

**CBSE School Teachers'
Teaching Aids Competition
2019**

Report

Shiksha Sadan, Central Board of Secondary Education

Background

Teaching aids are an integral component in any classroom. Good teaching aids play a vital role in enhancing learning. Many teachers in the country are involved in making teaching aids and improvised apparatus for demonstrations in their classrooms. However their isolated efforts in the schools do not get recognition at any platform except their own schools.

CBSE always tries to find and recognize hidden talent and continuing this tradition it provided the teachers of its affiliated schools a platform i.e. **CBSE School Teachers' Teaching Aids Competition** to showcase their efforts in development and use of innovative teaching aids and share their creative and innovative approaches and ideas in teaching.

CBSE Circular

CBSE issued necessary instructions and guidelines about the Teaching Aids Competition to all its affiliated schools vide Circular No. 24/2019 dated 29th April 2019. In response to the circular, the Board received applications from 727 teachers from across the country. A copy of circular is enclosed as Annexure A.

Objectives of the Competition

- ▶ To highlight the importance of teaching material in teaching learning process
- ▶ To encourage use of creative and innovative classroom demonstrations by teachers.



Teaching aids are an integral component in any classroom. Teaching aids not only help reinforce a skill or concept but also relieve monotony or boredom by presenting information in an interesting and exciting way by engaging all the senses of students. Good teaching aids play a vital role in enhancing learning.



Regional Level Teaching Aids Competition



The Regional Level Competition was conducted at 15 different venues across the country in the month of September 2019 in which 727 teachers participated and showcased their efforts in developing and using innovative teaching aids in the classroom. The aids were assessed on pre-defined criteria by experts and best aids were selected in the subjects of Science, Social Science/Humanities, Mathematics and Languages. 155 teachers were selected at the regional level. The list of venues is enclosed as Annexure B and teachers selected at the Regional Level is enclosed as Annexure C.



National Level Teaching Aids Competition

The National Level Teaching Aids Competition was held at Bharatiya Vidya Bhawan, Kasturba Gandhi Marg, New Delhi on 30th October 2019 in which 141 teachers participated. The participating teachers displayed their respective Regional award winning Teaching Aids/Materials in different subjects like Languages, Mathematics, Science, Social Science inclusive of Humanities and Commerce subjects at Primary, Middle and Secondary and Senior Secondary Levels. The displayed Teachings Aids/ Materials ranged from different types of Charts, Pictures, Models to Multi Media Presentations, Board Games and many more.



Teaching Aids Selected at the National Level

The following 12 Teaching Aids were selected at the National Level:

S. No.	Name of the Teacher	Name of the School	Subject	Title of the Teaching Aid	Class
1	Ms. C. Sabeeka Rao	DAV Public School, P.O. Nayapalli, Bhubaneswar	English	Let Open the Magic Book	1
2	Ms. Astha Arya	Tagore International School, East of Kailash, New Delhi	English	3 Secrets for Teaching Character Traits	VII
3	Ms. Sriekala Nair	DAV International School, Kharghar, Navi Mumbai	English	An Elementary School	XII
4	Ms. Mitali Madhusmita Satpathy	DAV Public School, Chandrasekharapur, Odisha	Mathematics	LCM	V
5	Ms. B. Hemakumari	Balam Academy, Vanpadi Road, Ranipet	Mathematics	Integer and Me	VII
6	Ms. Ashmita	BCM Arya Model Sr. Sec. School, Shastri Nagar, Ludhiana	Mathematics	Mobile Math Lab	IX
7	Ms. Deepa Singh	Shri Ram Shiksha Mandir Sr. Sec School, Jindpur, Delhi	EVS	Earth at a Glance	V
8	Ms. Surjit Kaur	Rukmini Devi Public School, CD Block, Pitampura, New Delhi	Science	Lights Camera Action	VIII
9	Mr. Mohanan Nair J	St. John's School, Keerukuzhy, P O Thumpamon	Physics	Malus Law – cum-Brewster's law Verifier	XII
10	Ms. Gargi Thakur	Ahlcon International School, Mayur Vihar, Delhi	EVS	Here Comes a Letter	III
11	Ms. Monideepa Bhaduri	Apeejay School, Salt lake, Kolkata	Geography	Conservation of Energy	VIII
12	Ms. Meenu	Delhi Public School, Behind Nacharam, Hyderabad	Fashion Studies	Lexique de la mode	XI

The brief write ups of all the selected teaching aids are enclosed as Annexure D.

Annexures

ANNEXURE A

CBSE Circular



केन्द्रीय माध्यमिक शिक्षा बोर्ड
CENTRAL BOARD OF SECONDARY EDUCATION



CBSE/DIR (ACAD)/2019

Date: 29th April 2019

Circular No. 24/2019

All Heads of Schools affiliated to CBSE

Subject: CBSE School Teachers' Teaching Aids/Material Competition

Teaching aids are an integral component in any classroom. Teaching aids not only help reinforce a skill or concept but also relieve monotony or boredom by presenting information in an interesting and exciting way by engaging all the senses of students. Good teaching aids play a vital role in enhancing learning. Many teachers in the country are involved in making teaching aids and improvised apparatus for demonstrations in their classrooms. However their isolated efforts in the schools do not get recognition at any platform except their own schools.

CBSE always tries to find and recognize hidden talent and continuing this tradition it is providing the teachers of its affiliated schools a platform i.e. **CBSE School Teachers' Teaching Aids/Material Competition** to showcase their efforts in development and use of innovative teaching aids.

OBJECTIVES

- To encourage creative and innovative classroom demonstrations by teachers.
- To provide opportunity to teachers to share their creative and innovative approaches and ideas in teaching.
- To highlight the importance of teaching material in teaching learning process.

LEVELS OF COMPETITION

- The Competition will be conducted at two levels – **Regional Level and National Level**.
- The Regional Level Competitions will be conducted in different parts of the country in the month of **August 2019**.
- The National Level Competition will be conducted after the completion of the Regional Level Competitions.
- Teachers selected at the Regional Level will participate at the National Level.
- The dates for both the levels will be notified later.

At the both-Regional and National levels, **best teaching aids** as per the following criteria will be identified and selected -

- One per each subject (**Language, Mathematics, Science and Social Sciences inclusive of Humanities and Commerce subjects**) at all the levels i.e primary; middle; secondary and senior secondary.



- In total **12 best entries** will be identified and selected per region. At National Level also, 12 best entries will be selected.

GUIDELINES

I. FOR PARTICIPATION:

1. All teachers willing to participate need to apply online on the link given below on or before **31st May 2019**.

[Registration - Teaching Aids Competition](#)

2. A school can submit any number of entries.
3. The teacher(s) may make a teaching aid/material for any one topic or any one theme of the subject of any one class being taught.
4. The teaching aids may be prepared/created for the students of:
 - i. Primary level (Classes I-V)
 - ii. Middle Level (Classes VI- VIII)
 - iii. Secondary and Senior Secondary Level (Classes IX-XII)
5. The teaching aid/material has to be prepared or created by an individual teacher. It may encompass material and other physical means/ infrastructure/ tools/ apparatus/ equipment used by the teacher to deliver a lesson, support student learning, engage students to acquire knowledge in different ways and facilitate the achievement of learning outcomes.
6. The teaching aid/material may be a visual aid / audio aid / audio – visual aid; projected or non – projected. So the teaching aid/material may be a chart, game (board/file folder/any other), puppets, cartoon(s), mobile technology, models, cards, videos, etc.
7. The items or the material used to prepare or create the teaching aid/material may be purchased/ designed by the teacher himself/herself / computer generated / any other and is readily available.
8. Use of biodegradable or recycled products/material in making teaching aids shall be appreciated.
9. Rs.1500/- has to be paid per entry as participation fee. The fee has to be paid in the form of Demand Draft in the name of Secretary CBSE payable at Delhi.
10. The printed copy of the online application duly signed and forwarded by the school Principal along with the Demand Draft is to be sent to the following address super scribed '**CBSE SCHOOL TEACHERS' TEACHING AIDS COMPETITION**' latest by **10th June 2019**:

Ms. Ramandeep Kaur
Assistant Secretary (Academics)
Central Board of Secondary Education
Shiksha Sadan, 17, Rouse Avenue
New Delhi – 110002

शिक्षा सदन, 17, राउस एवेन्यू, नई दिल्ली – 110 002
"Shiksha Sadan", 17, Rouse Avenue, New Delhi – 110 002
वेबसाइट/Website : www.cbseacademic.in





11. The selected teachers at the Regional Level will display and demonstrate the same teaching aid/material as selected at the Regional Level.
12. The participating teachers/ schools have to bear all the expenses related to participation in the competition. They have to make their own travel and stay arrangements.
13. Certificates will be awarded to all the participating teachers.
14. The venue and the date of the competition will be communicated to all the registered participants through email.

II. FOR DISPLAY AND PRESENTATION OF TEACHING AID/MATERIAL:

1. Display includes the teaching aid/material along with a brief write up.
2. The content of the write up includes the following:
 - i. Name of the participating teacher
 - ii. Name and address of the school
 - iii. Aid/Material: (Type of aid)
 - iv. Title of the teaching aid/material
 - v. Name of the topic /theme
 - vi. Subject
 - vii. Class
 - viii. Instructional Objectives to be achieved
 - ix. Material used in the preparation of the aid/material
 - x. Procedure of creating the teaching aid/material
 - xi. Time taken to prepare/create the aid/material
 - xii. Cost involved
 - xiii. Use of the aid/ material in actual classroom setting
 - xiv. Benefits of the aid/material to the students and teachers
3. The participants will be making an oral presentation too and demonstrate the use of the teaching aid/material. Oral Presentation will include all the information as given in the brief write up. Each participant will be given five - ten minutes for the oral presentation and demonstration.
4. The participants will have to bring their own supporting material eg. laptop, internet connection, tapes, charts, etc. for displaying their teaching aid/material.

EVALUATION CRITERIA

The teaching aids will be evaluated by a **group of experts** on the following criteria:

S. No.	Criteria	Marks
1	Originality and Creativity	5
2	Adaptability - Easy to make, cost effective, time efficient and the material used	10




केन्द्रीय माध्यमिक शिक्षा बोर्ड
CENTRAL BOARD OF SECONDARY EDUCATION



3	Ease of use – Easy to use and demonstrates usability in classroom settings	5
4	Educational Significance/ Instructional Appropriateness - The aid /material prepared/created is appropriate; encompasses the significance of teaching the topic on which the aid has been prepared; matches the grade level of the target audience and supports their learning or facilitates achievement of learning objectives	10
5	Professional appearance/quality	10
6	Presentation and Demonstration of the teaching aid/material	10
Total Marks		50

All school heads are requested to widely publicize the information to all the concerned teachers.

