



MINISTRY OF  
**EDUCATION**  
GOVERNMENT OF INDIA

# District Report Card for Aspirational Districts

## ARARIA (Bihar)

Percentage of student  
performing below basic

**12%**



### INTRODUCTION

The District Report Card (DRC) presents the academic achievement of school students at the District Level along with the participation rate of students and schools in the National Achievement Survey (NAS). The DRC communicates the findings of the NAS for classes III, V, VIII and X.





MINISTRY OF  
**EDUCATION**  
GOVERNMENT OF INDIA

# NAS 2017

National Achievement Survey  
**Class III, V, VIII and X**

## **District Report Card for Aspirational Districts ARARIA (Bihar)**

विद्यया ऽ मृतमश्नुते



एन सी ई आर टी  
NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्  
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

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## NAS 2017-18

**Classes III, V, VIII and X**

District Report Card for Aspirational Districts ARARIA (Bihar)

**First Edition**

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# Highlights




Class  
**3**

Performance of students  
(in percent correct)

-  **66%** (EVS)
-  **73%** (Language) and
-  **64%** (Mathematics)





Class  
**5**

Performance of students  
(in percent correct)

-  **60%** (EVS)
-  **60%** (Language) and
-  **53%** (Mathematics)






Class  
**8**

Performance of students  
(in percent correct)

-  **60%** (Language)
-  **47%** (Mathematics)
-  **47%** (Science) and
-  **48%** (Social Science)

Class  
**10**

Performance of students  
(in percent correct)

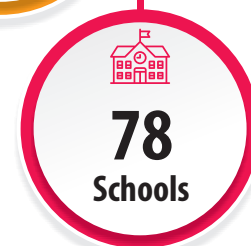
-  **44%** (Modern Indian Language)
-  **28%** (English)
-  **37%** (Mathematics)
-  **31%** (Science) and
-  **36%** (Social Science)

