



HEM *harmonize*

Maths
Grade V

Integration of Values

Teacher's Manual



Teacher Manual for Integration of Values in Teaching Academic subjects

By

HEMA Foundation, Mumbai

Teacher Manual for Integration of Values in Academic subjects

Maths

Grade V

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Preface



It gives immense pleasure to all of us at HEMA Foundation in presenting the “Teacher Manual for Value Integration” from Grade I to Grade X to our beloved teaching fraternity in school education. Teachers are the corner stones in building the huge edifice for the student community and they are the driving force and guiding spirit to the society. Little will change in the society, if the teachers do



not make any efforts. We are all living in a scenario where value systems need to be integrated and enhanced through essential school subjects so that the students assimilate values into their regular habits effortlessly. There may have been innumerable reasons why values from the society are disappearing, but there cannot be two opinions about the significance of educational institutions in restoring the culture and values of the society. When they say, ‘values are to be caught’, it is leaving a high degree of moral responsibility on the part of our teachers and this manual is our humble effort to lessen that burden for them. This manual is not a substitute to the academic teaching lesson plan, but is a supplementary assistance to the academic text. Nevertheless, the teachers are at perfect liberty to choose and aptly use the learning materials/activities wherever they find it relevant. This manual would be of great use to the teachers as they are written by practicing teachers in the school system and after thorough research and therefore, the general difficulties of teachers such as completion of portions in the given time to teach the subjects etc are taken care of. In fact, some of the lessons have been written after seeing their practical applications in actual classrooms.

We all have a responsibility of creating a society that is driven by values and our younger generation is the key change makers in the society. They all must be inspired by our educational institutions and their teachers so that their intellectual development is supported and augmented by the value systems and culture. HEMA Foundation takes it as a commitment to the society in participating in this huge endeavor. Inviting all the stakeholders to this venture of spreading and integrating values into the learning environment of schools, with all humility, we remain always your well wishers

Thank You,

Mahendra

Mahendra Kabra
Managing Trustee

Anita

Anita Maheshwari
Trustee & Creative Director

Acknowledgement

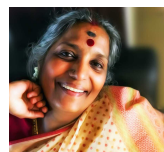
Welcome to HEMA Foundation's "Teacher Manual for Value Integration". I take this opportunity to thank each one of those who participated in it. At the outset I thank the Management of HEMA Foundation, its Managing Trustee Shri Mahendra Kabra and the Trustee and Creative Director, Smt. Anita Maheswari, for their unstinted support and cooperation in making this happen. Our humble pranams to the Senior most Member of HEMA Foundation Padmashree Shri Rameshwarlal ji Kabra, for his abundant blessings. The Associate Director Hetal Desai, the IT department Head, Shri Arvind Pandey, Shri Akash Shah and all other team mates from HEMA Foundation have contributed immensely toward realizing this manual.

There are several people outside the system who have supported this cause by giving their valuable comments and suggestions and my thanks are due to them as well. My sincere appreciations to the authors of this book who have been esteemed Principals, Section heads and Department heads and educators from reputed institutes of the country and they deserve the highest appreciation in envisaging the concept so well. My sincere appreciation to Dr. Shobana Nandakumar Nair, Mrs. Shobha Rajkumar, Mrs. Priya Cibi, Mrs. Sopna T. R and Rashmi Menon, for authoring the manual for Math, EVS, English and Science respectively. It was their untiring work and willingness to modify the documents as and when changes were required or further researches were needed, that this book was made possible.

As the Academic Director of HEMA Foundation and the person who has conceived this idea of value integration, I have gone through this document several times before presenting it to you and am fully aware of the significance of each word used in this document. I am sure the faculty who uses this manual would strictly adhere to the norms of the school Boards and the suggestions given over here. The Central staff of HEMA Foundation is more than willing to take your valuable suggestions and I promise that we shall be able to incorporate them if found suitable in our next publications.

I thank you for all your incredible commitment. All the credits if you find this document useful, would go invariably to all those who wrote the book and those who helped in the realization of the book and all those demerits if any, are purely due to my oversight. Believing that you would find it very useful in reaching out to the students and become inspiring teachers for our younger generations

I remain your sincere



Vijayam Ravi, PhD

Introduction

(must read before the teacher proceeds)

Its 'a Friday evening'. Everyone looks forward to a joyful weekend with family. After a weeklong work, it is a much-needed break. The school campus that was brimming with noises and screams of children, is silent and calm- The evening twilight has set in on the tall buildings, creating beautiful silhouettes. All have shut their tables; cupboards and the office of the school is closed. Principal and staff were slowly proceeding to the gate. They all wished each other a happy weekend. The peon is stepping out. Suddenly it happened. None expected the normal events that take place every day would take a turn so unexpectedly. School watchman came rushing to them to announce that there has been a riot in the city and he said he could see few students along with some other miscreants sabotaging public and private properties and hurting people on streets, hooting and howling. He added that it is not safe now to walk out. That the rioting group included their students as well. The miscreants included some of their old students too. And they were all those 'good' students when they were inside the school campus.

That left the teaching staff and the leaders stunned for a while. For a moment many of them looked at the school building just like that, which is their Almamater, and it stood so tall and elevated with a pride of creating thousands of glorious citizens in the past. Each one had a question mark in their eyes. None spoke. There was a dumb silence. Each one silently started replaying what they have been doing in the classrooms all along. There was an unbelief, inexplicable feeling reflected in their eyes. Did we make any difference to our students today? Did we teach our children to live or did we teach only Math, Science and language?

This is a serious question that all teaching faculty must ask themselves-

Did we teach subjects? Or did we teach children?

Professional standards for teaching academic subjects and transferring the right knowledge to the students have been the main objective of teaching all along, across the universe. All the latest teaching and learning revolutions that are happening in the classrooms and the students are evaluated for their skill development. Education is the vehicle for development of human being. Situations turned out to be grim when the pandemic engulfed the world with its outstretched arms. Every nook and corner of the world reeled under pressure with the pain and uncertainty that was caused by this pandemic. The ambiguity around, the uncertainty, complexity and insecurity around the schools was huge that none could fathom a way to come out of it. Teachers started looking toward blended learning in a hybrid classroom situation as a solution to reach students. All the more a reason for us, to do introspection about what we were doing till yesterday in the classrooms.

Yes, we taught our students Math, English, Languages, Social sciences, Sports, Music, Art and Craft and everything else-but values. We boasted ourselves as the top schools

with more students falling into the distinction list in terms of marks. Every year we sent out to the world, thousands of students with less skills and values but more of academics and marks. We were happy. Schools were happy. But we realize today that only some of those schools have been teaching students and not teaching subjects alone. Teaching subjects has a goal post and that is the academic credentials in terms of marks, but teaching students per say has another purpose altogether and that is -Touching their lives. We were confused and placing our balls in the wrong goal' posts. Result? The riots on the street, misbehavior, calamities, destruction, suicide and a valueless society in the making! Yes, certainly we imparted knowledge of academic subjects, however while this intellectual development is transmitted, there was room for us -the teachers for integration of values into these subjects. Few schools include moral science or value education in the curriculum and the teachers do teach the kids values like an academic subject and most of the schools assess the moral science in a written examination. It is very doubtful whether the students have really gained anything out of this process. Chances are bright that they end up considering the value education as just another subject. Teaching values through books was not a mistake, but assessing the children on marks was the issue. So, students when they completed their moral science examination, and received their 'pass marks', they quietly 'passed on' the values to the dustbins.

They say that the society's growth and degradation depend to a large extent the way the students are produced by the schools. The economic prosperity of a Nation depends to a large extent on living style and value systems of the society and there is every reason to believe that when the crime rate in a country goes high, the economic prosperity has declined in the society. The thinking, the culture of coexistence, working as teams and maintaining the art of tolerance, if these are removed from the society, it is very difficult to revive the Nation. India has been such a rich country with its values and it is a very painful scenario to watch how our younger generation is missing out on values. To a large extent the responsibilities can be passed on to the Macaulay's education system, parents and schools. If the schools make deliberate attempts to impart academic subjects and create excellence in that, the student's generation that gets molded out of the schools would certainly prove to be an asset in creating wealth and prosperity for the nation. However, if the schools do not impart values to the students, the nation will end up in a huge disaster after some time in terms of its moral fibre.. Wealth and success alone do not bring happiness to the society or an individual. Yes, it may bring some kind of satisfaction and one can always get a pleasure out of it. But very soon, this feeling becomes very transient and the mind would look for something else. This is human nature and it happens because the purpose of human life is not imparted to the students in schools. And when the assessment is done, that subject is also done.

Is this the purpose of education? Swami Vivekananda conceives education as the process where the innate potential of the human being is revealed. The innate nature of a human being is peace and joy. The riots on the street shows totally opposite virtues. Then where did the schools go wrong?

The riot on the street by students is not the debate here. It may be right or it may be wrong. The question is of larger dimension. It is of citizenry, safety, security and morality of a Nation, of the Globe! But why does such a behavior happen? Why do our students or our citizens behave in such an unruly manner that is a pain to others? When did our children or our citizens who passed out of the portals of our school, become so very intolerant? What is the fundamental cause for such an unrest in the minds of students, or generally speaking mankind as a whole? The intellectual quotient is very much in place. But when the spiritual quotient and emotional quotient are misplaced, the human beings sometimes behave weirdly. They lose cool, the power to think and act. Most often human beings react.

Did we, at schools, teach our students to act, or react?

Did we, at schools, teach the students values? Or imbue values in them?

Did we teach the students only subjects? Or did we touch their lives?

The Context to Value integration with subjects:

It is in this context of these questions, that the thought of integrating values with academic subject teaching dawned. Education and values are no two different subjects. They are mutually interwoven. As a teacher, the biggest role is to prepare their students behave like human beings with all values intact. All academic subjects may give them an opportunity to excel in life, but the values learnt help them to live as human being. Since the teacher is an integral part of education and the inspiration in the life of the children, they have to turn toward integrating values while they teach subjects. Value integration does not mean quoting a value and discussing it, rather it is an effort to lead the students to see a personal meaning in whatever the teacher teaches in all subjects. It depends to a large extent on the creativity of the teacher to highlight the value that is hidden in all subjects, including the languages. Value means a person's personal principles or standards of behavior the judgement of how important that value is to him in his life. In nut shell we can say, "Value is a preferential behavior". What the teacher needs to do in class is to help the kids choose 'his/her preferential behaviour'

The fundamental shift that needs to happen here is this.

At the centre, is the value and all subjects are contributing to the stabilization of the value. Therefore, the teaching has to be intertwined with those values from the subjects and the teachers reach to the students in a very subtle way. Each Subject-be it Science, Math Or languages, or social science, or Non-academic subjects, have got something very fundamental to convey to the people who spend time to learn those subjects. And if we look at those subjects from a very objective perspective, we can clearly see what they are all dying to convey to the children. Math talks about precision, value of time, sharing caring, multiplying happiness and joy and several likes. Science talks about hard work and resilience and the will power to fail and still work hard to achieve. Languages give the

feelings of expression, love, compassion and what not. So, when a student goes out of the school portals, he would have assimilated within him values like precision, punctuality, rationality, truth, compassion, love, caring, sharing, determination, courage to fail, spirit of enquiry et etc. Along with similar such values, the content gets learnt by the kids.

What benefits do Value integration bring to the students?

1. The students acquire several time honoured personal and collective values for life
2. Along with the cognitive development assured by modern education, integrating values in academic subjects prepares the children to develop their social and emotional lives
3. The approach of integration of values in teaching subjects, help the students enrich students' intellectually, physically, socially, morally, spiritually and artistically.
4. Schools can witness more of academic diligence with students showing increased attentiveness in the classroom and show capacity to do independent work
5. The school ambience also will see less of conflicting situations as the students start demonstrating greater empathy and responsibility
6. The student teacher relationships drastically improve and it becomes more trusting
7. Students feel a sense connectivity with others and belongingness

The argument

Teachers are the crucial ingredients in getting the values incorporated into the system and there is no two way about it. At present teachers are focused on completing their lessons on time amid all challenges and they do not have the extra time for doing any research for incorporating the lessons with values. Education and imparting values are no two different subjects. They are one. Additionally, thrusting a subject of value addition always attracts criticisms, primarily from the teaching community since they believe that it is an additional work and have to prepare more.

This argument is in place and cannot be ruled out and that is why HEMA foundation pitches in for help.

What does HEMA foundation offer to teachers?

This particular attempt from HEMA Foundation is to address this conflicting issue in education. HF is striving to reach out to teachers with ways and means to incorporate or integrate values while they teach academic subjects so that additional burden is not on them, while they address a major concern of education.

Values can never be taught, values can only be caught

Every subject has material knowledge that is needed for existence. What goes unnoticed more often is the subtle knowledge that the subjects try to convey. Any subject-Language, Math or science-all stand there for spreading virtues and values alongside the material knowledge. It is an integral part of learning the subject.

How and why are the values integrated by HF?

There is a very sound reason for HF to adopt the project of value integration into academic subjects and it is justified when any one reads the deliberations made in the NEP-2020 -NEP talks passionately about the integration of values, skills, and essential subjects to make the learning holistic. Let us refer to the clause 4.28, and it reads as follows: “Students will be taught at a young age the importance of “doing what’s right” and will be given a logical framework for making ethical decisions. In later years, this would then be expanded along themes of cheating, violence, plagiarism, littering, tolerance, equality, empathy, etc., with a view to enabling children to embrace moral/ethical values in conducting one’s life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work. As consequences of such basic ethical reasoning, traditional Indian values and all basic human and Constitutional values (such as seva, ahimsa, swachchhata, satya, nishkam karma, shanti, sacrifice, tolerance, diversity, pluralism, righteous conduct, gender sensitivity, respect for elders, respect for all people and their inherent capabilities regardless of background, respect for environment, helpfulness, courtesy, patience, forgiveness, empathy, compassion, patriotism, democratic outlook, integrity, responsibility, justice, liberty, equality, and fraternity) will be developed in all students.”

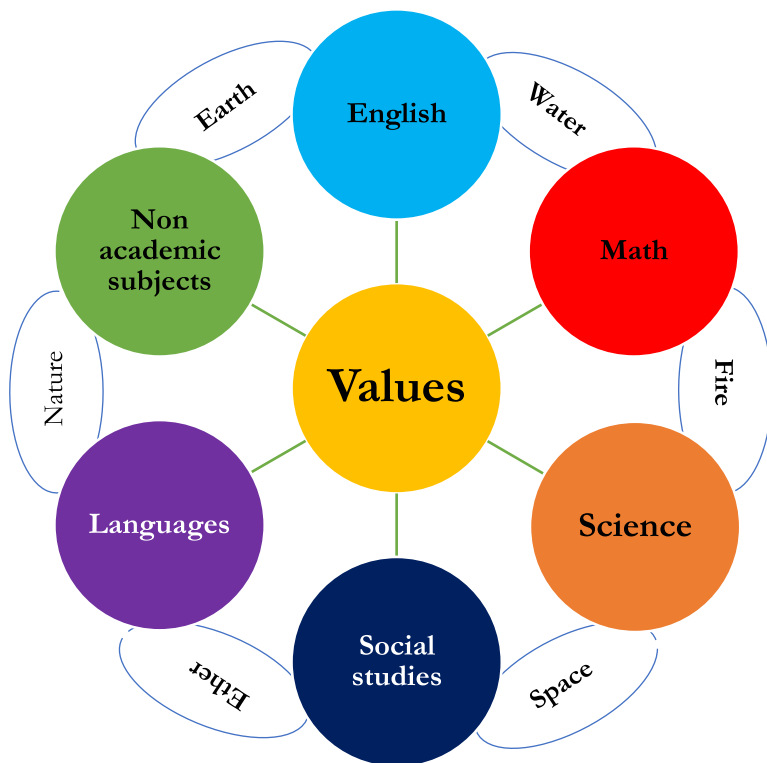
The new NEP and therein the NCERT insist on integration of values with essential subjects. Nature is the mother of all knowledge- Every learning that takes place with human beings is connected through the mind and intellect. While giving food for thought at the intellectual level, teachers have to supplement the emotional aspect through developing the mind. Mind develops by seeing, observations and hearing from sources that make sense to it. Human brain and human mind need to go hand in hand to make rational decisions and emotional attachments. If there are no emotions to any material knowledge learnt, it will remain a subject only. The love for the subject comes, when one extrapolates it to the application of it both at the material and emotional level. The emotional intelligence that gets originated while an academic subject is being taught is as powerful as the academic learning. Because it signals imagination and creativity and these are faculties associated with the mind. The rational brain which is provided with intellectual information about the academic subjects processes the knowledge with the help of the emotional brain-which is the mind. When no food is given to the emotional brain, it gets impoverished. Therefore, a balancing act needs to be done by teachers while imparting knowledge on academic subjects to incorporate the value or virtue that the subject is trying to convey to the reader or learner.

While the teacher teaches a topic ‘Patterns’ in Math, remember that the teacher has to touch the value of precision, discipline and punctuality. The whole universe gives us innumerable patterns and they all follow a certain order. That order brings discipline and it helps you see things in the right perspective. Similarly, the teacher, while discussing about geography, and earth in particular, what can be brought out is the virtue of evolution and the stability given by the earth. Earth is an evolved planet. The innate stability, the order, the growth and silence involved in this process are all virtues that can

be imparted to the students. On similar lines, the ecosystem, the biology, atmosphere, the plants, animals, air, water, aesthetics, and beauty-all talk about values and virtues of truth, tolerance and love, coexistence, interdependence, compassion and honesty.

Integration of values with academic subject teaching is an effort of HEMA Foundation to reach to the teachers with the varied ways of dealing with academic subjects and making it very interesting for the students to learn.

Whom does this manual serve?



The next thing that HF is trying to incorporate is Skills along with values. Skills are also considered to be an integral part of learning and hence while a value is highlighted the skills are also touched upon.

The additional advantage that teachers who use this manual of HF is that, the chart of the flow of lessons can be as such adopted in real teaching sessions without the need for doing a lesson plan again. The pattern of a school lesson plan used for imparting academic session is given incorporating the values integrated in it.

The perfect way of starting an academic lesson in a normal classroom situation so that the students get glued to the teacher's skills of teaching, is assured in the manual

through a context text-either by way of a story or an activity or discussion that rouses the interest of children

The description of the lesson ends with assignments for doing individually, at home or in class and this comes as a huge relief for the teachers

There is also a descriptive summary in the beginning of the text manual where in the topic, the core values, the skills and the activities that can be done and also the materials required for the same are all given so that the teacher gets a quick idea about how to go about the same.

HF, thus, is trying to travel that path of imbibing values to children along with the teachers!

Organization of the manual-How to read the manual?

The teacher will have to read and understand the manual as follows:

This teacher manual follows a certain structure that is not replacing the academic journal of the teacher. On the contrary, serves as an additional support as to how the teacher can link those values that are very relevant for a human life with the teaching of the subjects.

It has two parts:

A descriptive summary: this is a sheet in the beginning of each manual, showing what are the core values, sub values and skills that are linked with the topics and describes what activities can be undertaken to teach the values through subject integration and also shows what all education materials are required. Teacher has to glance through this to get a fair idea about how many values are integrated in total and understand this part first

The second part is the actual manual where the method of integration is dealt with the main academic concept.

The structure of the manual goes as follows: Start reading from introduction

1. **Introduction:** This gives what the lesson is about and what values, skills can be integrated here and the significance of it
2. **Learning objectives:** This plan talks about what are the academic and value driven objectives of learning the lesson
3. **Process and Action:** Here the way how the lesson has to be undertaken and it is shown in the form of a flow chart for quick understanding mentioning the activities at each stage. It starts with the context which actually serves as the introduction of the class to the new topic.
4. **Activities and related discussion:** Here the activities are dealt with in detail with discussion questions that lead to both academic and value driven integration. It is through these the teacher is able to deliver the total lesson effortlessly.
5. **Assignments:** Gives assignments that can be done individually, at home, or as group in the class.

The activities given can be chosen by the teacher as and when needed or as per the time available. It is not mandatory that the teacher does all activities.

Conclusion:

It is a proven fact that any particular value learnt becomes a habit when one practices it consistently. The purpose of integration of values with academic subjects is to learn the values along with the academic concepts and so whenever the academic concepts are tested, the value learnt is reiterated. The creativity and imagination of teacher make the lessons interesting to the students and HEMA Foundation presents this Value Integration Teacher Manual for the benefit of the teaching and student community.

Jai Hind

Conceived and presented by

Vijayam Ravi, PhD

Academic Director

HEMA Foundation

"वसुधैव कुटुंबकम्"

Vasudhaiva Kutumbakam ("vasudha", the earth; "iva", is ; and "kutumbakam", family). This Sanskrit phrase literally translates to mean that the whole world is one single family. The Sages have said that the entire world is truly just one family connected with thoughts, emotions, humanity and humility.



सर्वे भवन्तु सुखिनः सर्वे सन्तु निरामया ।
सर्वे भद्राणि पश्यन्तु मा कश्चित् दुःखभाग् भवेत् ॥

May all be prosperous and happy. May all be free from illness.
May all see what is spiritually uplifting. May no one suffer in anyway.
Om peace, peace, peace.



Vision

We aim to cultivate a conscious understanding of human values in individuals in order to help them coexist peacefully and harmoniously.



