APPENDIX – I

LIST OF EXPERTS FOR VALIDATION OF VALUE KNOWLEDGE TEST

Sr. No.	Name of the Expert	Designation & Address of the expert
1	Prof. Ashutosh Biswal	Department .of Education Faculty of Education and Psychology, The Maharaja Sayajirao University of Baroda, Vadodara
2	Dr. Jayshree Das	Associate Professor Department of Education, Faculty of Education and Psychology, The Maharaja Sayaji rao University of Baroda, Vadodara
3	Dr. Milind Sahasrabuddhe	Associate Professor Dept. of Educational Administration, Faculty of Education and Psychology, The Maharaja Sayajirao University of Baroda, Vadodara.

APPENDIX – II

LIST OF EXPERTS FOR VALIDATION OF THE VALUE PERCEPTION SCALE

Sr. No.	Name of the Expert	Designation & Address of the expert
1	Prof. Ashutosh Biswal	Professor in Education Department, Centre of Advanced Study in Education, Faculty of Education and Psychology, The Maharaja Sayajirao University of Baroda, Vadodara
2	Prof. N.Pradhan	Head, Department of Educational Administration, Faculty of Education and Psychology, The Maharaja Sayaji rao University of Baroda, Vadodara
3	Prof.S.C Panigrahi	Head, Department of Education, Faculty of Education and psychology, The Maharaja Sayajirao University of Baroda, Vadodara.

APPENDIX-III

LIST OF EXPERTS FOR VALIDATION OF ACHIEVEMENT TEST

Sr. No.	Name of the Expert	Designation & Address of the expert
1	Ms. Archana Khamar	Head of Mathematics department, Bharatiya Vidya Bhavan's V.M.Public School, Vadodara
2	Ms. Devsena	PGT, Mathematics, Bharatiya Vidya Bhavan's V.M.Public School, Vadodara
3	Ms.Mandira Sikdar	Assistant Professor, School of Science & Education, Navrachana University, Vadodara.

APPENDIX –IV

LIST OF EXPERTS FOR VALIDATION OF REACTION SCALE

Sr. No.	Name of the Expert	Designation & Address of the expert
1	Prof. Ashutosh Biswal	Department of Education Faculty of Education and Psychology, The Maharaja Sayajirao University of Baroda, Vadodara
2	Prof. N.Pradhan	Head, Department of Educational Administration, Faculty of Education and psychology, The Maharaja Sayaji rao University of Baroda, Vadodara
3	Prof. Jayshree Das	Associate Professor. Dept. of Education, Faculty of Education and psychology, The Maharaja Sayajirao University of Baroda, Vadodara.

APPENDIX -V
VALUE KNOWLEDGE TEST FOR STUDENTS

Name : _____ Roll No:_____
Date:_____STD:_____Marks obtained_____
Time: 40 mins Total Marks : 70

Instructions :

- *Give your answers with appropriate words for each values mentioned below.*
- *There are 3 questions for each value and all questions are compulsory.*
- *Total marks for each value is 7.*

1. What do you mean by the term Equality ?

_____

2. Write your own definition on Equality.

_____

_____

3. Write three characteristics of a person having Equality. .

_____

_____

_____

4. What do you mean by the term Honesty? .

_____

5. Write your own definition on Honesty. .

_____

_____

6. Write three characteristics of a person having Honesty. .

_____

_____

_____

7. What do you mean by the term Simplicity? .

_____

8. Write your own definition of Simplicity. .

_____

_____

9. Write three characteristics of a person who is simple in nature. .

_____

_____

_____

10. What do you mean by the term Determination? .

_____

11. Write your own definition of Determination. .

_____

_____

12. Write three characteristics of a person having Determination. .

_____

_____

_____

13. What do you mean by the term Dignity of labour? .

_____

14. Write your own definition of Dignity of labour. .

_____

_____

15. Write three characteristics of a person having the value of dignity of labour.

_____

_____

_____

16. What do you mean by the term Co-operation? .

_____

17. Write your own definition of Co-operation. .

_____

_____

18. Write three characteristics of a person who is co-operative in nature. .

_____

_____

_____

19. What do you mean by the term Loyalty ? .

_____

20. Write your own definition of Loyalty. .

_____

_____

21. Write three characteristics of a person who has the value of Loyalty. .

_____

_____

_____

22. What do you mean by the term Discipline? .

_____

23. Write your own definition of Discipline. .

_____

_____

24. Write three characteristics of a person who is Disciplined. .

_____

_____

_____

25. What do you mean by the term team work? .

_____

26. Write your own definition of team work. .

_____

_____

27. Write three characteristics of a person who is a perfect team man. .

_____

_____

_____

28. What do you mean by the term Regularity? .

_____

29. Write your own definition of Regularity. .

_____

_____

30. Write three characteristics of a person who is following regularity. .

_____

_____

_____

APPENDIX –VI

VALUE PERCEPTION SCALE FOR STUDENTS

Name:_____ Roll No:_____

Date:_____STD:_____Marks obtained_____

Time : 40 mins Total Marks : 50

Tick only one option most appropriate to you from each items. Please be Honest in your choice. It is compulsory to give response to all the items.

1. If you go to a shop near by and the shopkeeper gives you Rs. 70 instead of Rs. 20 as change returned, what will you do?

(a) I would keep it with me at first but would return it after some thought.

(b) I will take that money and do some charity or give it to needy people.

(c) I will return Rs.50 back to the shopkeeper

(d) I will keep the money with me because the shopkeeper makes a lot of profit.

(e) I will not return the money but will spend it and will not report the incident

2. Prior to your exams if someone gives you the question paper, what will you do?

(a) I will accept it and give the question paper to my other friends.

(b) I will not accept the question paper, and I will approach the right person and inform about the leakage.

(c) I will not accept the question paper.

(d) I will accept the question paper, but would also prepare the entire subject.

(e) I will accept it and only learn the questions set in the paper.

3. During your holidays you are given a project work, how will you complete the project work?

(a) I will buy the project from a professional.

(b) I will ask my friends or family to do the majority of the project for me

(c) I will do the project in the best possible manner independently.

(d) I will do the project work and only get little help if needed.

(e) I will do the project in any manner, just to submit it on time.

4. If you are made the prefect , how will you do your duties for school welfare?

(a) I will enjoy being a prefect but will not do my duties for school welfare.

(b) I will be undisciplined myself and will be casual about my duties.

(c) I will be disciplined myself but cannot ensure about the discipline of others.

(d) I will ensure proper discipline, good conduct of my school mates and will work hard for the school developmental programs.

(e) I will see that everybody follows proper discipline, also inform teachers about the misconduct of my friends.

5. One day after school, you go to play along with your friends without informing your parents and return late, what you will say to your parents after reaching home?

(a) I will make an excuse to my parents and will make a promise to myself not to make excuses in future.

(b) I would avoid going in front of my parents.

(c) I will make an excuse to my parents saying that I had an extra class in school.

(d) If my parents get angry of my being late then also I would tell them the truth.

(e) I will tell my parents the truth only if they were in a good mood.

6. What will your group do if they have finished the task first compared to the other group in the class?

(a) We will help them in completing the task on time in the best possible way.

(b) We will help them in completing the task but will not bother about the quality of work.

(c) We will again try to improve the quality of our given task and then may think of helping the other group.

(d) We will not be interested to help the other group to complete their task.

(e) We will not help them instead will try to disturb the other group in completing their task.

7. Would you help your friend in complete his/her pending class work ?

(a) I will not give her/him my notebooks at any cost, even if insisted by anyone

(b) I will help her/him in to write the class work, share my notes and clear the doubts if any.

(c) I will help him /her by just giving him/her my notes to copy.

(d) I would like to give her/him my notebook only if I am given permission by my parents.

(e) I would not like to give my notebook, but will only give it if insisted by teachers or parents.

8. What will you do if a group of students in your class are involved in collecting funds for a natural calamity?

(a) I will not give any contribution as it is a waste of time, money and energy

(b) I will not give any contribution also will ask my other friends not to do so.

(c) I will like to contribute the maximum amount and also would help them in collecting funds.

(d) I will give a good contribution but may not be able to offer any other help.

(e) I will give a minimum contribution just for the sake of giving it.

9. How will you co- operate with your teacher if she wants to take extra classes to complete the syllabus before time?

(a) I will not attend it and will discourage others from attending the extra classes

(b) I will attend the extra classes whenever she wishes to take them.

(c) I will attend only on those days when I have no tuition/games.

(d) I will only attend the extra classes if my friends are attending it .

(e) I will not attend it, as I feel that teachers should complete the course during their regular periods

10. What will you do if there is a get- together in your society?

(a) I will take the initiative and offer my help in organizing the get-together.

(b) I will join the other society members and help in organizing the get-together.

(c) I will help in organizing the get-together only if my friends join me.

(d) I will not go to the get together in order to avoid doing any kind of work.

(e) I will not offer any help in organizing the get together and will also discourage my friends from doing so.

11. Which procedure would you like to follow to score better results in examination?

(a) I will not study throughout the year and will rely on partners to help me in the examination by copying.

(b) I will study regularly from the very first day of school with proper planning.

(c) I will study periodically but with proper understanding and by making notes.

(d) I will study as per the schedule made by my parents/tuition teachers.

(e) I will study during the last few days prior to the examination.

12. What procedure you would like to follow if a project is given to you?

(a) I will do it along with my group and will rely on the group to get it done for me

(b) I will get my entire project done from my elder brothers/sisters/seniors who have done it before.

(c) I will try to make the best and innovative project going beyond what has been asked.
(d) I would like to do the project just according to what has been asked.
(e) If the project is going to be graded only then I would do it perfectly.

13. How will you fulfill the goals that you have set in your life?

(a) I will change my goals in middle if am not able to achieve it
(b) I will set goals, but as time passes I'll forget about them.
(c) Setting goals are mere wastage of time; we should enjoy our present and forget about the future.
(d) I will achieve my goals through all the hard work needed as it is the only key to success.
(e) I will word hard to some extent to achieve my goals.

14. Will you solve sums in Mathematics even if you are unable to reach to the solution of the sum?

(a) I will try and solve the sums by all possible methods known to me and try to get solutions.
(b) I will seek help from my teacher and ask her to solve it for me.
(c) I will leave that sum and will try to solve another one.
(d) I will close the book and do some other activity which entertains me.
(e) I will first go through the chapter thoroughly and would practice with more examples to get solutions.

15. How would you do voluntary work in any organization of social welfare?

(a) I will work for the development of the society in different areas putting in my best efforts.
(b) I will donate myself and collect money from others and do some other work to help the organization.
(c) I will only do voluntary work in the organization if asked by others.
(d) I will just do minimum work only to remain as a member of the organization.
(e) I will try to avoid taking responsibility for any work and will only remain as volunteer.

16. What will you do if your friend offends you by saying something unpleasant?

(a) I will respond to him by saying and doing something unpleasant.
(b) I will not feel bad and will tell him that he should be good to others.
(c) I will not feel bad and will not say anything to him.
(d) I will feel bad about it and complain it to my teachers or parents.
(e) I will respond to him by saying something unpleasant.

17. How would you like to celebrate your birthday?

(a) I will have a party for my friends in a good restaurant
(b) I would like to celebrate in a uniquely different style.
(c) I would like to give food and clothes to the poor on my birthday.
(d) I will celebrate my birthday only with my family.
(e) I will celebrate it only if my friends or parents give me a surprise party.

18. How do you manage to keep your room clean?

(a) I will clean my room only if I am asked to do so.

(b) I will start the work and later on will get the remaining work done by someone else.

(c) I will get all the cleaning work done by someone else.

(d) I will take the initiative to clean the room myself and will not involve others in doing my work.

(e) I will clean the room myself by following the example of others in my house.

19. What type of clothes will you buy when you go for shopping?

(a) I will buy stylish traditional clothes when I go for shopping.

(b) I will wear clothes bought by my parents.

(c) I will buy trendy and fashionable clothes which makes me look cool

(d) I will buy fashionable clothes which attracts the attention of others.

(e) I will buy sober traditional clothes without any style, when I go for shopping

20. What would you do when you see your friend having the latest mobile?

(a) I will be least attracted to such gadgets and will also ask my friend to stay away from it.

(b) I will just appreciate his mobile, but will not be interested to own one myself.

(c) I will be interested in owning a mobile but not necessarily the latest one.

(d) I will request my parents to buy me the same latest mobile which my friend owns.

(e) I will demand to my parents to buy me the latest and a much better mobile than my friends.

21. What will be your criteria for selecting the players for your team?

(a) I will select only those friends who will obey my orders.

(b) I will select players based on their abilities irrespective of their class, caste or gender.

(c) I will select a team of good players but will make sure that it also includes my friends.

(d) I will randomly select the players to provide a chance to everybody in my class.

(e) I will be biased and select only my friends.

22. Will you give a speech on any religion if asked?

(a) I would be interested to give speech only on my religion.

(b) I will give the speech on my religion and further promote my religion.

(c) I will give the speech by taking help from friends of other religion, and would also like to practice their customs.

(d) I will just give the speech on any religion but would not be interested in following their customs.

(e) I will not like to give any speech on any religion.

23. What is your opinion of working and independent women?

(a) It does not matter to me if a woman works or stays at home.

(b) I feel that women should stay at home and take care of their family and children.

(c) I feel that independent, working women have created a lot of problems in the society and so they should not work.

(d) In present times I believe women should be independent and allowed to work.

(e) Women can be independent and working but only with the permission of men.

24. How would you feel if your elders show disrespect to any religion/ caste which is different from yours?

(a) I will not mind their behavior, but I would ensure that I don't behave like my elders.

(b) I will neither appreciate nor criticize their way of showing disrespect to other religion/caste.

(c) I will accept the behavior of my elders, as my elders can never be wrong.

(d) I will not only appreciate their behavior but would also criticize other religion/caste with them.

(e) I will not like this behavior of my elders and will ask them to change their behavior.

25. What will you do, if a blind student in your class wants to have some friends?

(a) I will go out of the way and make him my friend and also help him to make other friends.

(b) I will make him my friend but will not help him to make other friends.

(c) I will make him my friend only if he approaches me.

(d) I will not make him my friend but will help him to make other friends.

(e) I will not approach him for friendship as he is differently abled.

26. What you will do if the librarian of your school needs help in the numbering of books?

(a) I will not approach him/her as it's not my work.

(b) I will readily help him/ her and also would help in the cleaning of the racks.

(c) I will help him/her in numbering the books only and nothing else.

(d) I would be interested in helping him/her but would not want to waste my free period.

(e) I will make some excuse and run away.

27. What would you like to do during your vacation to pass your time?

(a) Although I don't like to work, but I will do some work to impress others?

(b) I will not do any manual work would instead enjoy by going out for movies, playing or sleeping.

(c) I will make my society look beautiful, by planting trees, sweeping and also maintaining old monuments if any.

(d) I will clean my room though it's not my work, and also would be interested in being a helping hand to my mother in her work.

(e) I will only do manual work if asked by someone.

28. What will you do if you see that for your school function the seating arrangement and decoration has not been done on time?

(a) I will wait for other students to initiate the work, if nobody turns up then I will do the arrangements.

(b) I will not be able to do it because I have never done such work before.

(c) I will make sure that I am not seen there and I would enjoy with my friends elsewhere.

(d) I will take the initiative and along with my friends help the school to arrange all chairs and do the decorations.

(e) If I am asked to be a volunteer for the function then only I would do all the work.

29. What will you do if you observe that the tools , instruments and materials in your science laboratory is not in order and are dirty?

(a) I will keep everything in order and clean it by myself, only if my teacher asks me to do it.

(b) The lab assistant will keep the things clean and in order and I will help him only if required.

(c) I will do the work superficially only to impress my teacher.

(d) I will get away from such situations as I don't like to do such work.