## Participation

Class 3, 5 and 8



Class 10

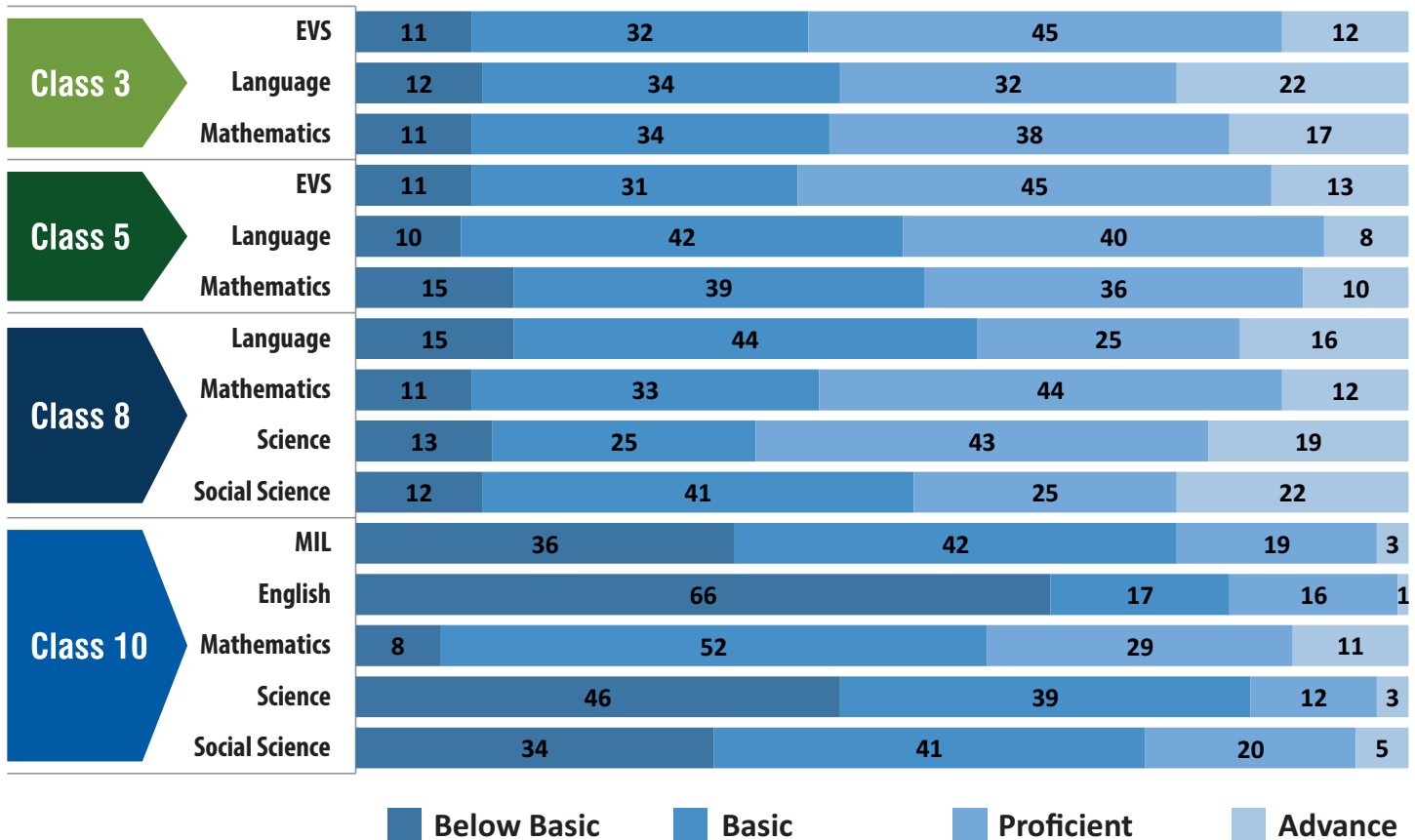


### Average Achievement (in percent correct)

■ District Average ■ State Average ■ National Average



### Percentage of Students by Performance Level



■ Below Basic ■ Basic ■ Proficient ■ Advance



## Performance by Gender

		Class 3		Class 5		Class 8		Class 10	
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
EVS	District	66	65	61	59	--	--	--	--
	State	61	62	57	57	--	--	--	--
	National	63	63	55	56	--	--	--	--
Language/English	District	73	72	61	59	61	59	29	28
	State	66	66	57	57	59	57	29	29
	National	66	67	56	57	55	56	36	37
Mathematics	District	65	64	54	53	47	48	40	34
	State	61	61	52	52	45	45	38	35
	National	62	62	52	52	41	41	34	33
Science	District	--	--	--	--	47	47	32	30
	State	--	--	--	--	44	43	32	31
	National	--	--	--	--	43	43	34	34
Social Science	District	--	--	--	--	48	49	37	36
	State	--	--	--	--	46	45	37	36
	National	--	--	--	--	42	43	39	39
MIL	District	--	--	--	--	--	--	44	43
	State	--	--	--	--	--	--	42	41
	National	--	--	--	--	--	--	47	49



## Performance by Location

		Class 3		Class 5		Class 8		Class 10	
		Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
EVS	District	65	72	60	59	--	--	--	--
	State	61	66	57	58	--	--	--	--
	National	69	73	61	56	--	--	--	--
Language/English	District	73	71	60	51	60	50	29	25
	State	66	69	57	58	57	62	29	29
	National	74	70	61	58	54	53	33	43
Mathematics	District	64	67	53	52	48	33	37	36
	State	61	65	52	53	45	45	36	35
	National	72	72	67	62	43	35	29	39
Science	District	--	--	--	--	48	38	31	25
	State	--	--	--	--	43	44	31	31
	National	--	--	--	--	44	40	34	37
Social Science	District	--	--	--	--	49	38	37	34
	State	--	--	--	--	45	46	37	36
	National	--	--	--	--	44	45	36	41
MIL	District	--	--	--	--	--	--	44	42
	State	--	--	--	--	--	--	42	42
	National	--	--	--	--	--	--	37	40