For any other information in this regard, please contact at 011-23231067 or email at cbsetac2019@gmail.com


(Dr. Joseph Emmanuel)
Director (Academics)

Copy to the respective Heads of Directorates, Organizations and Institutions as indicated below with a request to disseminate the information to all the schools under their jurisdiction:

1. The Commissioner, Kendriya Vidyalaya Sangathan, 18-Institutional Area, Shaheed Jeet Singh Marg, New Delhi-16
2. The Commissioner, Navodaya Vidyalaya Samiti, B-15, Sector-62, Institutional Area, Noida-201309
3. The Director of Education, Directorate of Education, Govt. of NCT of Delhi, Old Secretariat, Delhi-110 054
4. The Director of Public Instructions (Schools), Union Territory Secretariat, Sector 9, Chandigarh-160 017
5. The Director of Education, Govt. of Sikkim, Gangtok, Sikkim –737101
6. The Director of School Education, Govt. of Arunachal Pradesh, Itanagar –791 111
7. The Director of Education, Govt. of A&N Islands, Port Blair – 744101
8. The Director of Education, S.I.E., CBSE Cell, VIP Road, Junglee Ghat, P.O. 744103, A&N Island
9. The Director, Central Tibetan School Administration, ESSESS Plaza, Community Centre, Sector 3, Rohini
10. The Additional Director General of Army Education, A – Wing, Sena Bhawan, DHQ, PO, New Delhi-110001
11. The Secretary AWES, Integrated Headquarters of MoD (Army), FDRS Building No. 202, Shankar Vihar (Near APS), Delhi Cantt-110010
12. The Under Secretary (EE-1), MHRD, Govt. of India, Department of SE&L, Shastri Bhawan, New Delhi-01

“शिक्षा सदन”, 17, राउस एवेन्यू, नई दिल्ली – 110 002
“Shiksha Sadan”, 17, Rouse Avenue, New Delhi – 110 002
वेबसाइट/Website : www.cbseacademic.in

ANNEXURE B

Venues of the Regional Level Competition	
S. No.	Venue School
1	Sunbeam English School, Bhagwanpur Lanka, Varanasi (UP)
2	Columbia Convent School, Indore, Madhya Pradesh
3	SAI International School, Bhubaneswar, Odisha
4	Apeejay School, Salt Lake, Kolkata, West Bengal
5	Delhi Public School, North, Bangalore, Karnataka
6	Delhi Public School, Nacharam, Hyderabad, Andhra Pradesh
7	Indira National School, Pune, Maharashtra
8	Amity International School, Vasundhra, Ghaziabad, Uttar Pradesh
9	Pragyan School, Gautam Budh Nagar, Uttar Pradesh
10	Guru Nanak International School, Ludhiana, Punjab
11	Delhi Public School, Dhurva Ranchi, Jharkhand
12	Najath Public School, Ernakulam, Kerala
13	The Indian Heights School, Dwarka, New Delhi
14	Bharatiya Vidya Bhavan's Mehta Vidyalaya, KG Marg, New Delhi
15	Bhawan Vidyalaya, Sector 15, Panchkula, Haryana

ANNEXURE C

Regional Level Teaching Aids Competition Result

S. No.	Name of The Participant	Name & Address of The School	Subject	Topic on Which The Teaching Aid Has Been Prepared	Class
1	Juhi Singh	Sunbeam School Bhagwanpur 206, Bhagwanpur, Varanasi	Environmental Science	Sense Organs	I
2	Priya Mitra	Sunbeam English School 206, Bhagwanpur Lanka, Varanasi	English	Gender and Types of Gender	III
3	Alka Kumari	Sunbeam School Varuna, Central Jail Road, Sikraul, Varanasi U.P. 221002	Mathematics	Metric Conversions	V
4	Nandini Girdhani	Sunbeam Suncity 821 GA, Bachhaon Road, Karsana, Varanasi-221011 (U.P)	English	Active & Passive Voice and Direct & Indirect Speech	VI
5	Pradeep Singh	Sunbeam Suncity Karsana, Bachhaon, Road, Varanasi	Mathematics	Integer	VI
6	Amresh Tiwari	Sunbeam Suncity (School & Hostel) 821 GA Karsana, Bachhaon, Varanasi	Computer	Number System	VII
7	Pallavi Tiwari	Sunbeam School Varuna Central Jail Road, Sikraul Varanasi	Geography	Rain Water Harvesting & Water Cycle	VIII
8	Srikant Dwivedi	Sunbeam Suncity (School & Hostel) 821, GA, Bachhaon Road, Karsana, Varanasi, 221011, UP	Mathematics	Sides of a Triangle	IX
9	Rakesh Singh	Sunbeam School Lahartara Near Lahartara Overbridge, Varanasi	Science	Respiration	X
10	Upmesh Upadhyay	Aditya Birla Public School Jagdishpur Amethi	Hindi	RAS (Vyakaran)	X
11	Pragya Sharma	Sunbeam Suncity School & Hostel 821 GA Bachhaon Road Karsana Varanasi 220111	Business Studies	Introduction To Management	XII
12	Tarveen Kaur Singh	Apeejay School 115, Park Street. Kolkata - 700016	English	Three Little Pigs	I
13	Malavika Sinha	Apeejay School, Salt Lake,	Mathematics	Operation of	VI

		Kolkata		Integers	
14	Tanushri Bhattacharya	Guru Teg Bahadur Public School, Durgapur	Bengali	Bhasha O Byakaran	VI
15	Monideepa Bhaduri	Apeejay School, Salt Lake Kolkata-700091	Geography	Energy Resources	VIII
16	Shibani Dasgupta	Apeejay School, 115, Park Street. Kolkata - 700016	Chemistry	Chemical Reactions of Metals	VIII
17	Rashmi Mantri	Apeejay School, Park Street 115 Park Street, Kolkata 700016	English	Writing Skill- (Both Fiction And Non-Fiction)	IX
18	Moyukh Bhattacharya	Apeejay School, 115, Park Street, Kolkata 700016	Physics	Atoms	XII
19	Bandana Kumari	Viveka Vidyalaya, Jamshedpur	Mathematics	Generating Multiplication Table	III
20	Jhuma Mukerjee	Viveka Vidyalaya Jamshedpur	Science	Water Cycle	III
21	Soma Deogharia	Surendranath Centenary School, H.B. Road Dipatoli Ranchi	English	Adjectives	IV
22	Niketa Srivastava	Vivek Vidyalaya Jamshedpur, Pin-831015	Social Science	Indian Armed Force	V
23	Sweta Lata	Surendranath Centenary School, H.B. Road,Dipatoli, Ranchi-834009	Physics	Electricity and Circuits	VI
24	Anjali Singh	Surendranath Centenary School, H.B.Road, Dipatoli, Ranchi-834009	Geography	Internal Structure of the Earth	VII
25	Ritambara Jha	Mount Litera Zee School NH-33, Pardih Chowk, Jamshedpur, Jharkhand-831012	English	Tenses	VIII
26	Rita Singh	Surendranath Centenary School, HB Road, Dipatoli, Ranchi	Mathematics	Geometry	IX
27	Jyoti Kumari	Sri Ramakrishna Sarada Ashrama, Vivekananda Central School Rabindra Path, Hazaribag	Hindi	Ras	X
28	Nivedita Verma	Surendranath Centenary School, Old HB Road, Dipatoli, Ranchi	Geography	IT Industry	X
29	Jiwan Kumar Pandey	DAV Public School, Behind Police Line Gumla Jharkhand 835207	Physics	Mechanics	XI
30	Mini Elizabeth Abraham	Brilliant Public School Seepat Road, Bahatarai,	Mathematics	Pythagoras Theorem	VII

		Bilaspur, Chhattisgarh, 495001			
31	C. Sabeeka Rao	DAV Public School, Unit-VIII, Po-Nayapalli, Bhubaneswar-751012, Odisha	English	'Sh' Sound Words	I
32	Susrita Rani Biswas	DAV Public School Chandrasekharpur, Bhubaneswar	Odia	Sabu Sundara	III
33	Itishree Mohanty	D.A.V. Public School, Chandrasekharpur, Bhubaneswar, Odisha	Social Studies	Mapping India	V
34	Nilima Mohanty	DAV Public School Chandrasekharpur Bhubaneswar, Pin-751021	Science	Body Parts	V
35	Mitali Madhusmita Satpathy	DAV Public School, Chandrasekharpur Niladri Vihar, Bhubaneswar	Mathematics	LCM	V
36	Amrapalli Panda	DAV Public School Sailashree Vihar, Chandrasekharpur, Bhubaneswar	Science (Physics)	Multiple Reflection	VII
37	Arabinda Satapathy	DAV Public School Chandrasekharpur Sailashree Vihar, Bhubaneswar	Mathematics	Squares and Square Root, Cubes and Cube Root	VIII
38	Rajshree Mohanty	DAV Public School, Unit-VIII, PO-Nayapalli, Bhubaneswar-751012, Odisha	Science	Cell Division	IX
39	Dipanjali Padihary	DAV Public School Sailashree Vihar Chandrasekharpur Bhubaneswar	Chemistry	Solid State and Organic Compound	X
40	Md Galib Hasham	Greenfield School PO-Palaspara, Dist-Keonjhar, Odisha	Science	A.C Generator	X
41	Jyoti Ranjan Mohanty	DAV Public School Chandrasekharpur Bhubaneswar 751021	Physics	Semiconductor Devices	XII
42	Pradipta Kumar Sahoo	DAV Public School Chandrasekharpur Bhubaneswar	Physics	Electro Magnetic Induction	XII
43	Rekha J	Satchidananda Jothi Nikethan International School Kallar, Mettupalayam	Science	Human Physiology	IV
44	Kamal Preet	DPS, Bangalore South, Bikaspara Main Road, Mango Garden Layout,	Science	_SDG's Ka Pitara	VI

		Konanakunte, Bengaluru, Karnataka 560062			
45	Corsica Nancy M	Satchidananda Jothi Nikethan International School Kallar, Mettupalayam	Science	Structure of Atom	VII
46	Zakir Shariff A	Balsam Academy 5/410A, Vanapadi Road, Bharathi Nagar Extension, Ranipet-632403.	Science	Force and Laws of Motion	IX
47	Sampath Kumar.N	Kavi Bharathi Vidyalaya 792/665, Thiruvottiyur High Road	Physics	Light	X
48	Rajasekar.P	Satchidananda Jothi Nikethan Ineternational School Kallar, Mettupalayam	Mathematics	Centroid of a Triangle Using Soap Water	X
49	Vinothkumar.R	Kavi Bharathi Vidyalaya 792/665, Thiruvottiyur High Road	Mathematics	Pair of Linear Equations in Two Variables	X
50	Manju Balasubramanyam	Delhi Public School Bangalore North 35/1a, Sathanur Village, Jala Hobli, Bagalur Post, Bangalore North	Biology	Genetics	XII
51	Sreejith.M.K	Chitrakoota School No.37/6, Nagadevanahalli, Kengeri Hobli, Bangalore - 560056	Mathematics	Rolle's Theorem and Mean Value Theorem (Continuity And Differentiability)	XII
52	Archana Yedurkar	Delhi World Public School Greater Noida West (Noida Extension)	Mathematics	Number Comparison	I
53	Ilashri Jaiswal	Bal Bharati Public School Sector -21 , Noida	Hindi	Hindi Vyakaran Aur Sahitya	V
54	Sania Arora	Delhi Public School Gautam Budh Nagar B-1, Sector 132 Expressway	Environmental Studies	Shelter and Climatic Conditions	V
55	Neerja Bhatnagar	Bal Bharati Public School, Sector 21, Noida	Science And Environment	Experiential Learning	VII
56	Ritu Prasad	Delhi Public School Sector-132 , Expressway, Gautam Budh Nagar	Geography	Formation of Rocks and the Rock Cycle	VII
57	Shilpi Jain	Delhi World Public School HS 57, Knowledge Park V, Greater Noida West (Noida Extension)	Mathematics	Pythagoras Theorem	VIII
58	Kirti Tandon	Step By Step School Plot No. A 10, Sector 132, Yamuna Expressway, Noida	English	English Poetry/Grammar	X
59	Priyanka Sharma	DPS GBN- Sector 132 Noida	Mathematics	Conic Sections	XI