(e) I will take the initiative and keep everything in order and clean it by myself, before my teacher asks me to do it.

30. What you will you do, if you are sent abroad for higher studies and you are badly in need of money?

(a) I will do any part time job to earn as no work is small.

(b) I will search for some work relevant only to my few areas of interest.

(c) I would only work by giving tuitions to students.

(d) I will not look for any work as I am a student and I will ask money from my parents.

(e) I would leave my studies and will go back to my country as I am short of money.

31. When do you reach to the school in the morning?

(a) I am usually late to school and get punishment on a regular basis.

(b) I am never late and had usually reach before time.

(c) I always reach on time to school, except once or twice in a year.

(d) I go to school by van/rickshaw and my reaching to the school depends on my driver.

(e) I get late occasionally as I sometimes get up late in the morning.

32. When do you reach for a birthday party celebration or some social function?

(a) I generally reach the function sometimes on time or sometimes late.

(b) I always come late for such functions.

(c) I reach to the venue before time.

(d) I generally reach the venue as per the scheduled time.

(e) I always visit such places along with my friends or parents so reaching on time is dependent on them.

33. What are the things that you would consider while wearing your uniform?

(a) I will wear school uniform under the supervision of my parents.

(b) I will like to look modern and stylish in my uniform so I'll make necessary changes.

(c) I get punished often for not wearing complete uniform.

(d) I prefer to wear neatly washed clothes and Ironed clothes and also in a proper manner.

(e) I wear the uniform in any shabby manner, so that I don't break the school discipline.

34. How do you behave in the classroom in the absence of teacher?

(a) I always sit quietly in the classroom and am not concerned with others making noise.

(b) Whenever there is noise in class room I prefer to go out of the classroom and return to classroom when my teacher arrives

(c) I like to join my classmates in having fun when the teacher is absent

(d) I am the first one to get out of my seat and I start making a noise and have fun when the teacher is not present.

(e) I always try to maintain silence and also see to it that my classmates are also maintaining silence.

35. What do you do when you go to participate in a competition outside your school?

(a) I prefer to conduct myself in a perfect manner and would behave in much disciplined way.

(b) I always behave in disciplined manner whenever any teacher is with me.

(c) I will behave in appropriate manner if I find the competition is fair otherwise not.

(d) I will get into mischief with other students.

(e) I am least concern with my schools reputation, will behave in any manner I wish.

36. What approach will you adopt while working on a project?

(a) I prefer doing a project alone.

(b) I will always co ordinate, co operate with the group leader and group members make the project successful.

(c) I will co operate and co ordinate with my group member only if I am the leader of the group.

(d) I will be interested in completing the project in any manner as early as possible and submitting it.

(e) While working on projects I would like to make sure that my ideas are accepted by the group.

37. How do you behave as a player while playing a football/cricket match?

(a) I love winning all the matches and win trophies for myself.

(b) I prefer to play those games which I can play by myself and show my skills.

(c) I fully co operate with the players and fully contribute towards the game.

(d) I like to take the lead and bring out the best in my team mates.

(e) I usually prefer to be a substitute player and allow others to play the game.

38. Will you take responsibility with your team members in case of any failure?

(a) I will only take responsibility if I am the leader of the team.

(b) I am not responsible for any failure as I am a good performer.

(c) I will try to find out the team members who are responsible for the failure.

(d) I will readily take responsibility with my team members in case of any failure.

(e) I will only take responsibility for my performance in the team.

39. How will you feel when you see your team members performing better than you?

(a) I will just appreciate the efforts of my team members.

(b) I will notice their superior performance but continue playing my own game.

(c) I will not appreciate the good performers of the team.

(d) I will make discouraging comments to de motivate the good players of the team.

(e) I will appreciate the efforts of my team members and try to learn from them.

40. How will you set any goal for achieving success in a cricket/football match if you are the captain of the team?

(a) I will not set any goals and just want them to play the match.

(b) I will study the abilities of my team members and set the goals accordingly.

(c) I will set goals according to what my team had been able to achieve with ease so far.

(d) I will let the team members experiment with goal-setting.

(e) I will set goals according to my potential and will not think about other team members.

41. What will you do if you see a national flag, lying on the road?

(a) There are several things lying on the road in our country! I will ignore it like I ignore the rest.

(b) I will immediately pick it up and take it with me to my house.

(c) I will pick up the flag at that moment and keep it nearby.

(d) I don’t pick up anything lying on the ground or the road.

(e) I am not bothered to pick it up as I did not put it there.

42. Will you suddenly leave your team if you realize that the rival team is going to win the game?

(a) I am not particularly concerned about winning or losing so I will remain with my team only.
(b) I will not leave my team in any situation.
(c) I will never leave my team at any cost and give a strong fight to my rivals.
(d) I play to win so I would like to join a winning team.
(e) I will join my rival team and will share all the strategies of my original team with them to win the game.

43. What will you do if you hear someone insulting and spoiling the image of your school?

(a) I will report this incident to my teacher
(b) I will ignore his comments
(c) I will join him in insulting my school
(d) I will make sure that he apologizes and takes his words back
(e) I will request him to give an apology.

44. What will you do if you hear your friend talking against the development of your country?

(a) I will ask not to make such statements without facts.
(b) I will only speak if I am aware of the facts about my country
(c) I will ignore his comments and carry on with my work.
(d) I will join along with my friends to criticize my country.
(e) I will provide him with actual facts and figures to prove him wrong.

45. Will you break your friendship if your best friend fights with you?

(a) I will not break my friendship but I may feel bad about the fight.
(b) I will not break my friendship unless my friend stops talking to me.
(c) I will break my friendship and will not talk to him for ever.
(d) I will break my friendship and will also see that my other classmates are not making him their friend.
(e) I will not break my friendship whatsoever happens we will sort out the problems between us.

46. What efforts will you put in getting trained on your favorite sport?

(a) I would prefer to give up the sport than attend training.
(b) I will give my best effort, will never skip any of my sessions and if required will devote extra time.
(c) I will devote the required time without compromise..
(d) I do start such things with enthusiasm but do not continue them for long.
(e) I will opt for a crash course/ short term course instead.

47. When given homework at school, how do you complete it?

(a) I usually do my homework but at times I skip it for some or the other reasons
(b) I usually forget to do my homework and get punished the next day.

(c) I always complete my work as I have a fixed time to do my homework.
(d) I usually finish my homework in spite of no fixed time to do my homework.
(e) I finish my homework during the school hours itself in any possible way.

48. How often do you wish your teachers in the morning hours?

(a) My wishing depends on the teacher whom I meet.
(b) I occasionally wish, but it's not my regular practice.
(c) I usually forget to wish unless my classmates remind me.
(d) I like wishing all of them, and I do it as a regular practice.
(e) I wish majority of them on a regular basis.

49. Would you be interested in being a part of the morning assembly of your school?

(a) I will be interested to participate in only one of the items.
(b) I am interested but I am not confident to speak in front of all the students
(c) I will participate for formality, but I won't put in my best effort.
(d) I am not interested in participating in the morning assembly.
(e) I will be interested in trying out new things in the morning assembly

50. How have you been pursuing your hobbies?

(a) I don't believe in wasting my precious time on hobbies
(b) I have a great interest in my hobbies; and I will continue to follow my interests.
(c) I have an interest in my hobbies but am not sure about continuing it in the future.
(d) I have no hobbies at present but will pursue if they develop at any time.
(e) I am unable to pursue my hobbies on a regular basis as I don't find time.

APPENDIX- VII

ACHIEVEMENT TEST (2011-12)

SUB: MATHEMATICS **TIME: 3 HRS**
CLASS: VIII **MAX MARKS: 100**

SET – A

General Instructions:

a) The examination paper consists of 25 questions divided into 3 sections.
b) All questions are compulsory
c) Section A (Q.1 to 10) each carries 3 marks.
d) Section B (Q. 11 to 20) each carries 4 marks.
e) Section C (Q.21 to 25) each carries 6 marks.
f) Wherever internal choice is given, select one question out of two given.

Section - A

1. Find the least number which must be subtracted from 15665 to make it a perfect square.

2. Solve $\frac{x-2}{3} + \frac{x-4}{4} = 10$

   OR

   Solve $\frac{2x}{3} + 1 = \frac{7x}{15} + 3$

3. Simplify (a+b) (2a-3b+c)+(2ac-3bc)

4. Find the cube root of 3375.

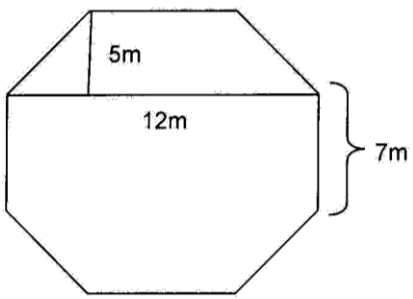
5. Factorise $x^2+12x+27$ using suitable identity.

6. A man takes 20 steps to cover a distance of 18m. How many steps will he needed to cover a distance of 396m?

7. Factorise 5z-7+7xy-5xyz.

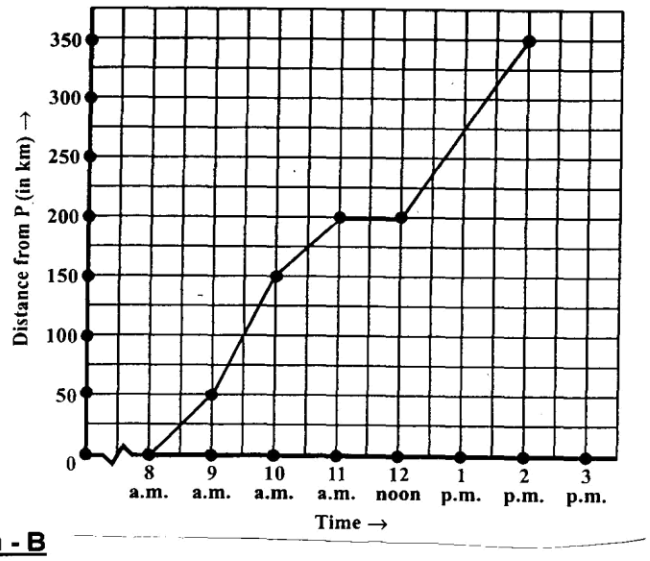
8. The radias of a circular cylinder is 7cm, its height is 10cm. Find the curved surface area, total surface area and volume of the cylinder .

9. Top surface of a raised platform is in the shape of a regular octagon as shown in the figure. Find the area of the octagonal surface.



10. The given graph describes the distances of a car from a city P at different times when it is travelling from city P to city Q, which are 350km apart. Study the graph and answer the following

a) When did the car begin its journey
b) How far did the car go in the first hour?
c) How far did the car go during
   i) The second hour?
   ii)The third hour ?
d) At what time did the car stop for some duration?
e) What was the speed of the car in the first hour?



Section - B

11. a) Find the value of n for which $(5^4)^{2n} \div 5^{-2} = 5^{10}$ (3)
    b) Express 0.000000154 in standard form (1)

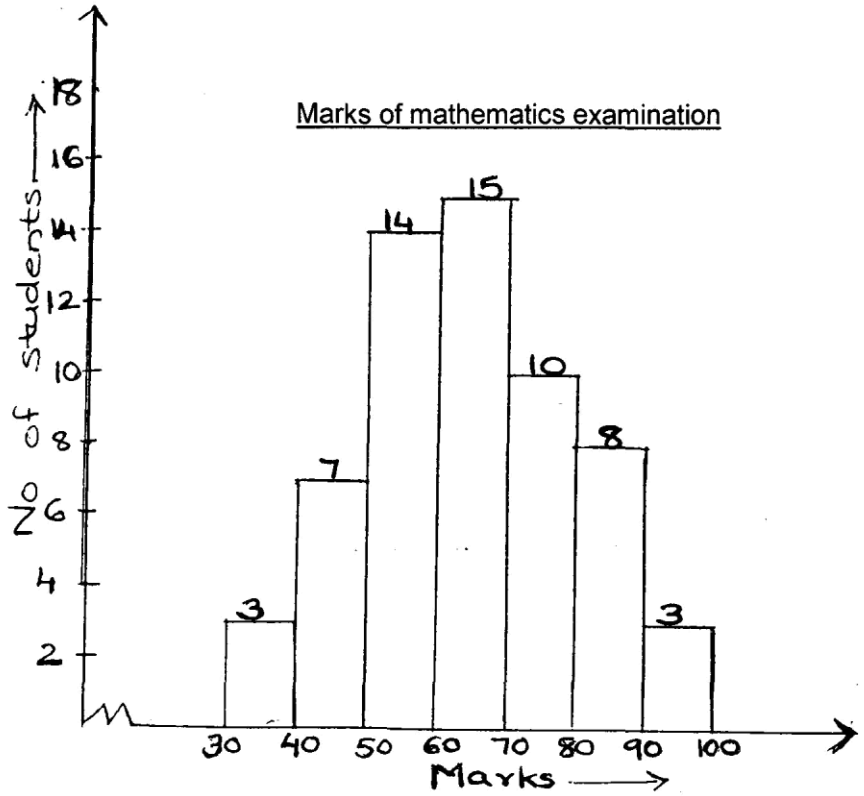
12. The denominator of a rational number is five more than the numerator. If three is added to both numerator and denominator the number becomes ½. Find the rational number

13. a) Two adjacent angles of a parallelogram are in the ratio 7:5. Find the measure of each of the angles (3)
    b) How many sides does a regular polygon have if the measure of an exterior angle is 24^0 (1)

14. Using suitable identities, find the following products
    a) 96x103 b) 102x102

15. The following is a histogram representing the marks obtained by 60 students in a mathematics examination. Answer the following

a) The score greater than or equal to 80 is considered to be an A+ grade. How many students got A+ grade?
b) If marks 40 or greater than 40 are considered as passing marks, how many students failed in the examination
c) what percentage of students have failed to clear the examination.
d) What percentage of students have passed in the examination.



16. Factorise $4b^2 - 28bc + 49c^2 - 25a^2$ using suitable identities

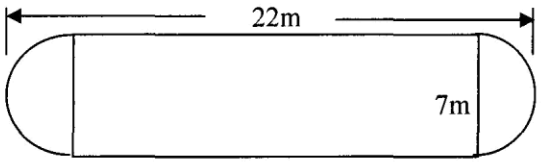
OR

Factorise $a^4 - (a-b)^4$

17. A car is moving at a uniform speed of 54 km /hr

    a) How far will it travel in 20minutes?
    b) Find the time required to cover a distance of 648km?

18. The shape of a garden is rectangular in the middle and semicircular at the ends as shown in the diagram. Find the area of this garden.



19. A bridge can be constructed by 1500 workers in 60 days. How many more such people should be employed to complete the work in 40 days?