Mission

Our mission is to awaken the spirit of value based living in all individuals at school, organizational and community levels through well researched and structured programs resulting in a responsible, effective and harmonious existence for all



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Topic	Values / Life skills integrated & imbibed	Activities
The Fish Tale	<p>Core Values considered : Hard work and Optimism /Hope</p> <p>Other Sub-Values: positive attitude</p> <p>Life skills: Drawing ability, creative thinking and estimation reasoning and problem solving ability and presentation.</p>	<p>Value integration Activities:-</p> <ol style="list-style-type: none"> 1. Warm up activity of drawing fish by using different shapes as a fun activity, Making groups using different numbers revise the previous knowledge of students. 2. Narration of real life story of Colonel Harland & Wilma Rudolph demonstrate the example of hard work and optimism 3. Guide students to research and do presentations of life history of personalities who become successful by hard work & optimism. 5. Assignment: 1. Write review after reading the autobiography of famous personalities

Materials / Resources needed

Value Integration:-

1. Drawing materials, Drawing papers
2. Facilities and Equipment to show videos and space for conducting activities
3. BB, Pen, Duster
4. Ncert Text Book, Reference books, (R.D Sharma , R.S. Aggarwal)

Description (of the points of discussion)

Value Integration:-

In this chapter the activities, stories and games are incorporated in such a manner that students realise that optimism/hope and hard work will always lead to success. Optimism is an attitude characterised by hope and confidence in success and a positive future. Optimists are those who expect always good things happen in the future. An optimistic attitude helps one to be happier, more successful and healthier. Similarly hard work is a trait students need to understand. By working hard one can achieve all their goals and once it is achieved one feels happy & content.

The key discussions are:

1. By doing a warm up activity of drawing fish by using different shapes as a fun activity, Making groups using different numbers, teacher shall revise the previous knowledge of students.
2. By narrating real life story of Colonel Harland Sanders & Wilma Rudolph teacher demonstrate the example of hard work and optimism
3. Guiding students to research and do presentations of life history of personalities who become successful by hard work & optimism.
5. Assignment:
 1. Write review after reading the auto biography of famous personalities which will help them in future life

Unit1**The Fish Tale****Hard work and Optimism/Hope****I. Introduction**

The lesson “**Fish Tales**” is a thematic chapter which presents to children the world of fish and of people who work with fish through an integrated approach. Mathematical concepts, such as shapes, estimation, sense of large numbers, simple operations, speed, loans, etc. are woven into real-life contexts to allow a creative revision of some ideas learnt earlier.

Through this lesson students realise that optimism/hope and hard work will always lead to success. Optimism is an attitude characterised by hope and confidence in success and a positive future. Optimists are those who expect always good things happen in the future. An optimistic attitude helps one to be happier, more successful and healthier. Similarly hard work is a trait students need to understand. By working hard one can achieve all their goals and once it is achieved one feels happy & content.

II. Learning Objectives / Outcomes

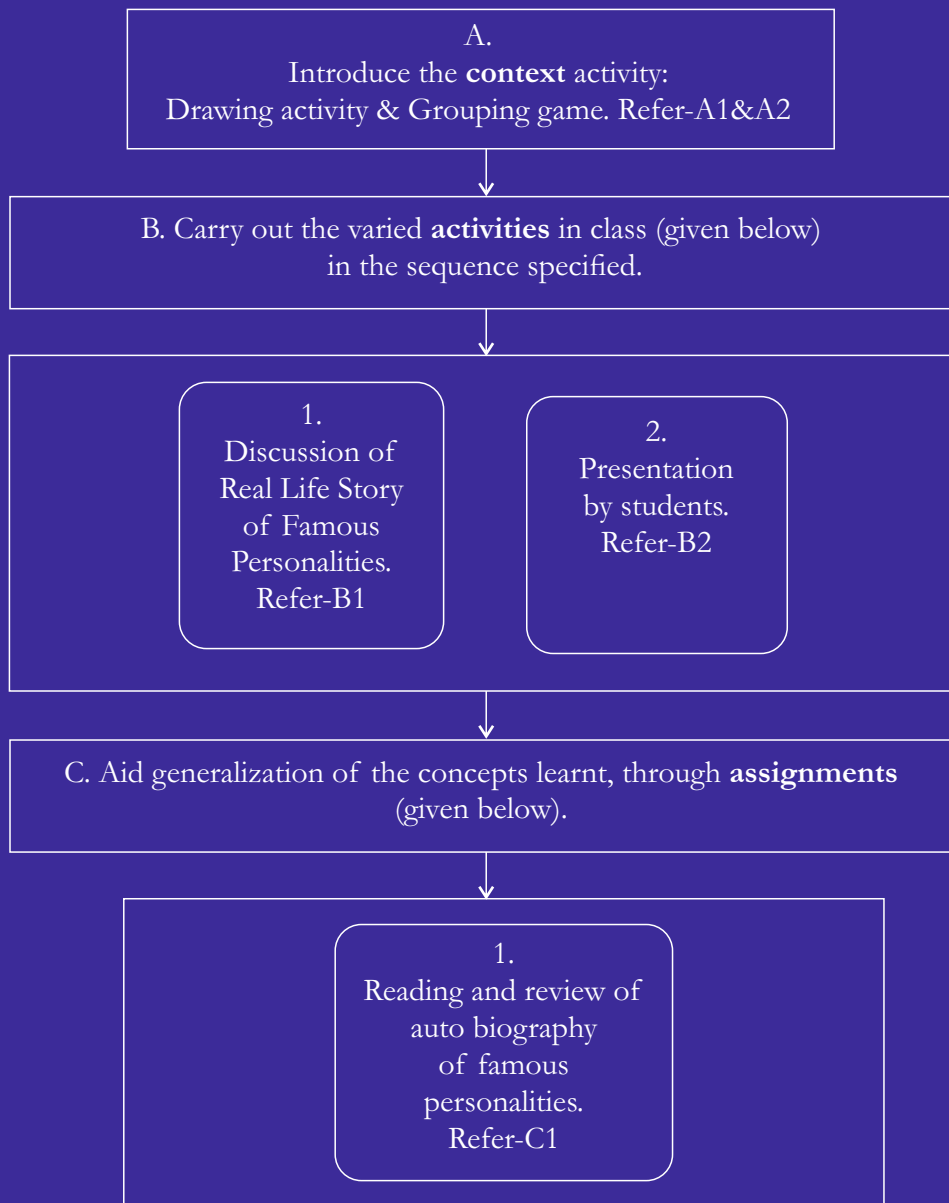
Through this unit, the students will achieve the following grade appropriate academic and value based goals

- Identifies and draws different shapes and different objects by using shapes.
- Reads and writes large numbers and understanding the place value, able to perform the basic arithmetic (+, -, x, /) operations on large numbers.
- understand equal groups and able to comprehend word problems, solve higher order multiplication – multiplication comparison and word problem
- Understands the various units of measurements, able to do the conversions of units (large to low)
- Understands the relationship between speed, time and distance.

- Understands the market level money transactions.
- Realise that hard work and optimism leads to success

III. Process & Action Plan

Determination, hard work and focus will lead the students in greater attainments and this lesson is on an optimistic approach. Your role as a teacher is significant, as you have the power and the means to shape the lives under your guidance. One of the most important goals you may have as a teacher, is the character education of the students using the academic content at hand.



While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

This topic incorporates the *core approach* – Knowing, Understanding, Valuing and Acting the values embedded in the topic.

The *core values* being considered are *hope/ optimism and hard work* along with other sub-values like *positive attitude*

The unit also provides the scope to develop the following life skills in the students: *Drawing ability, creative thinking and estimation reasoning and problem solving ability and presentation.*

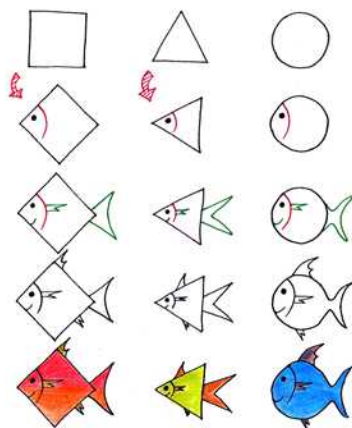
IV. Activities & Related Discussion

A: Context Activity for the Teacher to Start:

A1. Drawing Activity

Teacher shall take a drawing activity in the class room. Teacher shall instruct to all students to make fish family- grandparents, parents, brother, sister etc. (As per their imagination) by using different shapes. They can use Square, rectangle, and triangle, circle etc. Teacher shall demonstrate them how to draw fish by using shapes. This way teacher shall revise their previous knowledge about shapes, big and small, long & short. Teacher takes round and check student's imagination. And help them if they require.

Example:



Picture Source: [https:// in.pinterest.com/](https://in.pinterest.com/)

A2: Game - Move in Groups-Grouping Game;

Through this game teacher shall revise basic operations of mathematics.

Game Description for teacher

Choose a leader. Move in a circle while the leader claps his/her hands. The leader stops clapping and calls out a number. Make groups of the number she/he calls out a number Makes groups of the number she/he calls out



Picture Source: <https://www.azimpremjifoundationpuducherry.org/resource-catalogues/multiplication-fish-tale>

In the picture – 4 groups of 3 that is $3+3+3+3$ that is 4 times 3 or $4 \times 3 = 12$. Teacher shall instruct students to continue the game but make sure students form equal groups. That is each group must have same number of children. The number of students remain outside the group is named remainder.

B. Value Based Activities:

B1: Real life story of Kentucky Fried Chicken owner Colonel Harland Sanders

1. Teacher shall narrate the real life story of Kentucky Fried Chicken owner Colonel Harland Sanders to students as an example of hard work and optimism

The real-life story of Colonel Harland Sanders who was disappointed umpteen times in his life and still made his dream come true late in his life is really inspiring.

He dropped out of school in the seventh grade and tried many ventures in

life but tasted bitter defeat every time. He started selling chicken at his age of 65 but his dream of a restaurant was turned down many times due to conflicts and wars.

Later he attempted to franchise his restaurant. His recipe got rejected 1,009 times before the final approval. And soon the secret recipe, “Kentucky Fried Chicken” became a huge hit worldwide. KFC was expanded globally and the company was sold for 2 million dollars and his face is still celebrated in the logos.

Moral: Have you stopped your attempts to do anything just because you were rejected or you failed a few times? Can you even accept a failure of 1009 times? This story inspires everyone to try hard and believe in yourself until you see success despite how many times you have failed.

Reference: <https://www.edsys.in/motivational-stories-for-students/#>

2: Teacher discuss with students the life story of Wilma Rudolph

The Wilma Rudolph Story: Wilma Rudolph overcame long odds to become one of the world's best-known athletes. How and why she did what she did are as amazing as her accomplishments.

Wilma Rudolph was born into a poor home in Tennessee. At the age of four, she had double pneumonia with scarlet fever, a deadly combination which left her paralysed with polio. She had to wear a brace and the doctor said she would never be able to put her foot on the ground. But her mother encouraged her: she told Wilma that with God given ability, persistence and faith she could do anything she wanted, Wilma said, “I want to be the fastest woman on the track on this earth” At the age of nine, against the advice of the doctors, she removed the brace and took the first step the doctors said she never would. At the age of thirteen, she entered her first race and came way, way last. And then she entered her second, and third and fourth and came way, way last until a day came when she came in first

At the age of fifteen she went to Tennessee State University where she met a coach by the name of Ed Temple. She told him, “I want to be the fastest woman on the track on this earth.” Temple said, “With your spirit nobody can stop you and besides, I will help you.”

The day came when she was at the Olympics and at the Olympics you are you are matched with the best of the best. Wilma was matched against a woman named Jutta Heine who had never been beaten. The first event was 100-meter race. Wilma beat Jutta Heine and won her first gold medal. The second event was the 200 –meter race and Wilma beat Jutta a second time and won her second gold medal. The third event was the 400 –meter relay and she was racing against Jutta one more time. In the relay, the fastest person always runs the last lap and they both anchored their teams, the first three people

ran and changed the baton easily. When it came to Wilma's turn, she dropped the baton. Wilma saw Jutta shoot up at the other end: she picked the baton, ran like a machine, beat Jutta a third time and won her third gold medal. It became history: That a paralytic woman became the fastest woman on this earth at the 1960 Olympics

Discussion

Teacher discuss with students about the success story of the above two legends how they overcome all obstacles came in their journey, worked hard and always were optimistic of victory in order to reach their dream. They should take example and inspiration from them.

B2: Teacher shall guide students for research and do presentation for the life history of personalities who become successful by hard work and optimism

Divide students into groups and give the name of famous personalities who became successful by working hard and maintain a positive mind-set. Ask students to research and make a presentation for the class where every group members will participate. Each group can be given 10 minutes if there are 5 students in a group

1. Abraham Lincoln
2. Walt Disney
3. Azim Premji
4. Narayan Moorthy
5. Dhirubai Ambani
6. Abdul Kalam

V: C:Assignment

C1: Read autobiography of famous personalities and write reviews

Resources

References:

1. <https://www.edsys.in/motivational-stories-for-students/#>
2. <https://www.azimpremjifoundationpuducherry.org/resource-catalogues/multiplication-fish-tale>
3. Ncert Textbook, Reference books, (R.D Sharma, R.S.Aggarwal)

Topic	Values / Life skills integrated & imbibed	Activities
Shape and Angles	<p>Core Values considered : Harmony & Co existence</p> <p>Other Sub-Values: patience, respect, peace & happiness.</p> <p>Life skills: Spatial skills, creativity, observation, presentation.</p>	<p>Value integration Activities:-</p> <ol style="list-style-type: none"> 1. Discussion in the class room , doing activities, showing video to revise the previous knowledge of students 2. PPT or showing images to demonstrate the harmony & co existence 3. Discussion & explanation and showing short movies to inculcate the value of harmony & coexistence in students 4. Assignment: Teacher can make class into 4 groups and give assignment <ol style="list-style-type: none"> 1. Identify harmony in nature and make presentation for the class 2. Identify harmony in daily life/at home/school & make presentation 3. Identify harmony in space and make presentation 4. Identify harmony in inclusiveness(Grant Parents/under privileged/inter-culture)

Materials / Resources needed

Value Integration:-

- 1.Images of harmony and co existence
- 2.Facilities and Equipment to show videos and for conducting activities
- 3.BB, Pen
- 4.Ncert Text Book, Reference books,(R.D Sharma , R.S.Aggarwal)

Description (of the points of discussion)

Value Integration:-

In this chapter the activities and games are incorporated in such a manner that students learn the value of Harmony which is essential for co-existence and being happy. The ability to recognize Shapes & Angles in the surrounding environment helps one to realize how living and non-living things live together in harmony. By observation students learn how being in harmony is important to lead a stable and peaceful life. Living in harmony with friends, family relatives, society and nature gives peace and happiness.

The key discussions are:

1. By doing discussion in the class room and by doing activities, showing video teacher shall revise the previous knowledge of students
2. By using PPT or showing images teacher shall demonstrate the harmony & co existence to students
3. By discussion & explanation and by showing short movies teacher shall inculcate the value of harmony & coexistence in students
4. Assignment:
Teacher can make class into 4 groups and give assignment
 1. Identify harmony in nature and make presentation for the class
 2. Identify harmony in daily life/at home/school & make presentation
 3. Identify harmony in space and make presentation
 4. Identify harmony in inclusiveness(Grant Parents/under privileged/inter-culture)

Unit 2
Shapes & Angles
Harmony & Co existence

I. Introduction

The lesson “Shapes & Angles” gives students a sense of how angles determine the shape of a geometrical figure. Understand basic concept of types of angles like acute, obtuse, right angles through different pictures, garden, object, and classroom. Students observe and learn that different shapes are made stronger by using diagonal beams, Triangle shapes are strong and do not change easily.

Through the topic “**Shapes & Angles**” the teacher can inculcate the value of Harmony which is essential for co-existence and being happy. The ability to recognize Shapes & Angles in the surrounding environment helps one to realize how living and non-living things live together in harmony. By observation students learn how being in harmony is important to lead a stable and peaceful life. Living in harmony with friends, family relatives, society and nature gives peace and happiness.

II. Learning Objectives / Outcomes

Through this unit, the students will achieve the following grade appropriate academic and value based goals:

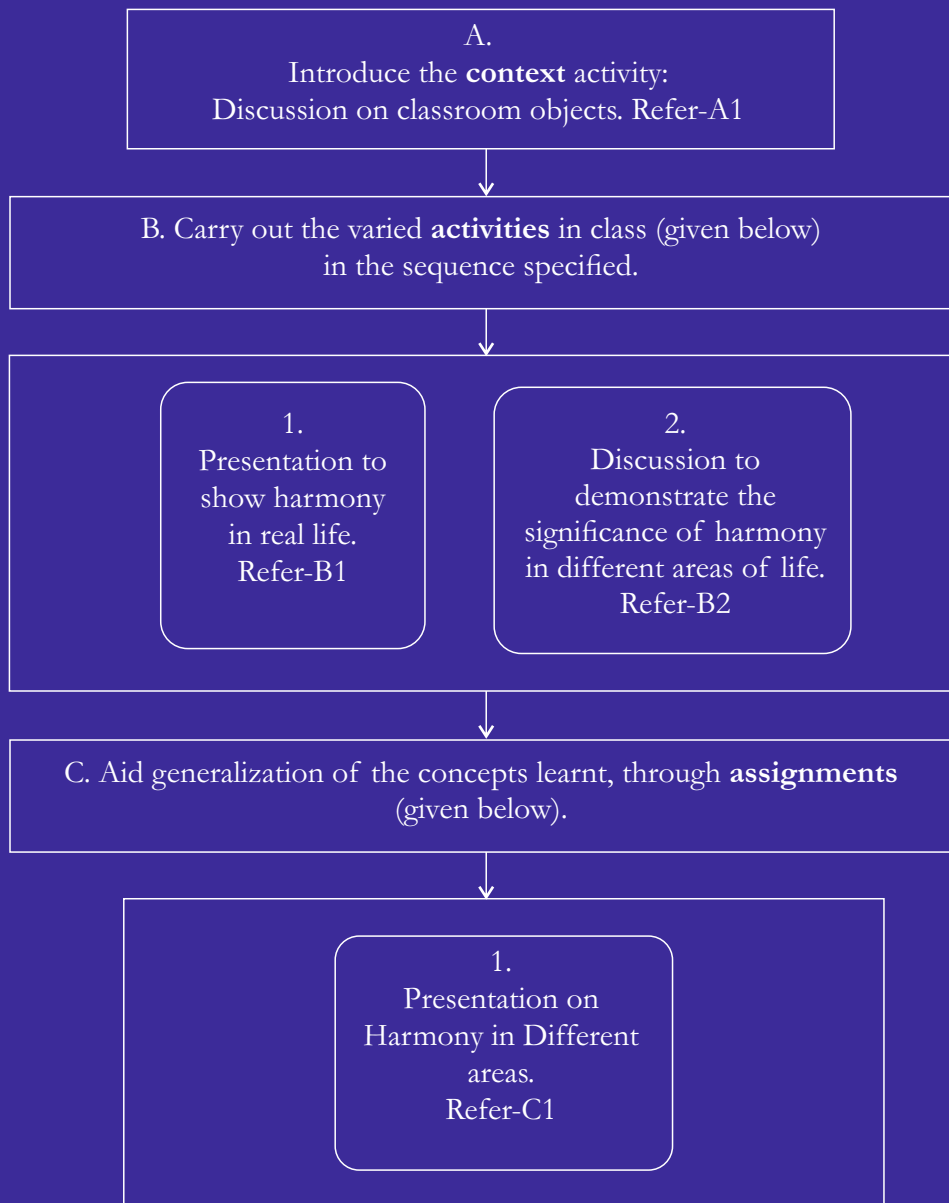
- Identify angles & classify angles into right, acute and obtuse angles
- Represent right, acute and obtuse angle through drawing
- Get a sense of how angles determine the shape of polygon
- Learn that shapes can differ even when the number of sides are same
- Identify open and closed figures
- Incorporate the value of maintaining peace with our surrounding environment and develop a harmonious relationship with the world.
- Inculcate the value of inclusivity and its importance in ensuring harmony in

relationships.

III. Process & Action Plan

Shapes and angles actually stand for a concept of convergence. Convergence always get a point of union and that is the point of harmony. Your role as a teacher is significant, as you have the power and the means to shape the lives under your guidance. One of the most important goals you may have as a teacher, is the character education of the students using the academic content at hand.

The values and life skills integration within this unit may follow the following process and action plan, as depicted in the flow chart on next page:



While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

This topic incorporates the core approach – Knowing, Understanding, Valuing and Acting the values embedded in the topic.

The core values being considered are Harmony & Co-Existence along with other sub-values like, patience, respect, peace & happiness.

The unit also provides the scope to develop the following life skills in the students: Spatial skills, creativity, observation, presentation.

IV. Activities & Related Discussion

A: The Context Activity for the Teacher to start:

Teacher can introduce the lesson by asking students to look around them (Class room, school, home and environment)

What do you see? Buildings, trees, books, tables, chairs, notebooks, sun, moon, stars, etc. Are they all same? Do they have the same shape? No, not all of them are alike. The shape of the sun is different from that of a book. The notebooks are of the same shape but different size. Today we will discuss the various shapes and the properties of these shapes and how it is connected with the principle of co-existence in our life

In order to elicit responses from the students, the teacher can form groups of students and conduct activities such as building shapes from matchsticks, ice-cream sticks or any other resources that will make the activity enjoyable.