		B-1, Sector-132, Expressway, Gautam Buddh Nagar Noida, U.P-201301			
60	Rani Vaid	Bal Bharati Public School, Sector - 21 , Gautam Budh Nagar , Noida , UP	Physics	Mechanics, Properties of Fluid	XI
61	Vinaya Pujari	Bal Bharati Public School, Sector 21, Noida, (Pin- 201301)	Business Studies	Scientific Management Techniques	XII
62	Nidhi Gupta	DWPS Noida Extension HS 57 Knowledge Park 5 Greater Noida West (Noida Extension)	English	Grammar	VI
63	Gargi Thakur	Ahlcon International School Mayur Vihar,Phase-1 Opp. Una Enclave, Block-F New Delhi-110091	Environmental Studies (EVS)	Communication- Postal Services	III
64	Smriti Chandra	Ahlcon International School Mayur Vihar, Phase - 1, Delhi-110091	Science	Uses of Plants	II
65	Isha Laroia	Amity International School, Pushp Vihar, New Delhi	Mathematics	Types of Triangles and Its Properties	VII
66	Karamjit Nagpal	Bal Bharati Public School Sector-12, Dwarka, New Delhi - 110078	Mathematics	Comparison of Area of 1sq.m & 1sq.cm	V
67	Annu Walia	C.L.Bhalla Dayanand Model School Plot No. 7, Jhandewalan, Karol Bagh, New Delhi- 110005	Chemistry	Corrosion and Polymers	XII
68	Farah Aqueel	G D Goenka Public School, J-Block Sarita Vihar, New Delhi-76	English	Story Writing	III
69	Ramaa Shankar	Notre Dame School BTPS Colony, Badarpur, New Delhi -110044	Business Studies	Principles Of Management	XII
70	Surjit Kaur	Rukmini Devi Public School CD Block, Pitampura, New Delhi-110034	Science	Light and its Properties	VIII
71	Shivali Gupta	St. Joseph's Academy Savita Vihar, North East, Delhi	Mathematics	Angle Sum Property of Polygon	X
72	Aastha Arya	Tagore International School East of Kailash, New Delhi	English	Character Traits	VII
73	K. Krishna Veni	Howard Public School Door No. 3-6-568, Street No. 8, Himayathnagar, Hyderabad, Telangana -	Social Science	India Natural Division	IV

500029					
74	Hazari Vijaya Laxmi	Howard Public School Door No. 3-6-568, Street No. 8, Himayathnagar, Hyderabad, Telangana - 500029.	Mathematics	Place Values	V
75	T. Usha Rani	Howard Public School Door No. 3-6-568, Street No. 8, Himayathnagar, Hyderabad, Telangana - 500029.	Social Science	Natural Vegetation of India	VI
76	K. Sarah Suhasini	Howard Public School Door No. 3-6-568, Street No. 8, Himayathnagar, Hyderabad, Telangana - 500029	English	Adjectives	VI
77	B.Hemakumari	Balam Academy 5/410a, Vanapadi Road, Bharathi Nagar Extension, Ranipet-632403	Mathematics	Addition of Integer - Rule	VII
78	B. Padmavathi	Howard Public School Himayath Nagar, Hyderabad	Telugu	Jeevana Bhashyam	X
79	B Uma Devi	D A V Public School Vivekananda Nagar Colony, Kukatpally, Hyderabad	Biology	Nephron - Structure and Function	X
80	Meenu	Delhi Public School, Plot No. 44, 42A, Behind Nacharam Telephone Exchange, Malkajgiri Mandal, Medchal District-500076	Fashion Studies	Fashion Vocabulary	XI
81	P Uma Maheshwari	Maharishi Vidyamandir, Kondapur	Language	Tenses	V
82	N Rama Devi		Mathematics	Angle Subtended Theorem	IX
83	Neha Budhiraja	Bal Bharati Public School Sector 12, Dwarka, New Delhi-78	Geography	Lithosphere (Continents) and Hydrosphere (Oceans)	VI
84	Monika Dass	Father Agnel School Gautam Nagar, New Delhi 110049	Science	Understanding Natural Phenomena and How Things Work? How Things Work	VIII
85	Jatinder Kaur Jolly	Father Agnel School Gautam Nagar , New Delhi-110049	Mathematics	Arithmetic Progression	X
86	Babli Kumari	Fr. Agnel School Gautam Nagar, New Delhi	हिंदी	हिंदी पाठ	VII

87	Yamini Pandey	G.D.Goenka Public School J-Block, Sarita Vihar, New Delhi - 110076	Social Science (History)	Nationalism in India	X
88	Rani Adhikari	Kendriya Vidyalaya Rajouri Garden, New Delhi	Art Education	Figurative Composition	
89	Poonam Kapoor	Lilawati Vidya Mandir Senior Secondary School, Shakti Nagar, Delhi-110 007	English	Story Telling: What Lies Beneath	V
90	Upma Narang	Maharaja Agarsain Public School Ashok Vihar Phase-4 Delhi - 110052	Mathematics	Multiplication	III
91	Deepa Singh	Shri Ram Shiksha Mandir Sr. Sec. School Jindpur, Delhi-110036	EVS	Our Planet- Earth	V
92	Priyanka Pandey	Tagore International School E-Block, East of Kailash, New Delhi-110065	Environmental Science	World of Animals	III
93	Tanima Sarkar Chakravarti	The Air Force School Subroto Park, New Delhi 110010	English	Classified Advertisement	XII
94	Hemlata Shinde	Bal Bharati Public School Sector 4, Plot No. 5, Kharghar, Navi Mumbai, Maharashtra-410210	Mathematics	Division	III
95	Parag Kuvar	Pawar Public School, Nanded City, Pune	Science	Atoms and Molecules	IX
96	Anuradha Santosh Raskar	Pawar Public School, Nanded City, Sinhgad Road, Pune- 411041	Science	Our Skeletal System	V
97	Rina Anthony	The Orbis School, Mundhwa 35, 2d/1, Mundhwa - Manjri Road, Keshavnagar, Mundhwa, Pune 411036. India	English	Different Genre of Stories(Literary Text)	V
98	Chitra Atul Mene	Delhi Public School Pune Nyati County, Village Mohammadwadi	Science	Effects of Electric Current	VIII
99	Madhuri Sunil Dixit	Vidya Pratishthan's New Bal Vikas Mandir, Pimpri Indapur Road, Pimpri- Baramati-413102	Mathematics	Speed Mathematics (Multiplication And Finding Square Roots of Two Digit And Three Digit Numbers)	VIII
100	Poonam Ganjale	Podar International School- Chakan Village Aambethan, Chakan, Taluka – Khed,	Sanskrit	Vyakaran - Shabdrupani	VIII

		Pune - 410501. Maharashtra.			
101	Monika Mishra	Vikhe Patil Memorial School, Off Senapati Bapat Road, Near Patrakar Nagar, Pune	Geography	Sustainable Environment	X
102	Vellanki Vasudeva Murthy	Atomic Energy Central School No 5 Anushaktinagar, New Mandala	Mathematics	To Solve The Mathematical Problems By Tactility	X
103	Sriekala Nair	D. A. V. International School Plot 31, Sector 15, Kharghar, Navi Mumbai	English Core	Poem	XII
104	Kiran Tiwari	Navrachana School Sama. Sama Main Road, Sama	English	The Sentence And Its Types	IV
105	Nandita Aich	New Era Senior Secondary School, Near Arpan Complex, Nizampura, Vadodara 390002	Science	Food Chain	IV
106	Shital Samani	Bright Day School (13022) Vasna Bhaily Road, Vadodara	Social Studies	Let's Discover Our Country - India	IV
107	Sapna Iyer	Navrachana School, Sama 24, Prabhu Park, Old Chhani Road, Nr. Deep Multiplex	Mathematics	Fractions	V
108	Madhusmita Jena	DAV International School Off Prahlad Nagar Corporate Road, Ahead of Vodafone Corporate House, Makarba	Social Science (Geography)	Layers of Atmosphere	VI
109	Indu Menon	At. Angela Sophia Sr. Sec. School, Outside Ghat Gate Jaipur Rajasthan	Mathematics	Area of Path	VII
110	Linata Arande	New Era Senior Secondary School, Near Arpan Complex, Nizampura	Mathematics	Polygons	VIII
111	Sweetey Karandikar	Ramakrishna Vivekananda Vidyapeeth, Kapildhara Colony, Bijuri	Science	Acid Rain	VIII
112	Kirti Budhiraja	JVP International School Sector-17, Pratap Nagar, Near P.H.E.D. Water Tank, Jaipur, Rajasthan 302033	Computer Science/ Informatics Practices	Virtual Concepts of Computer	XI
113	Puneet Krishna Sharma	Delhi Public School, Jaipur Bhankrota NH-8 Ajmer Road, Jaipur, Rajasthan Pin- 303011	Mathematics	Trigonometry	XI
114	Raman Kumar Choubay	Mount Litera Zee School Delanpur Sailana Road Ratlam, Ratlam	Mathematics	Introduction to Limit	XI
115	Sandipkumar G.	Bhagwati International	Physics	Polarization of	XII

	Darji	Public School College Campus, Rajmahal Road, Patan (Gujarat) - 384265		Light	
116	Nidhi Sharma	Uttam School For Girls	Mathematics	Addition	III
117	Shweta Singh	B- Block, Shastri Nagar, Ghaziabad	Science	Classification of Animals	III
118	Astha Sharma	D.A.V. Public School Sahibabad	English	Nouns	IV
119	Sanjay Raghav	Seth Anandram Jaipuria School, Sector 14 C Vasundhara	Mathematics	Factors and Number System	VIII
120	Arvind Sharma	Shambhu Dayal Global School, Dayanand Nagar Opp. Nehru Stadium Ghaziabad	Physics	Conservation of Angular Momentum	XI
121	Sunila Athley	Amity International School	English (Core)	On The Face of It	XII
122	Meenu Mathur Jha	Sector-6, Vasundhara, Ghaziabad	Science	State of Matter- Solid	VII
123	Kavita Mathur		Hindi	Visheshan	VI
124	Kartikey Bhardwaj		Mathematics	Coordinate Geometry	X

