

INDIAN SCHOOL AL WADI AL KABIR

Class VII, Mathematics (2023-24)

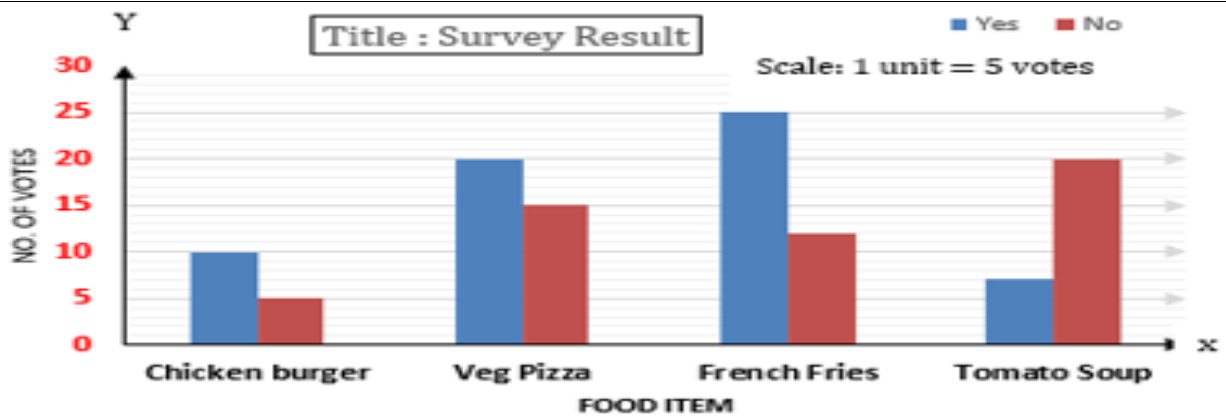
Worksheet DTQ – DATA HANDLING

SHORT ANSWER TYPE QUESTIONS- 7 QUESTIONS. (2 Marks each)

- Q1.** The number of points that Town Rugby Club scored in eight matches is 24, 17, 19, 35, 9, 43, 15, 30. Work out the range of the number of points scored.
- Q2.** Find the mean of the first 3 multiples of 5.
- Q3.** Sumi recorded the heights (in cm) of members of her extended family, to the nearest cm. Find the height of the tallest and the shortest member of her family.
163, 185, 164, 170, 187, 150, 168, 179, 163, 185, 164, 170, 188, 154, 168.
- Q4.** Jackson records the following data of people who go swimming on a particular Saturday morning: 5, 12, 24, 13, 64, 38, 71, 13, 14, 41, 13. Calculate the mode of the data.
- Q5.** Find the median of odd numbers between 12 and 26.
- Q6.** Find the mean of the first five whole numbers.
- Q7.** The number of service upgrades sold by each of the 11 employees is as follows: 32, 6, 21, 10, 8, 11, 12, 36, 17, 18, and 24 What is the median number of service upgrades sold by the 11 employees

SHORT ANSWER TYPE- 5 QUESTIONS. (3 Marks each)

Q8.



Robbie is trying to determine which food items would be desirable for the cafeteria menu. He surveyed and plotted the results of 'yes' votes versus 'no' votes on a double bar graph so that he can quickly see the choices of the students, and place that item on the menu. According to the double bar graph, answer the following questions:

1. Which food item has the maximum "Yes" votes?
2. Which food item is less preferred by students?
3. Which food item got 20 "Yes" votes?

Q9.	The scores of 13 students out of 100 are given: 56, 79, 77, 48, 90, 68, 79, 92, 71, 79, 60, 59 and 65. Find the median and mode of their scores.																
Q10	Age (in years) of 6 children of the two groups are recorded below: a) Find the mean age for each group. b) Mean age of which group is greater.																
	<table border="1"> <thead> <tr> <th colspan="2">Age (in Years)</th> </tr> <tr> <th>Group A</th> <th>Group B</th> </tr> </thead> <tbody> <tr> <td>7</td> <td>7</td> </tr> <tr> <td>7</td> <td>9</td> </tr> <tr> <td>9</td> <td>11</td> </tr> <tr> <td>8</td> <td>12</td> </tr> <tr> <td>10</td> <td>12</td> </tr> <tr> <td>10</td> <td>12</td> </tr> </tbody> </table>	Age (in Years)		Group A	Group B	7	7	7	9	9	11	8	12	10	12	10	12
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7	7																
7	9																
9	11																
8	12																
10	12																
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Q11.	A die was thrown 15 times and the result recorded were 5, 3, 4, 1, 2, 6, 4, 2, 2, 3, 1, 5, 6, 1, 2 Find the mean, median and mode of the data.																
Q12.	The number of pages that Carolyn wrote in her journal each day from Monday to Friday is 10, 18, 12, 16, and 19. What is the mean number of pages she wrote per day?																

LONG ANSWER TYPE- 3 QUESTIONS. (4 Marks each)

Q13.	The results of the pass percentage of Class X and XII in the C.B.S.E. examination for 5 years is given in the following table: <table border="1"> <thead> <tr> <th>Year</th> <th>2001-02</th> <th>2002-03</th> <th>2003-04</th> <th>2004-05</th> <th>2005-06</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>90</td> <td>95</td> <td>90</td> <td>80</td> <td>98</td> </tr> <tr> <td>XII</td> <td>95</td> <td>80</td> <td>85</td> <td>90</td> <td>95</td> </tr> </tbody> </table> Draw a double bar graph to represent the data.	Year	2001-02	2002-03	2003-04	2004-05	2005-06	X	90	95	90	80	98	XII	95	80	85	90	95
Year	2001-02	2002-03	2003-04	2004-05	2005-06														
X	90	95	90	80	98														
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Q14.	A student recorded her scores on weekly GK quizzes that were marked out of a possible 10 points. Her scores were as follows: 8, 5, 8, 5, 7, 6, 7, 7, 5, 7, 5, 5, 6, 9, 9, 8, 9, 7, 9, 9, 6, 8, 6, 6, and 7. Find the mode and mean of her scores on the weekly GK quizzes by using the frequency table.																		
Q15.	Read the double bar graph carefully and answer the following questions: (i) What is the information given by the double graph? (ii) Which mode of transport do girls use more than boys? (iii) Which mode of transport boys use the most? (iv) In which mode of transport number of girls is half the number of boys?																		
	<table border="1"> <caption>Data for Double Bar Graph</caption> <thead> <tr> <th>Mode of Transport</th> <th>Boys</th> <th>Girls</th> </tr> </thead> <tbody> <tr> <td>School bus</td> <td>80</td> <td>140</td> </tr> <tr> <td>Walking</td> <td>120</td> <td>60</td> </tr> <tr> <td>Bicycle</td> <td>240</td> <td>180</td> </tr> <tr> <td>Other vehicles</td> <td>150</td> <td>90</td> </tr> </tbody> </table>	Mode of Transport	Boys	Girls	School bus	80	140	Walking	120	60	Bicycle	240	180	Other vehicles	150	90			
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ANSWERS					
Q1.	34	Q2.	10	Q3.	188cm 150cm
Q4.	13	Q5.	19	Q6.	2
Q7.	17	Q8.	1. French fries 2. Tomato soup 3. Veg pizza	Q9.	Median 71 Mode 79
Q10.	a) 8.5 Group A & 10.5 Group B, b) group B	Q11.	3.1 3 2	Q12.	15
Q13.	-----	Q14.	Mode 7, and 6.9	Q15.	-----