1. Students realize that by changing angles one can change shapes even though the number of sides is same and this gives an idea that angles determine the shape of a figure. Students also learn number of sides, edges, & vertex of different shapes
2. Use of angle tester/divider to measure angles and concept of angle, its vertex, rays, different types of angles as per measure of angles. (Angle between sun & Flower, angles in leaves)
3. Triangular shape is used more for construction of towers & bridges
4. Different types Angles formed depends upon the time in clock, when you play carom & D- game
5. Formation of angles by our body parts when we do Yoga

6. Use of protractor for measurement angles.

Teacher can use the video to reiterate the concept by showing the following video, video (optional)

<https://www.youtube.com/watch?v=CzJ4Mn16Q3A>

B. Value based Activities

B1: Teacher shall show images representing harmony in real world

Living in harmony with nature will lead to a better future,



Peaceful Co-existence

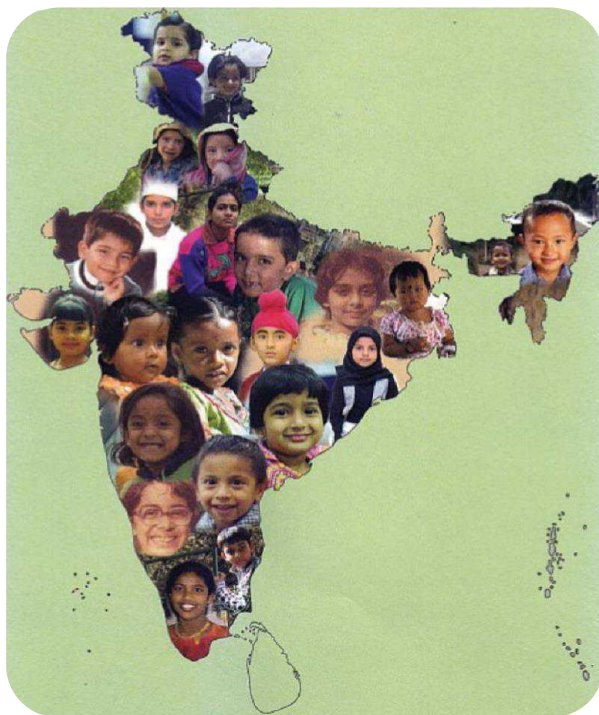
The flower gives nectar to the butterfly while the butterfly helps in carrying the pollen to



other flowers



Harmonious co-existence

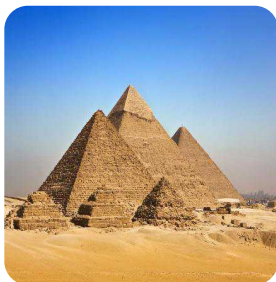
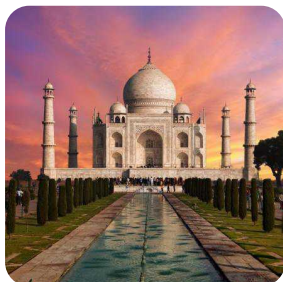
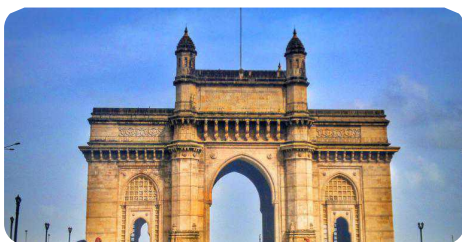
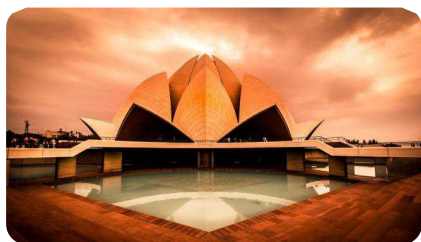


Harmonious co-existence: Inclusivity and diversity

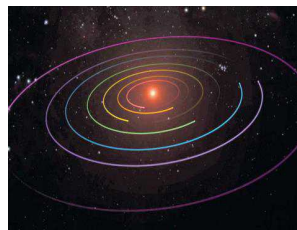
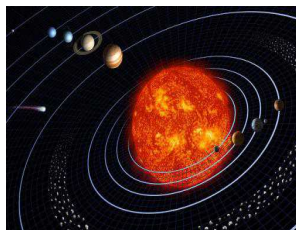
Harmonious Design: Beauty in design



Harmonious Design: Beauty in design



Harmony in Universe



Harmony in Relationships



B2: Teacher shall discuss with students significance of harmony in different areas in real Life

Harmony in Architecture

Geometry helps us in deciding what materials to use, what design to make and also plays a vital role in the construction process itself. Different houses and buildings are built in different geometric shapes to give a new look as well as to provide proper ventilation inside the house.

Here the teacher can emphasize about how different elements used in a construction come together to form a beautiful structure.

Harmony in Space Study and Astronomy

In astronomy, geometric shapes help to understand the location of different planets, solar system, and different stars. Our planets are spherical in shape. The orbits are oval in shape. Many geometrical principles and equipment are used in astronomy.

Here the teacher can emphasize about how the alignment of planets in the solar system create a harmonious pattern.

Harmony in Domestic Activities

Mathematics plays an important role in the culinary arts. There are helpful tools, such as measuring cups, measuring spoons and scales, to aid in food preparation.

Here the teacher can emphasize about how different ingredients come together to make something tasty.

From all the above examples teacher can explain how each one of us should apply this lesson in our lives. The teacher should emphasize that in order to maintain balance and lead a peaceful & happy life one should always strive to achieve harmony with their surroundings. Teacher can cite examples like academics or relationships with parents, friends, and relatives.

Teacher can also explain about the beauty and dignity of people with disabilities and other challenges. Here the teacher can emphasize on the importance of inculcating an attitude of inclusivity and how it is an important part of being in harmony with the world around you. This helps students understand the value of every human being and also teaches them that we are all made in the image and likeness of God. Our value does

not depend on our appearance, ability, or background.

(Click on the following link for movie on inclusivity) (Movie 1, Movie 2)

https://www.youtube.com/watch?v=_HIT_zWv_o4

<https://www.youtube.com/watch?v=QXY5TyCUTlo>

V. Assignments

Teacher can make class into 4 groups and give assignment

1. Identify harmony in nature and make presentation for the class
2. Identify harmony in daily life/at home/school & make presentation
3. Identify harmony in space and make presentation
4. Identify harmony in inclusiveness(Grant Parents/ under privileged/inter-culture)

Resources

References:

1. https://www.youtube.com/watch?v=_HIT_zWv_o4
2. <https://www.youtube.com/watch?v=QXY5TyCUTlo>
3. Ncert Textbook, Reference books, (R.D Sharma, R.S.Aggarwal)

Resources for Teachers:

3. <https://www.youtube.com/watch?v=CzJ4Mn16Q3A>

Unit 3

Topic	Values / Life skills integrated & imbibed	Activities
How Many Squares	<p>Core Values considered : Integrity, Accuracy, Creativity</p> <p>Other Sub-Values: honesty, patience, teamwork, perseverance, peace, confidence</p> <p>Life skills: Estimation, reasoning, thinking</p>	<p>Value integration Activities:-</p> <ol style="list-style-type: none"> 1.Hands on activity of measuring different object in the classroom and redecorating the classroom to revise previous knowledge of students. 2.Guide students to design a building plan to encourage creativity, accuracy and integrity 3.By narrating the story of the sculptor or by role play to be honest, accurate and excellent in whatever job- 5. Assignment: <ol style="list-style-type: none"> 1.Study on good effects of integrity& honesty 2.Study on bad effects of lack of integrity/dishonesty -real events or stories so that teacher can take a discussion in the classroom

Materials / Resources needed

Value Integration:-

1. Graph Paper, Colour pencils
2. Facilities and Equipment to show videos & conducting games
3. BB, Pen
4. Ncert Text Book, Reference books,(R.D Sharma , R.S.Aggarwal)

Description (of the points of discussion)

Value Integration:-

In this chapter the activities and games are incorporated in such a manner that children learn the importance of accuracy and integrity and while making different tile patterns from the basic shapes they become very creative.

The key discussions are:

- 1 By doing hands on activity of measuring different object in the classroom and redecorating the classroom teacher shall revise previous knowledge of students.
 2. By guiding students to design a building plan teacher encourage creativity, accuracy and integrity of their work
 - 3.By narrating the story of the sculptor or by role play :- This activity teaches students to be honest, accurate and excellent in whatever job they do will give satisfaction to them.
5. Assignment:
- 1.Study on good effects of integrity& honesty
 - 2.Study on bad effects of disintegrity/dishonesty -real events or stories so that teacher can take a discussion in the classroom

Unit3**How Many Squares****Integrity, Accuracy, Creativity****I. Introduction**

This chapter teaches the concept of perimeter and area of simple geometric figures. Students learn to measure the area of regular and irregular figures using 1 cm/1-unit square grid, this enabling them to use relevant units to measure in the real-world scenarios. Through this lesson children learn to solve simple problems related to measurement of area and perimeter in real life.

In addition to hands on activities like measuring area and perimeter of different objects or solving sums related to this lesson, students also acquire the importance of accuracy and integrity and while making different tile patterns from the basic shapes they become very creative.

II. Learning Objectives / Outcomes

Through this unit, the students will achieve the following grade appropriate academic and value based goals:

- Learn the concept of area and perimeter and compare the area and perimeter of different figures.
- To measure the area of regular and irregular figures using 1 cm/1 unit square grid or geo board.
- Able to find perimeter of given figures with given dimensions and express its relevant unit and derive formula for finding the perimeter and area of rectangle and square

- Able to modify basic shapes to create different tiling shapes and solve simple problems related to measurement of area and perimeter in real life.

III. Process & Action Plan

Through this lesson teacher shall motivate children do work with integrity and accuracy. We sometimes get distracted from the path of right but the moment we understand our mistake we should take corrective steps and own up to the consequences of the mistakes, this is what it means to be a person of integrity.

Doing any work with accuracy and integrity will help not only in the delivery of excellence in output but also gives one the satisfaction and confidence in one's efficiency.

A. Introduce the **context** activity: **Revision**
Hands on activities of measuring class room
objects. Ref-A1& A2



B. Carry out the varied **activities** in class (given below)
in the sequence specified.



1.

Accuracy, Integrity & Creativity

Prepare a building plan on the
graph paper with rooms &
hallways by taking correct units
instill the importance of
accuracy, creativity & integrity.
Ref-B1

2.

**Accuracy, Integrity &
excellence**

Role Play/Story narration about
the sculptor register the
importance of accuracy,
integrity, excellence in leading a
satisfied life.
Ref-B2



C. Aid generalization of the concepts learnt, through **assignments**
(given below).



1.

Case study on good
effects on
integrity/Honesty.
Ref-C1

2.

Case study on bad
effects of
Integrity/Honesty.
Ref-C2

While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

This topic incorporates the core approach – Knowing, Understanding, Valuing and Acting the values embedded in the topic.

The core values being considered are Integrity, Accuracy & Creativity along with other sub-values like honesty, patience, teamwork, perseverance, peace, confidence

The unit also provides the scope to develop the following life skills in the students: Estimation, reasoning, thinking

IV. Activities & Related Discussion

A: Context Activity for the teacher to start

A1: Find the area and perimeter of:

(a) Mathematics textbook

(b) Top of student's table and other live objects available in the class room.

By using a standard object like their pencil, eraser, coins and write the measurement in terms of the object

E.g.

1. Area of Mathematics text book = 50 times of eraser
2. Area of students table = 20 times of mathematic text book
3. Perimeter of mathematics text book = 5 times of their pencil
4. Perimeter of students table = 15 times of their pencil

A2: Redecorating the Classroom

- Divide the classroom into a number of different square and rectangular segments of varying sizes by using colourful tape. Label the segments A, B, C, etc.
- Teacher shall divide students into groups for the activity. Students will be given an order form for new carpet/tile for the classroom. Carpet/tile can be ordered by the square foot.
- In small groups, students measure each segment and calculate the area in square cm. They then fill out their order form. For example, a completed order form might read Segment A: 120 square unit of blue carpet. Segment B: 70 square unit of blue tile, etc(Teacher shall guide students to make cardboard cuttings of squares shapes of 1 unit to measure the area as a standard measure, The actual side length is insignificant; we simply label it as 1 unit.)

Order Form

Choose Carpet or Tile

Choose Colour

How Many square centimeters are needed?

Section A-120 square units of red carpet

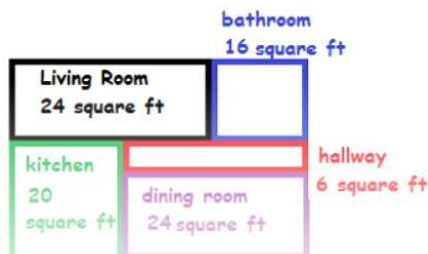
Section B – 70 square unit of blue tile

B. Value Based activities:

B1: Designing a Building

Area is very important in building projects. Show students a simple building plan, where rooms and hallways are drawn and labeled with their area.

Student's task is to use graph paper to design a building with at least five rooms of varying sizes. Rooms should be labeled with square footage and a scale (one square in the grid = one square foot).



Ref:<https://study.com/academy/lesson/area-of-rectangles-squares-lesson-plan.html>

After the students make different plans as per their imagination teacher shall discuss with students the significance of accuracy and honesty.

Discussion:

1. What will happen if you don't follow the proper measurement while drawing the plan?

Elicit the answers from students

Teacher shall explain to them the importance of accuracy & integrity. While doing the preparation of planning in groups they come out with different creative ideas of building plan.

- Accuracy can be one of the most important aspects to ensuring that a construction project runs smoothly. Accurate measurements, therefore, could save huge amounts of time, labour and money for people in the building trade.
- Teacher shall also site examples of dangers/insecurity of construction if the builders /planners if they don't follow the proper norms & measurements
- Without proper plan when people changes/alters the measurement it gives threat to the building
- Taking different examples teacher shall register among students the importance of accuracy and integrity.

B2: Story on Integrity: Teacher shall narrate the story of the sculptor (Teacher also can take it as Role Play for making it more effective)

Once a man visited a temple under construction in India. There he saw a sculptor making an idol of God. Seeing a similar idol nearby

The man asked, "Do you need two statues of same idol?"

The sculptor replied, "No, we need only one but the first one got damaged at last stage."

Man examined idol and found no apparent damage.

Man asked, "Where is the damage?"

Still busy with the work, Sculptor replied, "There is a scratch on the nose of idol.

Man got curious and asked, "Where are you going to install this idol?"

Sculptor replied, "It will be installed on top of pillar twenty feet high."

Man questioned, "If idol is going to be install that far, who is going to notice that little scratch on nose of idol?"

Sculptor stopped his work and looked up at the gentle man, smiled and said, "I will know it."

Discussion:

Teacher shall discuss with students the lessons/moral learned from the role play

1. Excellence in whatever job is assigned
2. Honesty and integrity on your job irrespective of whether someone else appreciates it or not.
3. Excellence, Accuracy & integrity is a drive/feeling should be from within not from outside.
4. Accuracy, integrity& excellence in job is not for someone else to notice but for your

own satisfaction

Reference:<https://moralstories26.com/best-moral-stories-excellence-in-work-and-honesty-story/>

V. C: Assignments

C1: Study on good effects of integrity/Honesty

C2: Study on bad effects of disintegrity/dishonesty -real events or stories so that teacher can take a discussion in the classroom

Resources

References:

1. <https://study.com/academy/lesson/area-of-rectangles-squares-lesson-plan.html>
2. Ncert Text Book, Reference books,(R.D Sharma , R.S.Aggarwal)
3. <https://moralstories26.com/best-moral-stories-excellence-in-work-and-honesty-story/>
4. Ncert Text Book, Reference books,(R.D Sharma , R.S.Aggarwal)

Unit 4

Topic	Values / Life skills integrated & imbibed	Activities
Parts and Wholes	<p>Core Values considered : Sharing, Caring, Patience</p> <p>Other Sub: empathy, kindness, cooperation</p> <p>Life skills: observation, thinking, problem solving, identification, comparison, measuring, computation and calculation</p>	<p>Value integration Activities:-</p> <ol style="list-style-type: none"> 1. Discussion and worksheets solving to revise their knowledge regarding time and routine activities they do regularly 2. Rangoli making activity to inculcate the significance team spirit, sharing and caring attitude 3. Book sharing activity in the classroom to instil in students the habit of sharing and inculcate reading habit. 4. Assignment: <ol style="list-style-type: none"> 1. Ask students to write a short paragraph on sharing is caring.

Materials / Resources needed

Value Integration:-

1. Worksheets for the context activity different colour powder for rangoli making
2. Facilities and Equipment to show videos.
3. NCERT Text books, reference books (R.D.Sharma, R.S Agarwal)
4. Pen, board, Duster.

Description (of the points of discussion)

Value Integration:-

In this chapter the activities and games are incorporated to encourage students to learn the quality of sharing impartially and thereby caring. Sharing not only shows care for others but also helps in self-development as a human being. It makes one selfless, humble and empathetic towards others, it further enables one to be a well-adjusted adult throughout life.

Children need to learn to share so they can build relationships, play cooperatively, take turns, negotiate and cope with disappointment. Sharing teaches children about compromise and fairness. It affects people in a good way because if you do something good to someone, they will feel loved and most likely do something good for someone else. Sharing also teaches them to be patient. Patience is necessary for success. It is said that “all good things come to those who wait” If we wish to achieve anything of significance, we cannot expect to achieve it overnight.

The key discussions are:

1. By discussion and worksheets teacher shall revise their knowledge regarding time and routine activities they do regularly

2. By Rangoli making activity teacher inculcate the significance team spirit, sharing and caring attitude

3. Book sharing activity in the classroom instil in students the habit of sharing and inculcate reading habit.

4. Assignment:

Ask students to write a short paragraph on sharing is caring. Give opportunity to students to read in the class so that every other student will be able to hear and understand the importance of sharing

Unit 4
Parts and Wholes
Sharing, Caring, Patience

I. Introduction

This lesson discusses about the concepts of part and whole of an object thereby instilling conceptual understanding of fractions. Students learn that parts are smaller than whole, series of parts make a whole. Students learn that fractional parts of an object are always equal. Students relate fraction in real life situations like relevance in money distribution, division of things among family members, friends and people, dividing time of a day as per each one's requirement.

Through this lesson students learn an important quality of sharing impartially and there by caring. Sharing not only shows care for others but also helps in self-development as a human being. It makes one selfless, humble and empathetic towards others, it further enables one to be a well-adjusted adult throughout life.

Children need to learn to share so they can build relationships, play cooperatively, take turns, negotiate and cope with disappointment. Sharing teaches children about compromise and fairness. It affects people in a good way because if you do something good to someone, they will feel loved and most likely do something good for someone else. Fraction also teaches them to be patient. Patience is necessary for success. It is said that “all good things come to those who wait” If we wish to achieve anything of significance, we cannot expect to achieve it overnight.

II. Learning Objectives / Outcomes

Through this unit, the students will achieve the following grade appropriate academic and value based goals

- Understanding the meaning of parts and whole, appreciate that parts are smaller than whole and series of parts make a whole, understand that fractional parts are always equal
- Find out patterns among various fractional parts and designs. Learn that parts make a whole and how to complete it, Learners use of fraction in their routine work.

- Developing sense of fractional parts which are equivalent too. Understand the relevance of fraction in money distribution.
- Develop an attitude of sharing and caring while dividing a whole into fractions.

Learn to be patient so that students find remedy for every trouble and solution to the problems faced by them.

III. Process & Action Plan

Part and Whole is a fundamental concept-may be a philosophical concept of life .While teaching the lesson “Parts and Wholes” by doing the activities mentioned in the manual teacher shall build the attitude of caring and sharing among the students along with academics. The values and life skills integration within this unit may follow the following process and action plan, as depicted in the flow chart on next page:

A. Introduce the **context** activity:
Discussion on classroom objects



B. Carry out the varied **activities** in class (given below)
in the sequence specified.



1.
Nature Walk

2.
Role Play –
Patterns in
nature

3.
Role Play –
patterns
in sandwich



C. Aid generalization of the concepts learnt, through **assignments**
(given below).



1.
Food Picture
book areas.

2.
Pattern
journal

While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

This topic incorporates the *core approach* – Knowing, Understanding, Valuing and Acting the values embedded in the topic.

The *core values* being considered are *sharing, caring and patience* along with other sub-values like *empathy, kindness, cooperation*

The unit also provides the scope to develop the following life skills in the students: *observation, thinking, problem solving, identification, comparison, measuring, computation and calculation*

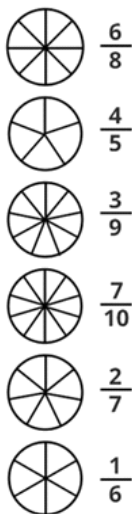
IV. Activities & Related Discussion

A. The context Activity for the teacher to start

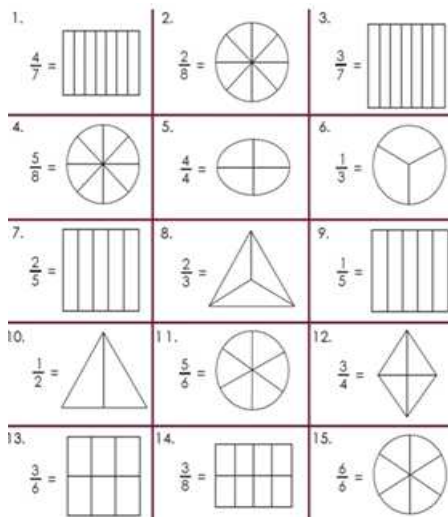
A1: Teacher will demonstrate different fractions by paper folding activity using square shaped colour card paper to revise the previous knowledge.

A2: Colour the fraction mentioned beside the picture

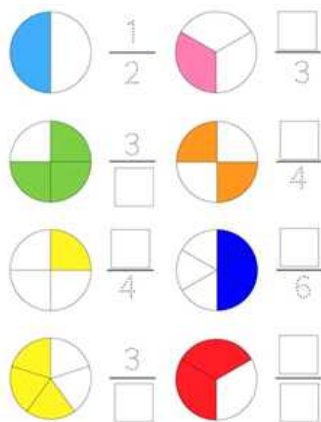
1



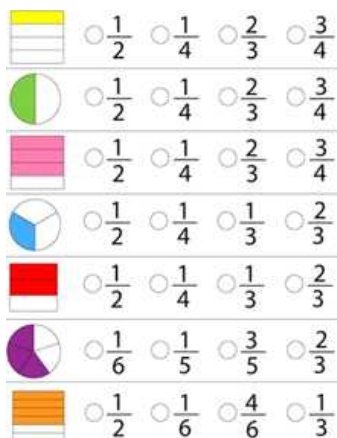
2.