ANNEXURE D

Brief Write Ups of the Teaching Aids Selected at The National Level

Name of the Participating Teacher	<ul style="list-style-type: none"> Ms. C. Sabeeka Rao
Name and Address of the School	<ul style="list-style-type: none"> D.A.V. Public School Unit VIII, Nayapalli -751012
Aid Material (Type of Aid)	<ul style="list-style-type: none"> Story Book
Title of the Teaching Aid / Material	<ul style="list-style-type: none"> Let's Open The Magic Book.....
Name of the Topic / Theme	<ul style="list-style-type: none"> 'Sh' Digraph Sound and Words
Subject	<ul style="list-style-type: none"> English (Language)
Class	<ul style="list-style-type: none"> I
Instructional Objectives to be achieved	<ul style="list-style-type: none"> Inculcating Reading Habit. Distinction between 'S' and 'Sh' Sound.
Material used in the preparation of the Aid/Material	<ul style="list-style-type: none"> Chart Paper Adhesive Black Paint & Brush Crayons Sketch Pens Cardboard(Carton Box) Popsicle Stick Aluminium Wrap Twigs Fabric Scrap
Procedure of creating the Teaching Aid / Material	<ul style="list-style-type: none"> Reusing discarded things of daily use at school and home.
Time taken to prepare the Aid /Material	<ul style="list-style-type: none"> 10 Hours (4 Days)
Cost involved	<ul style="list-style-type: none"> Rs.100/-
Use of the Aid /Material in Actual Classroom Setting	<ul style="list-style-type: none"> May be used for introduction, presentation, evaluation and follow up activity related to the topic.
Benefits of the Aid / Material to the Students and Teachers	<ul style="list-style-type: none"> Generates interest in the students for the topic Encourages reading habit among students

	<ul style="list-style-type: none"> • Pictorial Presentation helps in concrete learning • Holds students' attention throughout teaching-learning process • Complete package of covering the topic
Name of the Participating Teacher	<ul style="list-style-type: none"> • Ms. Aastha Arya
Name and Address of the School	<ul style="list-style-type: none"> • Tagore International School, East of Kailash, Delhi
Aid Material (Type of Aid)	<ul style="list-style-type: none"> • Visual Aid
Title of the Teaching Aid / Material	<ul style="list-style-type: none"> • 3 Secrets for teaching Character Traits
Name of the Topic / Theme	<ul style="list-style-type: none"> • Analyzing Characters
Subject	<ul style="list-style-type: none"> • English
Class	<ul style="list-style-type: none"> • VI - VIII
Instructional Objectives to be achieved	<ul style="list-style-type: none"> • Students will be able to differentiate between external traits and internal traits • Students will be able to identify and describe characters' thoughts, feelings, dialogues, actions with the help of textual evidence • Students will be able to infer that physical appearance is not a character trait as character traits describe behaviour and attitude by sharing character traits of a specific character from a story or a lesson • Students will be able to incorporate character traits given in the character web to fill in the graphic organizer and character wheel • Students will be able to add character traits in the help box given • Students will be able to describe a person of their choice using different character traits
Material used in the preparation of the Aid/Material	<ul style="list-style-type: none"> • Coloured charts, used a-4 sheets, quilling strips, sketch pens, scissors, fevicol, tape, celphren
Procedure of creating the Teaching Aid / Material	<ul style="list-style-type: none"> • Brainstorming of the mind- leading to generation of the idea of analyzing character traits • As my students mostly missed out to support the description of the characters with the help of textual evidences, this became a necessary aspect to deal with • A rough draft was prepared and sequence of the description was decided upon- i.e. Going from general to specific • As a token of reinforcement and motivation winner crown designed and made

	<ul style="list-style-type: none"> • Coloured chart sheets were taken and joined together in form of an album. • Sketch pens/ coloured pens/ water colour pens were used to write the information. • Cellophane sheet was used to cover the teaching aid so as to preserve and protect the teaching aid from any damage.
Time taken to prepare the Aid /Material	<ul style="list-style-type: none"> • 4 days
Cost involved	<ul style="list-style-type: none"> • Rs.250/- to Rs.300/-
Use of the Aid /Material in Actual Classroom Setting	<ul style="list-style-type: none"> • Can be used in pair works or group discussions and also in special tutorial classes
Benefits of the Aid / Material to the Students and Teachers	<ul style="list-style-type: none"> • The students will observe the picture and will be able to decipher the difference between inside and outside traits • It is handy and portable for the teachers to carry it in the class as it is in the form of an album • Each page contains limited information for the teacher to discuss with the students; and the album is progressive in nature. Each page/ step builds upon the previous page/step. • The sample graphic organizers/ worksheets can be distributed to the students which they will discuss and attempt in the pairs/squares • The students can use various adjectives given in the character web to describe the characters of a story or a lesson • The students can use the adjectives to describe their favorite person • It will help students to understand that every person is born black and white and it is these character traits that a person learns from socialization • The teaching aid can be used to analyze characters of almost all kinds of lesson/ story/ novels • Students of almost all age groups can benefit from these activities • Since it is made up of commonly available charts, sketch pens and colours; any teacher can make or modify as per the strength of the students/ topic or lesson at hand and the objective of the lesson
Name of the Participating Teacher	<ul style="list-style-type: none"> • Ms. Sriekala Nair
Name and Address of the School	<ul style="list-style-type: none"> • DAV International School Plot 31, Sector 15 Kharghar, Raigad District Navi Mumbai – 410210
Aid Material (Type of Aid)	<ul style="list-style-type: none"> • Audio Visual

Title of the Teaching Aid / Material	<ul style="list-style-type: none"> Poetry in Pictures
Name of the Topic / Theme	<ul style="list-style-type: none"> An elementary school classroom in a slum
Subject	<ul style="list-style-type: none"> English core
Class	<ul style="list-style-type: none"> XII
Instructional Objectives to be achieved	<ul style="list-style-type: none"> To make students understand the poet's angst To make students understand social stratification, class conflict and inter-related sociological contexts To make the students understand the figurative use of language To make students understand the tone, the play with words To make students understand the poem through visual images To make the students empathize with reality of life
Material used in the preparation of the Aid/Material	<ul style="list-style-type: none"> Pictures from Google sites to match the lines Videos relevant to the poem Snippets
Procedure of creating the Teaching Aid / Material	<ul style="list-style-type: none"> Surfing through various sites Collecting relevant pictures matching with lines Watching videos to match with content Then choose and arrange in accordance to teaching
Time taken to prepare the Aid /Material	<ul style="list-style-type: none"> One week
Cost involved	<ul style="list-style-type: none"> ZERO COST except for the relevant pictures collected over the years.
Use of the Aid /Material in Actual Classroom Setting	<ul style="list-style-type: none"> The poem is taught in the same manner as presented. Students evince interest while learning the poem. Students enjoy learning English literature through images which transports them to reality.
Benefits of the Aid / Material to the Students and Teachers	<ul style="list-style-type: none"> Better understanding of the poem is achieved through visual presentation Ability to understand and appreciate the poetic lines Ability to correlate with poems of similar genre Pictorial images facilitate good thought process, understanding and imagination Effective teaching-learning process and experiential learning
<p><u>NOTE:</u> The complete poem by Stephen Spender, line by line, has been converted into Pictorial images. During the teaching-learning process, the students, though in higher grade, find it easy to understand the meaning of the lines. Secondly, pictorial images evince interest in students to</p>	

pay attention to the explanation taken up by the teacher.

Thirdly, during enrichment class, students are able to recall what the lines represent and they are able to remember the explanation given by the teacher.

Fourthly, pictorial representations cannot mirror actual reality, but each representation offers a different construction of the world and of experience in it, which becomes very effective for communicating a message in an emotionally evocative way.

PRESENTING THE FIRST STANZA OF THE POEM



The stunted, unlucky heir
Of twisted bones, reciting a father's gnarled disease.
His lesson from his desk



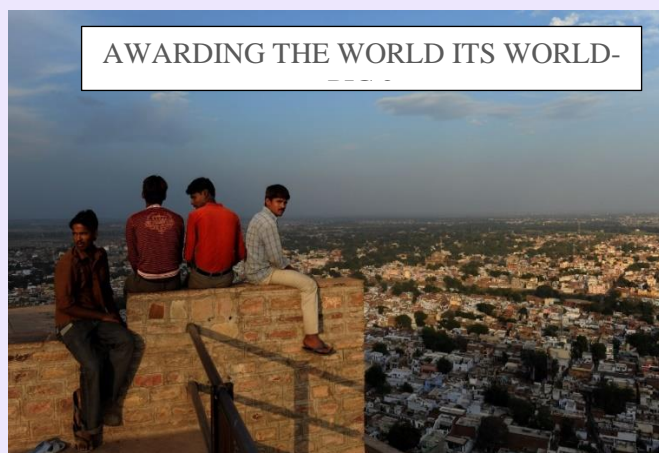
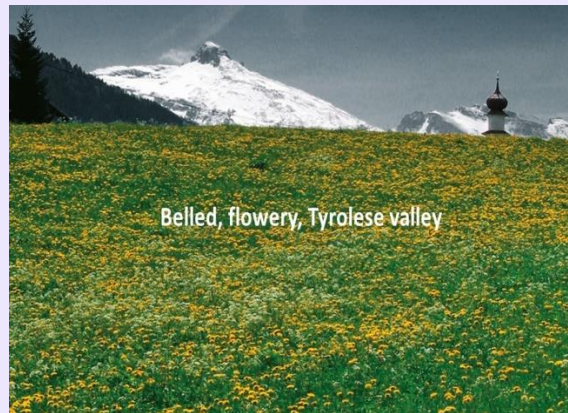
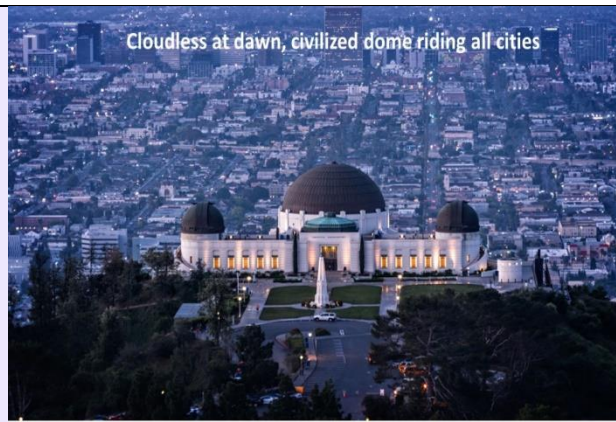
One unnoted, sweet and young.
His eyes live in a dream,
Of squirrel's game, in the tree room, other than this.