### Performance by Management

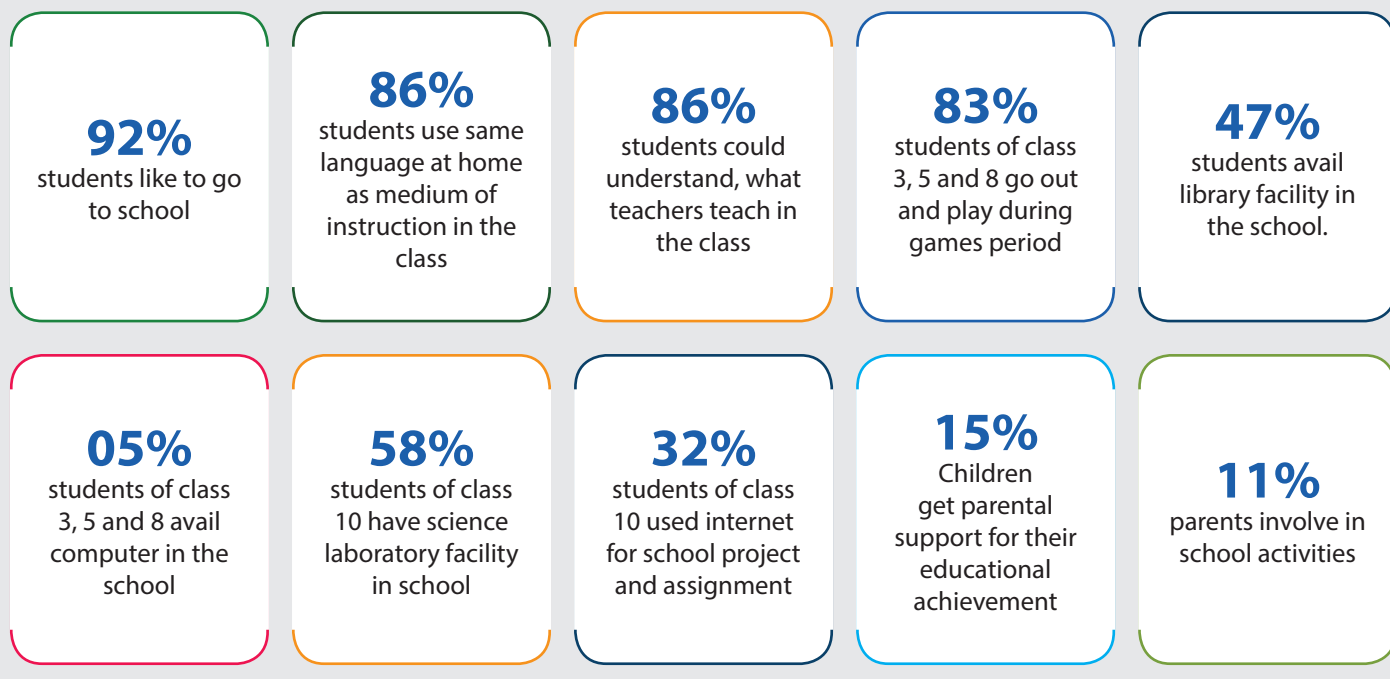
		Class 3		Class 5		Class 8		Class 10		
		Govt.	Govt. Aided	Govt.	Govt. Aided	Govt.	Govt. Aided	Govt.	Govt. Aided	Private
EVS	District	58	--	57	41	--	--	--	--	--
	State	58	56	52	54	--	--	--	--	--
	National	63	41	56	35	--	--	--	--	--
Language/English	District	61	--	59	40	54	63	30	--	19
	State	62	62	52	58	53	62	33	47	29
	National	66	43	57	37	55	41	28	21	42
Mathematics	District	59	--	53	33	43	48	38	--	31
	State	58	56	48	50	39	39	33	37	37
	National	63	41	52	33	41	29	27	20	36
Science	District	--	--	--	--	41	48	32	--	21
	State	--	--	--	--	40	44	32	40	31
	National	--	--	--	--	43	30	28	21	36
Social Science	District	--	--	--	--	43	61	38	--	30
	State	--	--	--	--	42	46	37	44	38
	National	--	--	--	--	43	30	32	23	41
MIL	District	--	--	--	--	--	--	45	--	39
	State	--	--	--	--	--	--	40	48	42
	National	--	--	--	--	--	--	37	28	52