3. Fill in the Blanks



4. Mark the correct Fraction



Reference:

1. <https://www.pinterest.ca/pin/30891947434229792/>
2. <https://www.pinterest.ca/pin/30891947434268069/>
3. <https://www.pinterest.ca/pin/574631233703049657/>
4. <https://www.pinterest.ca/pin/426505027211619082/>

B.Value Based Activities:

B1: Rangoli making activity in the class

1. Teacher shall divide the class into groups (4 students)
2. Instruct each group of students to bring one colour (Teacher shall decide the quantity)
3. Before rangoli making activity make each group put together will share their colours to all other group (Suppose if there are 7 groups each group will divide their colours in to 7 parts and share to 1/7 part to each group including their own group)
4. Teacher shall give place for each group and instruct them to make their design/ pattern to make rangoli and fill colours.
5. Teacher shall keep extra of all colours with him/her if any one couldn't bring colours teacher shall provide them

6. Give time to make beautiful rangoli by using different colours. After completion of rangoli activity by all students teacher shall appreciate students for their team spirit, sharing and caring attitude and the patience of doing beautiful rangoli. Teacher shall invite the head of the school and exhibit students work

Teacher shall explain to students that sharing brings love, care, passion, tolerance, interdependence, empathy, responsiveness, gratitude and harmony not only among the class but the families as well as in the societies and countries. We find a person, a society and a country more lovable and friendly if it shares his things and helps us in the time of distress and hardship

B2: Book sharing activity

1. Teacher instruct all students to bring one story book of their level preferably moral stories/autobiography of famous personality based on sharing, caring or patience
2. Teacher collects all the story books from students and put a name card in the last page of the book
3. Write numbers on the book from 1 to 30 depends upon the number of students
4. Now distribute the book to students for reading at home, do rotation everyday so that they will read a new book every day. If 30 students in the class students read 30 books in month by sharing each other book

Teacher shall discuss with students how sharing is helping them learn from each other book.

Note- There cannot be two books of the same kind, all books should be unique

V.C: Assignments

C1: Ask students to write a short paragraph on sharing is caring. Give opportunity to students to read in the class so that every other student will be able to hear and understand the importance of sharing

Resources

References:

1. <https://www.pinterest.ca/pin/30891947434229792/>
2. <https://www.pinterest.ca/pin/30891947434268069/>
3. <https://www.pinterest.ca/pin/574631233703049657/>
4. <https://www.pinterest.ca/pin/426505027211619082/>

Unit 5

Topic	Values / Life skills integrated & imbibed	Activities
Does it Looks the Same?	<p>Core Values considered: Equality</p> <p>Other Sub Values: diversity & respect</p> <p>Life skills: creativity, imagination, drawing</p>	<p>Value integration Activities:-</p> <ol style="list-style-type: none"> 1. Discussion , display of images to revise the previous knowledge of students 2. Discussion on equality/gender equality empower students 3. Story activity to inculcate that they should respect people as they are irrespective of caste colour or religion 4. Assignment: <p>Instruct students to make a drawing of equality as per their imagination and display on class bulletin board</p>

Materials / Resources needed

Value Integration:-

1. Poster or picture of butterfly cross section of lemon and order of rotation of rectangles
2. Facilities and Equipment to show videos
3. BB, Pen
4. Ncert Text Book, Reference books, (R.D Sharma , R.S. Aggarwal)

Description (of the points of discussion)

Value Integration:-

In this chapter the activities and games are incorporated in such a manner that helps students to reminds students regarding equality & fairness in life. Our nature and environment are taken care of the equality and fairness. Anything is beautiful & perfect because of equality & fairness in life. Therefore, being humans, it is our moral responsibility to carry forward the gift of nature into our life. We need to follow equality and fairness in every activity which makes our life beautiful

The key discussions are:

1.By discussion , display of images and by eliciting ,teacher shall revise the previous knowledge of students

2. By discussion on equality/gender equality teacher shall empower students and make them realise that they have equal opportunities.

3.By doing a story activity teacher shall inculcate that they should respect people as they are irrespective of caste colour or religion and be happy with themselves.

4. Assignment:

Instruct students to make a drawing of equality as per their imagination and display on class bulletin board

Unit 5
Does it Looks the Same
Equality

I. Introduction

The lesson “**Does it Looks the Same**” elaborates the concept about symmetry, When the exact reflection or mirror image of a line, shape or object gets created we say there is symmetry. The imaginary line that passes through the centre of the shape or object and divides it two identical halves. Any line splitting a shape into two parts such that the two parts are the same is called a line of symmetry. These parts are also said to be symmetrical to each other. This chapter also discuss about rotational symmetry.

Symmetry surrounds us. Look down at our body. Look at the shapes on the screen. Look at the buildings on your street. Look at your cat or dog. Symmetry is variously defined as "proportion," "perfect or harmonious proportions. Biologists believe the absence of asymmetry is an indicator of fitness (good genes), since only a healthy organism can maintain a symmetrical plan throughout its development in the face of environmental stresses, such as illness or lack of food. A symmetrical animal is usually a healthy animal. The same goes for humans. Our nature and environment are taken care of the equality and fairness. Anything is beautiful & perfect because of equality & fairness in life. Therefore, being humans, it is our moral responsibility to carry forward the gift of nature into our life. We need to follow equality and fairness in every activity which makes our life beautiful

II. Learning Objectives / Outcomes

Through this unit, the students will achieve the following grade appropriate academic and value based goals:

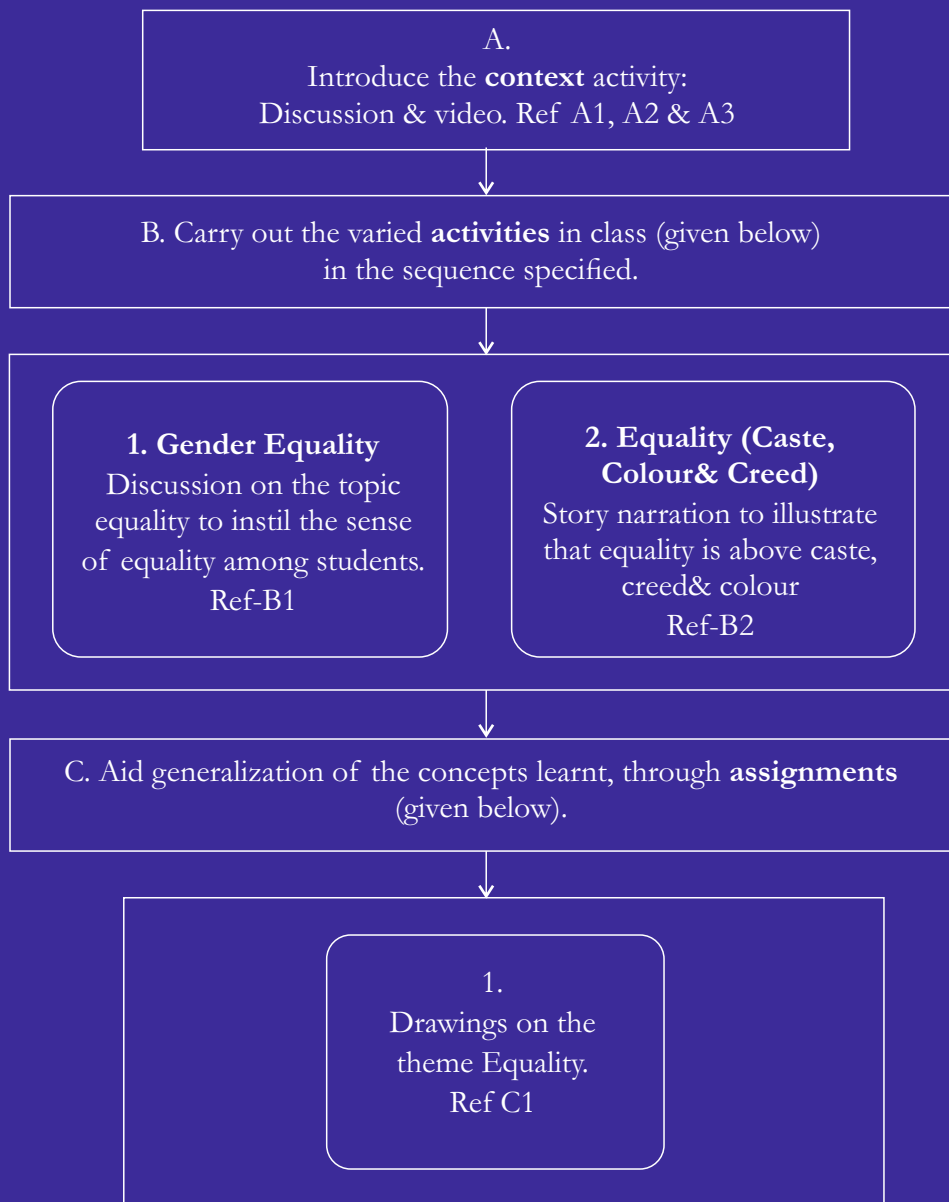
- Identify symmetrical figures, draw lines of symmetry, and explain why or why not a figure has symmetry.
- Learn the meaning of rotational symmetry, how the figures look after turning to (i) half turn (ii) One-fourth turn: (iii) One –third turn: (iv) One- sixth turn

- Predicts and draws the shapes how an object would look like after half turn, one fourth turn, one third turn and one –sixth turn
- Develop a sense of equality and fairness in all activities

III. Process & Action Plan

Nature around us has all forms of animate and inanimate objects and each has a space to occupy. All have equal rights to existence. Viewing everything alike is a skill. Teacher shall motivate and imbibe a sense of fairness and equality among students by using the activities given in the manual along with academics.

The values and life skills integration within this unit may follow the following process and action plan, as depicted in the flow chart on next page:



While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

This topic incorporates the *core approach* – Knowing, Understanding, Valuing and Acting the values embedded in the topic.

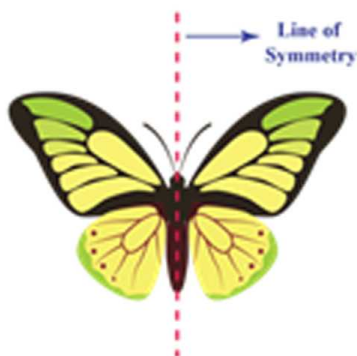
The *core values* being considered are *equality* along with other sub-values like *diversity* & *respect*

The unit also provides the scope to develop the following life skills in the students: *creativity, imagination, drawing*

IV. Activities & Related Discussion

A.Context Activity for the teacher to start:

A1: Discussion: Display the image of the butterfly



Reflection/Mirror image

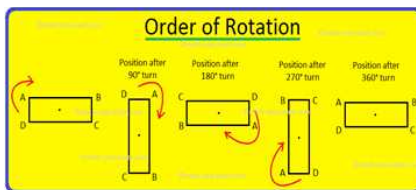
Ask the class to share some things they notice about the image. Some guiding questions you could ask are: What are the colors of the butterfly's wings? How are the wings shaped?

Once students touch on the idea that the wings match in some way, introduce the word "symmetry." Explain that something has symmetry if it can be split into two mirror-image halves. For example, a butterfly is symmetrical because you can fold a picture of it in half and see that both sides match

Ask about Real-life examples of symmetry, Elicit many examples from students

1. Reflection of trees in clear water and reflection of mountains in a lake.
2. Some human faces/body is the same on the left and right side.
3. People can also have a symmetrical mustache.

A2: Discussion: Display the Image of cross section of lemon & rectangle



Rotational Symmetry

Ask the class to share some things they notice about the image. Some guiding questions you could ask are: What happens when it rotates 90° , 180° , 270° and 360° two times it comes to the original position

Explain that a figure has rotational symmetry if it can be rotated by an angle between 0° and 360° so that the image coincides with the preimage. The angle of rotational symmetry is the smallest angle for which the figure can be rotated to coincide with itself. The order of symmetry is the number of times the figure coincides with itself as it rotates through 360°

Teacher shall show the video for introduction of the concept symmetry

<https://www.youtube.com/watch?v=s4tS-ZmpJfw>

B. Value Based Activities:

B1: Discussion on Equality

Teacher shall have a discussion session regarding equality with students on - **what is equality?**

Teacher shall explain that equality is about ensuring that every individual has an equal opportunity to make the most of their lives and talents. It is also the belief that no one should have poorer life chances because of the way they were born, where they come from, what they believe, or whether they have a disability.

Gender Equality: Teacher shall discuss with students and elicit from students their idea of gender equality and make them realise that

- Promoting Gender Equality will empower all children to realise that they should have equal opportunities, and will also encourage our younger generations to be more tolerant of differences reducing the occurrence of violence, abuse and harassment.
- Gender equality is crucial to a fair and just world. As children grow into adults it is important they follow their passions and never let gender stereotyping restrict their choices.
- We can empower young girls to be strong, assertive, self-confident and self-reliant, and teach boys to respect that empowerment, and to embrace and value it. Girls can have technical and physical strengths, and boys can have nurturing attitudes and artistic talents. No one should have to hide who they are. Promoting Gender Equality will have a direct influence on improving Mental Health, Social and Emotional Intelligence and aid in the prevention of the many different forms of abuse.

B2: Story narration Three Friends: Short Story written by: Zoila Mariano Faillace

There were three friends who really liked spend time together, but one of them was black, and wanted to be white. One of his friends investigated how to turn his friend into a white kid, and found out that there was faraway town where the sea could change the skin color of those swimming in it. He said to his friend: The three friends decided to go to the town to change the color of the friend from black to white. The three friends began their trip and finally reached the place they had talked about. When they reached the place, they realized that the sea was a chocolate sea, were excited and got swept up in their wishes, and two of them ended up in the chocolate sea, eating that delicious chocolate and decided to swim together.

He went into the sea, later, when they all were satisfied, went out, and the white kids realized that they were the ones that had changed their color instead of the black kid, they began to cry and said:

“We are so sorry, we just wanted you to be like us, God, help us to solve this, we will respect people as they are, we did not realize that what is in the heart is what matters”.

Little by little, the chocolate on their bodies was melting. They looked to the sky and said thanks to God. The kids learnt the lesson.

Discussion

Teacher shall ask the following questions and instill in them skin color does not matter, what matters is how we are inside our hearts. Religion, skin color or habits do not matter.

1. What was the difference of three friends?
2. Why did the friends go to the far away town?

Discussion

Teacher shall ask the following questions and instill in them skin color does not matter, what matters is how we are inside our hearts. Religion, skin color or habits do not matter.

1. What was the difference of three friends?
2. Why did the friends go to the far away town?
3. What happens to their plan once they reached the town?
4. What did happened after they swim in the sea?
5. What lesson did three friends learn after swimming in the Chocolate Sea?

<http://www.shortstories.net/for-kids/tales-about-equality/>

V. C: Assignments

C1: Instruct students to make a drawing of equality as per their imagination, display on class bulletin board

Resources

References:

- 1.<http://www.shortstories.net/for-kids/tales-about-equality/>
- 2.Ncert Textbook, Reference books,(R.D Sharma , R.S.Aggarwal

Topic	Values / Life skills integrated & imbibed	Activities
Be My Multiple, I'll be Your Factor	<p>Core Values considered : (Search for Truth)Right and wrong/ Good and bad</p> <p>Other Sub-Values: morality, curiosity, responsibility</p> <p>Life skills: Decision making, problem solving, and critical thinking, imagination& creativity</p>	<p>Value integration Activities:-</p> <ol style="list-style-type: none"> 1.Hands on activity of chart making by using their imagination and creativity by interactions and demonstrations and fun way. 2.Case study to instil in students analysing and decision making ability 3.Giving tasks to encourage students to search the true reason for the issues and problems faced by school and how to find solutions for it 4. Assignment: Case study on the use of Junk Food

Materials / Resources needed

Value Integration:-

1. Work sheet printouts, Chart papers
2. Facilities and Equipment to show videos & conducting games
3. BB, Pen
4. Ncert Text Book, Reference books,(R.D Sharma , R.S.Aggarwal)

Description (of the points of discussion)

Value Integration:-

In this chapter the activities and games are incorporated in such a manner that students learn how to analyse situations and identify root cause and consequences. In doing so, students learn how every action has its own unique consequences, with this knowledge and analysing mind students can make intelligent decisions during real world scenarios.

The key discussions are:

1. Hands on activity of chart making by using their imagination and creativity by interactions and demonstrations and fun way teacher shall revise the previous knowledge of students.
2. By doing a case study - instil in students analysing and decision making ability
3. By giving a task teacher encourage students to search the true reason for the issues and problems faced by school and how to find solutions for it
4. Assignment:
Case study on the use of Junk Food- Factors & Multiple solutions and make presentation in the class which will help them to follow healthy eating habits

Unit 6**Be My Multiple, I'll be Your Factor****(Search for Truth) Right and wrong/ Good and bad****I. Introduction**

The lesson **“Be My Multiple, I'll be Your Factor”** teaches children about multiples, factors and common multiples and common factors. It helps students to identify the factors and multiples of whole numbers.

Through this lesson students also learn how to analyse situations and identify root cause and consequences. In doing so, students learn how every action has its own unique consequences, with this knowledge and analysing mind students can make intelligent decisions during real world scenarios.

II. Learning Objectives / Outcomes

Through this unit, the students will achieve the following grade appropriate academic and value based goals:

- Knowledge about multiples and common multiples.
- Knowledge about factors a common factors
- Understand the difference between factors and multiples.
- Learn how to find factors and multiples of a number & common multiples and common factors
- Learn to search for truth of the situation

III. Process & Action Plan

Multiples and factors actually stand in real life for building relationships. The teacher's role is to explain the academic concept of factors and multiples and entice students to relate to real world scenarios by following the activities given below. In doing so, students will develop a new skill set in addition to widening of their world view.

The values and life skills integration within this unit may follow the following process and action plan, as depicted in the flow chart on next page

A. Introduce the **context** activity:
Skip counting chart preparation & worksheet. Ref-
A1 & A2



B. Carry out the varied **activities** in class (given below) in the sequence specified.



1.

Analysis and decision-making exercise

Case Study on lower score in math (Factors and Multiple solutions)
Ref-B1

2.

Analysis and decision-making exercise

Case study on school Improvement (Factors and multiple solutions). Ref-B2



C. Aid generalization of the concepts learnt, through **assignments** (given below).



1.

Case study on how consuming junk food affects one's health.

While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

This topic incorporates the *core approach* – Knowing, Understanding, Valuing and Acting the values embedded in the topic.

The *core values* being considered are *identifying good from bad, right from wrong* along with other sub-values like *morality, curiosity, responsibility*

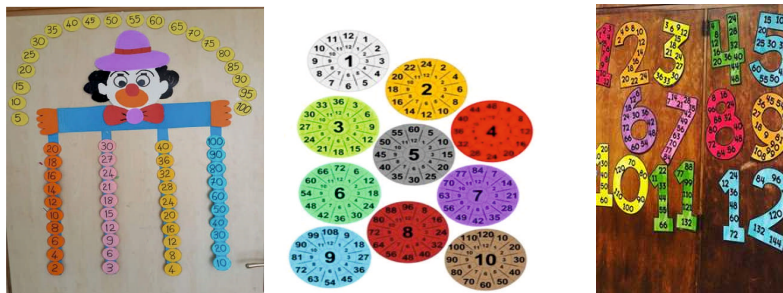
The unit also provides the scope to develop the following life skills in the students: *Decision making, problem solving, and critical thinking, imagination & creativity*

IV. Activities & Related Discussion

A. The context activity for the teacher to start:

A. Teacher shall divide students into groups and instruct them to make skip counting chart from 2 -12. Allow students to use their imagination and creativity so that they will enjoy and learn together.

E.g.



Picture source: <https://in.pinterest.com/pin/516436282262077578/>

A2: After revising the multiplication table teacher shall instruct students to solve the division and multiplication facts work sheet



Picture source: <https://in.pinterest.com/pin/74872412529500895/>

B: Value based activity

B1: Students were given a situation and ask them to find out a solution

Analysis and decision-making case study –

Students are given a situation that large numbers of students are scoring less marks in math in class 3. Find out the solution. The students will first critically think about the problem. Then they will find the factors responsible for the lower score. They will take a multiple decision to rectify the different factors responsible for lower score. This way factors and multiples help in finding solution in our daily life.

B2: Teacher shall give a task to students of finding out

Good factors about their school

Bad factors about their school

Find common factors in good & bad

Find multiple solutions and Least Common Multiple Solutions for the bad factors and give a report so that school can concentrate to work on bad factors.

So while studying factors and multiples teacher shall teach students to search for truth in every issues and problems

V.C: Assignments

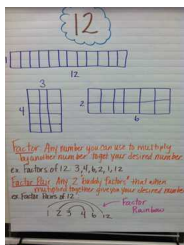
C1: Case study on the usage of junk food – Factors & Multiple Solutions and make presentation in the class which will help them to follow healthy eating habits

Resources

References:

1. Picture source: <https://in.pinterest.com/pin/516436282262077578/>
2. Picture source: <https://in.pinterest.com/pin/74872412529500895/>
3. Ncert Textbook, Reference books, (R.D Sharma , R.S.Aggarwal)

Resources for Teachers:



Topic	Values / Life skills integrated & imbibed	Activities
Can You See the Pattern?	<p>Core Values considered: Discipline & Curiosity</p> <p>Other Sub-Values: orderliness, harmony, curiosity, awareness</p> <p>Life skills: Creative thinking, observation and analysis</p>	<p>Value integration Activities:-</p> <ol style="list-style-type: none"> 1.Video and solution of worksheet teacher to revise the previous knowledge of patterns 2.Discuss and debate the importance of discipline required in daily life 3.Solution of puzzles and crosswords to instil curiosity among students 4.Assignment: 1. Prepare different types of puzzles

Materials / Resources needed

Value Integration:-

- 1.Worksheets solve in the class
- 2.Facilities and Equipment to show videos
- 3.NCERT Text Book, Reference books,(R.D Sharma , R.S.Aggarwal) P

Description (of the points of discussion)

Value Integration:-

In this chapter the activities and games are incorporated in such a manner that While learning the lesson students

learn to organise thoughts and establish order to their lives. As we begin to connect patterns in nature and life, they bring a sense of harmony to our minds. Patterns lead to and build math, vocabulary and cognitive concepts. Patterns are excellent in helping us establish priorities.