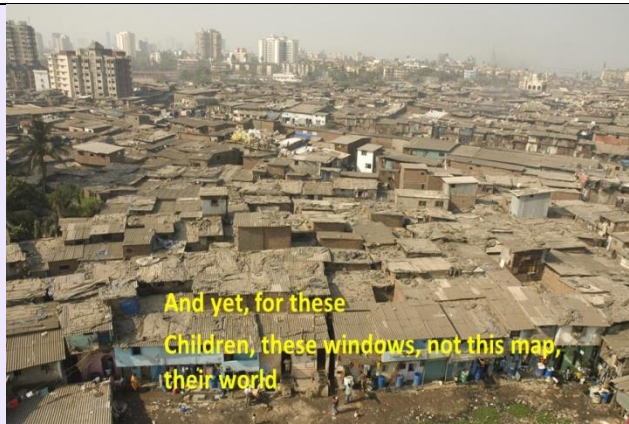


THE SECOND STANZA



On sour cream walls, donations.
Shakespeare's head





And yet, for these
Children, these windows, not this map,
their world



THESE WINDOWS.....THEIR

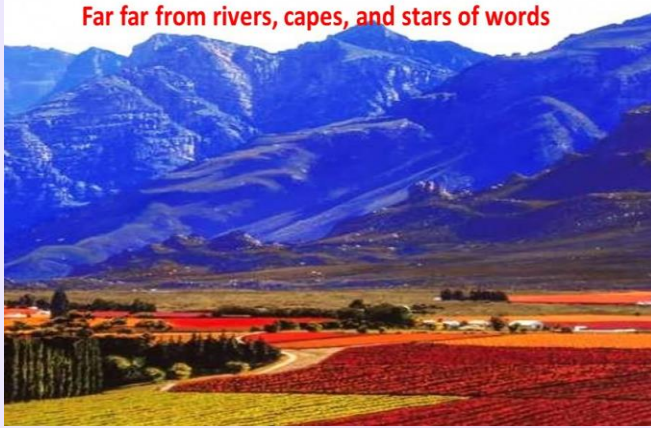


Where all their future's painted with a fog



A narrow street sealed in with a lead sky

Far far from rivers, capes, and stars of words



Through this slide, the explanation to the use of the words far, far in the beginning of the first stanza and the ending of the second stanza is taken up.

Far far from gusty waves these children's faces.

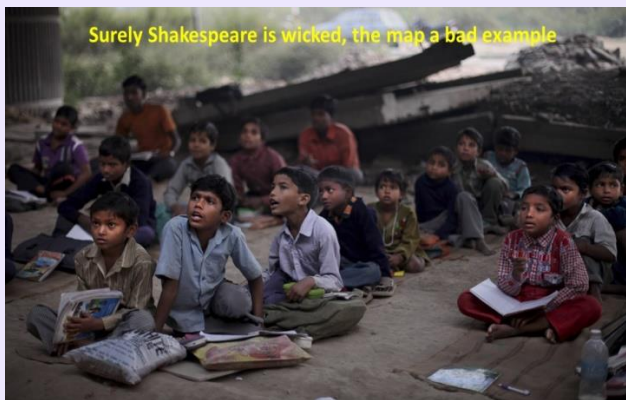


Far far from rivers, capes, and stars of words.



THE THIRD STANZA

Surely Shakespeare is wicked, the map a bad example



With ships and sun and love tempting them to steal—



Small Steps
PROJECT

www.smallstepsproject.org

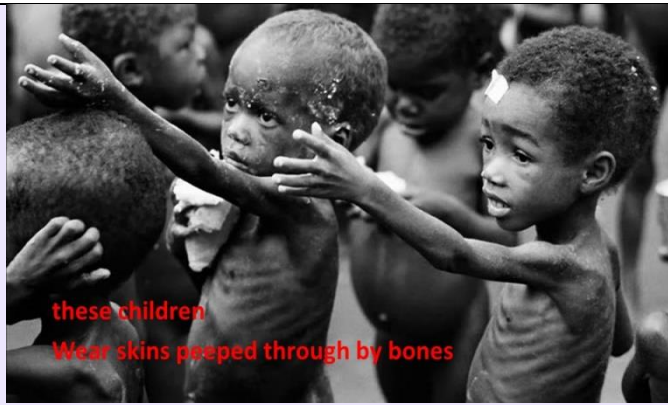
**A VIDEO BY SMALL STEPS PROJECT IS SHOWN TO STUDENTS.
THIS PROJECT ACTUALLY RELATES WITH THE THEME OF THE POEM.**

For lives that slyly turn in their cramped holes
From fog to endless night?

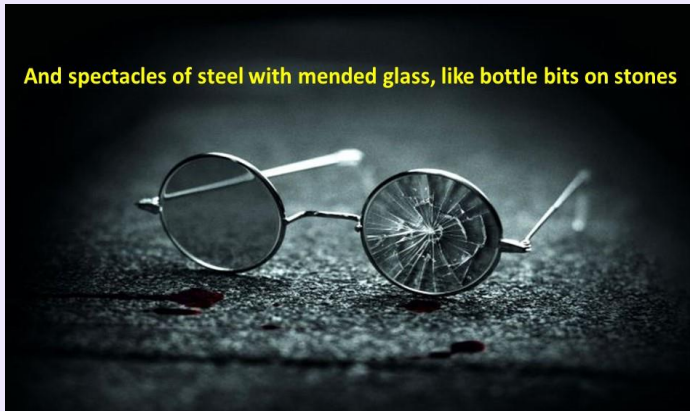


On their slag heap





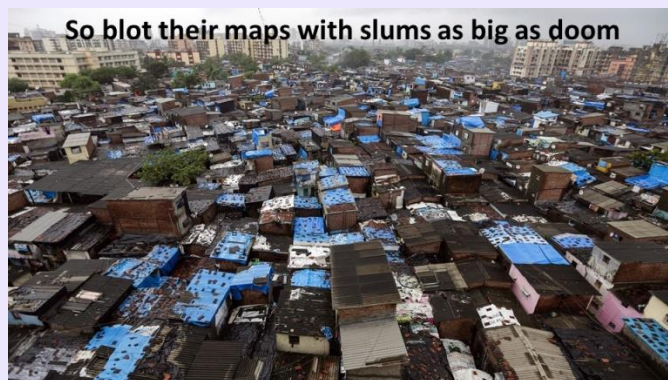
these children
Wear skins peeped through by bones



And spectacles of steel with mended glass, like bottle bits on stones



All of their time and space are foggy slum



So blot their maps with slums as big as doom

THE FOURTH STANZA

Unless, governor, teacher, inspector, visitor



This map becomes their window and these windows



These windows that shut upon their lives like catacombs



TO EXPLAIN THE WORD CATACOMB –
THE EXISTENCE OF CHILDREN IN SLUM





And show the children green fields and make their world
Run azure on gold sands, and let their tongues



ANOTHER VIDEO IS SHOWN TO
STUDENTS





After the complete explanation of the poem through pictograms, activities like crossword and word maze that are made online on free sites by the teacher are given to students so that they remember the key words important from examination point of view and certain poetic lines which can be used as philosophical line for life.

ACTIVITY 1 – WORD MAZE ON THE POEM

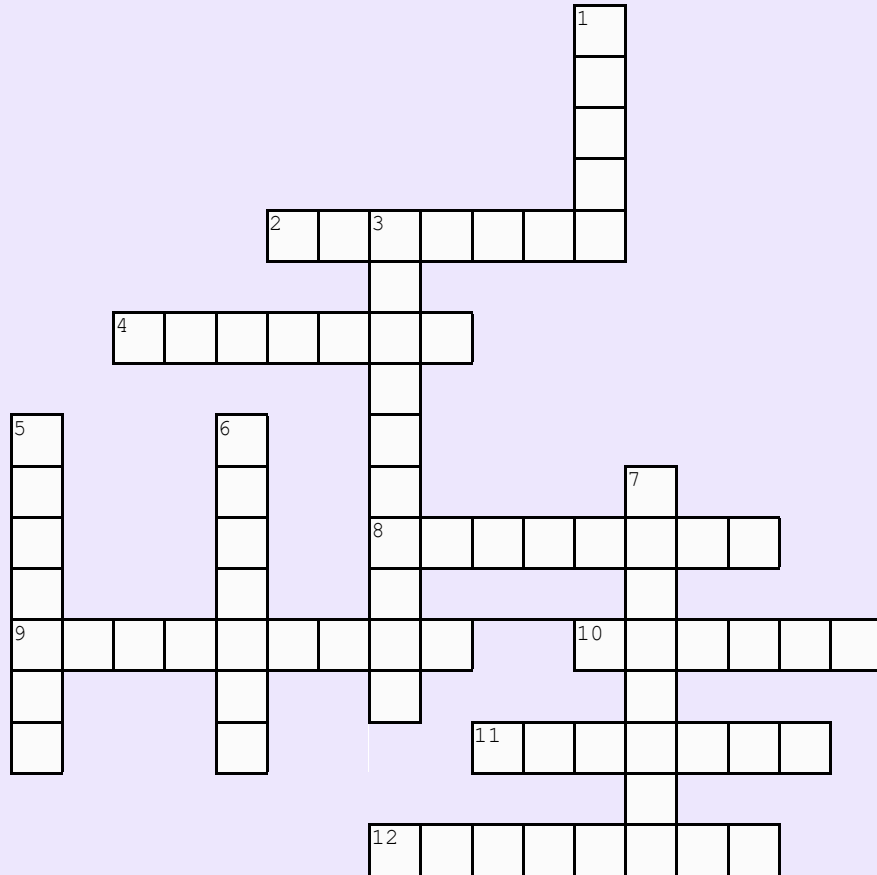
Slum class

L	A	N	G	U	A	G	E	U	N	N	L	A	E
C	E	A	S	H	I	P	S	M	P	A	Y	D	G
A	L	O	R	Y	T	S	S	E	L	T	O	O	R
T	G	R	R	N	O	R	W	O	R	R	A	N	Y
A	O	E	O	D	E	P	E	E	P	S	S	U	R
C	L	E	W	T	L	Y	R	E	E	Q	S	N	A
O	D	R	A	R	I	T	V	S	K	U	Y	N	T
M	E	N	A	E	L	S	T	S	E	I	E	O	N
B	N	B	S	T	C	U	I	E	S	R	S	T	E
S	D	U	Z	E	E	G	T	V	Y	R	A	E	M
A	N	V	T	E	W	E	I	G	H	E	D	D	E
B	N	R	L	S	K	I	N	E	N	L	S	T	L
Y	S	E	R	A	E	P	S	E	K	A	H	S	E
S	A	Z	U	R	E	G	A	G	S	A	N	D	S

VISITOR
NARROW
SQUIRREL
WEIGHED
SUN
TYROL
SHAKESPEARE
ELEMENTARY
SHIPS
ROOTLESS
CATACOMBS
GUSTY
AZURE
LANGUAGE
PEEPED
RAT
SKIN
SANDS
GOLDEN
UNNOTED

Play this puzzle online at : <https://thewordsearch.com/puzzle/282927/>

ACTIVITY 2 – CROSSWORD ON THE POEM



Created with The TeachersCorner.net Crossword Puzzle Generator

Across

2. A usually chronological record of events.
4. Brightly colored; gaudy.
8. Tunnels with recesses for graves. Often used in the plural.
9. Having a highly developed society and culture.
10. To make repairs or restoration to
11. Prevented from growing or developing
12. A rodent having a long flexible bushy tail

Down

1. Clouded or blurred by
3. To correct deficiencies in eyesight
5. Marked by misfortune
6. Knotty or misshapen
7. The chief executive of a state

ACTIVITY 3 – INTEGRATING WITH PROSE 2 AND POEM 5

An Elementary School Classroom in a slum – HOTS

Stephen Spender

1. What are the consequences of the distorted form of education given to the under privileged children?
2. The strength of a nation depends on its system of education. Comment
3. How can the indifference of those in power be social threat comment with reference to this poem?
4. The education in slum schools is a violation of human rights of children. How?
5. The children of the slum hope to have a life of mental and physical freedom. Comment.
6. If class inequalities exist, how do education and social changes affect the societal strata?