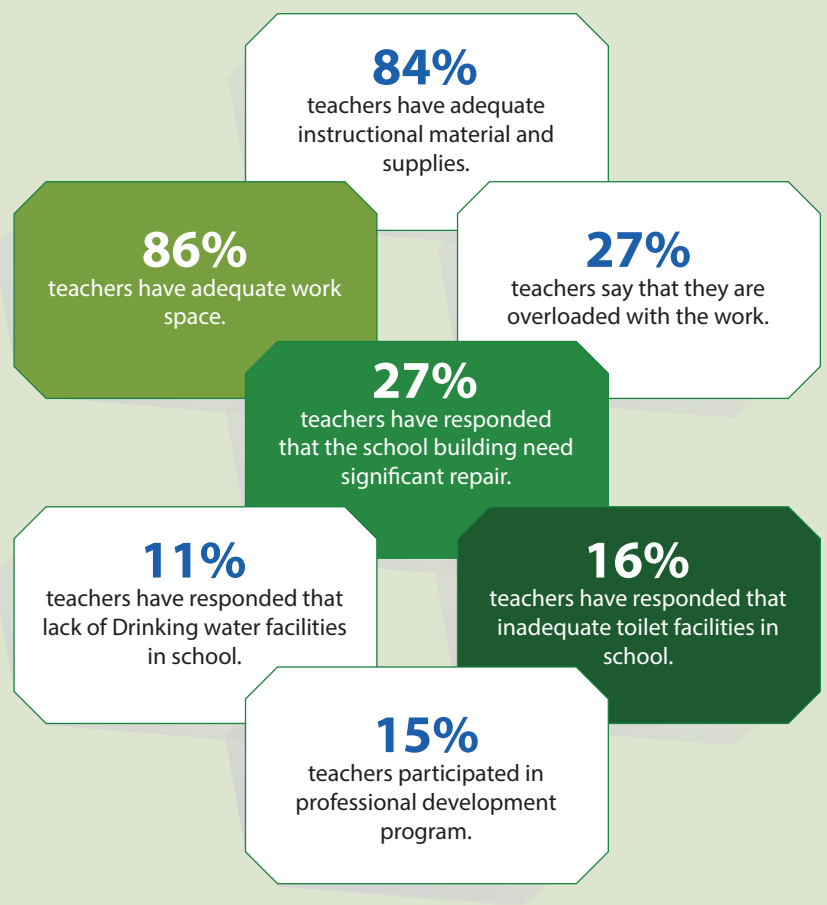
### Performance by Social Group

		Class 3				Class 5				Class 8				Class 10				
		SC	ST	OBC	Oth.	SC	ST	OBC	Oth.	SC	ST	OBC	Oth.	SC	ST	OBC	Oth.	
EVS	District	63	65	66	63	50	42	62	67	--	--	--	--	--	--	--	--	--
	State	61	62	62	64	55	56	57	58	--	--	--	--	--	--	--	--	--
	National	63	61	64	64	55	54	56	57	--	--	--	--	--	--	--	--	--
Language/English	District	73	65	73	70	50	48	61	66	60	66	60	62	26	27	28	31	
	State	66	66	67	69	55	57	57	59	55	58	58	61	27	27	29	30	
	National	66	64	67	67	56	56	57	58	55	52	57	58	34	34	36	39	
Mathematics	District	62	60	65	65	42	32	55	63	44	38	48	45	37	43	37	38	
	State	60	59	61	64	49	52	52	53	42	43	45	46	34	34	37	38	
	National	62	60	63	64	52	50	53	54	40	39	41	42	32	31	34	36	
Science	District	--	--	--	--	--	--	--	--	44	48	48	47	29	28	31	35	
	State	--	--	--	--	--	--	--	--	40	40	44	45	29	28	31	32	
	National	--	--	--	--	--	--	--	--	42	41	44	44	33	33	34	35	
Social Science	District	--	--	--	--	--	--	--	--	44	53	49	50	37	34	36	42	
	State	--	--	--	--	--	--	--	--	43	43	46	47	35	34	37	38	
	National	--	--	--	--	--	--	--	--	42	40	43	44	38	38	39	41	
MIL	District	--	--	--	--	--	--	--	--	--	--	--	--	44	43	44	43	
	State	--	--	--	--	--	--	--	--	--	--	--	--	39	41	42	44	
	National	--	--	--	--	--	--	--	--	--	--	--	--	47	45	49	51	

