



### District Report Card: 2017


<b>State:</b> Kerala	<b>District:</b> Kottayam
<b>Class:</b> 8	<b>Subject:</b> Mathematics
<b>Schools:</b> 51	<b>Students:</b> 1277


### Participation/Coverage


#### Students

 GENDER	Boys		Girls	
	Number	%	Number	%
	676	52.94	601	47.06

 AREA	Rural		Urban	
	Number	%	Number	%
	1028	80.50	249	19.50

 CATEGORY	SC		ST		OBC		GEN	
	Number	%	Number	%	Number	%	Number	%
	132	10.34	16	1.25	599	46.91	530	41.50

 CWSN	LD	VI	HI	S&LD	ID	Oth
	4	2	1	2	13	18

 Management	Government		Government-aided	
	Number	%	Number	%
	198	15.51	1079	84.49

### Average Performance of Students in Mathematics (%)

Overall	Gender		Area		Management		Social Group			
	Male	Female	Rural	Urban	Govt.	Aided	SC	ST	OBC	GEN
42.93	42.67	43.23	44.10	38.13	41.01	43.29	40.25	35.83	42.62	44.18

## Performance on Learning Outcomes (LOs)

Learning Outcomes	Description	Average Performance(%)
M601	Solves problems involving large numbers by applying appropriate operations	36.60
M606	Solves problems on daily life situations involving addition and subtraction of fractions / decimals	43.30
M620	Finds out the perimeter and area of rectangular objects in the surroundings like floor of the class room, surfaces of a chalk box etc.	35.38
M621	Arranges given/collected information in the form of table, pictograph and bar graph and interprets them	40.19
M702	Interprets the division and multiplication of fractions	48.16
M705	Solves problems related to daily life situations involving rational numbers	46.59
M706	Uses exponential form of numbers to simplify problems involving multiplication and division of large numbers	20.16
M707	Adds/subtracts algebraic expressions	51.68
M710	Solves problems related to conversion of percentage to fraction and decimal and vice versa	26.30
M717	Finds out approximate area of closed shapes by using unit square grid/graph sheet	34.58
M719	Finds various representative values for simple data from her/his daily life contexts like mean, median and mode	56.80
M721	Interprets data using bar graph	50.24
M801	Generalizes properties of addition, subtraction, multiplication and division of rational numbers through patterns	22.99
M802	Finds rational numbers between two given rational numbers	44.09
M803	Proves divisibility rules of 2, 3, 4, 5, 6, 9 and 11	34.11
M804	Finds squares, cubes, square roots and cube roots of numbers using different methods	35.28
M808	Uses various algebraic identities in solving problems of daily life	42.05
M812	Verifies properties of parallelogram and establishes the relationship between them through reasoning	50.70
M818	Finds surface area and volume of cuboidal and cylindrical object	29.92
M819	Draws and interprets bar charts and pie charts	53.17

Range of Performance of Students who Answered Correctly							
Below 30%		30% - 50%		50% - 75%		Above 75%	
Number	%	Number	%	Number	%	Number	%
360	28.19	498	39.00	357	27.96	62	4.86

## Lowest Performing Learning Outcomes (LOs)

- 1 - Uses exponential form of numbers to simplify problems involving multiplication and division of large numbers (20.16)
- 2 - Generalizes properties of addition, subtraction, multiplication and division of rational numbers through patterns (22.99)
- 3 - Solves problems related to conversion of percentage to fraction and decimal and vice versa (26.30)

4 - Finds surface area and volume of cuboidal and cylindrical object (29.92)

5 - Proves divisibility rules of 2, 3, 4, 5, 6, 9 and 11 (34.11)