeon, sparrow, duck, cock, hen, fish, turtle etc.

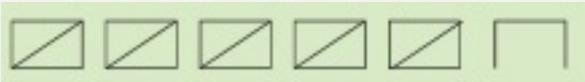
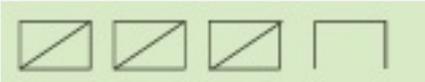
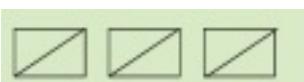
2. Making Tally Marks on the Road Sumita stood on the road for half an hour and counted the number of vehicles passing by. She made a tally mark for each vehicle. This helped her in counting quickly the total number of vehicles in each group.

	Tally Marks	Number
Cycle	☑☑☑☑☑☐	
Car	☑☑☐	
Auto rickshaw	☑☑☑☐	
Bus	☑☑☑	
Cycle rickshaw	☑☑☑☑☐	
Truck	☑	



(a) Write the number of each vehicle in the table.

Ans. (a) Writing the number of each vehicle in the table.

	Tally Marks	Number
Cycle		28
Car		12
Auto Rickshaw		188
Bus		15
Cycle Rickshaw		24
Truck		6
	Total	103

(b) How many vehicles in all did Sumita see on the road in half an hour.

Ans. (b) Number of vehicles seen by Sumiota in half an hour is 103.

(c) Auto Rickshaws are thrice the number of trucks – true/false?

Ans. (c) True.

(d) Make tally marks for 7 more buses, and 2 more trucks.

Ans. (d) Tally marks for 7 more buses: 

Tally marks for 2 more buses: 

3. Helping Hands In the EVS period, the teacher asked children whether they help their parents at home. There were different answers. Children named the work in which they help their parents the most. The teacher collected their answers and made a table.

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Help most in house work	Number of children
Going to the market	47
Washing utensils	15
Washing Clothes	3
Making, serving food	25
Cleaning the house	10
Total children who said they help their parents	

Ans.

Help most in house work	Number of children
Going to the market	47
Washing utensils	15
Washing Clothes	3
Making, serving food	25
Cleaning the house	10
Total children who said they help their parents	100

4. Ask 10 of your friends about what they like to do most after school.

Ans. On Collecting the answers given by my friends I tabulated information as under:

What they like to do after school	Number of children
Watching TV	3
Playing Football	2
Reading Story Books	1

Sleeping	2
Cycling	1
Doing Home work	1

5. Ragini loves to watch cartoons on televisions. One day she thought for counting the number of ads during the breaks. She found that in each break there were 14 advertisements. In 10 of those ads there were children as actors.

(a) Why do you think that children are used in so many ads?

Ans. (a) Children are used in so many advertisement as the cartoons are mostly watched by the children.

(b) Use tally marks to count the number of ads during a short break in a program. Were there ads during the news program?

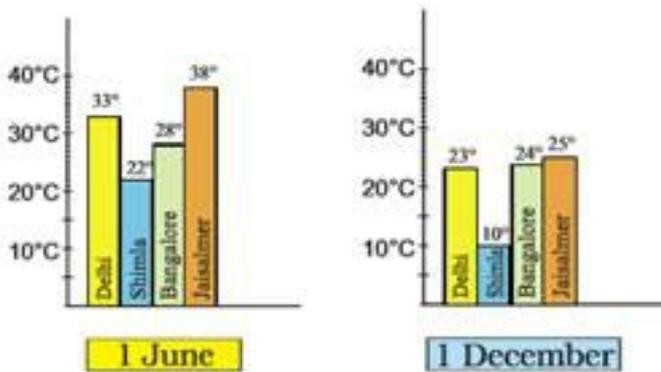
Ans. (b) Tally mark used to count the number of ads during a short break in a program:



Yes, there were ads during the news program.

6. Hot and Cold :

Have you seen the weather report on TV or in a newspaper? These are two bar charts. These show the highest temperature (in degrees Celsius) in four cities, on two different days. The cities are Delhi, Shimla, Bangalore and Jaisalmer.



Find out from the bar charts-

(a) Which city is the hottest on 1 June?

Ans. Jaisalmer is the hottest on 1 June.

(b) Which city is the coldest on 1 December?

Ans. Shimla is the coldest on 1 December.

(c) Which city shows little change in temperature on the two days- 1 June and 1 December?

Ans. Bangalore shows little change in temperature on the two days – 1 June and 1 December.

7. Rabbits in Australia:

Earlier there were no rabbits in Australia. Rabbits were brought to Australia around the year 1780. At that time there were no animals in Australia which ate rabbits. So the rabbits began to multiply at a very fast rate. Imagine what they did to the crops! The table shows how rabbits grew every year.

Time	No. of Rabbits
Start	10
1 year	18
2 year	32
3 year	58
4 year	105
5 year	
6 year	

(a) After each year the number of rabbits was-

(1) a little less than double the number or rabbits in the last year.

(2) double the number in the last year.

(3) 8 more than the number of rabbits in the last year.

(4) more than double the number of rabbits in the last year.

Ans. (1) a little less than double the number or rabbits in the last year.

(b) At the end of year 6, the number of rabbits cross 1000?

- 400
- 600
- 800

Ans. 400.

(c) After which year did the number of rabbits cross 100?

Ans. In the year 1788, the number of rabbits cross 100.

8. Madhav's mother helped him understand his family with the help of this drawing .

You can also find out about your older generations using such a family tree.

(a) How many grandparents in all does Shobhna have?

Ans. In all Shobhna has four grandparents.

(b) How many great great grandparents in all does Madhav have?

Ans. Madhav has 8 great, great grand parents.

(c) How many elders will be in the VII generation of his family?

Ans. There will be 32 elders in the VII generation of Madhav's family.

(d) If he takes his family tree forward in which generation will he find 128 elders?

Ans. 128 elders will be in IX generation of Madhav's family tree.

9. Find out the growth chart

(a) Between which days did the length of the plant change the most?

- (i) 0-4**
- (ii) 4-8**
- (iii) 8-12**
- (iv) 12-16**
- (v) 16-20**

Ans. (iii) 8-12

(b) What could be the length of this plant on the 14 th day? Guess.

- (i) 8.7 cm**
- (ii) 9.9 cm**
- (iii) 10.2 cm**
- (iv) 10.5 cm**

Ans. (ii) 9.9 cm

**(c) Which plant keep growing all the time? What will be its length on the 100 th day?
Make a guess.**

Ans. The plant will not keep growing in the height all the time. I think it's on the 100 th day may be 16.4 cm.