LOST SPRING Anees Jung

1. The extract 'Lost Spring' describes the plight of street children forced into labour early in life and denied the opportunity of schooling. Explain this with reference to the extract.
2. The story 'Lost Spring' gives us an authentic picture of child labour prevalent in India. What measures would you suggest to stop child labour?
3. The extract 'Lost Spring' tells us about the callousness of society and the political class to the sufferings of the poor. Is this true of contemporary India. Cite examples.
4. What are the two distinct worlds referred by Anees Jung in the lessons 'Lost Spring'?
5. The beauty of the glass bangles of Firozabad contrasts with the misery of the people who produce them. Comment.

ACTIVITY 4 – QUESTIONS FOR EXTRACT

AN ELEMENTARY SCHOOL CLASSROOM IN A SLUM

STEPHEN SPENDER

The theme of poverty is principal to the poem. He creates of children in poverty through his descriptions of dire situation and malnourished students revealing a sad, hidden segment of society. This poem was written during the American Civil Rights Movement. It strongly embraces communism and depicts its ability to transform education and uproot poverty. For Spender, children's mind possesses the brightness of the sun and the ability to clear the fog that threatens their future. He uses classroom and the children in his poem as an allegory for the struggle between proletariat and the bourgeois.

1. Who are the children mentioned in the poem?
2. Why are they described as rootless weeds?
3. Why is the boy described as an unlucky heir?
4. What has he inherited?
5. Where, do you think, are these children sitting?
6. How do the faces and hair of these children look?
7. Why is the head of the tall girl 'weighed down'?
8. What do you understand by the paper-seeming boy, with rat eyes?
9. What is the stunted by reciting?
10. Who is sitting at the back of the dim class?
11. "His eyes live in a dream" – what dream does he have?
12. What is the colour of the classroom walls? What does this colour suggest?
13. What do these classroom walls have?
14. What are donations?
15. What is the reference to the Tyrolean Valley?
16. What do you understand by 'civilized dome'?
17. Why is Shakespeare wicked?
18. Why is the map a bad example?
19. Which two worlds does the poet hint at? How is the contrast between the two worlds?
20. What do these windows and this map represent? To which of them do the children in the slum school belong?
21. What is the future of these children?
22. What do these children crave for? What do they want to get rid of?
23. Why is Shakespeare wicked? Why is the map a bad example?
24. What tempt them and why?
25. How do they live in their holes?
26. What two images are used to describe these slums? What do these images convey?

Name of the

• Ms. Mitali Madhusmita Satpathy

Participating Teacher	
Name and Address of the School	<ul style="list-style-type: none"> D.A.V. Public School, Chandrasekharpur, Bhubaneswar Odisha
Aid Material (Type of Aid)	<ul style="list-style-type: none"> Non Projected
Title of the Teaching Aid / Material	<ul style="list-style-type: none"> “EUREKA LCM”
Name of the Topic / Theme	<ul style="list-style-type: none"> LCM
Subject	<ul style="list-style-type: none"> Mathematics
Class	<ul style="list-style-type: none"> V
Instructional Objectives to be achieved	<ul style="list-style-type: none"> Children will be able to understand the concept of LCM of numbers more clearly.
Material used in the preparation of the Aid/Material	<ul style="list-style-type: none"> Cardboards, Ice-cream sticks, Colour Papers and Glue.
Procedure of creating the Teaching Aid / Material	<ul style="list-style-type: none"> Fix the cardboards Cover the cardboards with coloured papers Paste ice-cream sticks Use ribbons for explanation <p>EXPLANATION - EUREKA LCM</p> <ul style="list-style-type: none"> To explain the LCM of 2 and 3, multiples of 2 are represented with red colour ribbons and multiples of 3 are represented with yellow colour ribbons. Where both the ribbons coincide, these are the common multiples of 2 and 3. Children will observe that the common multiples are 6, 12, 18 etc. As the lowest among the common multiples is 6, so 6 is the LCM of 2 and 3. This will help the children to understand the concept of LCM more clearly so that they will be able to find the LCM of other numbers. <p>WELL OF LCM</p> <ul style="list-style-type: none"> To explain the LCM of three numbers 2, 3 and 4- Multiples of 2 are represent with white colour ribbons and multiples of 3 are represented with pink colour ribbons and multiples of 4 are represented with yellow colour ribbons. Where the three ribbons appear together, those are the common multiples. The smallest among them is the LCM of 2, 3 and 4. <p>APPLICATION OF LCM</p>

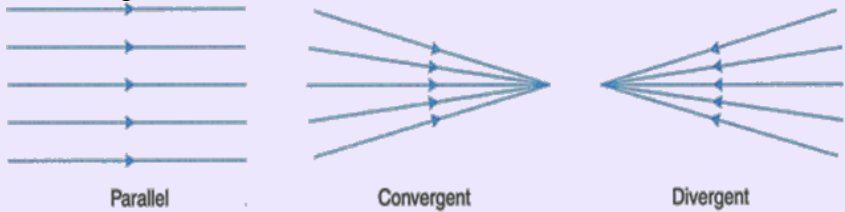
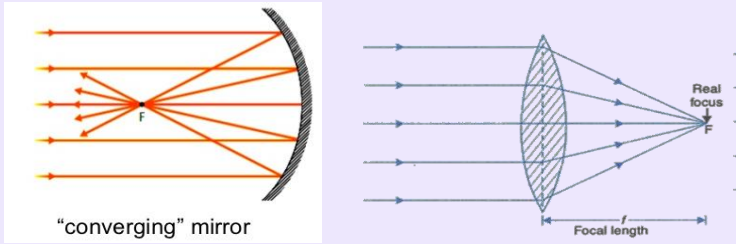
	<p>The story of two friends (Tina and Mina) given below will help the students to understand the implementation of LCM in real life.</p> <ul style="list-style-type: none"> Tina and Mina decided to visit Nandankanan Zoo on Sunday. Both of their trains started at 8 a.m in the morning. Tina's train takes a stop after every 20 mins. and Mina's train takes a stop after every 30 mins. Where both of their trains meet together, that is the Nandankanan station. Tina's train will stop for the first time after 20 mins., second stop after 40 mins. and third stop after 60 mins. Mina's train will stop for the first time after 30 mins. and second stop after 60 mins. So they will observe that they will meet together after 60 mins. i.e they will meet at 9 a.m in Nandankanan. So they will know the application of LCM in real life as the LCM of 20 and 30 is 60.
Time taken to prepare the Aid /Material	<ul style="list-style-type: none"> 2 Hours
Cost involved	<ul style="list-style-type: none"> Rs.150/-
Use of the Aid /Material in Actual Classroom Setting	<ul style="list-style-type: none"> Very easy is to handle and the children can perform the activity in groups to find the LCM of numbers on their own.
Benefits of the Aid / Material to the Students and Teachers	<ul style="list-style-type: none"> Helps the students to understand the LCM of numbers in a play way method. It is student friendly as well as teacher friendly.
Name of the Participating Teacher	<ul style="list-style-type: none"> Ms. B. Hemakumari
Name and Address of the School	<ul style="list-style-type: none"> Balsam Academy, 5/410 A, Vanapadi Road, Bharathi Nagar Extension, Ranipet, Tamil Nadu – 632403.
Aid Material (Type of Aid)	<ul style="list-style-type: none"> Non _Projected
Title of the Teaching Aid / Material	<ul style="list-style-type: none"> Addition of Integers
Name of the Topic / Theme	<ul style="list-style-type: none"> Integer and Me
Subject	<ul style="list-style-type: none"> Mathematics
Class	<ul style="list-style-type: none"> Grade 6
Instructional Objectives to be achieved	<ul style="list-style-type: none"> The students will be able to add: <ul style="list-style-type: none"> positive and negative integers together by using a visual aid positive and negative integers together without using a visual aid.
Material used in the preparation of the Aid/Material	<ul style="list-style-type: none"> Mica/Aluminium board , Nuts and bolts , Markers and chart

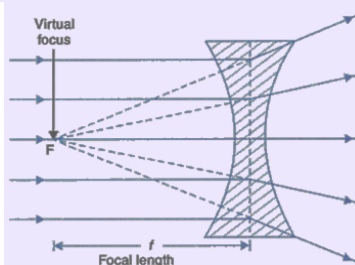
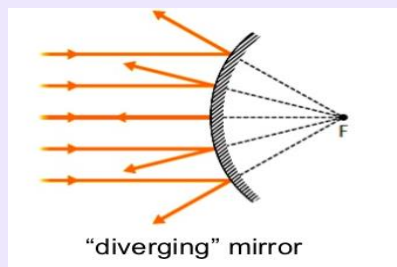
Procedure of creating the Teaching Aid / Material	<ul style="list-style-type: none"> Take a rectangular mica board / thick chart. Remove the middle part of the rectangle by leaving 2 inches around the rectangle. Mark negative integers and positive integers on either side of the rectangle. Make two small movable dolls / pictures for both the sides of the rectangle, where each doll represents each sign of integer. If the same doll/ picture is moved again we will add the numbers. If different dolls/pictures are moved we will subtract the numbers. The doll/picture which stands high indicates the sign of the answer. <div data-bbox="880 667 1284 1079"> </div>
Time taken to prepare the Aid /Material	<ul style="list-style-type: none"> 30 minutes to 1 hour
Cost involved	<ul style="list-style-type: none"> Rs.30/- to Rs.200/- (as per the use of the material)
Use of the Aid /Material in Actual Classroom Setting	<ul style="list-style-type: none"> It is very easy to handle in the classroom setting and even the students can create one on their own and use it very effectively. Kindles the interest and creativity of the students. Helps the students to remember the concept and its related rules. Helpful to give appropriate sign after performing addition operation in integers.
Benefits of the Aid / Material to the Students and Teachers	<ul style="list-style-type: none"> Easy to handle Cost effective Enables quick understanding of the concept Avoids confusion in the rules Gives clarity in concept Saves teacher's time Adaptable
Name of the Participating Teacher	<ul style="list-style-type: none"> Ms. Ashmita