The key discussions are:

1.By showing video and by solving worksheet teacher revise the previous knowledge of patterns

2.Discuss and debate the importance of discipline required in daily life

3.By solving puzzles and crosswords teacher instil curiosity among students

4.Assignment:

1. Prepare different types of puzzles

Unit 7
Can You See the Pattern?
Discipline & Curiosity

I. Introduction

This lesson describes about different types of pattern students come across in daily life and realise that pattern is something that follows a rule while repeating or changing and pattern description is how a pattern starts and how it continues.

Patterns help us organize thoughts and establish order to our lives. As we begin to connect patterns in nature and life, they bring a sense of harmony to our minds. Patterns lead to and build math, vocabulary and cognitive concepts. Patterns are excellent in helping us establish priorities.

II. Learning Objectives / Outcomes

Through this unit, the students will achieve the following grade appropriate academic and value based goals:

- Observe and understand the pattern and able to continue the pattern by making a clockwise turn or anticlockwise, $1/2$ turn, $1/4$ turn as required.
- Recognize the basic unit which generates the pattern, Make patterns with numbers and letters and compute the given patterns using basic operation of mathematics
- Able to continue different number patterns and are able to understand calendar patterns
- Able to find Palindromes and solve number riddles
- Apply the knowledge to form patterns and integrate with drawing.

III. Process & Action Plan

Observing the patterns and imagining the following structure is an aspect of creativity and discipline. The teacher's role is to help students understand the importance of discipline in life and how creating a routing out of positive patterns will help one lead a happy life. Although discipline is important, one should always be curios to keep making changes and explore the impact it has on one's life. By doing so students can better understand themselves and therefore build inner peace.

The values and life skills integration within this unit may follow the following process and action plan, as depicted in the flow chart on next page:

A. Introduce the **context** activity:
Showing video & Solving worksheet.
Ref-A1 & A2



B. Carry out the varied **activities** in class (given below)
in the sequence specified.



1. Discipline

Discussion on the topic
Discipline to inculcate
the importance of
Discipline.
Ref-B1

2. Curiosity

Solving puzzles and
crosswords to inculcate
curiosity among
students.
Refer-B2



C. Aid generalization of the concepts learnt, through **assignments**
(given below).



1.

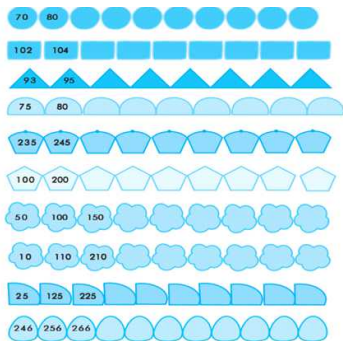
Preparation
of Puzzles &
Crosswords.
Refer-C1

While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

The *core values* being considered are **Discipline & Curiosity** along with other sub-values like *orderliness, harmony, curiosity, awareness*

IV. Activities & Related Discussion

Continue the pattern



B: Value Based Activities

B1: Inculcating the habit of **discipline** in life.

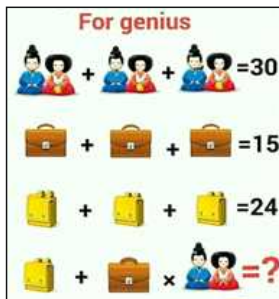
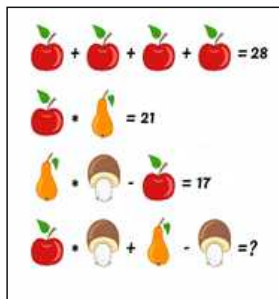
Teacher shall discuss with students the importance of discipline in life. Organized and consistent structure breeds discipline.

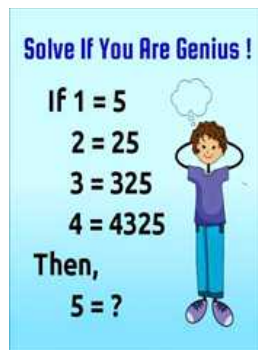
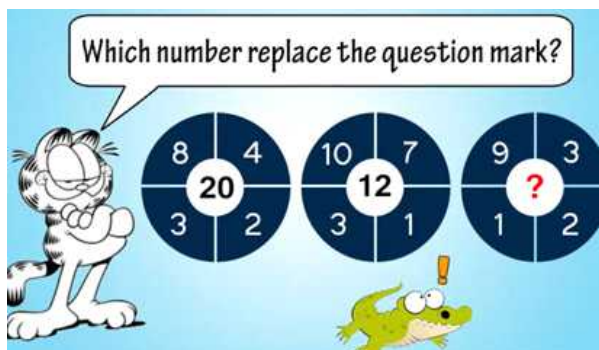
- Fixing a time for Waking up & Sleeping
- By setting a designated time for homework to be completed each day.
- Regular studies of daily syllabus
- Timely & Healthy eating habits
- Behaving politely with everyone

The routine will become a pattern and natural habit which will bring a discipline in one's life. Teacher shall discuss more examples of pattern to inculcate discipline among students.

B2: Inculcating curiosity among the students by practicing puzzles & crosswords

Teachers instruct to find out the answer and the rule used in each case. This puzzle is a brain teaser and helps them to instill curiosity among students.





<https://gpuzzles.com/mind-teasers/maths-grid-puzzle-for-kids/>

<https://www.pinterest.co.uk/pin/77053843605508021/>

<https://in.pinterest.com/pin/701154235713135735/>

V. C: Assignments

C1: Preparation of different types of puzzles by using proper rules

Resources

References:

1. <https://gpuzzles.com/mind-teasers/maths-grid-puzzle-for-kids/>
2. <https://www.pinterest.co.uk/pin/77053843605508021/>
3. <https://in.pinterest.com/pin/701154235713135735/>
4. Ncert Textbook, Reference books, (R.D Sharma , R.S.Aggarwal)

Ans: $9 - 3 = 6$, $1 + 2 = 3$, $6 \times 3 = 18$

Unit 8

Topic	Values / Life skills integrated & imbibed	Activities
Mapping Your Way	<p>Core Values considered: Unity, diversity and confidence</p> <p>Other Sub-Values: tolerance, teamwork, coordination, cooperation, trust and curiosity.</p> <p>Life skills: drawing, calculation, estimation, navigation.</p>	<p>Value integration Activities:-</p> <ol style="list-style-type: none"> 1. Games & role plays to revise the previous knowledge of students. 2. Encourage research on diversity and present them in class by using power point 3. Assigning responsibility of planning to instil confidence and curiosity among students 4. Organising a treasure hunt game teacher instil confidence and curiosity among students 5. Assignment Preparation unity & diversity charts for the class.

Materials / Resources needed

Value Integration:-

1. Maps to conduct treasure hunt game
2. Facilities and Equipment to show videos
3. BB, Pen, Duster
4. Ncert Text Book, Reference books, (R.D Sharma , R.S. Aggarwal)

Description (of the points of discussion)

Value Integration:-

In this chapter the activities and games are incorporated in such a manner that children learn aware the different cultures and the co-existence of unity and diversity. Students gain confidence when they solve the practical problems of directions.

Unity in diversity is a concept which signifies unity among persons who have certain differences among them. The differences can be on the basis of culture, language, ideology religion etc. Interaction with diverse culture and people provides an opportunity for exposure, further this interaction build up tolerance and respect to opinion of others. Unity in Diversity is very useful for a diverse country. The concept allows people of different religions, cultures, castes, to live together peacefully.

The key discussions are:

1.By using games & role plays teacher shall revise the previous knowledge of students.

2..By encouraging students to do research on diversity and present them in class by using power point teacher shall inculcate in students the importance of diversity, co-existence unity & team spirit among students

3.by assigning responsibility of planning teacher instil confidence and curiosity among students

4.By organising a treasure hunt game teacher instil confidence and curiosity among students

5. Assignment

Preparation unity & diversity charts for the class

Unit 8**Mapping Your Way****Unity, diversity and confidence****I. Introduction**

This chapter “**Mapping Your way**” is all about maps and directions. through suitable example students are made aware of different concepts like how to read maps, locate different places, reducing and enlarging maps, taking scales on map etc. While doing activities related to map of India teacher can ask students about dresses, languages, dances etc of different states and make them aware the different cultures and the co-existence of unity and diversity. Students gain confidence when they solve the practical problems of directions.

Unity in diversity is a concept which signifies unity among persons who have certain differences among them. The differences can be on the basis of culture, language, ideology religion etc. Interaction with diverse culture and people provides an opportunity for exposure, further this interaction build up tolerance and respect to opinion of others. Unity in Diversity is very useful for a diverse country. The concept allows people of different religions, cultures, castes, to live together peacefully. Unity in Diversity certainly enhances the quality of teamwork. This is because of the development of trust and bonding among people. As such the coordination and cooperation becomes very efficient.

II. Learning Objectives / Outcomes

Through this unit, the students will achieve the following grade appropriate academic and value based goals:

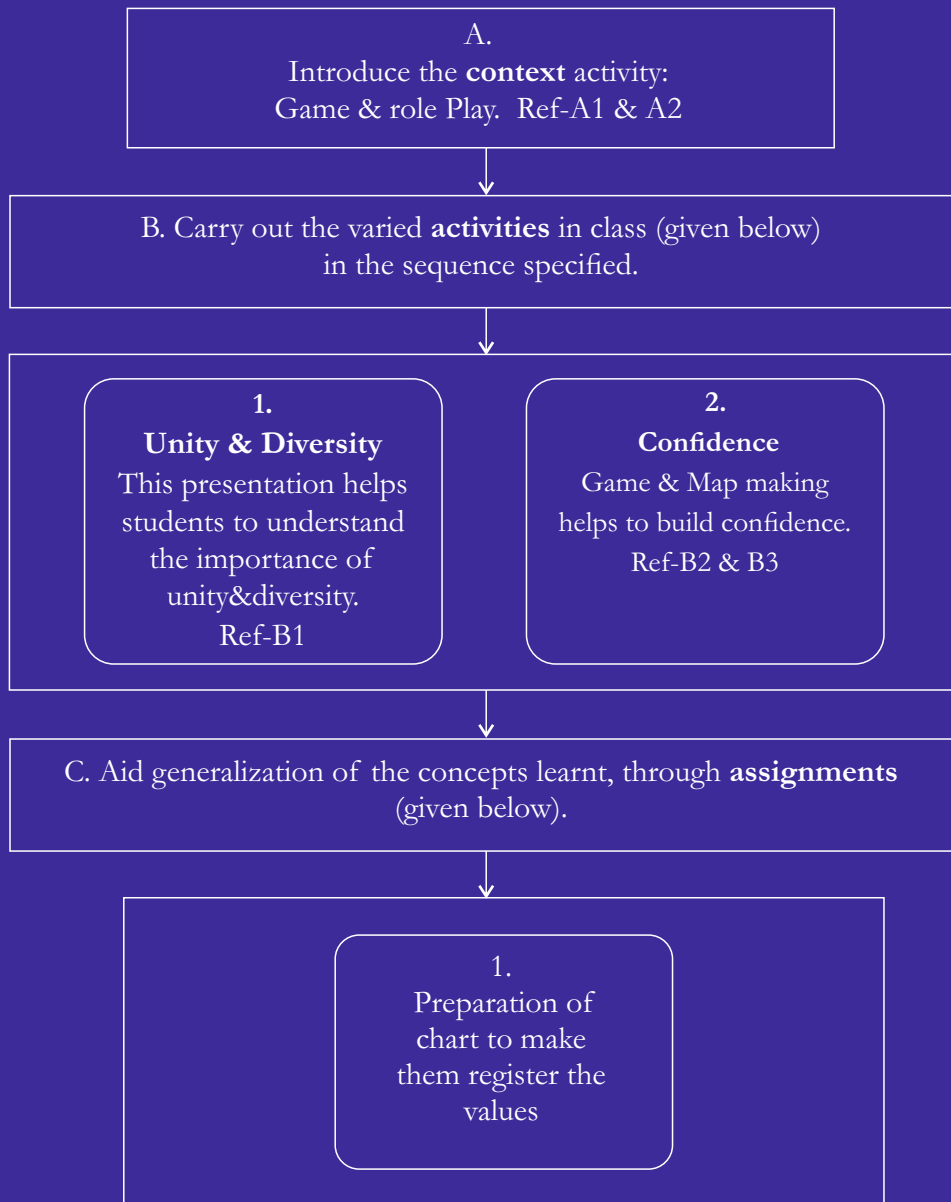
- Able to understand directions. Able to read maps, Able to enlarge and reduce maps
- Able to understand the concept of scale and locate different states in map of India and comprehend the map and find actual distances using scale of map
- Able to learn unity and diversity while studying maps and directions
- Acquire confidence and awareness while solving problem related to directions.
- To understand and use Directions-North, South, East & West in conversations.

- To familiarize with words like right, left, etc. required for instruction of Route map.
- To be able to create local map: Convert any top view picture of a location into map. Locating and spotting of places.
- To be able to connect 'distance measurement' and 'map' (reading Km, m, etc.)
- To be able to 'scale' the distances in the map.

III. Process & Action Plan

Each activity has a particular way of doing it and deciphering the meaning out of it is also something part of a matured outlook. Students need direction, structure and this chapter teaches them all of that. The Teacher's role is to guide students and help them understand the importance of unity in diversity.

The values and life skills integration within this unit may follow the following process



While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

This topic incorporates the *core approach* – Knowing, Understanding, Valuing and Acting the values embedded in the topic.

The *core values* being considered are *Unity and diversity and confidence* along with other sub-values like *tolerance, teamwork, coordination, cooperation, trust and curiosity*.

The unit also provides the scope to develop the following life skills in the students: *drawing, calculation, estimation, navigation*.

IV. Activities & Related Discussion

A. The Context activity for the teacher to start

A1: Game:

Make students to stand in their places and close their eyes.

Ask a student to “Turn right” or “Turn left”

Occasionally instructing them to “Turn left, turn left” or “Turn right, turn right” which should end up with everyone facing the back of the classroom.

After a series of instructions make them to open the eyes and self-assess.

Student standing in wrong direction gets out.

The students who stays till end is the winner

A2: Role Play/ Theatre activity for a given map

Teacher shall take the children outside the classroom/School ground and do the following activities

Make a group of two or three.

- 1) Give a Map: a simple map based on school ground different locations, with supporting vocabulary.
- 2) Make students to create conversation:

Example-1

A: Excuse me. How do I get to the (place in the given map)?

B: Turn left. Turn right at the 2nd corner. You'll see it on your left.

A: Thank you!

B: You're welcome.

- 3) Ask the students to demonstrate:
Students can enact with their creative skill set.

Example-2

1. In which direction does the sun set?
2. In which direction the sun rises.
3. When you are facing towards the sun which hand will show south direction?
4. When you are facing towards the sunset which hand will show the North direction?

B: Value Based Activity:

B1: Activity to teach unity and diversity

Teacher shall divide the class into 4-5 groups give name of the state to each groups. Ask each group of students to prepare a presentation or note of dresses ,languages ,dances, food habits etc. of the state and mention the states on each direction (Like which state is in the north, south, west & east). After collecting all information team wise students can present in the class either by PPT or reading their finding for the class. But make sure the participation of every student of the team. This will help all students of the class to understand the culture of different states and its diversity.

Then teacher shall explain the benefits of diversity,co-existence and unity by eliciting from students

- How many teachers& students from different states (Kerala, Tamilnadu, Bengal, Maharashtra)
- Which food items do you like? (Idli-Sambhar,vada Pav,Biriyani,samosa)
- Which dance forms do you like(Mohiniattam,bharata natyam, kuchhipudi, Kathakali)

Teacher shall create more examples and instill in children how diversity help them to make unity and there by happily coexisting in India)

B2: Activity to build confidence among students

Teacher shall divide the class into 4-5 groups give name of a Picnic Spot to each group. Ask students to make a road map and planning to visit the place. They need to take care of landmark, directions, distance, scale etc. Teacher shall promise them that she will take students to the best spot decided by the students. This will boost students to work meticulously on the plan, gain confidence and curiosity

B3: Treasure hunt Game

The map of the school campus with hidden treasure is generated. The team has to spot the right card from each location and complete in numerical order. The team that completes first will be the winners.

Example: Teacher shall prepare map of different types and give to teams



1. Go from the ship to the cactus, then turn left and walk 1 Km
2. Go to the light house then turn right and walk 2km
3. Turn right and walk 3 km
4. Go to the cave, then turn left and walk 1 Km
5. To find the treasure go 3 Km south, then turn right and walk 1 Km more

Ref:<https://www.matific.com/in/en-in/home/maths-activities/episode/treasure-island-using-a-map-grid-turning-left-and-right/>

V. C: Assignments

C1: Preparation unity & diversity charts for the class

Resources

References:

1. Ncert Textbook, Reference books,(R.D Sharma , R.S.Aggarwal)
2. <https://www.matific.com/in/en-in/home/maths-activities/episode/treasure-island-using-a-map-grid-turning-left-and-right/>

Unit 9

Topic	Values / Life skills integrated & imbibed	Activities
Boxes and Sketches	<p>Core Values considered : Perspective thinking</p> <p>Other Sub-Values: confidence, optimism, respect and tolerance</p> <p>Life skills: creativity, drawing, social interaction</p>	<p>Value integration Activities:-</p> <ol style="list-style-type: none"> 1. Demonstration of concrete objects or charts and hands on activities to revise the previous knowledge of students. 2. Provision of different situations to elicit different perspectives perceptiveness among students 3. Discussion of the topic diversity 4. Assignment: Prepare a small essay of unity in Diversity in India. While doing this students learn the rich culture of India.

Materials / Resources needed

Value Integration:-

1. BB, Pen, Duster,
2. Facilities and Equipment to show videos.
3. NCERT Text books, reference books (R.D. Sharma, R.S Agarwal)
4. Worksheet of puzzles
5. Charts and colour card paper to make cut outs.

Description (of the points of discussion)

Value Integration:-

In this chapter the activities and games are incorporated to teach students importance concept of perspective and diversity. The process of appreciating and analysing multiple and diverse perspectives is a developed skill that must be reinforced over time

Perspective-taking is the act of perceiving a situation or understanding a concept from an alternative point of view. Incorporating perspective-taking and the analysis of differing viewpoints into the curriculum will provide students with situational context for learning the new skill.

It is important to provide students with opportunities to learn from the diverse and varied experiences of each other. Students who show creativity and flexibility in their thinking are able to solve problems and become more confident. The ability to understand another person's perspective is beneficial for all forms of social interactions and relationships.

The key discussions are:

1.By using concrete objects or using charts and by doing hands on activities teacher shall revise the previous knowledge of students.

2.Through providing different situations and eliciting different perspectives teacher shall instil the value of

perceptiveness among students

3.Through discussion on the topic diversity teacher shall demonstrate the significance of being a true Indian where diverse culture of people living peacefully for many centuries

4.Assignment:

Prepare a small essay of unity in Diversity in India. While doing this students learn the rich culture of India.

Unit 9
Boxes and Sketches
Perspective thinking

I. Introduction

This chapter “**Boxes and Sketches**” focuses on visualization of 3 dimensional shapes and how they can be represented on paper. What is the use of 2D and 3D shapes? Where are these shapes being used? This lesson makes students to think differently. Therefore, this lesson teaches students the importance concept of perspective and diversity. The process of appreciating and analysing multiple and diverse perspectives is a developed skill that must be reinforced over time

Perspective-taking is the act of perceiving a situation or understanding a concept from an alternative point of view. Incorporating perspective-taking and the analysis of differing viewpoints into the curriculum will provide students with situational context for learning the new skill.

It is important to provide students with opportunities to learn from the diverse and varied experiences of each other. Students who show creativity and flexibility in their thinking are able to solve problems and become more confident. The ability to understand another person's perspective is beneficial for all forms of social interactions and relationships.

II. Learning Objectives / Outcomes

Through this unit, the students will achieve the following grade appropriate academic and value based goals:

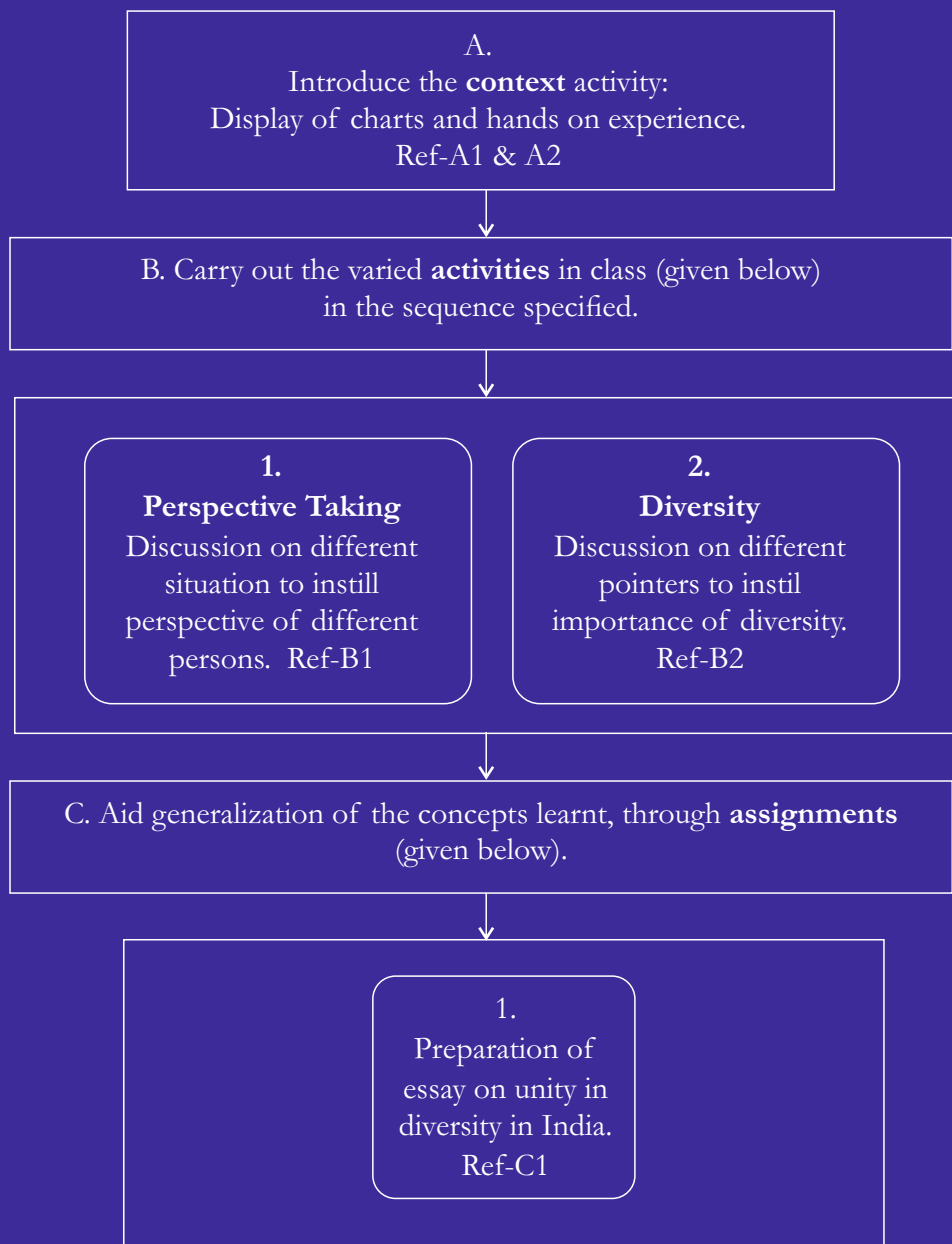
- Able to visualize the net of box and make the nets of cube and open box.
- Able to make deep drawings of a cube and house.
- Able to see the difference between deep drawings and layout plans and differentiate between 2-dimensional and 3-dimensional shapes.
- Identify edges and corners of three dimensional shapes.