## What Children say about Schools?



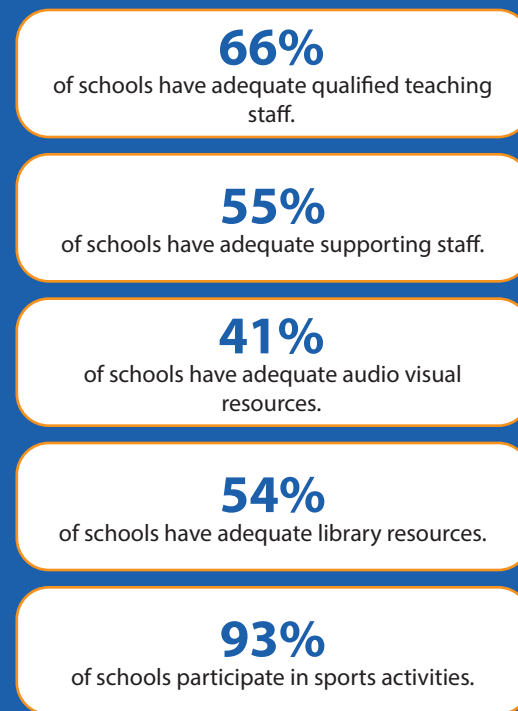
## What teachers responded about school?



**57%**

Students attended pre-primary classes/anganwadi

## What head teacher responded about school ?



## Performance of the District in Learning Outcomes (LOs)

## Class 3

LO Code	Learning Outcomes for Class 3	Average Performance (in percent)
Language		
L304	Reads small texts with comprehension i.e., identifies main ideas, details, sequence and draws conclusions	73
L312	Reads printed scripts on the classroom walls: poems, posters, charts etc	72
Mathematics		
M301	Reads and writes numbers up to 999 using place value	57
M302	Compares numbers up to 999 based on their place values	78
M303	Solves simple daily life problems using addition and subtraction of three digit numbers with and without regrouping	63
M304	Constructs and uses the multiplication facts (up till 10) in daily life situations	70
M305	Analyses and applies an appropriate number operation in the situation/ context	62
M306	Explains the meaning of division facts by equal grouping/sharing and finds it by repeated subtraction	66
M309	Identifies and makes 2D-shapes by paper folding, paper cutting on the dot grid, using straight lines etc.	75
M311	Fills a given region leaving no gaps using a tile of a given shape	43
M312	Estimates and measures length and distance using standard units like centimetres or metres & identifies relationships	36
M317	Reads the time correctly to the hour using a clock/watch	79
M318	Extends patterns in simple shapes and numbers	55
M319	Records data using tally marks, represents pictorially and draws conclusions	69
EVS		
E302	Identifies simple features (e.g. movement, at places found/ kept, eating habits, sounds) of animals and birds in the immediate surroundings.	60
E303	Identifies relationships with and among family members	66
E304	Identifies objects, signs (vessels, stoves, transport, means of communication, transport, signboards), places (types of houses/shelters, bus stand, petrol pump) activities (works people do, cooking processes) at home/school/neighbourhood	69
E305	Describes need of food for people of different age groups, animals/birds, availability of food and water and use of water at home and surroundings	71
E307	Groups objects, birds, animals, features, activities according to differences/similarities using different senses. (e.g. appearance/place of living/ food/ movement/ likes-dislikes/ any other features)	68
E309	Identifies directions, location of objects/places in simple maps using signs/symbols/verbally	55
E310	Guesses properties, estimates quantities of materials/activities in daily life and verifies using symbols/non-standard units.	78
E311	Records observations, experiences, information on objects/activities/places visited in different ways and predicts patterns etc.	48
E313	Observes rules in games (local. indoor, outdoor)	27
E314	Voices opinion on good/bad touch , stereotypes for tasks/play/food in family w.r.t gender, misuse/wastage of food and water in family and school.	74