Name and Address of the School	<ul style="list-style-type: none"> • BCM Arya Model Sr. Sec. School , Shastri Nagar , Ludhiana, Punjab
Aid Material (Type of Aid)	<ul style="list-style-type: none"> • Visual Aid
Title of the Teaching Aid / Material	<ul style="list-style-type: none"> • MOBILE MATHS LAB –Making Maths Fun To Learn
Name of the Topic / Theme	<ul style="list-style-type: none"> • Mathematical Modeling
Subject	<ul style="list-style-type: none"> • Mathematics
Class	<ul style="list-style-type: none"> • VI onwards
Instructional Objectives to be achieved	<ul style="list-style-type: none"> • To develop a positive attitude towards learning Mathematics • To recognize that Mathematics permeates the world around us • To develop a critical appreciation of the use of ICT in Maths • To communicate mathematical ideas • To appreciate the usefulness, power and beauty of mathematics • To develop mathematical curiosity and encourage use of inductive and deductive reasoning while solving problems
Material used in the preparation of the Aid/Material	<ul style="list-style-type: none"> • Waste wooden board, Board pins, Charts, Markers, Colors, 3 D Shapes, 4 batteries, motors, magnets, beam balance
Procedure of creating the Teaching Aid / Material	<ul style="list-style-type: none"> • Cut all shapes i.e. 2 triangles, 2 circles, 3 rectangles with proper measurement and then assemble them to make a box. • Paint on all different sections one by one. • Then nail using display board pins for Geoboard, number line and parts of circle. • Label and give final touch up to the model and make Charts.
Time taken to prepare the Aid /Material	<ul style="list-style-type: none"> • 4 full days
Cost involved	<ul style="list-style-type: none"> • Rs.500/- (approximately)
Use of the Aid /Material in Actual Classroom Setting	<ul style="list-style-type: none"> • MINI MATHS LAB is a Multipurpose teaching aid which is Compact, Portable, Low budget self-made aid which is easy to carry in the classrooms and provide opportunity for hands on practice of activities in the class for more than 150 concepts which includes: <ul style="list-style-type: none"> ○ Number Line concept ○ Number (place value) Abacus ○ Geoboard concepts

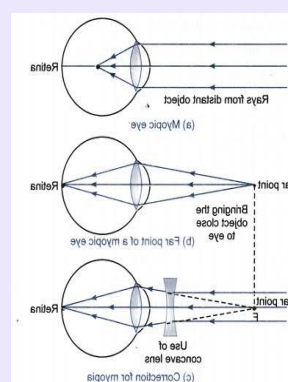
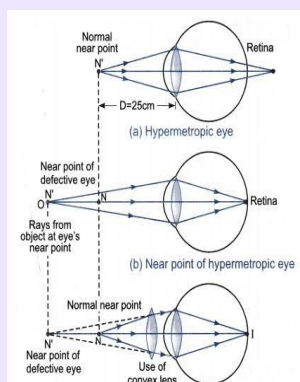
	<ul style="list-style-type: none"> ○ 3D Shapes ○ Conversion of 2D into 3D shapes ○ Rectangle Concept ○ Number of Tiles on Floor ○ Area of Cross roads ○ Area of rectangular path ○ Pythagoras theorem ○ Conversion of Units ○ Arithmetic progression ○ Geometric progression ○ Circle concepts ○ Concentric circles ○ Triangle all concepts ○ Similar and congruent triangles ○ Incircle ○ Quadrilateral concepts ○ How to make ellipse ○ Trigonometric concepts ○ Heights and Distances Angle of elevation and depression ○ Quadrant Study ○ Set Theory – subsets , Intersection , union & complement ○ Venn Diagrams ○ Mathematical house Maths in everyday life Black board ○ Maths Display board ● It is especially for those schools that don't have infrastructure to build Maths Lab. ● Instead of sticking to traditional teaching methods, this is an effort to make the learning environment interesting and engaging so that students not only grasp concepts better but also enjoy learning.
Benefits of the Aid / Material to the Students and Teachers	<ul style="list-style-type: none"> ● It gives each learner the opportunity to interact with the content in a way which allows them to comprehend more easily. ● Student's attention shifted to the main subject by involving them in hands on practice
Name of the Participating Teacher	<ul style="list-style-type: none"> ● Ms. Deepa Singh
Name and Address of the School	<ul style="list-style-type: none"> ● Shri Ram Shiksha Mandir Sr. Sec. School, Jindpur, Delhi-110036
Aid Material (Type of Aid)	<ul style="list-style-type: none"> ● Visual
Title of the Teaching Aid / Material	<ul style="list-style-type: none"> ● EARTH- At a glance
Name of the Topic / Theme	<ul style="list-style-type: none"> ● Our Planet- Earth

Subject	<ul style="list-style-type: none"> EVS
Class	<ul style="list-style-type: none"> V
Instructional Objectives to be achieved	<ul style="list-style-type: none"> To enable students to explain 3D layers of earth, latitudes and longitudes
Material used in the preparation of the Aid/Material	<ul style="list-style-type: none"> Old newspapers, fevicol, balloons, colours & brushes, glitter & other decorative material, clay, old/used boxes and PVC pipes
Procedure of creating the Teaching Aid / Material	<ul style="list-style-type: none"> Create moulds of Earth using paper mache (technique over balloons) Colour & decorate moulds Place the moulds over stands made of old boxes, clay and pipe
Time taken to prepare the Aid /Material	<ul style="list-style-type: none"> 3-4 days
Cost involved	<ul style="list-style-type: none"> Balloon pack- Rs.50/- Fevicol- Rs.60/- Decoration Material - Rs.80/- Pipe- Rs.90/- Clay- Rs.30/- TOTAL- Rs.310/-
Use of the Aid /Material in Actual Classroom Setting	<ul style="list-style-type: none"> Easy to carry Effective in building concepts
Benefits of the Aid / Material to the Students and Teachers	<ul style="list-style-type: none"> For Students <ul style="list-style-type: none"> Easy understanding regarding different layers of earth, latitudes and longitudes Effective calculation of date & time, etc. through 3D shapes. For Teachers <ul style="list-style-type: none"> Compact & easy to use, impart understanding on various topics related to earth.
Name of the Participating Teacher	<ul style="list-style-type: none"> Ms. Surjit Kaur
Name and Address of the School	<ul style="list-style-type: none"> Rukmini Devi Public School, CD Block, Pitampura, New Delhi - 110034
Aid Material (Type of Aid)	<ul style="list-style-type: none"> Visual
Title of the Teaching Aid / Material	<ul style="list-style-type: none"> Lights...Camera...Action
Name of the Topic / Theme	<ul style="list-style-type: none"> Light
Subject	<ul style="list-style-type: none"> Science

Class	<ul style="list-style-type: none"> VIII
Instructional Objectives to be achieved	<ul style="list-style-type: none"> To enable students to: <ul style="list-style-type: none"> observe convergence and divergence of light rays in spherical mirrors and lenses. explain defects of vision i.e., Myopia and Hypermetropia- its causes and correction.
Material used in the preparation of the Aid/Material	<ul style="list-style-type: none"> Simple low cost/no-cost eco-friendly material like cardboard, paper, etc. are used. Scientific material required will be convex and concave lenses and mirrors, plane mirror and laser lights.
Procedure of creating the Teaching Aid / Material	<ul style="list-style-type: none">
Time taken to prepare the Aid /Material	<ul style="list-style-type: none"> 1 week
Cost involved	<ul style="list-style-type: none"> 2 laser lights - Rs.100/- Convex and Concave mirror - Rs.20/- each Convex and Concave lens - Rs.20/- each Rest of the material like carton box, project motor, cardboard etc. can be easily arranged from surroundings.
Use of the Aid /Material in Actual Classroom Setting	<p>Two laser lights will be used to ensure crystal clear understanding of the following properties of light:</p> <p>a. Ray, beam of light, parallel beam, convergent beam and divergent beam</p>  <p>b. Converging nature of convex lens and concave mirror.</p>  <p>c. Diverging nature of concave lens and convex mirror.</p>



- d. Concepts of principal focus, focal length, centre of curvature.
- e. Concept of real and virtual focus in case of spherical mirrors and lenses.
- f. Defects of Vision- Myopia and Hypermetropia – Causes and Correction



The above stated properties of light will be taken up using activity method using laser lights. This will help in developing concrete understanding of foundational concepts of Physics.

Extended activities: Working of a simple projector and a hologram

Benefits of the Aid / Material to the Students and Teachers

- **For Students:**
 - Hands-on teaching learning approach makes the understanding of foundational concepts of Science concrete.
 - Students enjoy observing various important properties of light through laser light. This makes the foundational understanding of optics concrete.
- **For teacher:**
 - Use of no cost/ low cost teaching aids developed or obtained from locally available resources, waste and simple materials.
 - Easy to maintain and user friendly.

Name of the Participating Teacher

- **Ms. Mohanan Nair J**

Name and Address of the School

- St. John's School Thumpamon Keerukuzhy P.O. Pathanamthitta District

Aid Material (Type of

- Improvised working model

Aid)	
Title of the Teaching Aid / Material	<ul style="list-style-type: none"> • Mechano-Optic Polarizer Cum Brewster's Angle Detector
Name of the Topic / Theme	<ul style="list-style-type: none"> • Wave Optics – Polarization
Subject	<ul style="list-style-type: none"> • Physics
Class	<ul style="list-style-type: none"> • XII
Instructional Objectives to be achieved	<ul style="list-style-type: none"> • Easy and better conveyance of the subject
Material used in the preparation of the Aid/Material	<ul style="list-style-type: none"> • PVC pipe, wooden frame, aluminium frame, hylom sheet, polaroids, light source, glass plates, clock dial, etc.
Procedure of creating the Teaching Aid / Material	<ul style="list-style-type: none"> • Given in the description of the Teaching Aid
Time taken to prepare the Aid /Material	<ul style="list-style-type: none"> • 4 days
Cost involved	<ul style="list-style-type: none"> • Rs. 900/-
Use of the Aid /Material in Actual Classroom Setting	<ul style="list-style-type: none"> • Given in the description of the Teaching Aid
Benefits of the Aid / Material to the Students and Teachers	<ul style="list-style-type: none"> • Reduces the strain in teaching/learning the subject thoroughly

Description of the Teaching Aid

This teaching aid consists of three sections

1. Mechanical polarizer
2. Optical polarizer and Malus law verifier
3. Brewster's angle detector

Hence it is named as Mechano-optic polarizer cum Brewster's angle detector.