20. Draw the graphs for the following tables of values, with suitable scales on the axes.

Time (in hours)	1	2	3	4
Distance covered (in km)	40	80	120	160

Section - C

21. a) The internal measures of a cuboidal room are 13m x 10m x 6m. Find the total cost of white washing all four walls and the ceiling, if the cost of white washing is Rs 7 per m^2 (5)

b) If each edge of a cube is doubled, how many times will its volume increases (1)

22. a) Divide $y(5y^2-125)$ by $5y(y+5)$ (3)

b) Divide $12abc\ (3a-15)(5b+30)$ by $156(a-5)\ (b+6)$ (3)

23. a) On a particular day, the sales (in rupees) of different items of a bakers shop are given below. Draw a pie chart for this data. (5)

Ordinary bread	: 300
Fruit bread	: 80
Cakes and pastries	: 160
Biscuits	: 100
Others	: 80
Total	: 720

b) When a die is thrown, what is the probability of getting an odd number. (1)

24. a) Show that $(4pq+3q)^2-(4pq-3q)^2= 48pq^2$ using suitable identity (4)

b) Use a suitable identity for finding the product of (abc-4) (abc-3) (2)

25. Construct a quadrilateral PQRS where PQ=4cm, QR=6cm, RS=5cm, PS=5.5cm and PR=7cm

OR

Construct a quadrilateral MIST where MI= 3.5cm, IS=6.5cm, $<M=75^0$, $< I=105^0$ & $< S=120^0$

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APPENDIX- VIII

REACTION SCALE FOR STUDENTS

Put tick (√) below accordingly for

Strongly Agree : SA; Agree : A ; Un decided : UD ; Disagree : DA ; Strongly Disagree :SD

Sr. No.	Statements	SA	A	UD	DA	SD
1	The value integrated approach for teaching mathematics was different from other methods.					
2	The integrated approach made the learning of mathematics joyful.					
3	This integrated approach was helpful to increase my knowledge about the different values of life.					
4	This integrated approach helped me to understand the basics of mathematics clearly.					
5	The examples used to understand mathematical concepts integrated with values were effective.					
6	The value integrated approach gave equal importance to mathematics and values					
7	We always felt that it was mathematics class and not just a value education class					
8	The integrated approach helped me to increase my perception of values.					
9	A sense of curiosity was developed to know new ways of learning mathematics					
10	This integrated approach in studying mathematics reduces the burden of mathematics learning					
11	The mathematics syllabus was completed on time.					
12	The activities conducted to understand the concepts were interesting.					
13	The classroom management was effective even with the particaption of students in various activities.					
14	The class was very participative in the discussion on values.					
15	The explanation on values were ideal and enriching.					
16	The stories used during the interacation was very interesting and value based.					
17	The games played were very interesting and taught us values.					
18	I like to practise values taught in my daily life.					
19	The stories were linked perfectly with mathematical concepts.					
20	I was very much interested in participating in all activities done in class.					

LESSON PLAN OF CHAPTER: 1 'RATIONAL NUMBERS'

Entry Behaviour:

Students have some prior knowledge of numbers like natural numbers, whole numbers, integers and fractions.

Students are aware about team work.

General Objectives:

1. Students will be able to acquire the knowledge of rational numbers.
2. Students will be able to understand about the properties of rational numbers.
3. Students will be able to represent rational numbers on the number line.
4. Students will be able to apply their knowledge on consolidation of the operations on rational numbers.
5. Students will be able to find rational numbers lying between another rational numbers.
6. Students will be able to apply their knowledge to solve word problems on rational numbers.
7. *Students will be able to develop an understanding about the conceptual knowledge of value Team work.*
8. *Students will be able to develop a desired perception of the value team work and practice loyalty in their daily lives.*

Media: Black board.
Method: Lecture cum discussion.
Approach: Integrated Approach

Introduction :

Teacher : Good morning .Students
Students: Good morning ,Sir
Teacher : Today we are going to learn about Rational number, but before learning that we need to learn about other numbers as well.
Teacher : Would you all be interested in listening a story on number system, how the origin of the number system took place?
Students : yes sir, we want to listen to the story.
Teacher : (Teacher starts with the story telling activity)
Teacher : The knowledge of numbers in the beginning was introduced to the world by none other than primitive men, who were the natural people.Natural numbers was given to the world by them, as they were called as natural people hence the number given by them is known as Natural numbers, as they used symbolic means to show numbers they themselves used to work in groups and exhibit good team work, and they could use their fingers to represent it and count them, so the countable numbers were known as natural numbers, they couldn't show zero therefore it is not included in the set of Natural numbers, later on Aryabhatta found zero and other set of mathematicians could give dimensions to it and then we came to know about the Whole numbers, which started with 0, 1,2,3,,4,5, …..and so on. After that by time progressed

people started walking in groups and settled near river banks and did agriculture together and started earning money and also borrowing money so the concept of integers came into existence as and later on fathers started giving their property by dividing it into parts and we got to know about fractions. And it continued. This series of discoveries led to the knowhow of various numbers for us. It was indeed a co-ordination of various concepts which lead to the knowledge of new numbers, in fact one team of people transferred their knowledge to another team of people and with a good team work co- ordination, keeping the best discarding the not so useful concepts, today we have beautiful mathematics to be learnt."

Teacher: Did you enjoy the story?

Students : very much, sir. We got to know how numbers came into picture.

LESSON PLAN OF CHAPTER:2 'Linear Equation'

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Entry Behaviour:

Students have some prior knowledge of algebra, integers, algebraic expression.

Students are aware about equality, etc.

General Objectives:

1. Students will be able to acquire the knowledge of Linear equation.
2. Students will be able to apply their knowledge in solve equations with linear expression on one side and number on other side.
3. Students will be able to apply their knowledge in solving sums related to linear expression on both sides.
4. Students will be able to apply their knowledge in solving problem sums related to linear equations.
5. *Students will be able to develop an understanding towards the conceptual knowledge of value equality.*
6. Students will be able to develop a desired perception towards the value equality and practice the value equality in their daily life.

Media: Black board,
Method: Lecture cum discussion.

Approach: Integrated Approach

Introduction of the lesson:
Teacher: Good morning students.

Students : Good morning sir…

Teacher : Today we are going to study a new chapter dealing with the term Equality, quickly go

through the index and let me know which chapter am talking about?

Student/s(they open their text books and scans the index and responds) : Linear Equation.

Teacher : Very good, what a guess!!

Teacher : Why did I co related this topic with Equality, is there really any connection with this word, where the term Equality and where the term Linear Equation, one talking about the social world and other one talking about mathematical world.

Student: There may be a correlation like In Equality all are equal, so in Linear equation all sums or numbers will be equal.

Teacher : Good attempt !

Teacher : Let us see how it can be correlated, today our objective along with the concept is to find how we can develop equality concept through this chapter, isn't it interesting?

Student : yes sir

LESSON PLAN OF CHAPTER :3 'UNDERSTANDING QUADRILATERALS'

Entry Behaviour:

Students have some prior knowledge of polygons, angles, parallel lines, perpendicular, quadrilateral, etc,.

Students are aware about Regularity & Team work.

General Objectives:

1. Students will be able to acquire the knowledge of polygons, types of polygons, angle sum property, measure of exterior angles, interior angles of regular polygons, types of quadrilateral, properties of parallelogram and some special properties of Parallelogram.
2.. Students will be able to apply their knowledge on solving questions related to above concepts.
3. *Students will be able to develop an understanding towards the conceptual knowledge of the value regularity .*
4. *Students will be able to develop a desired perception of the values regularity and team work and practice regularity and team work in their daily lives.*

Media: Black board,

Method: Lecture Method, discussion.

Approach: Integrated Approach

LESSON PLAN OF CHAPTER:4 'PRACTICAL GEOMETRY'

Entry Behaviour:

Students have some prior knowledge of constructing line segments using ruler, making triangles and also constructing various angles, angle bisectors, perpendicular bisectors, etc.
Students are aware about Discipline.

General Objectives:

1. Students will be able to acquire the knowledge of Practical Geometry.
2. Students will be able to understand about the construction of various polygons.
3. Students will be able to apply their knowledge in construction of polygons.
4. *Students will be able to develop an understanding towards the conceptual knowledge of value Discipline.*
5. *Students will be able to develop a desired perception towards the perception of the value discipline and will be able to practice the value discipline in their daily life..*

Media: Black board, Geometrical instruments.
Method: Lecture Method, Demonstration, lecture cum discussion.
Approach: Integrated Approach

Introduction :

Teacher : Good morning students.
Students : Good morning sir,
Teacher: we are going to study a chapter on practical geometry , in which we will try to do construction on quadrilaterals, are you all ready to study in a disciplined manner?
Students : yes sir…
Teacher : To begin with lets do one activity
Teacher :(*takes 5 sticks which he carried along with him in the class and asked two boys to come out)*
Teacher: now am going to make a quadrilateral out of these 4 sticks on the table.
Teacher : you have to change the shape and get another shape out of this quadrilateral
Student : yes sir. (*he slides the sticks keeping one base fixed and gets a new shape*)
Teacher : Now I will add a diagonal in between and then you try to change the shape without letting the diagonals move away from the two vertices of the quadrilateral.
Student : *attempts…. but fails*
Teacher : Students this is what a diagonal can do, it provided support to the quadrilateral and fixed it and it became a strong structure because diagonal divided a quadrilateral into two triangles , and in triangle once a shape is formed you cannot change it shape like quadrilateral. Triangle is said to be the strongest structure.
Teacher : In a class, a student is like a quadrilateral who can go any where and change its characteristics but they need to have at a point of time one diagonal element in them to bring strength in their life and that diagonal element is nothing but discipline in life.
Teacher : so today we will study this chapter providing an angle of disciplined work as it deals with construction and all we would ensure a good neat and clean discipline work during the entire session. So lets begin the chapter with a positive note

LESSON PLAN OF CHAPTER :5 'DATA HANDLING'

Entry Behaviour:

Students have some prior knowledge of numbers, average, midpoint of two numbers,etc,.

Students are aware about equality.

General Objectives:

1. Students will be able to acquire the knowledge of Bar, Pie , line graphs and Histogram.
2. Students will be able to acquire the knowledge of constructing the graphs.
3. Students will be able to acquire the knowledge of Co-ordinate geometry
4. Students will be able to apply their knowledge about solving problem sums related to Simple interest and time and distance for graphs.
5. *Students will be able to develop the conceptual knowledge of the value equality.*
6. *Students will be able to develop a desired perception on the value co-operation and will be able to practice equality in their daily life.*

Media: Black board,

Method: Lecture cum discussion.

Approach: Integrated Approach.

LESSON PLAN OF CHAPTER : 6 'SQUARES AND SQUARE ROOTS'

Entry Behaviour:

Students have some prior knowledge of numbers, various operations like addition, subtraction, multiplication, division on numbers, use of identity $(a+b)^2$.

Students are aware about the value simplicity.

General Objectives:

1. Students will be able to acquire the knowledge of squares.
2. Students will be able to acquire the knowledge of properties of square numbers.
3. Students will be able to identify the various pattern of numbers.
4. Students will be able to apply the knowledge to find the squares and square roots of numbers.
5. *Students will be able to develop the conceptual knowledge of value simplicity.*
6. *Students will be able to develop a desired perception of the value Simplicity and will be able to practice value simplicity in their daily life.*

Media: Black board, Activity

Method: Lecture Method, lecture cum discussion.

Approach: Heuristic**,** Integrated Approach

LESSON PLAN OF CHAPTER : 7 ‘CUBES AND CUBE ROOTS’

Entry Behaviour:
Students have some prior knowledge of numbers, squares and square roots, prime-factorisation,.

Students are aware about determination.

General Objectives:

1. Students will be able to acquire the knowledge of cubes and cube roots..
2. Students will be able to apply their knowledge about solving problem sums related to cubes and cube roots.
3. *Students will be able to develop the conceptual knowledge of value determination.*
4. *Students will be able to develop a desired perception of the value determination and will be able to practice value simplicity in their daily life.*

Media: Black board, Activity

Method: Lecture cum discussion

Approach: Integrated Approach

LESSON PLAN OF CHAPTER 8 :'COMPARING QUANTITIES'

Entry Behaviour:

Students have some prior knowledge of ratios, percentage, increase or decrease in percentage, term discount, cost price, selling price, profits, loss, interest.

Students are aware about the value honesty.

General Objectives:

1. Students will be able to acquire the knowledge of profit and loss,discounts, sales tax, value added tax, simple interest and compound interest.
2. Students will be able to apply their knowledge about solving problem sums related to profit and loss, profit and loss percent, discounts, sales tax, VAT, simple and compound interest.
3. *Students will be able to develop the conceptual knowledge of value honesty.*
4. *Students will be able to develop a desired perception of the value honesty and will be able to practice value honesty in their daily life.*

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Media: Black board,

Method: Lecture cum discussion.

Approach: Integrated Approach

LESSON PLAN OF CHAPTER: 9 "Algebraic Expressions and identities"

Entry Behaviour:

Students have some prior knowledge of algebraic expression, linear expressions, variables, constants.

Students are aware about equality.

General Objectives:

1. Students will be able to acquire the knowledge of Algebraic Expressions, polynomials.
2. Students will be able to understand and acquire the knowledge of Identities.
3. Students will be able to apply their knowledge in solving Algebraic expressions and problems related to identities.
4. *Students will be able to develop the conceptual knowledge of value equality.*
5. *Students will be able to develop a desired perception of the value equality and will be able to practice value equality in their daily life.*

Media: Black board.

Method: Lecture cum discussion.

Approach: Integrated Approach

LESSON PLAN OF CHAPTER:10 'VISUALISING SHAPES'

Entry Behaviour:

Students have some prior knowledge of various shapes like cubes, cuboid, pyramids,etc.

Students are aware about the value Determination.

General Objectives:

1. Students will be able to acquire the knowledge of vertex, edges, faces..
2. Students will be able to acquire the knowledge of Euler's formula.
3. Students will be able to apply their knowledge about using Euler's formula.
4. *Students will be able to develop the conceptual knowledge of value determination.*
5. *Students will be able to develop a desired perception of the value equality and will be able to practice value determination in their daily life.*

Media: Black board, Activity

Method: Project Method, lecture method, demonstration

Approach: Integrated Approach

LESSON PLAN OF CHAPTER :11'MENSURATION'

Entry behaviour

Students have some prior knowledge of area, related to circles, squares, rectangles, etc,.

Students are aware about Team work, Co-operation and dignity of labour.

General Objectives:

1. Students will be able to acquire the knowledge of Area of 2D shapes and area & volume of different 3D shapes.
2. Students will be able to apply their knowledge about solving problem sums related to area and volume.
3. Students will be able to measure, use formula and calculate the area and volume of any objects in their daily life.
4. *Students will be able to develop a conceptual knowledge of the value team work, co-operation and dignity of labour.*
5. *Students will be able to develop a desired perception towards the values like team work. co-operation and dignity of labour and they will be able to practice these values in their daily life.*

Media: Black board, Activity

Method: Lecture cum discussion.

Approach: Integrated Approach

LESSON PLAN OF CHAPTER :12 'POWERS AND EXPONENTS'

Entry Behaviour:

Students have some prior knowledge of integers, powers, expansion of numbers.

Students are aware about loyalty.

General Objectives:

1. Students will be able to acquire the knowledge of powers and exponents, laws of exponents and standard form of numbers.
2. Students will be able to apply their knowledge about solving problem sums related to powers and exponents using laws of exponents.
3. *Students will be able to develop a conceptual knowledge of the value loyalty.*
4. *Students will be able to develop a desired perception towards the value loyalty and they will be able to practice this value loyalty in their daily life.*

Media: Black board

Method: Lecture Method, puzzle solving, discussion.

Approach: Integrated Approach

Introducation
Teacher : Good morning students
Students : Good morning sir
Teacher : Solve this puzzle using two 2s, get 25 as the answer by using any operators, like +, - , /, *
Students : attempts the puzzle but fails were given the option to and so on.

Teacher : provides the solution of the puzzle (.2)^-2 = 25.

Here the teacher didn't use any other number instead made one two as .2 and another as -2 and explained the process of getting the result of 25 mentioned abouve.
Teacher : This is the puzzle related to the chapter of Powers and Exponents here base is (.2) and power is (-2)

LESSON PLAN OF CHAPTER:13 "Direct Proportion and In direct proportion"

Entry Behaviour:

Students have some prior knowledge of , linear expressions, variables, constants.

Students are aware about the value dignity of labour.

General Objectives:

1. Students will be able to acquire the knowledge of direct and indirect proportions.
2. Students will be able to apply their knowledge in solving direct and indirect proportions.
3. *Students will be able to develop a conceptual knowledge of the value dignity of labour.*
4. *Students will be able to develop a desired perception towards the value dignity of labour and they will be able to practice this value dignity of labour in their daily life.*

Media: Black board.