- Able to acquire perspective taking and diversity

III. Process & Action Plan

Dimensions and understanding them is a skill. The teacher's role is to help students identify the different perspectives that one can look at while handling a real-world scenario. One of the most important goals you may have as a teacher, is the character education of the students using the academic content at hand.

The values and life skills integration within this unit may follow the following process



While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

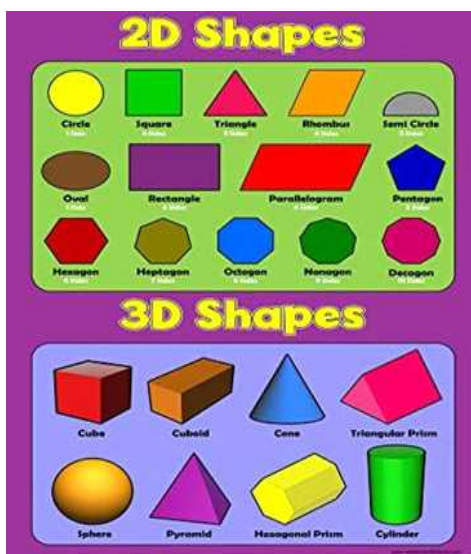
This topic incorporates the *core approach* – Knowing, Understanding, Valuing and Acting the values embedded in the topic.

The *core values* being considered are *perspective taking and diversity* along with other sub-values like *confidence, optimism, respect and tolerance*

The unit also provides the scope to develop the following life skills in the students: *creativity, drawing, social interaction*

IV. Activities & Related Discussion

A: Context Activity for the teacher to start:



A1: Teacher shall show either by using chart or by bringing concrete objects in the class and show them the 2D & 3 D shapes in the class room and make them understand the difference.

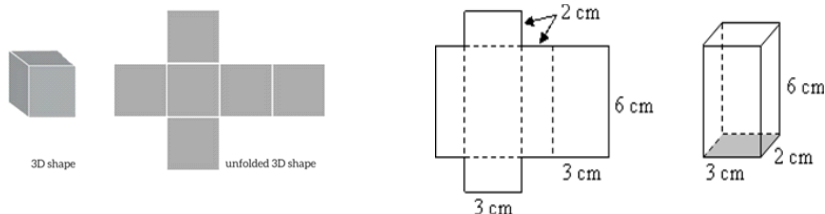
Once they realise the difference of 3D & 2D shapes it is easy for the teacher to explain the concept. Teacher shall show different types of boxes in the class room and make students to unfold/ open in the class room, removed the extra flaps so the cut-out looked like shown below.

A2: Teacher instructs students to make the cut outs and make boxes by taking proper measurements.

The spatial understanding is an inherent idea that is provoked through hands on

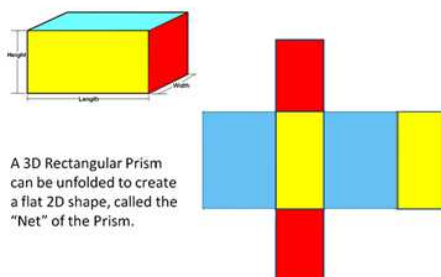
activity in this lesson

Source:



1. <http://passyworldofmathematics.com/total-surface-area/>

Rectangular Prism



2. <https://www.sculpteo.com/en/3d-learning-hub/create-3d-file/fix-non-manifold-geometry/>

B. Value based activities:

B1: Perspective taking –Discussion

Teacher shall discuss with students about the different perspective of an object when we look from different positions.

Perspective-taking refers to a person's ability to consider a situation from a different point of view. It requires you to put yourself in the other person's position and imagine what you would feel, think, or do if you were in that situation. When you are able to imagine a situation from someone else's perspective, you can gain a better understanding of someone else's motives or change your own behaviour so you don't offend someone

Perspective Taking {and its related skills} are very important skills for children to learn because they need these skills to relate to others, make others feel comfortable around them, and to influence others in a positive way.

Examples:

Note: You do not have to agree with someone, to understand their perspective.

Understanding someone's perspective means that you can cognitively understand why they are doing, thinking or saying something; but it does not mean that you have to agree with it.

1. Homework given to students by teacher

Teachers Perspective: Teacher wants her students to practice their academic skills.

Students Perspective: Teacher shall ask questions to find out about different perspective.

2. Parents scold students for watching TV continuously

Parents Perspective: Parents do not want her children to get addicted to TV & miss out academics & playing outside

Students Perspective: Teacher shall ask questions to find out different perspective.

Why do you think he did that? Why do you think she said that? What do you think they were feeling?

B2: Diversity - Discussion

Teacher shall discuss with students when we look at an object in different position the view changes. The shape, color and the total appearance is different. Similarly, in our journey we meet different people, people from different states, different countries, different food habits, different dressing styles etc. How being a student they need to respect and learn from them

In India, people of diverse religions, cultures, castes, sects, etc. have been living together. Furthermore, they have been living together for many centuries.

This certainly shows the intense tolerance and unity of the Indian people. Hence, India is a country which perfectly demonstrates Unity in Diversity.

In conclusion, Unity in Diversity is an integral part of ethics and morality. The concept is certainly essential for the future progress of human society. People must display faith in this concept. Above all, they must keep aside feelings of racism, discrimination, and oppression. Without Unity in Diversity, the demise of humanity will certainly happen. India is a brilliant example of Unity in Diversity. So teacher shall make a feeling in children that they should feel proud that they are born in India a land of diverse culture where people have been living together peacefully for many centuries.

V.C: Assignments

CI: Prepare a small essay of unity in Diversity in India

Resources

References:

1. <http://passyworldofmathematics.com/total-surface-area/>
2. <https://www.sculpteo.com/en/3d-learning-hub/create-3d-file/fix-non-manifold-geometry/>
3. Ncert Textbook, Reference books, (R.D Sharma, R.S. Aggarwal)

Topic	Values / Life skills integrated & imbibed	Activities
Tenths and Hundredths	<p>Core Values considered : Interconnectedness, Interdependence</p> <p>Other Sub-Values: accuracy, trust, relationship</p> <p>Life skills: counting, observation & thinking, problem solving</p>	<p>Value integration Activities:-</p> <ol style="list-style-type: none"> 1.Solution of worksheets for revision and introduction of new concept. 2.Video and discussion to demonstrate interconnectedness and interdependence in nature ,classroom and at home. 3 Video and discussion to register the value of interdependence among them. 4.Assignment: Write the importance of Interdependence with the community/Society

Materials / Resources needed

Value Integration:-

1. BB, Pen, board, Duster.
2. Worksheet of puzzles
3. Papers, colour pencil
4. Facilities and Equipment to show videos.
5. NCERT Text books, reference books (R.D.Sharma, R.S Agarwal)

Description (of the points of discussion)

Value Integration:-

In this chapter the activities and games are incorporated to help children in learning the significance of interdependence and interconnectedness through this lesson. Interdependence provides support to individuals allowing them the strength to support others and to focus on their own personal growth

The key discussions are:

1. Worksheets are used for revision and introduction of new concept.
2. By showing video and discussion teacher demonstrate interconnectedness and interdependence in nature ,classroom and at home.
3. By showing video and after through discussion teacher shall register the value of interdependence among them.
4. Assignment:
.Write the importance of Interdependence with the community/Society

Unit 10**Tenths and Hundredths****Interconnectedness, Interdependence****I. Introduction**

The lesson “**Tenths and Hundredths**” focuses on the decimals as fractions with denominators 10 and 100. This chapter discusses conversion of a decimal into fraction and vice versa and usage of decimals in temperature measurements and money transaction. This chapter further discusses about the interdependence /interconnectedness between cm and mm and the currency of other countries and their value in Indian currency

Children learn the significance of interdependence and interconnectedness through this lesson. Interdependence provides support to individuals allowing them the strength to support others and to focus on their own personal growth

II. Learning Objectives / Outcomes

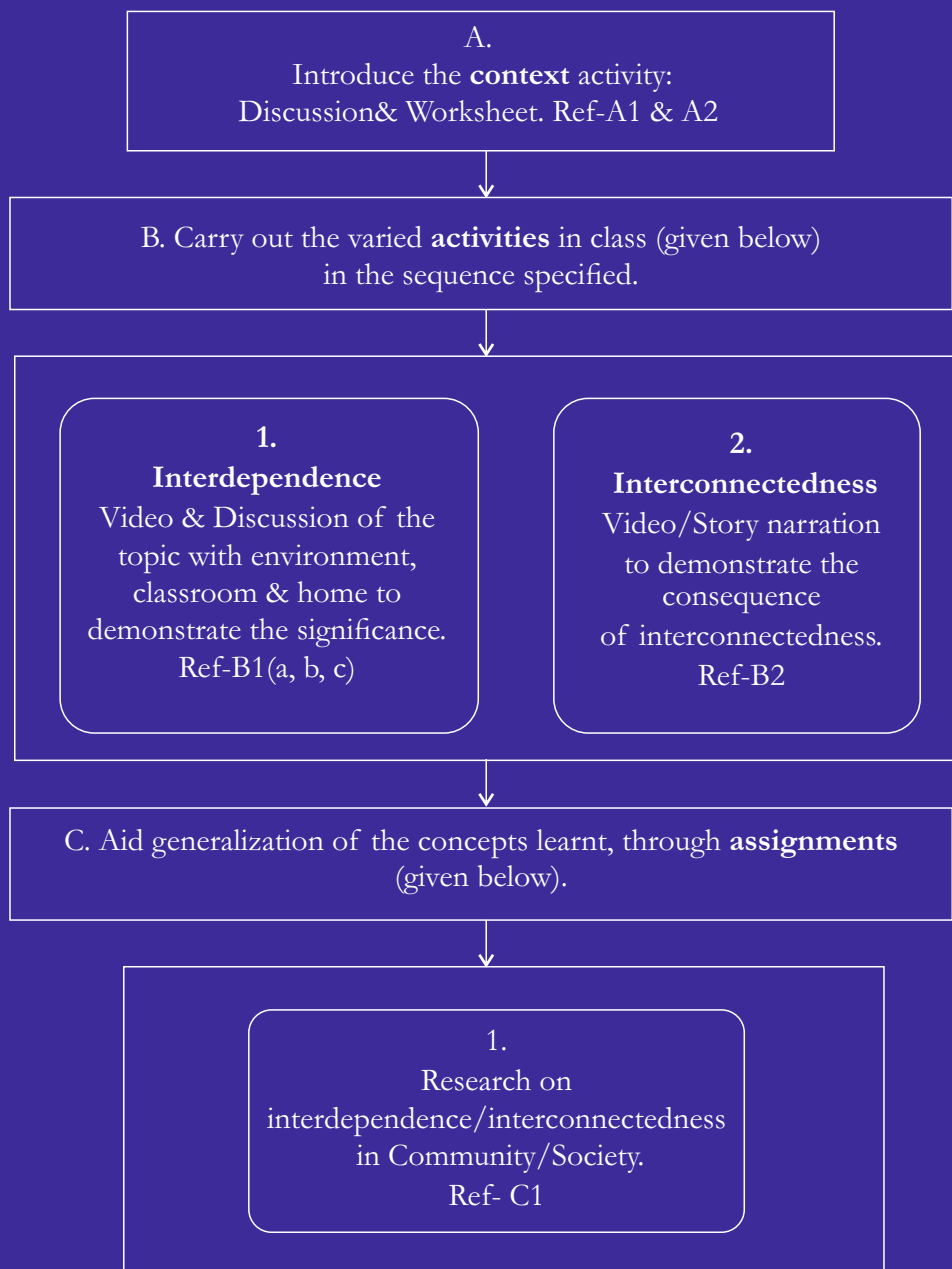
Through this unit, the students will achieve the following grade appropriate academic and value based goals:

- Understanding of decimals through fractions with denominators 10 and 100
- Able to convert a decimal into fraction and vice versa, able to convert units into decimals
- Ability to compute, add and subtract decimals
- Able to solve problems related to money transaction, measures of temperature
- Able to realize the significance of interdependence and interconnectedness in life.

III. Process & Action Plan

How the value of numbers change when the zeros change positions is beautifully illustrated in this chapter. As and when they shift the places, the value changes. Your role as a teacher is significant, as you have the power and the means to shape the lives under your guidance. One of the most important goals you may have as a teacher, is the character education of the students using the academic content at hand.

The values and life skills integration within this unit may follow the following process and action plan, as depicted in the flow chart on next page:



While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

This topic incorporates the *core approach* – Knowing, Understanding, Valuing and Acting the values embedded in the topic.

The *core values* being considered are *Interconnectedness & interdependence* along with other sub-values like *accuracy, trust, relationship*

The unit also provides the scope to develop the following life skills in the students: *counting, observation & thinking, problem solving*

IV. Activities & Related Discussion

A. The context Activity for the teacher to start:

A1: Fill in the blanks (Revise the previous knowledge)

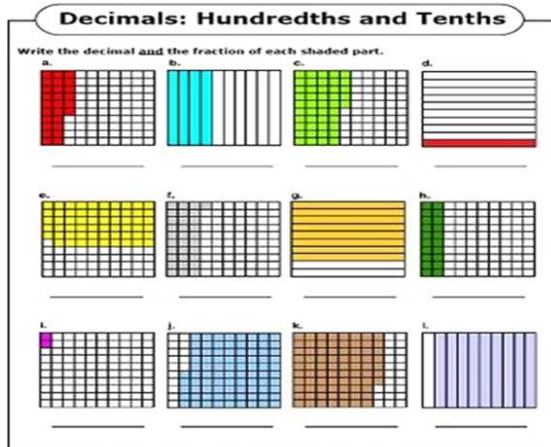
A2: Introduction of decimals worksheet

Completo

Fracción	Decimal
	1.0
	0.9
	0.8
	0.7
	0.6
	0.5
	0.4
	0.3
	0.2
	0.1
	0.0

Three-tenths

0.3 DECIMAL 30% PERCENT



<https://www.pinterest.co.uk/pin/816910819891281812/>

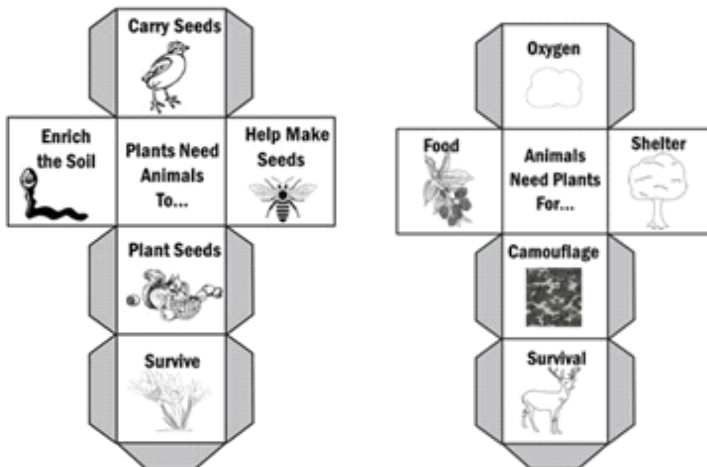
<https://www.pinterest.co.uk/pin/244461085998928653/>

B: Value Based activities:

B1: Teacher shall have a discussion with students on the topic. Why is Interdependence Important? Teacher shall show the video pause and discuss about interdependence

a: In the environment

<https://www.youtube.com/watch?v=Yzwr4Kxfg9o>



All living things depend on their environment to supply them with what they need, including food, water, and shelter. Students will love exploring the relationships between plants, animals and their environments. Symbiosis is a close relationship between organisms of different species in which at least one of the organisms benefits.

B: In classroom

Teacher shall discuss about the interdependence in classroom.

How students depends on teachers and teachers depends on students

Interdependence allows for all students to express their thoughts and opinions. They bring previously built ideas into the classrooms that deserve to be shared. Interdependence allows for students to:

- Share individual knowledge with one another
- Debate between said individual knowledge points
- Use argument techniques to change possible misconceptions within other students
- Piece together individual ideas to build new and more “whole” ideas

Cooperative learning is a teaching method that requires the use of real group work. This group work type is typically different from regular methods. Cooperative learning requires that students:

- Truly depend on one another
- Put individual information together to reach a conclusion
- All contribute to the assignment or project
- Actually work as a group
- Equally distribute work load

From the above points, the most important factors of cooperative learning is interdependence. Students need each other's individual minds and thought processes to reach an overall agreement on a project.

C: At home

Teacher shall discuss the significance of interdependence at home

Teacher shall explain to them that they will be stronger as families, as communities and as a nation when we remain connected and interdependent. We will likely be happier as individuals when our relationships with our family members are good. And when we are able to form close relationships with grandparents.

Teacher shall elicit from students how the grandparents and children are interconnected and benefit from each other

- Children will be better off when they are never too old to turn to grandparents for advice.
- Grandchildren will benefit from that extra layer of protection that comes from the loving wisdom grandparents seem to know how to offer better than anybody.

Teacher shall elicit from students how the parents and children are interconnected and benefit from each other

- Parents will raise their children to be able to handle the world
- They will watch carefully to be sure that you are safe and make correct decisions
- They will guide you whenever you cross boundaries of discipline
- They will celebrate your success and become proud of your success
- Children always need parents support to grow and acquire success
- Children take care of parents when they need support

Teacher shall ask many questions and make them realize the importance of strong relationship within the family

Reference:<https://www.kabbalah.info/bb/interdependence/>

B2: Story on interdependence

<https://www.youtube.com/watch?v=9MjicweesN0>

Teacher shall show the video or teacher shall tell the story to students and register the value of interdependence among them.

1. Why did the trees get angry?
2. What did the trees do to animals of the forest?
3. What did the woodcutter thought?
4. What happened to the tree?
5. What is the moral of the lesson?

V. C: Assignments

C1: Write the importance of Interdependence with the community/Society

Resources

References:

1. <https://www.youtube.com/watch?v=Yzwr4Kxfg9o>
2. <https://www.youtube.com/watch?v=9MJicweesN0>
3. Ncert Textbook, Reference books, (R.D Sharma , R.S. Aggarwal)
4. <https://www.kabbalah.info/bb/interdependence/>

Topic	Values / Life skills integrated & imbibed	Activities
Area and its Boundary	<p>Core Values considered : Self-Awareness & Self Control</p> <p>Other Sub-Values: self-discipline, accuracy</p> <p>Life skills: estimation, calculation, computing, and concertation</p>	<p>Value integration Activities:-</p> <p>1 Hands on activity of finding out area of irregular shapes by using a grid paper to revise the previous knowledge of students.</p> <p>2. Conduct the combination activity of drawing a rectangle or finding out area of triangle</p> <p>3. Discussion & Case study of the topic from daily life .</p> <p>4. Assignment: Find a weakness which students want to overcome and write steps to control and come out of the weakness</p>

Materials / Resources needed

Value Integration:-

1. Graph Paper to conduct context activity.
2. Grid paper to find area and perimeter
3. BB, Pen, scissor, colour pencils.
4. Facilities and Equipment to show videos.
5. NCERT Text books, reference books (R.D.Sharma, R.S Agarwal) pen, board, Duster.

Description (of the points of discussion)

Value Integration:-

In this chapter the activities and games are incorporated to inculcate in students that they should always set a boundary and space for them. Boundary means a control and discipline in every walk of their life and space means one should know about oneself.

Teaching children self-control and self-awareness is one of the most important things we can do for our students. Self-regulation simply means self-control and our ability to manage emotions, desires, and behaviours in order to reach a positive outcome. The art of building these skills and finding our balance between expressing feelings, avoiding unnecessary tension and experiencing negative unintended consequences, is our ability to successfully grow, prosper and self-regulate.

The key discussions are:

1. By doing hands on activity of finding out area of irregular shapes by using a grid paper teacher revise the previous knowledge of students.

2. Conduct the combination activity of drawing a rectangle or finding out area of triangle teacher shall instil significance of self-control and self-awareness and focus in every activity of life.

3. Discussion & Case study of the topic from daily life. The activity helps students relate to their real life situations and learn the consequences and solution if they lack self control and self awareness.

4. Assignment:

Find a weakness which students want to overcome and write steps to control and come out of the weakness

Unit 11
Area and its Boundary
Self-Awareness & Self Control

I. Introduction

The lesson “**Area and its Boundary**” discusses about the concept of measurement of area and its boundary or perimeter. Area of a figure is the number of square units that cover the surface of the closed figure. Perimeter and area are two math concepts that students often get confused. Perimeter is the distance around an object or surface. On the other hand, area is the amount of space inside of a given surface. Through this lesson the teacher shall inculcate in students that they should always set a boundary and space for them. Boundary means a control and discipline in every walk of their life and space means one should know about oneself.