## Class 5

LO Code	Learning Outcomes for Class 5	Average Performance (in percent)
Language		
L504	Reads and comprehends independently storybooks, news items/ headlines, advertisements etc.	57
L508	Reads text with comprehension, locates details and sequence of events	61
Mathematics		
M401	Applies operations of numbers in daily life situations	38
M412	Explores the area and perimeter of simple geometrical shapes (triangle, rectangle, square) in terms of given shape as a unit	57
M418	Calculates time intervals/duration of familiar daily life events by using forward or backward counting/addition and subtraction	72
M421	Represent the collected information in tables and bar graphs and draws inferences from these	54
M501	Reads and writes numbers bigger than 1000 being used in her/his surroundings	64
M504	Estimates sum, difference, product and quotient of numbers and verifies the same using different strategies like using standard algorithms or breaking a number and then using operation	52
M505	Finds the number corresponding to part of a collection	50
M506	Identifies and forms equivalent fractions of a given fraction	44
M508	Converts fractions into decimals and vice versa	51
M509	Classifies angles into right angle, acute angle, obtuse angle and represents the same by drawing and tracing	48
M512	Relates different commonly used larger and smaller units of length, weight and volume and converts larger units to smaller units and vice versa	63
M513	Estimates the volume of a solid body in known units	43
M514	Applies the four fundamental arithmetic operations in solving problems involving money, length, mass, capacity and time intervals	54
M515	Identifies the pattern in triangular number and square number	45
M516	Collects data related to various daily life situations, represents it in tabular form and as bar graphs and interprets it.	55
EVS		
E403	Identifies relationship with and among family members in extended family	62
E410	Records observations/experiences/information for objects, activities, phenomena, places visited in different ways and predicts patterns and activities/ phenomena	60
E501	Explains the super senses and unusual features (sight, smell, hear, sleep, sound, etc.) of animals and their responses to light, sound, food etc	52
E503	Describes the interdependence among animals, plants and humans	67
E504	Explains the role and functions of different institutions in daily life (Bank, Panchayat, cooperatives, police station, etc.)	74
E505	Establishes linkages among terrain, climate, resources (food, water, shelter, livelihood) and cultural life. (e.g. life in distant/difficult areas like hot/cold deserts).	40
E506	Groups objects, materials, activities for features/properties such as shape, taste, colour, texture, sound, traits etc.	40
E507	Traces the changes in practices, customs, techniques of past and present through coins, paintings, monuments, museum etc. and interacting with elders	56

LO Code	Learning Outcomes for Class 5	Average Performance (in percent)
E508	Guesses (properties, conditions of phenomena), estimates spatial quantities (distance, area, volume, weight etc. ) and time in simple standard units and verifies using simple tools/set ups	54
E509	Records observations/experiences/information in an organized manner (e.g. in tables/ sketches/ bar graphs/ pie charts) and predicts patterns in activities/phenomena to establish relation between cause and effect	59
E510	Identifies signs, directions, location of different objects/landmarks of a locality /place visited in maps and predicts directions w.r.t. positions at different places for a location	61
E512	Voices opinions on issues observed/experienced and relates practices /happenings to larger issues of society.	67
E513	Suggests ways for hygiene, health, managing waste, disaster/emergency situations and protecting/saving resources	70

## Class 8

LO Code	Learning Outcomes for Class 8	Average Performance (in percent)
Language		
L813	Read textual/non-textual materials with comprehension and identifies the details, characters, main idea and sequence of ideas and events while reading	60
Mathematics		
M601	Solves problems involving large numbers by applying appropriate operations	48
M606	Solves problems on daily life situations involving addition and subtraction of fractions / decimals	66
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.	55
M621	Arranges given/collected information in the form of table, pictograph and bar graph and interprets them	35
M702	Interprets the division and multiplication of fractions	51
M705	Solves problems related to daily life situations involving rational numbers	54
M706	Uses exponential form of numbers to simplify problems involving multiplication and division of large numbers.	42
M707	Adds/subtracts algebraic expressions	60
M710	Solves problems related to conversion of percentage to fraction and decimal and vice versa	47
M717	Finds out approximate area of closed shapes by using unit square grid/ graph sheet	42
M719	Finds various representative values for simple data from her/his daily life contexts like mean, median and mode	51
M721	Interprets data using bar graph such as consumption of electricity is more in winters than summer	48
M801	Generalises properties of addition, subtraction, multiplication and division of rational numbers through patterns	34
M802	Finds rational numbers between two given rational numbers	40
M803	Proves divisibility rules of 2, 3,4, 5, 6, 9 and 11	60
M804	Finds squares, cubes, square roots and cube roots of numbers using different methods.	55
M808	Use various algebraic identities in solving problems of daily life.	24
M812	Verifies properties of parallelogram and establishes the relationship between them through reasoning	38
M818	Finds surface area and volume of cuboidal and cylindrical object	21
M819	Draws and interprets bar charts and pie charts	48