Method: Lecture cum discussion.

Approach: Integrated Approach

LESSON PLAN OF CHAPTER:14 'FACTORISATION'

Entry Behaviour:

Students have some prior knowledge of factors, algebraic expressions, Identities.
Students were aware about Team Work, and Co-operation.

General Objectives:

1. Students will be able to acquire the knowledge of Factors
2. Students will be able to apply their knowledge in factorisation of algebraic expression.
3. Students will be able to use identities for factorisation.
4. Students will be able to divide an algebraic expression by algebraic expressions using factorisation.
5. Students will be able to apply their knowledge of factorisation to find errors in expression.
6. *Students will be able to develop and understanding about the conceptual knowledge of values Team Work and co- operation.*
7. *Students will be able to develop a desired perception towards the value co- operation and will be able to practice the value co- operation in their daily life.*

Media: Black board,Activity

Method: Lecture cum discussion

Approach: Integrated Approach

LESSON PLAN OF CHAPTER:15 'GRAPHS'

Entry Behaviour:

Students have some prior knowledge of data handling, percentages, basic graphs.

Students are aware about the value equality.

General Objectives:

1. Students will be able to acquire the knowledge of bar, pie, line graphs and Histogram, constructing the graphs, Co-ordinate geometry.
2. Students will be able to apply their knowledge about construction of graphs and solving problem sums related to Simple interest and time and distance for graphs.
3. *Students will be able to develop and understanding about the conceptual knowledge of value equality.*
4. *Students will be able to develop a desired perception towards the value equality and will be able to practice the value equality in their daily life.*

Media: Black board.

Method: Lecture cum discussion, demonstration.

Approach: Integrated Approach.

Presentation :					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
04.07.11	Number system	Students will be able to write the sets of numbers in natural numbers, whole numbers.	After introduction teacher will list down all the numbers of various sets.	Studens will copy all the set of numbers neatly in their books.	Write the set of Natural numbers, Integers, Whole numbers, Prime numbers,and rational numbers.
05.07.11	Rational Numbers and Properties	Students will be able to write all the properties of rational numbers.	Teacher will introduces the topic of rational numbers and its properties through the value of team work to understand it.	Students will listen to teacher.	What do you mean by the term rational number?
			Teacher will write on the board the first property of rational numbers : Closure property.	Students will listen	

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
	Closure property	Student will be able to write the property of Closure with an example.	For any whole numbers, if 'a', 'b' are any two natural, whole, integers or rational numbers its addition will result into natural, whole, integers or rational number respectively.	If, ‘a’ belongs to Q, and ‘b’ belongs to Q, then a + b will belong to Q.	State the property of Closure property using 'a' and 'b'. Give one example using rational numbers
			Teacher : If any person belongs to a team A , and another person also belongs to team A and so on many persons belong to team A, then their performance for the winning will be considered as team A’s win, that is if two rational numbers are added result would be a rational number only.		
			Secondly, teacher will explain Commutative property of addition as follows : Commutative property of addition		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			"If A is a player of a doubles game with B, and if A scores points along with B then the total score will be addition of both and not just the score of one person, i.e., addition of A's points to B's point or B's point to A's points will give the same answer. Order is not a matter of concern, only the thing which matters is perfect co-ordination, listening and responding to your partners effectively and working hard for your team success and not just individual gains, example Leander paes and Mahesh Bhupathy they are more famous playing in doubles rather than singles.	"Team score is the overall score considered in a team of 2 members, what was the score of first member and second member in which every order is not important"	If in a debate competition two students are selected from each school and if one school wins does it makes a difference about the individual scores, what is important overall score or individual scores?
			(teacher questions)		
		Students will be able to speak orally on the value team work.	Team work is an art of people coming together and working together for achieving goals, objectives and completion of any task.	It is about people doing some work together for achieving goals,.	What do you mean by the value Team work?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher will continue…		
	Commutative Property	Student will be able to write the property of commutative with an example.	We can say that a + b = b+ a, where 'a', 'b' can be whole numbers, integers, rational numbers or so, it will be true for all such cases…		
			Teacher will use an example or rational number to consolidate the concept mathematically.		
			Teacher then explains Associative Property		
			For players more than three say 'a', 'b' and 'c' or 'd', 'e' and f so on….		
			In any game if for a, b and c… if a coordinates well with 'b' and then with 'c' or if 'b' coordinates well with 'c' first and than with 'a', whatever ever be the case the team will win if it is done properly,		
			Similiarly if for addition or multiplication of three number together at a time only two numbers can be added and resultant is added to the third number, so if in		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
	Associative property.	Students will be able to write the associative property with and example.	A + (B +C) = (A + B) +C, for A, B,C can be any natural, whole, integers or rational numbers. The above property is true.	Student writes in book the associative property. i.e., a +(b + c) = (a + b) + c; and a * (b*c)=(a*b)*c	State the associative property for addition and mulitplication using an example.
			Teacher further discuss on values as		
			In a perfect match there has to be better co- ordination, there has to be proper feedback given to each other at regular intervals , the results will be obtained in any case as by adding any number we will get results, but the best output can be obtained by best efforts.(i.e association of best pair of members, like in mathematics best possible numbers added will give the results faster and accurate, for example : Adding numbers like 25,36,42,64,78, here we can associate i.e., add 36 to 64 and 78 to 42, then resultant can be added to 25 rather than adding all numbers in order that is given	Effective communication, all will come to know of what is being told instead of making noise people should talk in association.	What are the outcomes of proper association between three members in a team if worked according to this property of association?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			(further discussion of Associativity exist under addition, multiplication, whereas it does not exist in the case of division and subtraction by considering negative attributes of a team work)		
		Students will be able to define team work		It is when 2 or more individuals gather together to achieve any goal or objective.	Define team work
06.07.11	Distributive property		Teacher: explains Distributive property.		
		Students will be able to write the distributive.	For any rational numbers: a, b and c		
			a(b + c) = a. b + a.c ; here a is outside the bracket and when the bracket is opened a is multiplied with b and also with c, like	Students write in book the distributive property with example.	State the distributive property with an example

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			In a game one person always has to take the initiative and that is the captain and he needs to co- ordinate, delegate the task effectively to each team member and here a is the captain and b and c are the members of a team, firstly a goes to b discusses then with c and takes the suggestion or motivates and then they play the match and result would be wonderful in the end.		
			After discussion teacher asks question		
			What if a only talks to b and neglects c?	He should talk to every member of the team, and should not neglect any body. He should be ready to take suggestions from his team members.	How does a leader or captain communicates with the members in a team

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
		Students will be able to speak about the characteristics of Team work.	Similiarly in a(b + c) a should be multiplied to both b and c not just with b only.	They will always lead the team members in crisis and will listen to all. They will never be biased towards any member. They are good in communicating ideas to their team members. They are good listeners, they will work for attaining team goals.	What are the characteristic of a good leader and good players having the value of Team
		Students will be able to solve examples based on properties.	Teacher will solve sums i.e., one or two sums based on properties of rational numbers	Studetns will write and understand how to solve the sums on properties	Find the value of (2/3) + (4/9 - 1/9)
07.07.11	Rational numbers on a number line	Students will be able to represent rational numbers on a number line.	Teacher will draw on the board and explain how to make a number line for rational and plot points on it.	Studetnts will observe and understand and draw in their note books	Represent 3/7 on a number line.
08.07.11	Rational numbers between two rational number	Students will be able to determine rational numbers between two rational numbers.	Teacher will explain how to find rational numbers between two rational numbers and also discusses various sums based on these concepts	Studetns will follow them and writes in their notebook	Find 5 rational numbers between (-3/4) and (4/5).

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
09.07.11-11.07.11		Students will be able to solve the problems.			
12.07.11			Teacher explains other concepts of the book and by the completion of all the task he narrates a story in the end		
			team work narrates a story_.		
			Teacher narrates the old story and continues as what happened after the real story second time when they did race the hare ran fast without stopping anywhere and won the race and the new moral of story was scripted as “Fast and consistent will never loose the race against slow and steady”		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Soon after that tortoise again requested to have the race and he choose a new track which had a river just before the finishing line and the hare ran fast but couldn't cross the river and hence the tortoise won the race after crossing the river again the new moral was scripted as "Same strategy cannot provide success every time, to attain success new strategies helps"…in the end both tortoise and hare ran with the help of each other and won race together and understood importance of each other and remained friends forever…	Slow n steady wins the race. Never give up when faced with failure Fast and consistent will always beat slow and steady. Work to your competencies Compete against the situation, not against a rival. Pooling resources and working as a team will always beat individual performers	What are the various moral of the story?
		**letters in blue shows value integration with mathematics & value based activity.*			
Recapitulation:		1	State all the properties of rational numbers		
		2	Represent 5/7 on a number line		
		3	What do you mean by the value Team Work		
		4	Give 3 characteristis of a person with the value Team work		
Home Assignment:			Solve the exercise of textbook		

Presentation:					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
21.07.11	Linear Equation	Students will be able to define linear equation	Teacher introduces the topic of linear equations and co relates the topic with the value of equality	Students listen	What is linear equation?
	Algebraic expression		Teacher teaches linear expression with algebraic expression then equation in following ways		
			Teacher Draws, 4 circles and makes eyes, nose and asks students, about the expressions of these faces	No response.	
			Teacher : True as it doesn't have the operator,(teacher then draws the mouth part with smiley, sad and no emotions, tears from eyes and asks) Now what are the expressions?	Happy, Sad, weepy, no emotions	
	mathematical expression	Students will be able to solve question related to linear equations.	Teacher: In a face with eyes, nose and operator mouth we got a facial expression, similarly with numbers and operators like +, -, *, /, we get the mathematical expressions like 2 + 3, 9 – 5 and so on…		
			Further with alphabets, numbers and operators we get algebraic expressions like 2x + 3y, 3x – 4z, etc.		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
	linear expression		Teacher adds : As the facial expression of an individual tells us many things, observe something on these faces, whose faces are these (converts the faces of each type with a face of person belonging to different religion by making some changes in drawings, by adding sturban, cap, hat and holy marks on forehead) Here the algebraic expression is related to all people from different religion They all believe in different religion but at the end of the day they all are equally treated as Indians. They all possess all the possible expression and all do study linear expression in the form of linear equation.	Students observes and enjoys the linking of equality with algebraic and facial expressions	
			Teacher will ask about rich culture of the country.	Diversity in culture, different religions, people belonging to different state, speaking many languages.	Why India is said to be country with diverse and rich culture.
	Equation		Teacher will ask.	Equation formed of linear expression…	What do you mean by equation?
		Students will be able to define equation	Teacher will say " when an expression on left side is equal to an expression or any number on right side, that forms an equation." The symbol = makes it an equation, like equality in our life is also very important similarly equality is must in this topic	Student: Mathematically when one quantity is same like other quantity we say they are equal.	What do you mean by the term Equality in terms of mathematics a d values?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
		Students will be able to speak orally about the value Equality	It's the feeling of one ness, together, all people in this world are equal irresepective of their 3 Cs…	In terms of values, All are same…one…irrespective of religion.Feeling of one God.	
			3 Cs.are Caste, Creed, Culture.	Student: caste, class, custom…	What do you mean by these 3 Cs?
		Students will be able to speak orally about the characteristics of the value equality.	There are open minded people, They are always helpful, caring, co- operative in nature.	Believe in all religion, no difference between genders, provides equal opportunity to all, does not believe in racism.	What are the characteristics of a person with equality?
			In equality, all people have to enjoy equal rights and all are same in the eyes of God in Heaven and in this world: Law, Equality is not just confined to religion only, but also in terms of money, gender, regions. World is now considered to be one family,	There are lots of problem, people doesn't respect each others religion. The women education is again a problem and many more like these and so on…..	What is the status of equality in our nation?
			Lord Rama also treated shabri with equality without any bias once when he happened to visit her place while wandering in forest with his brother Laxman	All are equal in t he eyes of Go	What is the moral of the story from Ramayana.

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
22.07.11 - 27.07.11	Solving linear equations with expression on one side and constant on other side, expression on both sides, simple and complex linear equations	Students will be able to solve linear equations	Teacher explains the method to solve linear equation using values of equality, like like terms add together in an expression if it has 2x - 5 = 4x + 7, here 2x and 4x are brothers of same country who got seperated where as -5 and + 7 are another two like brothers who got separated and they will go to each other but when they cross the borders they will change themselves and then meet and add up or subtract each other	*student listens and understands the like term concept in linear equations*	
			3x -4 = 2x +5 in explanation,	Student: 2x will shift to left side and becomes negative, whereas – 4 will go to right side and becomes positive.	*Solve 3x-4 = 2x + 5, with explainations*
			Teacher explains, *As linear equation is equation of line, it says all people of this world should follow one line of religion and that is of mankind.*		
			Teacher will make students solve some problem sums based on linear equation. (Teacher solves the exercise one by one and makes students solves the exercise with class work and home assignments on mathematics and in between inputs the concepts of equality and oneness to solve the questions.)	Students will solve the remaining exercise using the brother hood relation in linear equation, like term should be operated together and unlike terms doesn't get operated.	

Recapitualtion:	1	What is linear equation? Give one example of linear equation.
	2	What is the meaning of the value equality
	3	Give 3 characteristics of a person with the value equality.
Home Assignment:		Solve the exercise of text books and practise books.

Presentation:					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
13.07.11	Polygons	Students will be able to define polygons.	Teacher will explain the term polygon	Student will listen and learn it	What do you mean by the term polygon?
			Teacher will define the term Polygon.: It is a closed figure(curve) with n- sides	Students will write it in their note books.	Draw a table showing sum of all the angles of a polygon with n sides
	Types of polygon	Students will be able to state different types of polygons	Teacher explains to make tables and find the sum of all angles of a polygon,		
		Student will make a table on polygons with n sides and its name.		Students draws the table in his book.	
	Regular polygon	Student will be able to define regular polygon	Teacher will ask students the definition of regular polygon	it could be those polygon which comes regularly which has regularity of occurring again and again in various diagram.	What do you mean by the term regular polygon?
			These are those polygons which are regularly seen with equal side and equal angles.		
		Students will be able to speak orally about the value regularity.	Teacher will ask question on regularity as a value.		What do you mean b y the term regularity?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher will appreciate the answer and further states a person who reaches somewhere on time always, or who is disciplined is said to be regular, but in actual regularity means having orderliness, following a proper method, being uniform, doing things following quality, and being periodicity. For examples: Regular as a clock ,Regular as a heartbeat, etc.	Student answers : a person being regular is said to be having a value of regularity.	
			Teacher will explain like doing mathematics regularly will enhance the mathematics skills and he ask students about regular polygon.	Regular polygon is all about a polygon along with sides its all angles if found equal than it is said to be regular polygon.	What is regular polygon ?
			A regular polygon is regular if it has equal sides with equal angle , similarly a person is said to be regular if he devotes the equal amount of time to all his works with equal efforts	Students listen	
			Teacher will explain different types of regular polygon and name them.	Students will note it down in their books	Draw a table of polygons.
15.07.11	Angle sum property of polygons	Students will be able find the sum of all the angles of a polygon	Teacher will explain the procedure of getting the sum of all the angles of polygons.	Students will listen to teacher	

