# NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING
## NATIONAL ACHIEVEMENT SURVEY - NAS
### (Survey of Learning Outcomes)

| District Report Card: 2017 | |
|---|---|
| **State:** Himachal Pradesh | **District:** Mandi |
| **Class:** 8 | **Subject:** Mathematics |
| **Schools:** 50 | **Students:** 982 |

## Participation/Coverage

**Students**

| GENDER | Boys | | Girls | |
|---|---|---|---|---|
| | Number | % | Number | % |
| | 453 | 46.13 | 529 | 53.87 |

| AREA | Rural | | Urban | |
|---|---|---|---|---|
| | Number | % | Number | % |
| | 960 | 97.76 | 22 | 2.24 |

| CATEGORY | SC | | ST | | OBC | | GEN | |
|---|---|---|---|---|---|---|---|---|
| | Number | % | Number | % | Number | % | Number | % |
| | 403 | 41.04 | 14 | 1.43 | 47 | 4.79 | 518 | 52.75 |

| CWSN | LD | VI | HI | S&LD | ID | Oth |
|---|---|---|---|---|---|---|
| | 0 | 1 | 1 | 0 | 2 | 1 |

| Management | Government | | Government-aided | |
|---|---|---|---|---|
| | Number | % | Number | % |
| | 982 | 100.00 | 0 | 0.00 |

| Average Performance of Students in Mathematics (%) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Overall | Gender | | Area | | Management | | Social Group | | | |
| | Male | Female | Rural | Urban | Govt. | Aided | SC | ST | OBC | GEN |
| 40.22 | 40.53 | 39.96 | 40.49 | 28.79 | 40.22 | 0.00 | 38.96 | 40.48 | 38.44 | 41.36 |

# Performance on Learning Outcomes (LOs)

| Learning Outcomes | Description | Average Performance(%) |
|---|---|---|
| M601 | Solves problems involving large numbers by applying appropriate operations | 33.88 |
| M606 | Solves problems on daily life situations involving addition and subtraction of fractions / decimals | 38.57 |
| 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. | 40.15 |
| M621 | Arranges given/collected information in the form of table, pictograph and bar graph and interprets them | 36.94 |
| M702 | Interprets the division and multiplication of fractions | 43.89 |
| M705 | Solves problems related to daily life situations involving rational numbers | 36.25 |
| M706 | Uses exponential form of numbers to simplify problems involving multiplication and division of large numbers | 36.38 |
| M707 | Adds/subtracts algebraic expressions | 53.36 |
| M710 | Solves problems related to conversion of percentage to fraction and decimal and vice versa | 22.76 |
| M717 | Finds out approximate area of closed shapes by using unit square grid/graph sheet | 39.59 |
| M719 | Finds various representative values for simple data from her/his daily life contexts like mean, median and mode | 56.11 |
| M721 | Interprets data using bar graph | 49.19 |
| M801 | Generalizes properties of addition, subtraction, multiplication and division of rational numbers through patterns | 34.15 |
| M802 | Finds rational numbers between two given rational numbers | 36.18 |
| M803 | Proves divisibility rules of 2, 3,4, 5, 6, 9 and 11 | 39.39 |
| M804 | Finds squares, cubes, square roots and cube roots of numbers using different methods | 42.68 |
| M808 | Uses various algebraic identities in solving problems of daily life | 46.54 |
| M812 | Verifies properties of parallelogram and establishes the relationship between them through reasoning | 39.06 |
| M818 | Finds surface area and volume of cuboidal and cylindrical object | 25.41 |
| M819 | Draws and interprets bar charts and pie charts | 26.07 |

| Range of Performance of Students who Answered Correctly | | | | | | | |
|---|---|---|---|---|---|---|---|
| Below 30% | | 30% - 50% | | 50% - 75% | | Above 75% | |
| Number | % | Number | % | Number | % | Number | % |
| 322 | 32.79 | 368 | 37.47 | 251 | 25.56 | 41 | 4.18 |

## Lowest Performing Learning Outcomes (LOs)

1 - Solves problems related to conversion of percentage to fraction and decimal and vice versa (22.76)

2 - Finds surface area and volume of cuboidal and cylindrical object (25.41)

3 - Draws and interprets bar charts and pie charts (26.07)

4 - Solves problems involving large numbers by applying appropriate operations (33.88)

5 - Generalizes properties of addition, subtraction, multiplication and division of rational numbers through patterns (34.15)