LO Code	Learning Outcomes for Class 8	Average Performance (in percent)
<b>Science</b>		
SCI703	Classifies materials and organisms based on properties/characteristics	43
SCI704	Conducts simple investigation to seek answers to queries	27
SCI705	Relates processes and phenomenon with causes	48
SCI708	Measures and calculates e.g., temperature; pulse rate; speed of moving objects; time period of a simple pendulum, etc	62
SCI710	Plots and interprets graphs	40
SCI711	Constructs models using materials from surroundings and explains their working	44
SCI801	Differentiates materials, organism and processes	56
SCI804	Relates processes and phenomenon with causes	48
SCI805	Explains processes and phenomenon	42
SCI807	Measures angles of incidence and reflection, etc.	50
SCI811	Applies learning of scientific concepts in day-to-day life	48
SCI813	Makes efforts to protect environment	61
<b>Social Science</b>		
SST605	Identifies latitudes and longitudes, e.g., poles, equator, tropics, States/UTs of India and other neighbouring countries on globe and the world map	43
SST610	Locates important historical sites, places on an outline map of India	40
SST625	Describes the functioning of rural and urban local government bodies in sectors like health and education	30
SST703	Explains preventive actions to be undertaken in the event of disasters	63
SST704	Describes formation of landforms due to various factors	31
SST722	Explains the significance of equality in democracy	29
SST726	Describes the process of election to the legislative assembly	56
SST731	Explains the functioning of media with appropriate examples from newspapers.	72
SST733	Differentiates between different kinds of markets	72
SST734	Traces how goods travel through various market places.	60
SST802	Describes major crops, types of farming and agricultural practices in her/his own area/state	54
SST805	Locates distribution of important minerals e.g. coal and mineral oil on the world map	32
SST807	Justifies judicious use of natural resources	58
SST809	Draws interrelationship between types of farming and development in different regions of the world	45
SST810	Distinguishes the modern period from the medieval and the ancient periods through the use of sources	40
SST815	Explains the origin, nature and spread of the revolt of 1857 and the lessons learned from it	49
SST816	Analyses the decline of pre-existing urban centers and handicraft industries and the development of new urban centers and industries in India during the colonial period	37
SST818	Analyses the issues related to caste, women, widow remarriage, child marriage, social reforms and the laws and policies of colonial administration towards these issues	46
SST823	Applies the knowledge of the Fundamental Rights to find out about their violation, protection and promotion in a given situation	44
SST827	Describes the process of making a law. (e.g. Domestic Violence Act, RTI Act, RTE Act)	59
SST831	Identifies the role of Government in providing public facilities such as water, sanitation, road, electricity etc., and recognizes their availability	47
SST833	Draws bar diagram to show population of different countries/India/states	57

## Performance of Students: Content wise

Subjects	District Average (% correct)	State Average (% correct)	Significant Difference
<b>Mathematics</b>	<b>37.35</b>	<b>36.55</b>	↔
Algebra	38.41	37.85	↔
Coordinate Geometry	33.48	33.84	↔
Mensuration	40.37	39.59	↔
Geometry	34.84	33.27	↔
Statistics	33.41	34.79	↔
Trigonometry	44.68	43.86	↔
Number System	40.48	37.38	↔
Probability	34.96	33.47	↔
<b>SCIENCE</b>	<b>30.82</b>	<b>31.02</b>	↔
Food	33.65	30.67	↔
Materials	29.23	30.13	↔
The world of living	32.84	33.69	↔
Moving things, people and ideas	32.70	30.98	↔
How things work	29.67	29.64	↔
Natural phenomena	26.96	26.96	↔
Natural resources	33.33	34.67	↔
<b>SOCIAL SCIENCE</b>	<b>36.01</b>	<b>36.62</b>	↔
Political Science	40.57	40.27	↔
History	34.78	35.61	↔
Economics	34.35	35.33	↔
Geography	34.33	35.28	↔
<b>ENGLISH</b>	<b>28.26</b>	<b>28.95</b>	↔
Reading Comprehension	29.38	29.81	↔
Language Element	27.24	28.11	↔
<b>MODERN INDIAN LANGUAGE (MIL)</b>	<b>46.94</b>	<b>43.12</b>	↑
Reading Comprehension	46.94	43.12	↑

# Project Team

## MoE

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**National Achievement Survey (NAS) Cell**

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