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher uses inductive method to find the formula of finding all the angles of polygons with number of sides and co relates it with the regularity of the pattern being formed in these polygons.(teacher proceeds with series of question)		
			What is the sum of all the angles of triangle?	180˚	
			What is the sum of all angles of quadrilateral?	360˚	
			In triangle there are 3 sides total angle is 180, in quadrialteral there are 4 sides, total angle is 180 + 180= 360, in pentagon there are 5 sides = 180 is added 3 times and so on ..each time the 180 is added 2 less than the number of sides,		
			What is observed on regular basis when we increase a side of polygon?	Angle increases by 180˚, i.e. one more triangle is formed.	
			Teacher will state the formula the sum of all the angles of a polygon with n sides = (n-2) × 180˚. And will comment:	(n-2)*180	What is the formula to find the sum of all the angles of a polygon?
			This we could derive on the basis of regularity of occurance of triangle in the polygons and see how great results are achieved due to regularity.	Students will understand the regularity pattern in getting the formula	
		Students will be able to define regularity.	Teacher will ask questions definition on regularity.	Student speaks: "It is something related to do regularly."	Define regularity .
			Teacher will answer:		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			"It is an act in doing the same thing or action at the same time each day or on a regular basis."		
18.07.11		Students will be able to find the measure of each interior and exterior angle of a polygons	Teacher will teach the other concepts of chapter like interior, exterior angles of polygons.	Students will note down and will solve question based on text book exercise.	Draw a table showing sum of all angles, measure of each interior angles and exterior angles of a regular polygon
19.07.11	Different types of quadrilateral and its properties.	Students will be able to write all the properties of quadrilateral, parallelogram, trapezium, rhombus,square and rectangle. Student will be able to speak about the how the generations made the next generation more systematics and regular.	Teacher will explain the concept of quadrilateral and its different types in the following manner..Teacher will enlighten students with the story about which generation follows more regularity in life. He will tell a story, like "once upon a time there was a Quadrilateral, these were very addressed to our great grand parent generation, where in quadrilateral there are no side necessarily equal or angles same, it can be any manner and aur ancestors are also the same, they had limited options and they lived the life very simple.	Students will say that their generation is better than grand parents generation. Or vice-versa	Which generation is better the grandparents time or the present generation?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			In the second generation came parallelograms and rhombus which can be correlated to our father, mother, etc here parallelogram, rhombus and other one trapezium, like three sons of quadrilateral. They were in order than the grandfather quadrilateral, more regular but not to the fullest. In parallelogram opposite sides are equal, opposite angles are equal, diagonals bisect each other, where as in trapezium atleast their one pair of opposite sides are parallel, this could be spoilt brat of father quadrilateral. We can compare these three as our fathers, uncles and all where they got refined because of their father, whatever mistakes our grandparents did, they didn't allow their sons to continue and this made them little a bit perfect. Where as the third generation were the most refined ones, Parallelogram and rhombus had children named rectangle and square. Squares had all sides equal , diagonals bisected each other at right angles. Rectangle had all angles and both diagonals equal and all other properties of parallelogram, where as in square all sides,angles and diagonals equal, diagonals	Students listen to the story and list down the important information carried in the story.	List down the properties of parallelogram. Define trapezium Give 2 properties that are common in square and rectangle
			Teachers questions about characteristics	There are regular and follows a particular pattern ,they are disciplined, they are systematics	Give characateristiccs of person with the value regularity

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Person with regularity are the ones who follows punctuality, being systematic in approach, following disciplined behavior, managing time and having good coordination with others		Make a table of all properties of quadrilateral and its types.
19.07.11	Special Quadrilaterals and parallelogram	Students will be able to solve problem sums related to quadrilateral and its types	Teacher will make students solve the remaining questions of the last exercise and conclude the chapter.	Students will solve the question of exercise and will practise more sums of quadrilateral	Name the quadrilateral whose diagonals bisect each other at right angles.
20.07.11			Teacher will play a game on developing the value of team work : Picking the bottle		
		**letters in blue shows value integration with mathematics & value based activity.*			
Recapitulation		1	What is regular polygon		
		2	What is formula to find sum of all angles, measure of each interior angles and exterior angles		
		3	Give 3 characterstics of a person have the value regularity.		
		4	State 4 properties of a rectangle		
Home assignment		1	Make tables of regular polgons till 12 side, write their name and find its total angle , each interior angles and exteriors angles		
		2	Make a table showing the properties of Quadrilateral and its types		

Presentation:					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
29.07.11	Construction	Students will be able to speak orally about the value discipline	Teacher after introduction will write the heading on the top of the board in a neat way and adds that they shall be studying the chapter with good disciplined efforts, mathematics is a subject which has some disciplinary values in it and by doing perfect constructions and we can develop such values in us, to begin with lets understand what is discipline for today so that we are ready for the actual task in this chapter.	Students will listen to the the explanation and will sit properly in a disciplined manner in their respective place.	
		Students will be able to speak orally about the value discipline	Teacher coins the word discipline and waits for the response	It is being in order, following rules and regulations, following good manners,	What do you mean by the value discipline?
			Discipline is the assertion of willpower over more base desires, and is usually understood to be synonymous with self control		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
		Students will be able to define the value discipline	It is a Training or conditions imposed for the improvement of physical powers, self-control, etc.	series of actions that are systematic and perfection in itself	Define Discipline
			Teacher explains the importance of discipline in life. He adds further…	To be perfect in our work and become successful in future.	Explain the importance of being disciplined in life?
		Students will be able to speak about the 5 elements of discipline in life.	there can be 5 elements which can enable us to be disciplined in our life like 5 measurements can help us get a unique quadrilateral.	student gives response on 5 elements as Punctuality, Maintaining silence, coming to school on time, doing the work on time...	
			who are the most disciplined people in this country	Army, defence people.	
			Teacher will say ...the 5 elements of discipline are		
			Orderliness, regularity, keeping the things simple and straight forward, self control, acceptable behaviour		What are the five elements of discipline?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
30.07.11	Constucting a Quadrilateral	Students will be able to do construction of a quadrilateral of simple types	Teacher will thus introduce the topic and will ensure to teach the students to follow a discipline approach. He will give instructions to draw every other construction in a discipline way. Based on the definition of discipline we will undergo a training of doing things systematically, like military training.		
			Teachers will give steps of doing construction in a disciplined way on the board.	Students will listen and note down the steps to follow during construction in the first page of their construction chapter.	
			Teacher will give the following directions : Firstly all necessary equipment should be bought by the students, if a student is found without any material they		
			won't be allowed to do the task.		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Secondly while doing construction they will make a rough sketch and also all the measurement sides required for construction on right side corner of the actual construction page.	Students will listen to the teacher	
			All the construction would be measured properly with scales accurately using the ideal instrument the actual construction to be made.in systematic way using pencils only.		What is a quadrilateral ? How many sides are there in a quadrilateral and minimum how many measures are required for construction of a quadrilateral?
			Teacher will teach the construction by demonstrating few constructions on board using the teaching aid of scale and compass and protractor wherever needed	Students will follow what the teacher is doing	Construct a quadrilateral with following measures: AB = 5cm, BC = 6cm, CD = 5.5 cm □A= 45˚, □B= 65˚

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher will emphasise on working in a disciplined manner and follow the steps that are instructed teacher will make students redo if not done properly till they learn the art of doing disciplined work.	Students will do the work in discipline, neatly and with proper measurements	
		Students will be able to speak orally about the characterisitics of the value discipline	Teacher in the meanwhile identifies a student with good disciplined, systematic work and appreciates his qualities of being a discipline student.		
			He is disciplined because		
			He is goal oriented		
			He has self control		
			He is determined to fulfill the task on time and understands the importance of time.		
			How can you say that the student is disciplined based on what behaviour	He comes to school on time. Never makes noise in the class, particular about his work,respects elders and teachers.	What are the characteristics of a disciplined student?
			These are nothing but the characteristics of this disciplined boy, would like to see more students like him.		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
31.07.11 to 05.08.11	Construction of quadrilaterals with 4 sides 1 angle, 3 sides 2 angles, 3 angles 2 sides, special quadrilateral	Students will be able to construct quadrilateral with given measures of special types.	Teacher will teach all the construction for successive days and will ensure disciplined work by students and if not found any disciplined work will make them do again with strict guidance	Students will complete all the assigned task	
		**letters in blue shows value integration with mathematics & value based activity.*			
Recapitulation		1	Construct a quadrilateral with 4 sides as 4,6, 7 and 4.5 cm and 1 angle as 60degree		
		2	Give 3 characteristics of a student with the value of discipline		
Home assignment:			Complete the exercise of textbook and practise books		

Presenatation :					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
06.08.11	Data, types of data	Students will be able to define data	Teacher will discuss about the data regarding various aspects related to country.	Students will listen and provide data as per the questions asked by teacher	What is data?
		Students will be able to state about various data	Teacher will ask students about the number of religion and name them.	Students will answer it as there are 7-8 religions in our country namely : Hindu, Muslim, Sikh, Christianity, Jainism, Buddhism, Zorastranis and one more is there.	
			Teacher quotes : Hindu muslim sikh isaai aapas mein sub bhai bhai.	Student listens	
			Teacher the number of population would be different but we cannot rule out that our country is rich in culture due its multi religious set up, multi languages, multi regions and so on. What are the different types of languages in our country? How many languages are there?	Hindi, Gujarati, Marathi, Malayalam, Tamil, Punjabi, Bengali and so on there are …	How many languages are there in our country?
			The term population is again data, India is second in terms of population next to China, we can say this based on data is recorded every sec and there are lots of data like that which is useful.		
			Teacher again ask about the number of girls in top 10 list of board result.	Student answers it as 6 girls.	

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher ellaborates that there was a time when women used to be very learned but as time progress certain mind set up stopped their education and today once again they are coming upto the level of a man and now both of them shares almost equal status in every field of development.	Students will listen to the teacher	
		Students will be able to speak orally on equality.	Teacher says : It is the era of Equality, all were equal in the equal in the eyes of god and all are equal to day, every person in this world has all the rights to live happily irrespective of any religion, caste, sex, culture,etc	Everybody is equal irrespective of caste ,creed culture	What do you mean by the value Equality?
			Teacher will provide a task of collecting data related to our country like: population, number of religion, Number of states, Number of languages, ratio of women is to men in different parts of the country, literacy rates and so on…	Students notes down the task in their diary	Find data related to population, number of states, etc
08.08.11	Pictograph, Bar graph, double bar graph		Teacher will discusses about data used in students life like height, weight marks, etc gives various examples also explains concept of pictograph, bar graph and double bar graphs	Students understands and solves the question given by teacher	Interprete from the bar graph following results.
09.08.11	Represenatation of data using frequency tables and tally marks	Students will be able to draw fequency table and determine the frequency of the given data	Teacher to teach the concept of frequency, tally marks and find the mean of the data, uses a situation to highlight equality and these concept		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher asks students "how many of you all would like to help poor children. How many feels that they are not equal to you or they are different from you. How many believes that there is some difference between two people of different community or caste.	Students will give their responses.	
			Now lets take an example so imagine that you all are going out from the school for a picnic in some rural place and there you find some poor children in the streets and on seeing them you all feels to collect some money buy them some toys. The cost of the toys available had different range of cost it had ranges like 10, 15,20, and so on. Now those student who had the feeling of equality and love of concern towards the children disregard to the status, caste or creed steps forward to help them.	(ten students raise their hands)	
			Teacher speaks to students "How many of you would be interested to help I want 20 students from this class those who may help in that type of situations?"	Students will raise their hands	
			Teacher will suggest every body to contribute in multiples of 10	Students will agree	
			Teacher ask to the student 1,how much money he would like to spend (to Student 1)	Student 1 replies 20 Rupees .	
			Teacher to the next student: What about you?	Student 2: 50 Rupess.	
			Teacher collects data from all the 20 students and writes in a box form all the data collected then he find the range of data and does divide in terms of class interval and explains the concept of frequency and tally marks	students one by one provides all the data	

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher after getting the different amounts than ask the question		
			Now after getting the rupees from different students now what we shall do buy them toys of different range or of same type?	Students replies as :Same Range	
		Students will be able to speak on equality	Teacher enquires why same range.	Students will reply " there should not be any discrimination among them and they may quarrel later."	
			Teacher: Very well said to have equality among them there should not be any differences and hence the children should be given same type of toys to each.		
			Teacher so how can we decide that which type of toys may be appropriate for the children who are 10 in numbers	Student replies that they will find the total of Rupees that have been collected and divide it with the number of children and accordingly they will buy the toys	
	Mean of the data	Students will be able to write the formula of mean of the data	Teacher appreciates the answer and explained that what they did was finding mean of the given data which is equal to the sum of all the observation upon the number of observation.		What is mean of a data?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
	Range of the data	Students will be able to find the range of the data.	Also the range of the money which we had can be known through the difference between the highest number and the lowest number.	*Here the students knowingly or unknowingly understands the value of equality and seeing 20 students other also develops a feeling that all are equal and the equality concepts should be there.*	What is range?
		Students will be able to define equality.	Teacher says that all the students are having a good value of equality, it is indeed a good class and ask the definition of equality.	Its is a value saying all are equal irrespective of caste, creed, culture, gender, etc.	Define equality?
		Students will be able to speak orally on the characteristics of the value Equality	Teacher then question about the characteristics of a person with equality	They are un biassed, they are having good co operation, they believe in all Gods, they are true people, they respect opposite sex, etc	Give characteristics of a person with equality?
10.08.11 to 13.08.11	Histogram, pie chart, Probability and chances.	Students will be able to draw histogram and pie chart for the data. Students will be able to solve questions related to probability and chances.	After that, few examples on making frequency tables were done and teacher will continue with other topics of the chapter on subsequent days and will do discussion on value equality wherever possible.	Students follows what teacher teacher the subsequent days	Draw histogram, make frequency table of the given data and find the mean of the data.
		**letters in blue shows value integration with mathematics & value based activity.*			
Recapitulation:		1	Draw a histogram on the data provided		
		2	List down the characteristics of person with equality		
		3	Find the mean of first 5 prime numbers		
Home assignment :			Collect data related to the India and its various religion, sex ratio, education in india, sports achievements, etc.		