Teaching children self-control and self-awareness is one of the most important things we can do for our students. Self-regulation simply means self-control and our ability to manage emotions, desires, and behaviors in order to reach a positive outcome. The art of building these skills and finding our balance between expressing feelings, avoiding unnecessary tension and experiencing negative unintended consequences, is our ability to successfully grow, prosper and self-regulate.

II. Learning Objectives / Outcomes

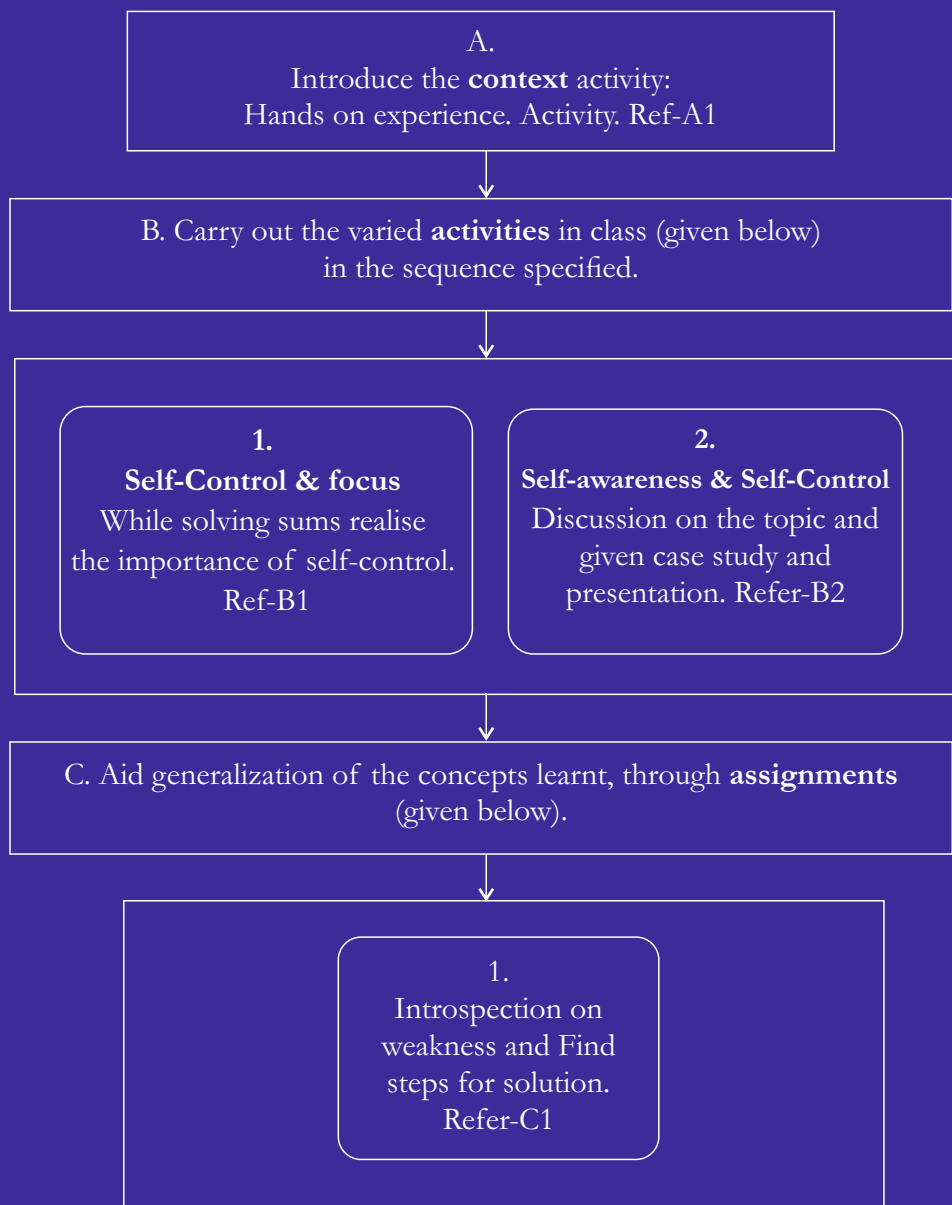
Through this unit, the students will achieve the following grade appropriate academic and value based goals:

1. Learn the meaning of field (area) and fences perimeter/boundary, boundary / perimeter is the sum of the side of the given figure and able to find area by counting squares and compare the area & perimeter
2. Derive formulas for finding perimeter and area of a square and rectangle and state the unit of area and perimeter
3. Able to solve simple problems related to area and perimeters
4. Able to realise self-discipline, self-control & self-awareness in all the activities in their life.

III. Process & Action Plan

Areas and Boundaries illustrate the space dimension where one can specify certain authority. In real life also one has to define the area or space for his own behaviour , Your role as a teacher is significant, as you have the power and the means to shape the lives under your guidance. One of the most important goals you may have as a teacher, is the character education of the students using the academic content at hand.

The values and life skills integration within this unit may follow the following process and action plan, as depicted in the flow chart on next page:



While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

This topic incorporates the *core approach* – Knowing, Understanding, Valuing and Acting the values embedded in the topic.

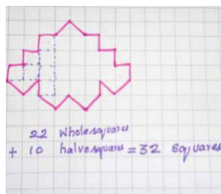
The *core values* being considered are *Self-Awareness & Self-Control* along with other sub-values like *self-discipline, accuracy*

The unit also provides the scope to develop the following life skills in the students: *estimation, calculation, computing, and concertation*

IV. Activities & Related Discussion

A: Context activity for the teacher to start

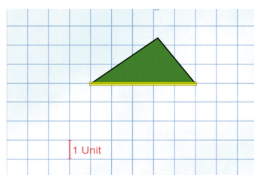
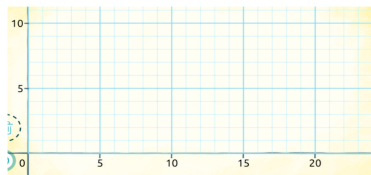
Teacher shall give any irregular object, thread and grid paper to all students and instruct them to find out area and perimeter of the given object to revise the previous knowledge of students. Teacher shall take rounds and help students those who needed help. Remind students that a square that measures one centimeter by one centimeter is a square centimeter. Count full squares and half or more than half squares as one and omit less than half squares. Teacher shall compare the area of hand prints of students and discuss with children



B: Value Based Activity:

B1: Combination Activity:

1. Create a rectangle with an area of 50 square units
2. What is the perimeter of the given triangle?



After answering the question correctly teacher shall discuss with them

1.If you miss 1 unit or add one unit more while calculating area or perimeter what will happen?

Elicit different answers from students

This is applicable in real life therefore the self-control and self-awareness and focus play an important role in every activity of life.

B2: Discussion on Self-control & Self-Awareness

Self-awareness is our ability to truly perceive the level of skill, knowledge, value and responsibility we use when it comes to our emotions. It gives us the confidence to know who we are and what we have to offer. Awareness is the root of self-esteem. It allows us to understand our strengths and our weaknesses and is a critical step along the path to self-improvement.

Self-Control: Self-regulation simply means self-control and our ability to manage emotions, desires, and behaviors in order to reach a positive outcome.

The art of building these skills and finding our balance between expressing feelings, avoiding unnecessary tension and experiencing negative unintended consequences, is our ability to successfully grow, prosper and self-regulate.

Becoming emotionally aware and learning how to manage that awareness are two steps toward emotional independence and freedom.

“My fault, my failure, is not in the passions I have, but in my lack of control of them.” — Jack Kerouac

Teacher shall divide the class into different groups and quote some examples/Case study from real life. Instruct students to find out reasons, consequences and solutions and present in the class

1. Playing with friends and reaching home late without informing parents
2. Not submitting the Project/ Assignment in time
3. Reaching late in school ,fighting with classmates, disturbing the class while teaching
4. Non participation in extracurricular activities

Teacher shall teach students some breathing in and breathing out techniques for self-awareness and self-control. The breath is a great self-regulation tool and kids will relate to their feelings of different situations from embarrassment, to frustration, to anger and more. Each time students shall use their breath to help her work through her feelings.

V. C: Assignments

C1: Find a weakness which students want to overcome and write steps to control and come out of the weakness

Resources

References:

1. <https://azimpremjiuniversity.edu.in/SitePages/resources-ara-vol-5-no-2-july-2016-area-and-perimeter.aspx>
2. <https://www.matific.com/in/en-in/home/maths-activities/episode/all-the-way-around-measuring-perimeters/>
3. Ncert Textbook, Reference books, (R.D Sharma , R.S. Aggarwal)

Topic	Values / Life skills integrated & imbibed	Activities
Smart Charts	<p>Core Values considered : Honesty & Responsibility</p> <p>Other Sub-Values: team spirit, sharing, cooperation, transparency</p> <p>Life skills: observation, listening, computing, observation and coordination</p>	<p>Value integration Activities:-</p> <ol style="list-style-type: none"> 1.Solving fun based worksheets in the classroom to revise previous knowledge and introduce the lesson. 2. Combination activity to inculcate the value of responsibility& honesty 3.Discussion with students and narrating a life story of Bobby Jones to instil the benefits of being honest in life. 4.Assignments <ol style="list-style-type: none"> 1.Write an essay on advantages of honesty 2. Prepare a quote poster based on honesty for school display board

Materials / Resources needed

Value Integration:-

1. Workk sheet to conduct context activity
2. Facilities and Equipment to show videos
3. Pen,Board,Duster
4. NCERT Text Book, Reference books,(R.D Sharma , R.S.Aggarwal)

Description (of the points of discussion)

Value Integration:-

In this chapter the activities and games are incorporated in such a manner that children develop the value Honesty discipline and responsibility among students. Honesty is one of the important virtues. an honest behaviour is regarded highly in all ages. it is generally based on trust and truthfulness. Honest intentions in speech and action gain the attention and respect of others. Honesty helps a person shine through their career, education, and all aspects of life. . By being as honest as you can with yourself. Be honest about your thoughts, words, actions and wants.

The key discussions are:

1. By solving fun based worksheets in the classroom teacher shall revise their previous knowledge and introduce the lesson.

2. By doing a combination activity teacher can inculcate the value of responsibility of attending the class regularly and answer honestly the reason of absenteeism and their hobbies after school hours

3. By discussion with students and narrating a life story of Bobby Jones teacher enlighten students the benefits of being honest in life.

5. Assignments

1. Write an essay on advantages of honesty
2. Prepare a quote poster based on honesty for school display board

Unit 12**Smart Charts****Honesty & Responsibility****I. Introduction**

The lesson “**Smart Charts**” focus on data handling, tally marks, chapati/pie chart, and temperature in degree Celsius, family tree and growth of a plant. Students learn collection of data, recording of data and presentation of data in different ways, like tally marks, bar graph, pie-charts and through pictographs. Students also learn interpretation of data from the graphs/tables

While collecting the information, it is very important that students' need to be very honest and responsible to get accurate results. Through this lesson teacher shall instil Honesty discipline and responsibility among students.

Honesty is one of the important virtues. an honest behaviour is regarded highly in all ages. it is generally based on trust and truthfulness. Honest intentions in speech and action gain the attention and respect of others. Cheating and dishonesty can prevail for a while successfully but in the end, honesty is what triumphs. Honesty helps a person shine through their career, education, and all aspects of life. . By being as honest as you can with yourself. Be honest about your thoughts, words, actions and wants.

In life, there will be so many ups and downs. Everyone will face situations where your honesty could be put at stake or questioned. It is those times that you need to stay strong by favouring honesty. Even if the mistake is yours, admit it. Even if your close ones have done a wrong, correct them. You should have the courage, to tell the truth, no matter what. This is what will portray you as an honest person in life. When you have the guts to tell the truth and stand for the right thing, you will be trusted and honoured by one and all. So, for a healthy relationship, career advancement, and to build trust, honesty is important. Remember that honest people are always the happiest and most importantly peaceful persons. So, to lead a joyful and satisfactory life, be honest.

II. Learning Objectives / Outcomes

Through this unit, the students will achieve the following grade appropriate academic and value based goals:

- Able to know the meaning of data, record of data in the term of pictograph, by using tally marks, Collect and record the data in raw form
- Present the data in the form of frequency table, Temperature/bar chart of different cities; understand the chapatti/pie chart by using fractional numbers.
- Ability to interpret the data. Interpreting Real Life Situation into meaningful data
- Learn honesty and responsibility of handling situations

III. Process & Action Plan

Handling information and making formative comments or remarks based on that is an essential skill that children may need when they take up career. Your role as a teacher is significant, as you have the power and the means to shape the lives under your guidance. One of the most important goals you may have as a teacher, is the character education of the students using the academic content at hand.

The values and life skills integration within this unit may follow the following process and action plan, as depicted in the flow chart on next page:

A. Introduce the **context** activity:
Discussion by conducting Q & A activities
Ref- A1, A2 & A3



B. Carry out the varied **activities** in class (given below)
in the sequence specified.



1.

**Honesty &
Responsibility**

Combination activity
to teach honesty &
Responsibility.
Ref-B1

2.

Honesty

Discussion & Story
narration to instill
honesty.
Ref-B2



C. Aid generalization of the concepts learnt, through **assignments**
(given below).



1.

Write essay on
advantages of
honesty.
Ref-C1

2.

Preparation of
Honesty quote
poster.
Ref-C2

While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

This topic incorporates the *core approach* – Knowing, Understanding, Valuing and Acting the values embedded in the topic.

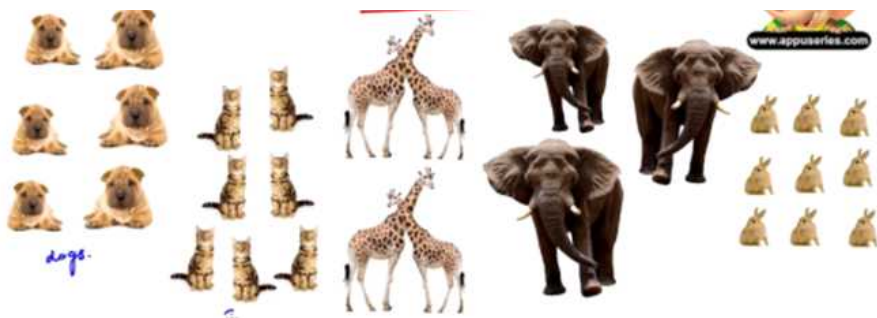
The *core values* being considered are *honesty & responsibility* along with other sub-values like, *team spirit, sharing, cooperation, transparency*

The unit also provides the scope to develop the following life skills in the students: *observation, listening, computing, observation and coordination*

IV. Activities & Related Discussion

A. The context activity for the teacher to start:










A1: Make a table of name of animals and no of animals by using tally marks



Picture source: <https://www.pinterest.com/pin/378091331192715554/>

A2: Teacher shall draw an aquarium with fishes and ask the following questions to revise the previous knowledge.



1. How many  fishes are in the aquarium?
2. How many  fish are in the aquarium?
3. Are there more  or  in the aquarium?
4. How many more  than  are in the aquarium?
5. Which type of fish is    the most in the aquarium?
6. How many fish are in the aquarium in all?

A3: Teacher shall discuss with students and instruct students to frame questions like above?



<https://www.matific.com/in/en-in/home/maths-activities/episode/graph-and-release-tally-marks/>

B: Value Based Activities:

B1: Combination Activity: Project Idea

(This supporting activity helps to comprehend the content presented in Smart Charts of Grade 5, NCERT Mathematics Textbook & learn values of honesty & responsibility)

I. Teacher shall divide the students in a group of 10

Discussion Questions:

- 1) Why is attendance necessary?
- 2) Who is always present?
- 3) Who is mostly absent? Why?

Through this discussion, the teacher should provide the consolidated idea of preparing a colorful attendance sheet and represent the absentees in bar graph of for each group of their members for a week. Ask each of them to present in the class

Note: Teacher shall give them Flip sheet. Round Stickers. Attendance register from the past.



Competency: Ability to compute

1. The table given below shows the number of absentees in class III in a week. Represent the same in the form of a bar chart: (1 cm = 1 student)

Days	No of students Absent
Mon	4
Tue	3
Wed	8
Thurs	9
Fri	5
Sat	10

Through this activity students understand the **responsibility** of attending the class regularly and answer **honestly** the reason of absenteeism

II.Practice Time after School: Group of 10 students

Ask 10 of your friends about what they like to do most after school.

Teacher shall discuss how each one of them spends their time after school hours. Teachers insist them to give honest answer without hesitation. Then guide them how they should balance time for all activities constructively .so that they get time for studies as well as for hobbies. Then teacher instruct them to prepare

Table and make pie diagram or bar diagram and present for whole class group wise

This way teacher inculcate responsibility among students while teaching smart charts

What they like to do after school	Number of children
Watching TV	
Playing football	
Reading story books	
Helping parents	

Reference &` Picture Source:

<https://www.azimpremjifoundationpuducherry.org/lesson-plans/smart-chart-g5>

B2: Discussion on Honesty: Honesty- How it Benefits you and others

Teacher shall discuss and elicit from students

Teacher narrates the incident happened with bobby Jones: Lost Game and Robbing Banks

Bobby Jones was a golf player who played national and international matches about a century ago. He was known for his honesty and sportsmanship.

At the U.S. Open in Boston, 1925, he hit his ball on the 11th hole. He, although, insisted that he had moved the ball slightly by accidentally clipping the grass. He told the officials that he had violated Rule 18 (moving the ball), but they didn't agree. He stayed firm and they finally had to accept. He lost the game by the same margin, one stroke. The sportswriters praised him for his honesty

Teacher explains to students that Honesty isn't something that is bound by age or social status. The above incident of honesty tell us that no matter who we are, where we are, what we do, honesty and integrity go a long way. The result may not be immediate, but the universe doesn't lose even a single good deed. It's remembered and properly rewarded. Teacher shall conclude by saying that honest people are always the happiest and most importantly peaceful persons. So, to lead a joyful and satisfactory life, be honest always.

V.C: Assignments

C1: Write an essay on advantages of honesty

C2: Prepare a quote poster based on honesty for school display board

Resources

References:

1. <https://www.azimpremjifoundationpuducherry.org/lesson-plans/smart-chart-g5>
<https://www.matific.com/in/en-in/home/maths-activities/episode/graph-and-release-tally-marks/>
3. <https://www.pinterest.com/pin/378091331192715554/>
4. Ncert Textbook, Reference books, (R.D Sharma , R.S.Aggarwal)

Topic	Values / Life skills integrated & imbibed	Activities
Ways to Multiply and Divide	<p>Core Values considered : Self-discipline, Self-Control</p> <p>Other Sub-Values: Patience, Temptation, discipline</p> <p>Life skills: Observation, thinking, computing & calculation</p>	<p>Value integration Activities:-</p> <ol style="list-style-type: none"> 1. Solving worksheets of puzzles and crosswords to revise the previous knowledge of students. 2. Video or story narration to explain the consequences of not sharing or caring . 3. Discussion and narration of the life story of Mother Teresa who was the epitome of love and care for the humanity 4. Assignment <p>1: Read autobiographies of famous personalities who does/did caring for humanity.</p> <p>2: Prepare poster of Mother Teresa</p> <p>Quotes</p>

Materials / Resources needed

Value Integration:-

1. Worksheets of puzzles & cross words for the context activity
2. Facilities and Equipment to show videos
3. Facilities to conduct games
4. BB, Pen
5. Ncert Text Book, Reference books,(R.D Sharma , R.S.Aggarwal)

Description (of the points of discussion)

Value Integration:-

In this chapter the activities and games are incorporated in such a manner that children learn caring and sharing which are the qualities they need to involve during younger age which make them a good human being in future. Sharing teaches children about compromise and fairness. Teaching the crucial art of sharing and caring is important for the moral development of a child. When children are taught how to share things and care for others, they will learn to collaborate with fellow kids, practice kindness, and do things for others.

The key discussions are:

1. By using worksheets of puzzles and crosswords teacher shall revise the previous knowledge of students.
2. By video or story narration teacher explain the consequences of not sharing or caring .
3. By discussion teacher shall share the life story of Mother Teresa who was the epitome of love and care for the humanity
4. Assignment
 - 1: Read autobiographies of famous personalities who does/did caring for humanity.
 - 2: Prepare poster of Mother Teresa Quotes

Unit 13
Ways to Multiply and Divide
Sharing & Caring

I. Introduction

The lesson “**Ways to Multiply and Divide**” focusses on concept of multiplication & division and explore the relationship between multiplication and division. Students realise multiplication is repeated addition and division is repeated subtraction. Students also realize that when we multiply two numbers the value becomes bigger than both the numbers. The same way when you help/care someone you get back abundantly. When we divide bigger number by smaller number each time you share equally which means you consider every one equally and you develop kindness towards everyone.