Presentation:					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
16.08.11	Squares	Students will be able to define Squares.	Teacher will ask about term square?	Student relates it to Square shape.	What is a square?
		Students will be able to find the squares from 1 to 20.	Teacher will ask about Square number? Teacher will condutct activity named making a square.		What is a square number?
		Students will be able to write all the properties of square number.	*Teacher conducts an activity in the form of a game kind : Making a square :* Firstly students were asked to make groups of following number of members , like 4, 6, 7, 8, 9,10 they were asked to get members according to uniformity and teacher selects 6 team leaders and asked to gather the remaining members, to arrange themselves in squares. With all the students filling the gaps and no gaps was allowed inside. Out of the 6 students called Only two groups could make squares.	Students will participate actively in the activity, where they try to make square arrangement from the available members.	
		Students will be able to make all the patterns related to numbers.	Secondly, teacher called two students and asked them to make square of 4 students in one line, and asked them to maintain uniformity.	Students will call out other students and will make a square of 16 students.	Find the square of 5?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher will ask students about the term of square. How many members in a group formed square? What was the conclusion	A number obtained because of square shape. A number obtained by multliplication of same number.	
			Teacher explains A Square is infact given as (side * side)	Students will note it down.	Define square.
			Teache will asks about the activity of understanding squares, was it simple or confusing.	Student will say it's a simple way to understand square	
			Teacher will say that the focus of the chapter is KISS technique…		Give full form of KISS technique.
			Teacher elaborates it as Keep it Simple and Stupid sweet). And asked students to think in simple and easy way rather than complex means.		
			Teacher will talk about the importance of the chapter related to memory, fast calculations and understand the various patterns in numbers related to squares.		
			Teacher will say if students leearn all the concepts, properties perfectly than they could be able to do the calculation very easily.	Students will listen to teacher	
			Teacher will asky why to follow simple way.	Students will say "Simplicity is the best policy".	
		Students will be able to realize the importance of Simplicity .	Teacher supports to the fact the best policy and also shows concern about many of the lot don't like to follow the steps of simplicity rather than that we like to take shortcuts.		
			Teacher will ask more on simplicity.		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher will ask what did they mean by the term Simplicity?	Student answers like Being Simple. No style, wearing simple clothes, etc..	What do you mean by the term simplicity?
			Teacher summarise it as : being simple, simple in thoughts are all related to simplicity, or can be say, having uniformity in thoughts and ideal thoughts and living life peacefully can lead to simplicity.		Define simplicity.
		Students will be able to state few names of personalities with the value of simplicity.	Teacher will ask " When you hear a word simplicity, who comes into your mind?"	Mother Teressa, Sachin Tendulkar, Mahatma Gandhi.	Name few personalities who are simple in nature.
			Teacher will add names like Laxmi Mittal? Dhoni, who once in his interview said, I like to keep things simple and straight forward and gave enough freedom to my players and we emerged as winners…		
		Students will be give their own definition about the identified value Simplicity.	Teacher will supplement by saying :Simplicity deals with not just appearance, but also from thoughts, that is what we will be focusing on in this chapter, we will try to thing straight forward and perfect and that will make the concepts simple and interesting and all complex calculations can be made easy with some techniques,		Define simplicity.
			Teacher will ask how it possible to make calculations easy		
			Teachers express that there are properties in every chapters, these properties gives an hint to do things differently to make it simple.		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			And Simplicity has a basic nature and way to look to it, similarly to make the things simple we need to know the basic concepts of mathematics, to do fast calculations basics of properties should be known, squares of number should be known patterns also helps to develop better logic in mathematical thinking		
			As per the characteristics of person with simplicity shows true nature , originality in view,peace loving, idealistic and realistic in nature , simplicity exists in thoughts, behavior, outlook and many more like these.		Give few characteristics of a person who is having the value simplicity.
17.08.11	Squares of numbers	Students will be able to write all the squares	Teacher: to begin with lets multiply all numbers from 1 to 20 twice and find the squares….Okay all of you open your notebooks and write the headings and about squares and write the squares from 1 to 20 by multiplying it twice, eq..	Students will write all the squares in their notebooks.	Find all the squares of number from 1 to 50.
18.08.11 19.08.11	Patterns in squares	Students will be able to identify patterns in square numbers.	Teacher: Now let us understand the pattern in this square numbers, but before that this would be a daily practice, the moment we start the chapter, I need everybody to write all the squares from 1 to 20 on regular basis.	Students will understand various patterns related to square numbers, and numbers in general like triangular numbers, fibonacci series, etc.	Give few patterns related to square of a number.
20.08.11	Properties of square numbers	Students will be able to write all the properties of square number.	Teaacher explains the properties of squares and patterns in square numbers		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher : Good, so keep these things in mind, lets now try to understand the interesting patterns in numbers, we need to understand that simple thinking gives high results, in the field of art all big sketches or drawing is actually a result of simple basic shapes like circles, squares, rectanges, triangles, etc. similiarly the there are different number patterns which leads to different numbers, for example triangular number : 1,3,6,10,15,……..are obtained by adding numbers 1, 2,3,4,5,6, so on if we actually see the structure it becomes much more easy to understand in a simple way,		
			Now further adding consecutive triangular numbers to previous triangular number we get squares and such beautiful concepts are obtained with beautiful concepts of maths.		Write the first ten triangular numbers.
			Teacher will ask about the famous painting of Leonardo Da Vinci	Students will answer : Mona Lisa	
			Teacher will ask why it is so famous, though it looks very simple and sober.	smile, lots of emotions	
			Teacher will ask who knew the mathematical point of view in the drawing		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher will answer :Its all about Golden ratio. This ratio is famous because of various models having this ratio on their face, as a result their face looks beautiful. Mathematimcs plays a great role in making the things perfect and itself states that keep the facts simple and ideal rather than in complex manner.		
22.08.11 to 25.08.11	Square root by prime factorisation, division method,etc	Student will be able to find the Square root of a number by repeated subtraction, prime factorization and division method.	Teacher than explains the remaining concepts for the remaining days.	Students will listen to explanations and solve questions of exercises and completes the chapter with a simple work	Find squares by prime factorisaion
		letters in blue shows value integration with mathematics & value based activity.			
Recapitulation		1	Find the square of 24 without multiplying		
		2	find the smallest number to be multiplied with the number 1200 to make it a perfect square		
		3	How can we develop the value of simplicity in us?		
Home assignment :			Find more patterns in squares and make a chart of squares and square root.		

Presentation:					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
29.08.11	Cubes	Students will be able to write and recall cubes of numbers from 1 to 20	Teacher coins the term Cubes and cube roots and writes down cubes from one to 20 and explains about the cubes and relationship with squares. T*eacher will do an activity of story telling:Hardy Ramanujan Number 1729*	Student writes and learn all the cubes from 1 to 20.	Write cubes from 1 to 20.
29.08.11	Hardy Ramanujan Number	Students will be able to find patterns in the Hardy Ramanujan Number and express it in terms of cubes	He begins with the story of Hardy Ramanujan Number 1729, as "once Hardy went to meet Ramanujan when he was sick and this guy Hardy was also genius in mathematics, he travelled by taxi and when he reached he noticed the number of taxi as 1729 and Hardy started calculating in his mind as he was a determined mathematician, he had to see mathematics where ever he went, but this time he was unable to find anything about the number and a person who is determined to do something and he is unable to do it they they get depressed very soon, and he reached to the room of Ramanujan in the meanwhile, Ramanujan saw the serious face of Hardy and enquired	Students will listens to the story of Hardy Ramanujan Taxi Cab number story and notes down the combination of two cubes.	Who were Hardy and Ramanujan? Which number is called Hardy Ramanujan number.

	Continued Hardy Ramanujan number and patterns related to cubes.	Students will be able to speak orally the meaning of determination	what was the problem, Hardy shared his thinking about the number 1729 a dull number, on listening to this, Ramanujan another genius in mathematics thought for a while and gave a wonderful statement: "Dear friend it's a very good number, it's the smallest ever possible number which is the sum of two cubes with two combination i.e., $1^3 + 12^3$ and $9^3 + 10^3$ " on listening to this Hardy got delighted and thanked Ramanujan, since than this number was known as 1729 and also Hardy went on to find more things about it on the basis of Ramanujan's thinking which also said that		What is the cube of 12? What is the cube of 9?
		Students will define determination	1+7+2+9= 19 and 19 *91 = 1729		
	Cubes and Cube Roots	Students will be able to speak characteristic of determination Students will be able to express	Then there was more determined efforts on this number like using these numbers 1,7,2,9, they found the values from 1 to 100 in following way like.		
			1+7+2 – 9 = 1		
			1 + [(7 +2)/9] =2 and so on….		

			Teacher says now he would like to see the determination of his students and they were given the task of finding the remaining answers using these numbers and for this he also said the teacher had tried it once and he was so determined to find the results that wherever he travelled, whatever he was doing he was thinking and making others think of this number and was doing calculations all day long and could find many results using them.		Find all the combination possible with numbers 1,7,2,9 to get the solutions from 1 to 100 using any matheamtical operator.
			Teachers will ask students how many of they would be a mathematician like Ramanujan		
			Teacher further says that its not a difficult task they can do it, only essential thing required determination to do something and accept any challenges given and bit of hardwork and using approprite knowledge one can complete any given task.Nothing is impossible in this world.		
		Students will be able to speak orally the meaning of the value determination	Teacher will ask the meaning of determination		What do you mean by the value determination?
		Students will be able to define the value determination	Teacher will ask the definition of determination		Define Determination
			Teacher provides definition as The quality of being determined; firmness of purpose. The process of establishing something exactly by calculation or research.		

		Students will be able to speak orally the characteristics of person with the value determination	Teacher then enquires about how will you show to be determined in doing any work, what characteristics you need to develop?	students will answer: Goal oriented, patient, punctual, never say die attitude, hard worker, focussed towards the goal.	Give the characteristics of a person with value determination.
30.08.11 to 03.09.11	Finding the cube roots by prime factorisation	Students will be able to determine cube roots of a cube by prime factorisation	Teacher will then explain the concept of cuberoots, and methods of finding it.	Students will find the cube roots using prime factorization method, method of approximation	What is the cube root of 1331, find using prime factorization?
	Problem sums on cubes and cube roots	Studetnts will be solve problem sums of cubes and cube roots	Teacher will explain the prime factorization mathematics and solve problems	Students will be able to sovle problem sums of cube	
					What should be added to 15600 to make it a perfect cube?
		**letters in blue shows value integration with mathematics & value based activity.*			
Recapitulation		Find the cuberoot of 1728?			
		What should be subtracted from 10000 to make it a perfect cube?			
		How can we develop the value of determination in us?			
Home Assingemnt		Find cubes till 1- 50 and also solve extra sums from practise books on cube and cube roots and make a chart on patterns of cube.			

Presentation:					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
05.12.11	Percentage, ratio.	Students will be able to explain percentage, ratios, profit, loss, Discounts, Tax, Interest.	Teacher introduces the concepts of the chapter like percentages, ratio, proportions Loss, Discounts, etc. and explains all the terms turn by turn like percentage means per century, ratio : comparision between to quantities having same units and so on..	Students will listen to teacher and notes down what teacher ask them to note down.	What do you mean by percentage? What do you mean by ratio?
		Student will be able explain the relation between honesty and mathematics	He will tell students that in this chapter you will come across lots of formula, remember *Formulas are the most honest thing in mathematics. If we use the correct formula in the correct question we will get the desired result, similarly if we are honest towards our life, we will get the desired output. We will obtain what we deserve. If we are honest we may lead a very peaceful life, the formulas teaches us to be honest in life. Apply the correct and true formula at the correct place and you will get the correct answers.*	Students will listen to teacher	
	Profit and loss, selling price, cost price, discount , tax.	Students will be able to calculate the profit, loss, cost price, selling price, profit & loss percent , discounts, sales tax.	Teacher will write down all formulas of percentage change, profit and loss, profit % , Loss %, etc.	students will note down all the formula	Write the formual to find percentage increase?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			All these formulas when used properly gives correct result, that shows the honesty of the formula, now it is up to you how honest you all are in learning these formulas and using them the way it should be applied.		
			Teacher will do an activity of story telling : generosity of Milkman : he narrates it as "To begin with I will tell you a story about myself,		
06.12.11			Before being a teacher I used to help my family during my school and college days by earning money for my family, I used to sell milk, I had a cow who used to give me daily 1 litre milk and I used to sell the entire milk to one landlord daily, while I was going to sell the milk on my cycle I saw one child crying, and because I had helping mentality I went nearer to the child and asked what was the matter? Why he was crying? He replied he was hungry..I felt sad, and from the bottle measured 200 ml of milk and gave it to that child, but I had to give 1 litre milk to my landlord, so on my way I added pure mineral water. to fill up the bottle again to the top.	Students will listen to the story	

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher stops for a minute with the story and ask some questions to students		
			Now tell me what percent of milk is there in the mixture and what percent of water is there.	Student answers : 80% milk and 20% water.	what is the percentage of milk and water in the bottle?
			Teacher will appreciate the student and continues with the story.		
			Further when I was going, I met the same child who got his younger brother with him for the same reason, and you all know that am a very kind person and my heart melts very soon so I again measured 200 ml and gave to that child also , later again filled up the bottle by means of pure mineral water.		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher : will again question students how much percentage of pure milk is there in the mixture and percentage of water in the same?	Student answers : 60% milk and 40 % water	What is the ratio or percentage of milk to water?
			Teacher will deny the answer and ask to try more.	Student will try but fails..	
			Teacher explains 200 ml given to second child will consist of 80 % milk and 20% water so 160 ml milk is gone and 40 % water is removed from 800 ml milk and 200 ml water, so finally 640 ml milk and 360 ml water , i.e., 64% milk and 36% water is present in the mixture after the water is added.	students will understand the correct answer, they will also calculated and check the result.	
			Teacher will ask what is the profit? Is there any loss for milkman?	No profit, no loss…coss he sold the 1 litre.	what was profit in this situation?
			Teacher will ask student whether he was honest.	Student : 50 -50, you tried to help the child, but cheated the landlord, it act of dishonesty but for a good cause	
			Teacher will accept Very true, I could have told the fact to the landlord about the incident and instead I cheated without any gain for myself as well, else would have said there was a shortage of milk .		
		students will be able to speak about the value of honesty	Teacher will ask , What do you mean by the word Honesty ?	Truthfullness, never lies, always happy and no fear of anything.	What do you mean by Honesty ?
			Teacher explains as : Honesty is the act of truthfulness towards any incident without considering the consequences of the fact.		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
		Students will be able to define honesty	Teacher will ask definition with the flow	Honesty is speaking truth.	Define Honesty ?
			Honesty is straightforward conduct. Honesty is being sincere, truthful, trustworthy, honorable, fair, genuine, and loyal with integrity.		
		Students will be able to speak orally about the characteristics of a person with the value honesty.	Teacher will ask about characteristics : People having honesty are firm believers of telling the truth despite consequences to them, voice their opinion in a kind, thoughtful way, Show and share their feelings,feel and react without guilt, express themselves positively as well as critical.When confronted with a situation, think of others.	they always speaks truth, they don't wear mask of lies, they are straight forward, they are more understanding, they will never do any thing wrong.	Give characteristics of a person with value honesty
			How can you say mathematics teaches you honesty	Formulas in Mathematics are the honest things	
			Teacher: learn your formulas very well to get honest result and apply the logic accordingly pertaining to the concepts. If the logic is perfect and if your formula used is correct your answers can never be wrong. In some cases its is just tailor made apply the formulas and you get the correct answers,	Students listen to the answers and	
07.12.11 08.12.11		Students will be able to solve problem sums related to all the concepts of profit loss, and interest	Teacher will solve question on profit and loss and percentages (solves exercise 8.1 followed by Try these text book sums)	Student will solve exercise questions as per the instruction of the teacher.	Find the discount in Rs. on a product with M.R.P 600 with a discount of 25% ?
			Teacher will say that now lets us find some dishonest approach of shopkeeper to confuse the person in terms of discounts to make profit.		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher ask students How often they have seen double discount and people going for the products and ends up paying the same amount, which they use to pay before.	studetns will say more often.	
			Teacher will ask , Which one is a better offer, first 20 % on the product and than 50 % on the discounted price or first 50% on M.R.P and 20% on the discounted price?	Students will say, first 50 % and then 20 %	
			Teacher: In fact both are same in the end, doesn't make any difference in both the case, in the end amount calculated would be same only in both cases, that is a strategy to attract customers towards a product.		
			Teacher: Discount means find the amount and than subtract it from M.R.P		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Like discounts, there are tax means addition to the principal amount, which also leads to income of nation. If there is honesty in the system followed by government than there will be no economic crisis, but the nature of humans leads to all crisis, as formula and mathematics is considered to be true by its nature and are supposed to delivered appropriately, all other problems are due to human mind, and system created by humans today corruption is a part of the system and which leads to various problems in our society. It is now upto you all that in future, with good dedicated efforts and honesty put good efforts in studies and make yourself so capable that you are in a position to change the system for betterment	Students will share their experience about the corruption and will try to give some	What do yo mean by tax?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher : In our world the most honest and efficient professionals are people working in bank, there everything is based on calculation of correct formulas, so we are now going to study on calculating interest on various ways of dealing with money.		
09.12.11 to 15.12.11	Simple Interest, Compound Interest	Students will be able to calculate simple interest, compound interest, and solve problem sums based on it.	Teacher : (teaches the concepts of interest, both simple interest and compound interest and discusses honesty wherever the scope arises as per the problem sums like loans, investments and honesty affairs while repaying the loans other wise consecuences and all would be discussed and chapter would be completed by solving all the exercise and a project on collecting informations of various bank's interest rates on loans & savings ,etc would be done)		Find the compound interest compounded annually as well as half yearly on a principal of 5000, with rate of interest 10% for 2 years.
		letters in blue shows value integration with mathematics & value based activity.			
Recapitulation :			What do you mean by the term honesty?		
			What is the formula for Finding profit percentage?		
			Calculate the compound interest if principal is doubled.		
Home assignment:			Make a list of interest rates of different banks		
			Solve the following exercise of chapter 8		

Presentation:					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
21.09.11	Expressions	Students will be able to define algebraic expression	Teacher will recapitulate the term algebraic expression taught during the linear equations	It is an expression with numbers variables and constant along with operators	What do you mean by algebraic expression?
	Terms, factors, coefficient, monomials , binomials, polynomials	Students will be able to write factors, coefficient from the expression	Teacher will explain the concepts of terms, factors, coefficient using an algebraic expression	Students will listen and and take notes of the concepts	Find the coefficient of x in the expression (-3x +4y)
	monomial, binomial , polynomials	Students will be able to list out the polynomials in terms of monomials, binomials and polynomials	Teacher will explain the terms monomials binomials and polynomials like : monomials consist of single term like a house with just one person, binomial with two terms i.e., a house with 3 members, and trinomials means three terms, i.e., house with 3 members...polynomial means expression with many terms, herer polynomial is like world with many members. Today the world is considered to be 'Vasudaiyva kutumbam' : whole world is one family. There are lots of nuclear families joint families, end of the day they all belong to one big family "Mother Earth" Earth takes care of its children very nicely	Students will listen to the concept of polynomials	Categorise the following expressions as monomial, binomials or polynomials: 3xy + 4, -2x + 4y - 7z, 3xy and so on….

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
22.09.11	addition and subtraction of algebraic expression	Students will be able to add and subtract polynomials by polynomials.	Teacher will explain the concept of addition of polynomials he will explain like : addition of terms in polynomials can be done using the like terms and mostly all the students finds it difficult in identifying the like terms. The like terms will have same alphabets, same powers, only coefficients can be different.	Students will listen and understand.	2xy + 4xy = ? -7xy - 9yz = ?
			Teacher will explain like , lets consider there are two families living in vadodara, one is a strong brahmin family and they are locals and in their family there are three children, 2 grandparents, and 2 member husband wife ,whereas another family is a hyderabadi muslim family with 2 children, 3 grandparents and again 2 member		
			Teacher will then have series of question answer round like :		
			What could be the first category?	Student will answer : Children.	
			Let us give them the alphabet : z		
			Now which is the next category	Parents : husband wife	
			can they be given the same alphabet? Teacher will ask	No , we will give aphabet : 'y '	
			Teacher will giverepresent husband wife as xy term		
			Teacher asks what can be used for grandparents	xyz	
			So lets get the polynomial form for both the family , what will be the polynomial form for the hindu family?	3z +2xy +2x y z	

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
22.09.11			for muslim family what will be the polynomial form	2z + 3xyz + 2xy	
			teacher explains the addition the grandchildren, parents and grandparents will be added like 3z + 2z giving 5z, then 2xy + 2xy = 4xy and 2xyz + 3xyz = 5xyz, teacher will ask students the final answer.	final answer is 5z + 4xy + 5xyz	
			This is how the answer will look like and not like adding all numbers and x, y andz. This family happens to be the ideal family which every family should follow, in this family both the women are educated and working and helping their family and all the children are very friendly to each other, grand parents always go for morning walk with each other, an ideal Indian citizen no regards to what they are and living their life with peace and harmony, that is what equality is all about. Teacher will ask about meaning of equality then definition followed by characteristics.	Student will listen to the explanation.	
		Students will be able to speak orally about the meaning of the value equality	Equality basically means access or provision of equal opportunities, where individuals are protected from being discriminated against.	All are equal and enjoy equal rights	What do you mean by the value equality
		Students will be able to define about the value equality	The state of being equal, especially, in status, rights, and opportunities	It is being equal	Define : Equality

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
		Students will be able to speak orally about the characteristics of the value	Peoplewho believe in equality treat every person equally irrespective of age, disability, ethnicity, gender.They are always helpful, caring, co operative in nature. They believe in one God concept or respect all religions ideology.		Give characteristics of a person with equality
			The above example is just an idea how to think whenever there is a polynomials give some story to it and see the wonder it will enable you to get the results in an ideal and perfect, you will not mix it up with grandparents and grand children you will know to differentiate the like terms and will do it perfectly.	Students will listen .	
23.09.11 to 30.09.11	Multiplication of monomials by polynomials, Standard identities	Students will be able to solve sums on multiplication of monomials and binomials, binomials and polynomials, solve sums using properties,	Teacher will explain the concept of multilpication of polynomials by binomials, polynomial and will also explain the concept of standard identities and will sovle exercise related these concepts.	Students will solve the exercise and understands the other concepts with more examples with though process with some stories of equality.	(2x + 3Y)(-4x y + 5x) = ?

letters in blue shows value integration with mathematics & value based activity.

Recapitulation :	1	Find the product of following binomial into binomial
	2	Simplify (2xy + 2x -7y) - (4x - 3xy + 5y) + (9x - 7y + xy)
	3	What do you mean by Vasudaiyva kutumbam, is it really happening?
Home assignment:		Solve the exercises from text book and practise books and minimum of 10 sums per day.

Presentation:					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
12.10.11	2D shapes of 3D shapes	Students will be able to identify and match pictures with objects of 2D- 3D shapes.	Teacher will give a brief idea about the chapter and along with the other concepts.	Students will listen to teacher	What do you mean by 2D and 3D shapes?
	Top View,Front view, side view	Students will be able to draw 2D representationg of 3 D shapes	*Teacher will take the activity of value game of solving Rubik's Cube .*	Students will listen to teacher, and in holidays they will find the algorithm to solve Rubik's Cube and solve it.	Represent the 2D shape of the following 3 D shapes.
	Euler formula, Faces, Vertices and Edges.	Students will be able to determine vertices, edges& faces and verify Eulers relation for 3-D figures with flat faces: Cubes, cuboid, tetrahedrons, prisms and	Teacher will explain the other concepts of this chapter will explain the Euler formula with edges, vertices and faces.		What is Euler's Formula.
			Teacher will give a brief idea about solving Rubik's Cube , teacher says that it's one of the interesting things one can do in developing their thinking power as well as the value to determination to obtain a sense of achievement.	Student will say I have Rubik's cube but I don't know to solve it.	

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
	Rubik's Cube	Students will be able to solve Rubik's Cube	Rubik's cube is a cue with 27 small cubes with 6 faces, and 8 vertices and 12 edges. Now in Rubik cube we need to solve the cube in such a way that the colours which are not in order in all the 6 faces should be in order and its not an easy task. This happens to be the assignment for your Rakhee break		What do you mean by Rubik's cube? How many edges are there in this cube? How many different colours are there?
			After the rakhi break all students are suppose to show me the how did you manage to solve a Rubik cube, so during the vacations learn how to solve it practise it rigourously and improve the speed and when you come back do solve it in front of the entire class, we will have a group competition or individually you may solve it	Students will note down the task to be done.	
			The students with strong determination value will be able to solve it.		
			Teacher will say this is one of the best way to develop good determination in an individual as well as good thinking ability.		
		Students will be able to speak about the value Determination	What do you mean by Determination No matter how hard things get, or how badly a person want to just give up, the ability to keep on going irrespective of all odd factors shows the dtermination in a person. Determination is not giving up. Determination is not letting go. Determination is falling on your face and getting back up.	Determination is simply not giving up.	What do you mean by the value Determination?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
		Students will be able to define the value determination	Try to define it like how we use to de before:	The quality of being determined; firmness of purpose.	Define the value Determination
			The process of establishing something exactly by calculation or research.		
		Students will be able to speak about the characteristics of the value determination.	*List down few characteristics of a person with value determination*	There have never say die attitude, they are goal oriented, they like to take challenges	State few characteristics of a person with the value determination.
			Peoplewith determination have awareness of personal strengths and weaknesses. They possess the ability to set goals and make choices. The also possess the ability to be assertive at appropriate times. They do have the ability to interact with others in a socially competent manner . They are persistent.		
16.11.12	Rubik's Cube Activity	Students will solve or present on Rubik's cube	Teacher will say: that he would like to see how many of the studentts are determined to solve the Rubik's Cube and that too quicker, if any student is unable to solve than they would be doing the presentation by collecting information on Rubik's Cube and make groups and present with a chart.	Students will listen to teacher and then notes down in their diary and will do the given task in their vacations	How to solve a Rubiks's cube
		**letters in blue shows value integration with mathematics & value based activity.*			
Home assignment :		Solve Rubik's cube			
		Solve the exercise of text book			

Presentation:					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
23.01.12-24.01.12	Area of Trapezium and a polygon	Students will be able to state all the formulas of various 2-D shapes like parallelogram, triangle, trapezium, rhombus.	Teacher will teach students the various formula and make them write all the formula in their books. Teacher will solve few question related to the various formulas of Trapezium and polygons like square, rectangle, quadrilateral etc.	Students will write all the formulas and solves the questions done by the teacher.	What is the area of a trapezium?
25.01.12	concept of volume	Students will explain the relation between volume and area	After completing the first exercise based on area related to 2-D shapes, the teacher will start with the concept of volume	Studetns solves the exercise	
27.01.12	Measurement of volume of cube, cuboid and a cylinder	Students will be able to calculate the volume of cube, cuboid and cylinder	Teacher states the formula for the concept of volume of cube, cuboid and cylinder and solves questions based on it from the text book.	Students will note down the formulas and perfoms calculations based on it	What is the formula of volume of cuboid? Find the volume of 4 cylindrical pillars with height of each cylinder of 8 m and radius of 30cm.?
28.01.12	Volume and Capacity		Teacher states that concept of Volume of cube, cuboid and cylinder are very important in everybodies life, we should know the basic knowledge of finding area and volume for our day to day living, if we are about to do any work at home related to painting the door or carpentary work, to avoid extra expense, we can make use of this concept		
			How many of you like to make some items like a carpenter or how many of you had tried to make one item ?	Student will raise their hand if they had done anything like that.	

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher will speaks to students, students learning various things in school , should learn how to apply the learnings in their daily life, if not all atleast some mathematical concepts can be applied quiet effectively in daily like, like that of mensuration, you can apply this concept in making a table, a box for your daily use, paint doors and walls,etc, all you need is the knowledge of mensuration and a value of dignity of labour.An architect's ideas will not be a reality if there are no people to build it by working hard.		
			A student should not feel shame in doing any thing in their life. A student should know to do all the basic work in their life.They should have dignity towards labour.		
		Students will be able to speak orally about the value dignity of labour.	Teacher asks about the meaning of …dignity of labo	no work is big or small, every work is same.	What do you mean by the word dignity of labour?
		Students will be able to defind the value dignity of labour	Teacher asks students to define.	same answer.	Define dignity of labour.
			It is an attitude of respect that one has towards any level of work.		
		Students will be able to speak orally about the characteristis of the value dignity of labour	*Teacher asks about characteristics to develop the value of dignity of labour*	they are disciplined, they are free minded people, no shame in doing any taks, open minded people, enjoy working, hardworkers, pleasant and so on…	Give few characteristics of a person with dignity of labour

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher will urge students to develop these qualities and do their studies and also some work along with play during their free time, try to help neighbours, help mom in household chores, dad in gardening, etc. and try to think mathematically everywhere it will be fun in doing the task.		
			Teacher continues with the concept of Volume, provides formula of each shape, stating these formula will help you in your daily work, think about the cylindrical glass from which you will drink water, think about the bucket in which you will fill water for cleaning your bicycle, or dads car or floors of the house, think about the rectangular table on which you do your studies, cut vegetables to help your mom and so many thinks like that never sit idle, an idle mind is the place where devils reside.	Students will listen and follow accordingly. Area of plates which we will wash after eating our food….	What all other things can have the work aspects with mathematics?
30.01.12 to 04.02.12	Surface area of a cube, cuboid, cylinder	students will be able to calculate the volume and capacity	Teacher will teach various examples and solves exercise of the textbook exercise and will discuss about value of dignity of labour whereever possible	Students will solve the questions and will participate in discussions held by students and will percieve the knowledge that teacher provides	find the area and volume of a cuboidal tank with its sides measure as 15cm.
			Teacher will conduct an activity based on the concept formation of the this chapter as well as development of the value Co operation and dignity of labour	Students after completion of exercise, they will do an activity on : Measuring the playground.	

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
		Students will be able to measure the dimensions and perform the calculations for determining the area and volume of 2D, 3D shapes respectively.	*Teacher will do and activity of value based game: Measuring play ground* , here teacher will take the students to the play ground. on the playground, there is a basketball court,a badminton court,a tennis court and also one assembly stage outside in the playground of the school, The courts have markingswhich is ideal for 2D shapes where as the assembly stage and pillars of the basket ball court are ideal for 3D shapes. Teacher will asks studetns to work in groups and determine the area volume of the possible shapes.	The studetns will clean the courts and assembly stage first do a group activity out side the classroom.by measuring all the required length breadth radius and performs the calculations and will discuss among the groups and once finalised will show the final calculations to teacher	Find the area and volume of the cuboidal shapes in the play ground?
		Students will be able to speak orally on the importance of Co operation		It helps us to do the work faster and quickly and correctly, the results can be more authentic than doing the sum all alone	Find the difference between one person doing all the calculations and a group of people doing all the calculations?
	**letters in blue shows value integration with mathematics & value based activity.*				

Recapitulation :	1	Find the volume of a cube with 8 cm, cuboid with 7cm , 9cm and 11 cm measures of the side.
	2	Find the area and volume of a cylinder with diameter as 21 cm and height as 10 cm
	3	Give the 3 characteristics of the person with value dignity of labour and co operation as well.

Home Assignment :	*	Students will make a model in mathematics related to the topic of 3 D shapes , they will identify questions from their textbook which can be given a physical shape and will make a model in groups and will present it in the class within a week time. (Model Making Activity : Team work & Co operation)
	*	This chapter will have some task for students during the Educational Field trip (T & C, work & Co operation)

Presentation:					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
16.12.11	Powers and Exponents.	Students will be able to find power and exponents in an exponential form of numbers.	Teacher after introducing the term Powers and Exponents continues explain power and exponents	Students note down the solution of puzzle and express the term powers and exponents	Get 1000 using 1 and 3? In 3-4, what is power and what is base?
			Teacher will ask students , What I did with the two 2s	Student : One two you made (.2) and other 2 you made it (-2)	Is 2 greater than 0.2?
			Is it possible to get 25 without changing the twos like this	Students will say : NO	
			Teacher will continue the discussion "it is impossible to get 25with small numbers and at times we need to think out of the box and this is what in life also one need to do, to get big results called succes in life and one should have to change his value from his/ her original value.	Students will agree to the statement	
			A loyal person may have to face negative effects as well as to live the life with less monetory benefits, but if they try to remain loyal and not getting influenced by luxuries of life, than it would enable him to get success and earn good name in this society.	Students will say there is lot of corruption in this society	
		Students will be able to speak orally about the value loyalty	Teacher at this point of view discusses about loyalty, he does value discussion with students on loyalty.	Students participates effectively in the process of value discussion	What do you mean by the value Loyalty?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			It is something about doing the right, fair and ethical actions or behaviour related to person to person or country or group of person or ideas or causes.	It is being true from the bottom of the heart.	
		Students will be able to define the value Loyalty	Teacher defines :A state or quality of being loyal . It is a feeling of allegiance.It is faithfulness or a devotion to a person, country, group, or cause.		Define Loyalty?
		Students will be able to speak orally the characteristic of loyalty.	Characteristics: People who are loyal are selfless person, they have good mental strength. They keep the country, familyand organization's goals at priority than their personal goals.		
			Teacher discusses one of the global issue of our country "Corruption "		How can one try to loyal in this corrupted society?
17.12.11	numbers to exponent forms	Students will be able to write the values of expression with exponent forms.	Teacher will explain the concept of powers and exponents	Students will do what is being done on the board and solves questions from exercise.	Express 1/81 in the form of powers and exponents
19.12.11	Laws of exponents	Students will be able to solve the sums suing laws of exponents.	Teacher after having a valuable discussion focus on the chapters and explains law of exponents, where laws plays an important aspect in one life and nation, each person should learn to follow laws properly and be a loyal citizen of the nation.		What are the laws of exponents?
			Teacher discusses the laws of exponents and continues with the chapters for successive days.		
			Teacher will say (after explanation of Laws and exponents)		
		Students will be able to state the laws to be followed by an individual	The way we studied laws of powers and exponents. Lets understand the laws to be followed by humans	obey traffic rules, never say lies, never get involved in any unfair means, never give bribe to any body, etc	What are the laws that one should keep in mind to follow as a student and future citizen.
		Students will be able to write number in standard form	Teacher will teach the standard form of a number	Students will do sums based on standard form	Express 2450000000 in the standard form.