Through this lesson students learn **caring and sharing** which is the qualities they need to involve during younger age which make them a good human being in future. Sharing teaches children about compromise and fairness. Teaching the crucial art of sharing and caring is important for the moral development of a child. When children are taught how to share things and care for others, they will learn to collaborate with fellow kids, practice kindness, and do things for others

II. Learning Objectives / Outcomes

Through this unit, the students will achieve the following grade appropriate academic and value based goals:

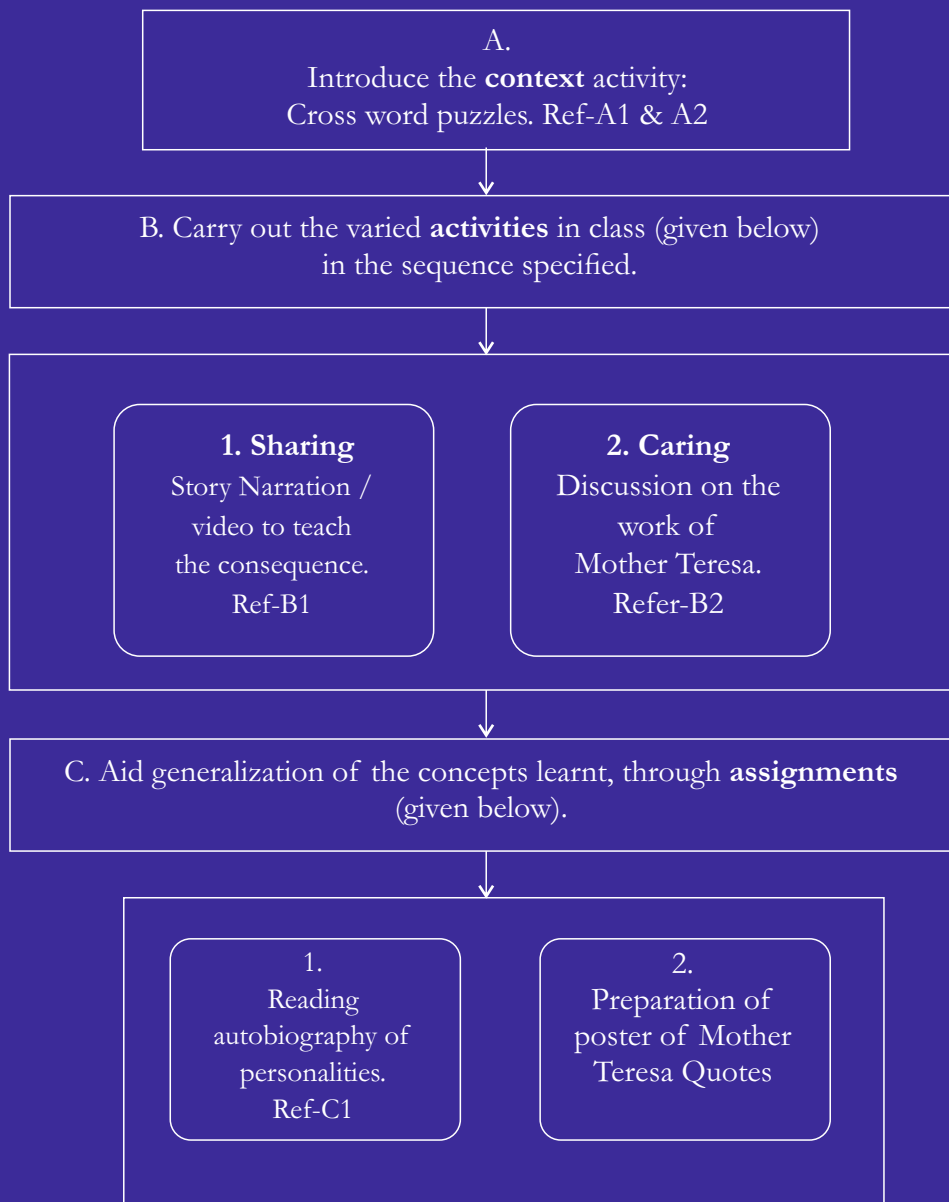
- Multiplies of two or three digit numbers through standard algorithm
- Solve real life problems based on multiplication and division
- Divides given numbers through nonstandard algorithm
- Divide numbers through standard algorithm
- Creates and solves patterns, games, puzzles using multiplication and division
- Explore the relationship between multiplication and division

- Learn to take care of others, share things with others and realize that which makes them happy.

III. Process & Action Plan

Ways to multiply and divide is an important basic concept of mathematics that serve the fundamental aspect of mathematics. By learning this chapter the children learn to increase their happiness and divide what they have with others, in other words, they become care givers. Your role as a teacher is significant, as you have the power and the means to shape the lives under your guidance. One of the most important goals you may have as a teacher, is the character education of the students using the academic content at hand.

The values and life skills integration within this unit may follow the following process and action plan, as depicted in the flow chart on next page:



While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

This topic incorporates the *core approach* – Knowing, Understanding, Valuing and Acting the values embedded in the topic.

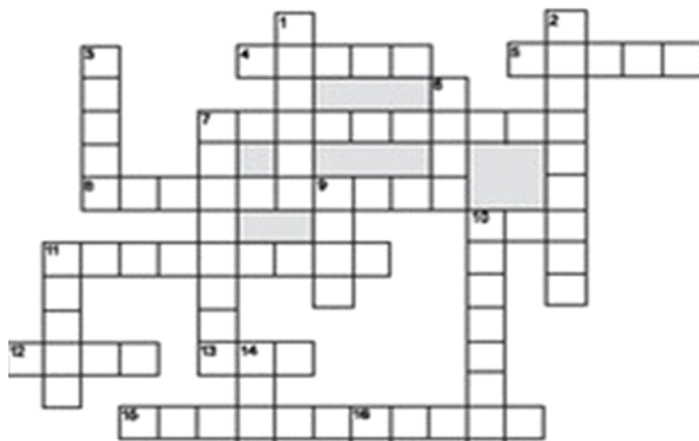
The *core values* being considered are *caring and sharing* along with other sub-values like *kindness, patience, gratitude*

The unit also provides the scope to develop the following life skills in the students: *computing, accuracy, critical thinking, observation*

IV. Activities & Related Discussion

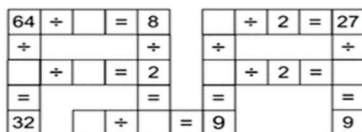
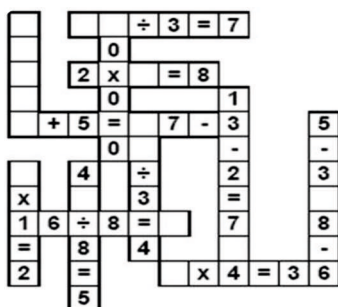
A.CoA: Context activity for the teacher to start:

A1: Solve the equation and write the number word in the puzzle



Across	Down
4. $24 \div 8 = \underline{\hspace{2cm}}$	1. $5 \times 6 = \underline{\hspace{2cm}}$
5. $10 \times 5 = \underline{\hspace{2cm}}$	2. $6 \times 9 = \underline{\hspace{2cm}}$
7. $6 \times 8 = \underline{\hspace{2cm}}$	3. $56 \div 7 = \underline{\hspace{2cm}}$
8. $7 \times 5 = \underline{\hspace{2cm}}$	6. $45 \div 9 = \underline{\hspace{2cm}}$
10. $16 \div 8 = \underline{\hspace{2cm}}$	7. $7 \times 6 = \underline{\hspace{2cm}}$
11. $8 \times 8 = \underline{\hspace{2cm}}$	9. $28 \div 7 = \underline{\hspace{2cm}}$
12. $100 \times 0 = \underline{\hspace{2cm}}$	10. $13 \times 1 = \underline{\hspace{2cm}}$
13. $17 \div 17 = \underline{\hspace{2cm}}$	11. $63 \div 9 = \underline{\hspace{2cm}}$
15. $9 \times 3 = \underline{\hspace{2cm}}$	14. $81 \div 9 = \underline{\hspace{2cm}}$
	16. $36 \div 6 = \underline{\hspace{2cm}}$

A2: Fill the blank boxes:



Reference: <https://www.teacherspayteachers.com/Product/Multiplication-Division-Crossword-Puzzle-5174628>

B: Value based activities:

B1: The Duck Who Didn't Want To Share | A Story about Sharing

<https://www.youtube.com/watch?v=GGBYFn4iXtA>

Discussion

Learning to share and care for others can be a great challenge for younger children. But, it is indeed an essential life skill needed to be learned and practiced throughout the childhood as well as later in life.

B2: A Symbol of Love, Care, Passion: Mother Teresa Was the Humanitarian the World Needed

Teacher shall tell the example of any personality who takes care of others without expecting anything in return. Teacher shall take some incidents or quotes of Mother Teresa. Teacher shall discuss with students on the following points & explain the gist of each points.

• Her Mission Was To Serve-

Mother Teresa, a nun and missionary, was born in Macedonia to parents of Albanian descent. on she is still an inspiration to many and is remembered for her contribution to humanity.

• All For A Selfless Cause-

One of the greatest humanitarians of the 20th century, she devoted her life serving the poorest of the poor. She was a ray of hope for many, including the aged, the destitute, the unemployed, the diseased, the terminally ill, and those abandoned by their

families.

- **A Life Lived For Others**

In 1979, she was awarded the Nobel Peace Prize “for work undertaken in the struggle to overcome poverty and distress, which also constitutes a threat to peace.” She didn't attend the ceremonial banquet but asked that the \$192,000 fund be given to the poor.

- **Winning Hearts**

Prime Minister Indira Gandhi awarded Mother Teresa India's highest civilian award, the Bharat Ratna, on January 25, 1980, for her humanitarian work.

- **Come Be My Light**

During the last years of her life, despite increasingly severe health problems, Mother Teresa continued to govern her Society and respond to the needs of the poor and the Church.

By 1997, Mother Teresa's Sisters numbered nearly 4,000 members and were established in 610 foundations in 123 countries of the world.

Mother Teresa taught us do “small things with great love” and that will change the world

Teacher shall discuss some quotes of Mother Teresa and instruct children to find out quotes and make charts/posters to display on school bulletin board

Ref:<https://economictimes.indiatimes.com/magazines/panache/a-symbol-of-love-care-passion-mother-teresa-was-the-humanitarian-the-world-needed/a-life-lived-for-others/slideshow/65543233.cms>

V. C:Assignments

C1: Read autobiographies of famous personalities who does/did caring for humanity.

C2: Prepare poster of Mother Teresa Quotes

Resources

References:

1.<https://www.teacherspayteachers.com/Product/Multiplication-Division-Crossword-Puzzle-5174628>

2. <https://www.youtube.com/watch?v=GGBYFn4iXtA>

3.<https://economictimes.indiatimes.com/magazines/panache/a-symbol-of-love-care-passion-mother-teresa-was-the-humanitarian-the-world-needed/a-life-lived-for-others/slideshow/65543233.cms>

Topic	Values / Life skills integrated & imbibed	Activities
How Big? How Heavy?	<p>Core Values considered : Accuracy & curiosity</p> <p>Other Sub-Values: responsibility, flexibility, honesty</p> <p>Life skills: measuring, calculation, creativity, observation.</p>	<p>Value integration Activities:-</p> <p>1 Solving worksheet & Sowing video to revise the previous knowledge and introduce the new lesson.</p> <p>2.solving Sudoku puzzles to create curiosity & concentration among students.</p> <p>3. Knock the Towers Game to make students realise the importance of accuracy and self control w</p> <p>4.Assignment Preparation of new games /puzzles/riddles</p>

Materials / Resources needed

Value Integration:-

- 1.Facilities and Equipment to show videos
- 2.BB, Pen
- 3.Ncert Text Book, Reference books,(R.D Sharma , R.S.Aggarwal)
- 4.Work sheets for context activity& Value based activity.
- 5.Worksheets for context activity & Sudoku worksheets sheets

Description (of the points of discussion)

Value Integration:-

In this chapter the activities and games are incorporated in such a manner that children learn the importance of accuracy, realise the responsibility of being responsible and develop curiosity. For any measurement, accuracy and precision are the qualities which are to be applied/used, which is applicable in daily to balance our life. Curiosity is critical for success because it signals a voracious mind. If students are inquisitive, then they are open to new experiences. This will result to generate more original ideas and produce simple solutions to complex problems. Instilling above qualities will lead children a better successful human being.

The key discussions are:

1.By solving worksheet & using video teacher shall revise the previous knowledge and introduce the new lesson.

2.By encouraging students to solve Sudoku puzzles teacher create curiosity & concentration among students.

3.By Making students to play Knock the Towers Game teacher shall make students realise the importance of accuracy and self control while playing the game

4.Assignment

Preparation of new games /puzzles/riddles.

Unit 14
How Big? How Heavy?
Accuracy & curiosity

I. Introduction

This chapter “**How Big? How Heavy?**” gives students a fairly good idea of Area, Volume, Weight and its units. It teaches one to estimate and measure the volume of liquids & solids in litters' millilitres, cubes, estimates and measures the weights of substances, compares volume & weight of different solids and verifies them by actual measurement.

While learning the lesson students acquire the importance of accuracy, realise the responsibility of being responsible and develop curiosity.

For any measurement, accuracy and precision are the qualities which are to be applied/used, which is applicable in daily to balance our life. Curiosity is critical for success because it signals a voracious mind. If students are inquisitive, then they are open to new experiences. This will result to generate more original ideas and produce simple solutions to complex problems. Instilling above qualities will lead children a better successful human being.

II. Learning Objectives / Outcomes

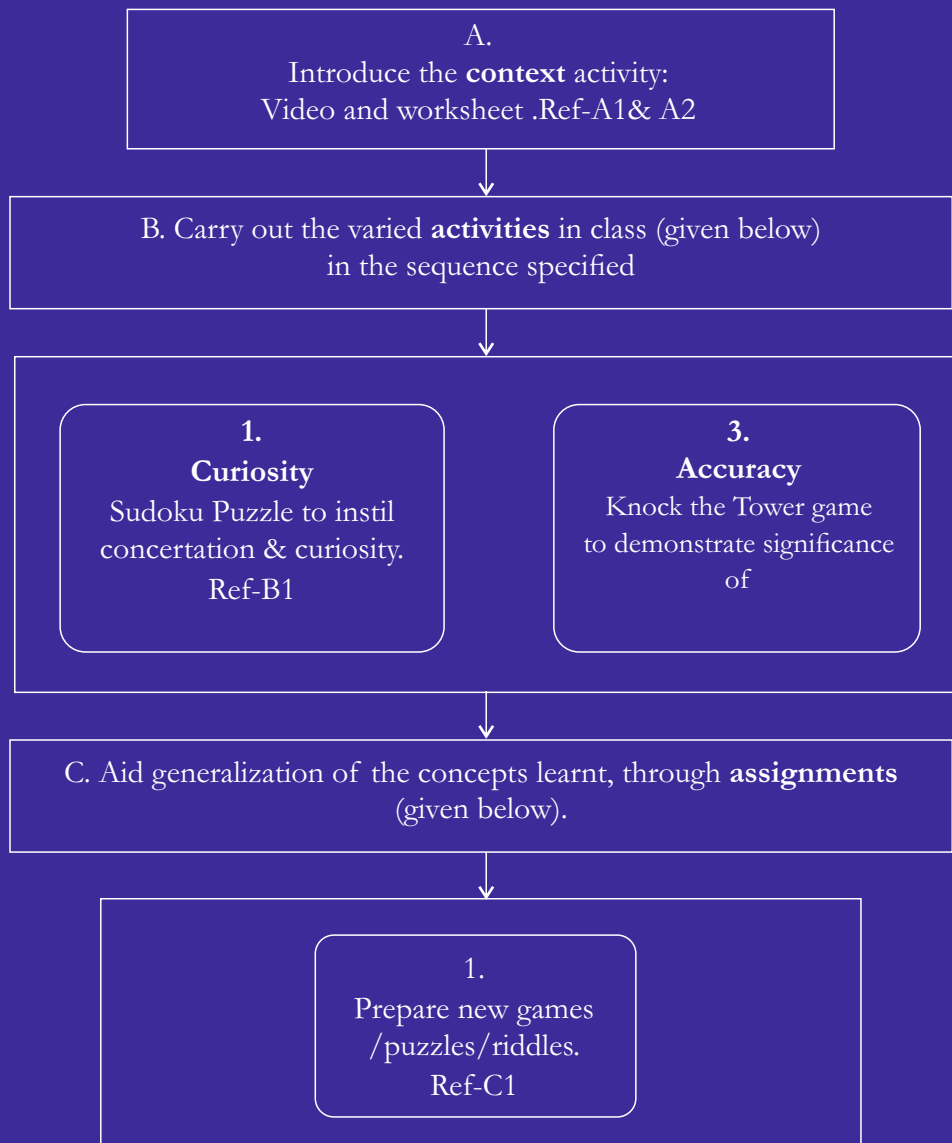
Through this unit, the students will achieve the following grade appropriate academic and value based goals:

- Gusses approximate volume of solid objects found in day to day life
- Measures and compares the volume of solids, Calculates volume of different objects in terms of other objects and find the volume of cube, cuboid
- Solves real life problems based on volume of solids
- Relates different commonly used larger and smaller units of weight and convert large units to smaller units and vice versa
- Applies the four fundamental arithmetic operations in solving a variety of contextual problems involving weight

- Applies accuracy while doing real life situations and develop an approach of curiosity to learn more

III. Process & Action Plan

This chapter, as the name denotes signifies the concept of heavy and light, small and short and big and small. This is also a very essential trait of behaviour that the kids need to learn .Your role as a teacher is significant, as you have the power and the means to shape the lives under your guidance. One of the most important goals you may have as a teacher, is the character education of the students using the academic content at hand.



While it would be ideal to expose the students to all the activities as given, and the discussion that would ensue, you may choose as per your convenience and availability of time, the activities that would be relevant to the content being taught and/or suited to the cognitive and emotional maturity of the students.

This topic incorporates the *core approach* – Knowing, Understanding, Valuing and Acting the values embedded in the topic.

The *core values* being considered are *accuracy and curiosity* along with other sub-values like *responsibility, flexibility, honesty*

The unit also provides the scope to develop the following life skills in the students: *measuring, calculation, creativity, observation*

IV. Activities & Related Discussion

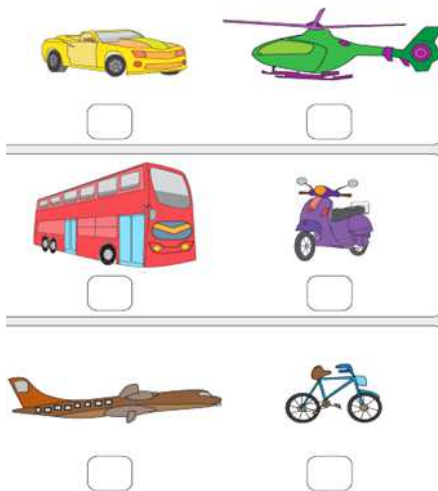
A: The Context Activity for the teacher to start:

A1: Teacher shall show the video to revise the previous knowledge and get solved the worksheet.









<https://www.youtube.com/watch?v=Cgmj25WHYBY>

A2. Worksheet solving

1. Tick the heavy one and cross out the light one in each section.



2. Estimate the capacity of each object

1)  • 2 L • 200 mL • 20 mL	2)  • 50 mL • 50 L • 5 L
3)  • 3.5 L • 35 mL • 350 mL	4)  • 100 mL • 10 mL • 10 L
5)  • 40 mL • 4 L • 400 mL	6)  • 15 mL • 1.5 L • 150 mL
7)  • 4 L • 400 mL • 40 L	8)  • 20 L • 20 L • 200 mL

B. Value Based Activities:

B1: Sudoku Puzzles: Teacher discuss the rules of Sudoku puzzles and give a puzzle to solve in the class. This game work as stress busters and teaches children the skills of analytical thinking and how to take critical decisions. At the same time, it helps children in improving their cognitive skills. This game help children in building curiosity and promote learning.

Rules: The classic Sudoku game involves a grid of 81 squares. The grid is divided into nine blocks, each containing nine squares. The rules of the game are simple: each of the nine blocks has to contain all the numbers 1-9 within its squares. Each number can only appear once in a row, column or box.

8			9	3				2
		9						4
7		2	1			9	6	
2							9	
	6						7	
	7				6			5
	2	7			8	4		6
	3					5		
5				6	2			8

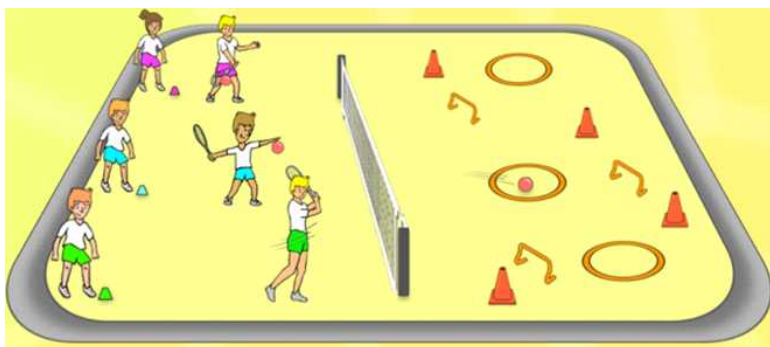
8	3			2	9			
	9		7				6	
4				1		2		
	4	8			2		1	9
		9					4	
1	2		9			3	5	
		4		6				7
	5				1		2	
			3	5			4	1

This Sudoku puzzle builds and encourages curiosity in students. Sudoku puzzles are also known to improve abstract reasoning among children and improve their IQ levels. One of the benefits of Sudoku is that it requires the player to concentrate on the grid and use logical thinking to find the solution for each cell. While doing this, the brain becomes fully focused on the task at hand rather than the source of stress and anxiety.

Ref: https://www.sudokuessentials.com/easy_sudoku.html

B2: Knock the Towers Game:

Students need to be controlled and accurate to hit on target.



- Divide the class into 4-5 groups
- Each group lines up at one end, with a racquet and ball
- On the other side of the net, put out lot of different targets
- One player at a time, teams try to hit the most targets
 1. Run up to the net with your racquet and ball
 2. Drop the ball for it to bounce, then hit it over the net
 3. If you hit the target, go collect it and bring it back to your team
 4. Pass the racquet and ball to the next player in your team to go
 5. After 10 minutes, see which team has hit the most targets

Teacher can decide how to hit the ball over

- Donkey drop- drop/bounce the ball then step and swing
- Overarm serve-throw the ball up in the air and hit over

- Spike-throw the ball up and hit it over with your hand

V. C: Assignments

C1: Preparation of new games /puzzles/riddles.

Resources

References:

1. <https://in.pinterest.com/pin/656188608178790821/?d=t&mt=login>
2. https://www.sudokuessentials.com/easy_sudoku.html
3. <https://www.youtube.com/watch?v=Cgmj25WHYBY>
4. . Ncert Textbook, Reference books,(R.D Sharma , R.S.Aggarwal)

Maths
Grade V

Integration of Values

Teacher's Manual

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