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
20.12.11			So finally teacher will conclude : according to powers and exponents and its various laws: it can be summarised as if one gets power and if follows law properly, it would ensure this world as a better place to live.		
		**letters in blue shows value integration with mathematics & value based activity.*			
Recapitulation :		1	Find the standard form of 0.000000025		
		2	Evaluate 3^(-2) * 81^1/2		
		3	How can we remove corruption from our society?		
Home Assignment:			Solve the exercise of both the practise and text books		

Presentation :					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
21.12.11	Direct proportion	Students will be able to write the formula or expression for the direct proportion	Teacher explains the concept of variation	One which changes	What do you mean by the term variation?
		Students will be able to solve questions on direct proportions	Teacher will say nothing in this world is permanent, everything changes, this chapter is all about how the changes takes place with respect to two variables. When one particular variable changes other variable also changes with respect to the previous one		
			Teacher will teach direct proportion and explains it as		
			If one thing increases other also increases , we call it as direct proportion. If the cost of items increases as the number of items, distance increases as per the increase in time with constant speed.	more number of people in house, more food is required. More money in life more tension. More topics to study more miserable life becomes.	Give one example of direct proportion related to daily life?
			More the number of years we study , more knowledge we obtain. More number of plants in the world more greenery and more healthy society we will have.		
			Tree plantation is also important, we can develop this with small habit of gardening at home, again for this reason there needs to be a sense a value of dignity of labour, if we have the feeling of dignity of labour than there will be no issues in the society and all will work in synchronisation		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher will ask the meaning of the value Dignity of Labour	No work is small, it's a feeling an attitude towards any work and considering each and every work as important work.	What do you mean by the value dignity of labout?
			Teacher will choose a student and will ask him		
			What kind of activity you would like to do to show that you have dignity of labout in you.	Painting the door, I painted doors last month with my dad	
			Teacher will ask him the duation of the task, like how many hours he took to paint one door	student will reply : 3 hrs	
			How many doors he will be able to paint if he paints continously for 9 hours	student will reply : 3 doors	
			Teacher will ask : which kind of proportion is this ?	Direct proportion	
			direct proportion is when x increases y also increases		What happens with x and y in direct proportions
			so here in the case of this boy doing a good job of painting the door, what is the x and what is y	x is number of doors and y is number of hours	
			Expression is x1y2 = x2y1 or (x1/y1) = (x2/y2)	Students notes it down in their book and listen to teacher	What is the expression for direct proportion?
22.12.11 to 24.12.11	Indirect proportions	Students will be able to state the expression for indirect proportion and solve sums based on indirect proportion.	Teacher will explains the concept of indirect proportion and provides the expression for the same with adquate examples	Students will note down the expression and will solve sums related to indirect proportion from textbook exercises	Give the expression of indirect proportion
24.12.11			towards the end of the completion of chapter the teacher will conduct story telling activity by narrating a funny story on tree plantation		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher will narrate a funny story on showing dignity of labour : once when the teacher had gone for a morning walk , there in the garden while taking rounds he saw two people working, one was digging the ground and other one was filling it with the same mud. Every round the teacher took each time he found those two person doing the same task repeatedly, out of curiosity teacher went to the them and enquired, on enquiry they said "We actually belong to municipality and we are from the department of tree plantation, actually we are three in number, the third person is on leave whose duty is to plant the tree is on leave, so we are doing our duty with dignity.	Students will laugh and will enjoy the story	What is the moral of the story ? Is dignity all about doing the work without giving a proper thought?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
		Students will be able to define the value dignity of labour	Teacher will ask to define :	It is a state of mind saying all work equal in the eyes of humans	Define dignity of labour.
			It is an attitude of respect that one has towards any level of work.		
		Students will be able to speak orally about the characteristis of dignity of labour	Teacher will discuss about characteristics	They will never say no to any work, but will ensure sensible work, they love doing work, they are worcaholic, they respect every individuals, they are co operative	Give the characteristics of an individual with the value of dignity of labour
			Teacher on this note practise the chapter again with all the questions and never feel shame to do the questions again if needed of consolidation of concepts, dignity of labour shows that you become perfectionist if do lot of work again and again and you will end up being a hardworker and in turn success will be yours	Students will listen	
	**letters in blue shows value integration with mathematics & value based activity.*				
Recapitulation:		1	What do you mean by the direct proportion and indirect proportion		
		2	What do you mean by the value dignity of labour?		
		3	Give 3 characteristics of person with the value dignity of labour		
Home Assignment:			Solve exercises of textbook & practise book.		

Presentation:					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
04.01.12	Factorisation	Students will be able to explain orally about factorisation	Teacher will introduce the topic of Factorisation, ask students what word comes in their in your mind when you hear this word?	Factory product	What do you mean by the term factorisation?
			Teacher will appreciate the answer and will say like a factory produces lotss of products this topic also provides lots of factors		
			Teacher will ask about factory what happens in that place	all humans working with machines and making all useful products for the utilisation of man kind.	
			Factory has lots of components like machine factor, human factor, etc making into departments, some programming some strategies, etc are there in factories, similarly in factorisation also all these kinds of components are found. There are human who will find the factors so human factor is there, there are identities to be applied to certain type of questions, there are grouping regrouping etc in factorisation, hence there is a good co relation with the topic		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher : Like Factorisation has lots of factors in terms of numbers, alphabets and monomials, binomials, etc A factory also has lot of components leading to its functions, there are lot of factors in a factory. Human factor, machine factor ,etc again making into departments and so on,Like in a factory each factor or each department work co operatively and in a team to achieve the target as per schedule . In mathematics there are factors which multiply together to form an algebraic expression, we are suppose to find the factors of an algebraic expression given, we need to look inside a big algebraic expression and find its components.	Students will listen	
			In a factory there is a basic nature which follows were regularly that is proper co-ordination and co-operation, these are the two main components of any team work, each member has to co-operate and co-ordinate nicely among its team members, here also we will try to follow this in understanding this chapter, we will have a better co-operation among each other to understand this chapter nicely using all basic concepts.		
		Students will be able to speak orally about the value Co-operation	Teacher will ask students what did they mean by the term Co operation?	Helping each other with understanding and with a motive to achieve some goal.	What do you mean by the term co operation?
		Students will be able to define cooperation	Teacher explains very good, it can be defined as " Cooperation is the process of groups of organisms working or acting together for their common/mutual benefit, as opposed to working in competition for selfish benefit"		Define co - operation

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teacher will ask if it is an important component in any groups, class, organization, company, etc..?	yes, very important component	
			Teacher will again ask question to specify it with an example that why it is important	one person cannot do everything in this world , he needs to depend on others for one or the other kind of things and hence cooperation plays a great role there.	
05.01.12	Factors using prime factorisation.	Students will be able to find the product of factors by prime factorisation method	Teacher will teach them to find factors by using primefactorisation method		Similiarly what could be the prime factorization of 24 x^3y^2
			Teacher will say that the basic concept wills help them to do the big factorisation.		
	Factorisation using regrouping	Students will be able to factorise using the concept of regrouping	Teacher will then explain the factorisation with regrouping		
			Teacher will explaing Regrouping, is a word when students study in a class they study all together but once a task is given they will make groups or change the group which can be related here, algebraic expression would be given as a whole of 4 terms where one can make two groups and complete the factorisation in few minutes	Students will listen to teachers' explanation	
			Teacher explains with an example		
			$4xy + 6x + 6y^2 + 9y$….here		
			$(4xy + 6x)$ and $(6y^2 + 9y)$ will for two groups and then we will factorize them individually which gives $2x(2y + 3) + 3y(2y + 3) = (2x + 3)(2y + 3)$	Students will understand and writes in their books	

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			So in the class at times if there is any task to be done as a whole divide yourself into small groups and work co operatively and get the desired results.		
06.01.12 to 08.01.12			Teacher will then solve the questions from the textbook exercises.	Student solves in their notebooks	Factorise : 8xy + 6x + 12y2 + 9 y
09.01.12 to 11.01.12	Factorisation using identities	Students will be able to factorise quadratic expression using identities	Teacher will explain before the introduction of identities, that In an organization while work is going on or in a team some pre decided or standard principle are applied or they follow a certain model, in the case of factorization of some particular algebraic expression,identities identities can be used for effective process of factorisationas the guiding factors for such special algebraic expression, for example there are some algebraic expression which are perfect squares, and can be used the identies of $(a + b)^2$ or $(a – b)^2$ to factorise them, there are some quadratic expression which may be of the form $x^2 + (a+b)x + ab$, which can be factorized as $(x + a) (x + b)$ and so on….like there are some winning strategies in every sport which follows a proper steps and sequence so here also there follows a proper steps and each step is important. In exams there are marks for each steps and just getting answer is not important, showing proper steps is also important.	Students will listen to the explanation and use it in their studies	Factorise : x^2 +5x+6

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			As we are discussing facts about team and co-operation in this chapter, let us make groups or pairs and solve the questions further, firstly lets recap all the identities and in groups please teach and revise each other the identies and then we will proceed towards solving questions.		
		Students will be able to speak orally about the characteristics of a person with co-operation	The main features of co- operation are togetherness, service attitude, empathy, understanding, volunteering for the benefit of others and Self-motivation.	togetherness, understanding, service attitude, multi tasking, good listener, intelligent, good communication skills	Give the characteristics of a person with the value cooperation.
12.01.12 to 17.01.12	Factorisation by splitting the middle term	Students will be able to factorise the quadratic expression using splitting the middle term	Teacher : (Explains how to solve questions of factorization by splitting the middle term and also solves more examples and calls students one by one each pairs to board to solve various questions where one student will solve by the guidance of other student..)	students will solve the exercises working in groups	
17.01.12			By the end of the chapter Teacher will do an activity related to story telling : Rotten potatoes.		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			It is a story about a teacher giving instruction to children to carry potatoes. One day the teacher after seeing a lot of fights happening around in classroom told her students that they will do one activity. Each students depending upon the number of enemies he or she had was asked to carry that many number of potatoes in his bag. They were asked to take this bag everywhere they went. Finally they were frustrated with the odour of the rotten potatoes they were carrying which represented negative thoughts.The moral of story is more the number of enemies or negative thoughts are there in a person's life, more unhappiness and misery will be faced by them. Learn to Co operate will one and all and keep a healthy friendship with one and all for peaceful life	Keep no enemies in life and be co-operative with all for a peaceful and happy life.	What is the moral of the story?
	**letters in blue shows value integration with mathematics & value based activity.*				
Recapitulation		1	Factorise : 2x^2 +5x + 3		
		2	Give the various characteristics of cooperation in an individual		
Home Assignment :			Solve minimum 10 sum daily from practise books and complete all the sums of exercise and practise books.		

Presentation :					
Date	**Content**	**Specific Objectives**	**Teacher's Activity**	**Student's Activity**	**Evaluation**
18.01.12	Bar graphs, pie charts, line graphs,	Students will be able to draw bar, double bar graphs, pie charts, Histogram.	Teacher enquires student about the marks obtained by each one of them in mathematics during the first semester exams. On obtaining the marks teacher presents the data in the form of bar graph, and he takes the score of 3 boys and 3 girls and notes and represents it, After the scores were represented on board, teacher ask does it makes any difference in the marks of boys and girls separately ? or this boy being a Gujarati, or a Punjabi or that girl being a Keralite ?	Students will listen to teacher and responds	Draw a bar graph on the given data;
			Is there any other factor for scoring better apart from studies?	student will say no other factor only studying nicely	
			Teacher further explains like in education there is no bifurcation for any individual or community everything is to be enjoyed equally, it is an individual who makes it different.		

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			Teachers shares the performance of students in the board exams and expressed that previous year results of 2010 boards exams showed 7 girls in top 10 and only 3 boys could make it into list and the result can be reversed the coming year, the point of discussion is there is no difference in any individual, today we have divided the nation in terms of religion, caste, culture, regions, sex, class, etc, end of the day we all are equal.		
			Teacher further questions students about Equality.		
		Students will be able to speak orally about Equality	What do you mean by Equality?		What do you mean by the term Equality?
		Students will be able to define on value equality	After a satisfactory discussion he further ask students to define equality and he consolidates it with definition.		Define Equality.
		Students will be able to speak orally about the characteristics of the value equality .	After the definition teacher deviates to the mathematics content by drawing a bar-chart with literacy rate of various states. He discusses why in states like Kerala literacy rate is high and how importance is given to women and men education, where as in states like Rajasthan why literacy rate is effected due to lack of women education in particular state.	Students will listen to teacher and discusses with teacher	What are the characateistics of a person with equality?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
19.01.12-21.01.12	pie charts	Students will be able to draw pie charts	After that teacher asks a particular student to share his marks and the teacher represent his scores on and explains the pie chart and further express that pie chart can be made for various data of climate, religions, crops grown in a state, sports like by students in a class and so on and teacher explains how to make a pie chart. For making a pie chart, like for any dtata there has to be a centre point, for us our Mother India is the centre point and we just revolve round it, similiarly the pie diagram is drawn iin the form of a circle and centre on it, from the centre a radius is drawn and then segments are formed based on radius.		Draw a pie chart about the number of students in various house in your class
			Teacher solves one example of text book pg.232 where information of TV channels are given. Distributions were given on the basis of news, informative, sports, entertainment. It was represented and teacher elaborates on the favourite topic sports.Teacher was interested in Cricket and explains how our cricket team was lead by Dhoni and his company and how the likes of Dravid, Ganguly, Zaheer khan makes the team a best team.	Students will listen and provides information on various other sports like football.	Who is good cricketer, one with lots of money and fame or the one with talent and simple person?

Date	Content	Specific Objectives	Teacher's Activity	Student's Activity	Evaluation
			These players were selected not on the basis of any class and religion all are selected on the basis of performance and hence that is the perfect example of equality.Then the teacher will encourage some discussion of value equality.		What is the status of equality in our nation as per your observation?
			Teacher proceeds with the concepts of .		
20.01.12	line graphs	Students will be able to intepret data from line and other graphs.	line graphs, co ordinate geometry and solves the examples for remaining 6 days of mathematics teaching of this chapter. In the end teacher gives students an assignment of making graphs of their choice related to the topics like		
21.01.12-23.01.12	Co ordinate geometry	Students will be able to determine the coordinates on the graphs.	Teacher explains the co ordinate geometry, explains question on simple interest type graphs	Students will observe and solves the questions in their books.	
	**letters in blue shows value integration with mathematics & value based activity.*				
Recapitulation :	1	Draw a histogram on the data given			
	2	What is the difference between bar graph and histogram			
	3	Give 3 characteristics of a person with equality .			
Home assignment:		Make a project on the various aspects like education, religion, men women ratio in different states and prepare a suitable graph on it.			