Mechano-Optic Polariser cum Brewster's Angle detector is an improvised working model for the visual demonstration in large dimension so that a student can get solid idea about polarization of light that takes place in the order of the wavelength of light. It helps a student to realize unpolarised (ordinary) light, how polarization of light takes place and plane polarizer light is obtained. How plane of vibration changes according to the rotation of pass axis of the polarizer, how polarization helps to confirm the transverse wave nature of light, how Malus law is obeyed by plane polarized light etc.

Optical polarizer is an exact optical version of abovesaid mechanical polarizer which can explain polarization that takes place in optics.

Brewster's angle detector is another device that can establish the existence of Brewster's angle (which is

the angle of incidence for which the reflected light becomes completely plane polarized).

MECHANICAL POLARIZER

Construction

Mechanical polarizer made up of a circular disc of diameter 4 cm fitted on the axis of a dc toy motor, 2 slits S_1 and S_2 that can be rotated about a horizontal axis in a vertical plane, a small pulley, an aluminium frame of width nearly 10 cm and length 110 cm. The length of the frame can be adjusted by sliding in or out telescopically. The slits can be slid along the aluminium frame and fixed at any position. The pulley is fixed at the other end of the frame. One end of a string is tied to the edge of the disc. The other end is passed through the slits S_1 and S_2 and over the pulley, and carries a weight hanger to provide tension to the string. The axis of the motor, centre of the slits and edge of the pulley are arranged to lie in the same horizontal level and same straight line.

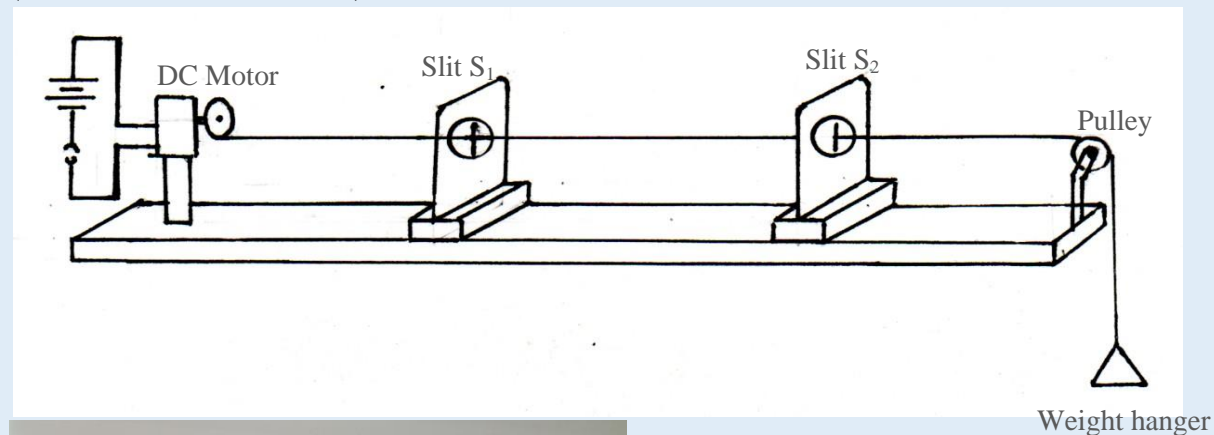
Working

The slit S_1 is kept at a suitable distance nearly 30 cm from the disc, and the slit S_2 at a distance of 30 cm from the slit S_1 . The string is given a suitable tension by placing weight in the hanger.

When the motor is switched on, as the disc rotates we can see that the string forms a cylindrical shape in air between the disc and slit S_1 which represents unpolarized light consisting vibrations in all directions. We can see the vibrations of the string emerging out of the slit is confined in one plane representing the plane polarized light. When the orientation of the slit S_1 which act as the polarizer is changed, we can see that the plane of vibration of string is also changed. When the slit S_2 at a suitable distance from S_1 is rotated and they are parallel the entire vibration emerges out through the slit S_2 and reaches upto the pulley. When we rotate S_2 (which act as the analyzer) we can see that the vibration of the string emerging from slit S_2 gradually reduces and becomes 0, when the two slits are perpendicular to each other. Now the student get a convincing idea about polarization and Malus law regarding variation of intensity of plane polarized light.

MECHANICAL POLARIZER

(SCHEMATIC DIAGRAM)



OPTICAL POLARIZER

Construction

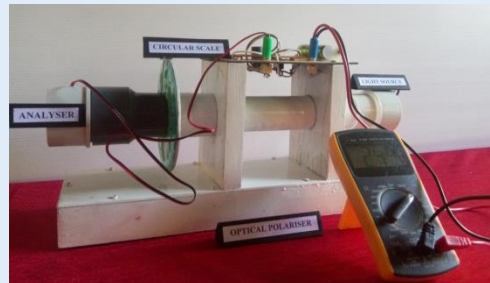
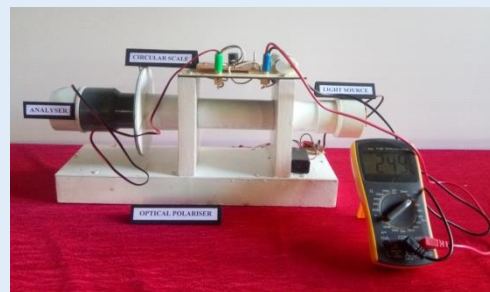
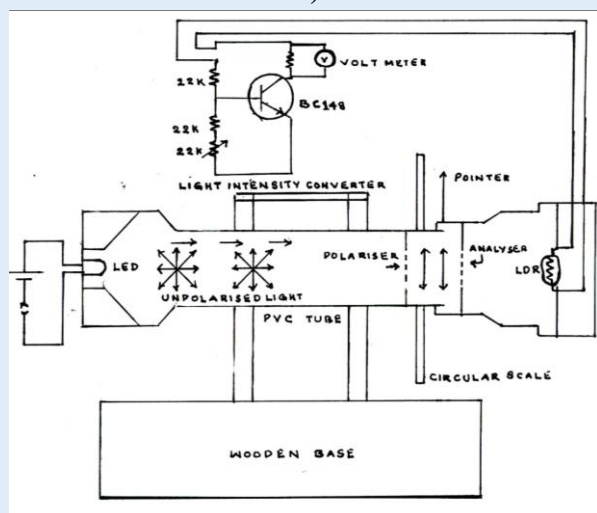
The optical polarizer is made up of a PVC pipe of diameter 4 cm and length 25 cm mounted horizontally

on a wooden base, a LED torch, 2 polaroids (taken from the display of a damaged digital multimeter), a transistor circuit consisting a LDR and resistors, protractor etc. The LED torch with a reflector is fixed at one end of the pipe which acts as the source of unpolarised light. One of the Polaroids is fixed along with a circular scale graduated in degrees at the other end of the PVC pipe, so that 0-180 graduation on the scale is parallel to the pass axis of the polaroid.

Second Polaroid fixed at one end of another PVC pipe of radius slightly greater than the first pipe act as the analyser. The second pipe is attached with the first pipe coaxially so that it can rotate about the axis of the pipe. A pin fixed on the second pipe moves over the circular scale fixed on the first pipe. When the second pipe carrying analyzer is rotated, the angle of rotation of the pin gives the angle between the pass axes of polarizer and analyzer.

The other end of the second pipe is closed by a cap carrying a LDR at its centre. The light coming from the second Polaroid incident on the LDR converts the light intensity into voltage variation with the help of a simple electronic circuit consisting of a transistor and 3 resistors. The variation in voltage is measured by a multimeter.

OPTICAL POLARIZER (SCHEMATIC DIAGRAM)



Working

The LED torch with a parabolic mirror is switched on to produce a parallel beam of light. The light coming out of the pipe fitted with the polarizer is plane polarized. The pipe fitted with analyzer is rotated so that the pointer reads zero degree on the circular scale. Now the pass axis of polarizer and analyzer are parallel and the intensity of transmitted plane polarized light is maximum. So the deflection in the light intensity converter is maximum. When the analyzer pipe is rotated the intensity of light gradually decreases becoming zero when it has been rotated through 90° . This demonstrates the polarization of light and Malus law.

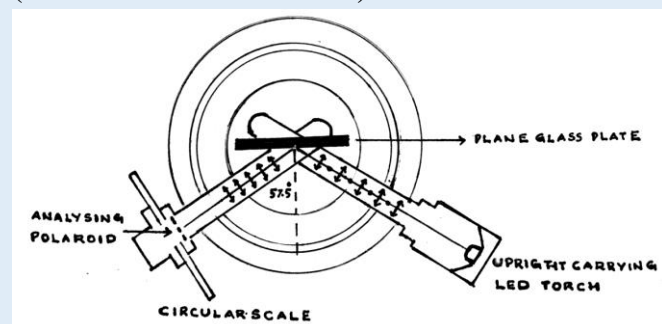
BREWSTER'S ANGLE DETECTOR

Construction

The Brewster's angle detector consists of a circular optical bench fitted with a plane glass plate in the vertical plane on the axis of rotation. A circular scale graduated in degrees is also fixed at the centre about the same axis. Two uprights are made of hylom sheets of length 10 inches and breadth 2 inches, and plastic brackets. These uprights can be moved on the optical bench in the horizontal plane about the axis passing through their one end. A LED torch is inserted in one upright which can act as a source of

light. A horizontal pipe carrying a circular scale is fixed on other upright so that the scale can be rotated in the vertical plane about the horizontal axis. A Polaroid is fixed inside the horizontal pipe with its optic axis parallel to 0-180 reading on the circular scale. This arrangement acts as the analyzer. The two uprights can be moved separately along the optical bench and set for any angle with the normal to the plane glass plate fixed vertically on the axis at the centre.

BREWSTER'S ANGLE DETECTOR (SCHEMATIC DIAGRAM)



Working

The source is illuminated. The upright carrying it is moved along the circular scale so that the incident beam makes an angle 57.5° with the normal at the point of incidence on the glass plate. Now the angle of incidence is Brewster's angle for glass. The other upright carrying analyzer is moved along the circular scale and fixed at 57.5° with the normal. Now the reflected light is seen through the analyzer. The analyzer is slowly rotated through 90° in the vertical plane. It can be observed that the intensity of the light in the field of view varies from maximum to minimum according to Malus law. This is possible if and only if the reflected light is completely plane polarized. This confirms that the light reflected at Brewster's angle is completely plane polarized. When the angle of incidence is set for any other angle, this phenomenon cannot be observed. Thus establishes the existence of Brewster's angle, using this equipment.

Name of the Participating Teacher	<ul style="list-style-type: none"> Ms. Gargi Thakur
Name and Address of the School	<ul style="list-style-type: none"> Ahlcon International School, Mayur Vihar, Phase-1, Opp. UNA Enclave, Block-F, New Delhi-110091
Aid Material (Type of Aid)	<ul style="list-style-type: none"> Visual
Title of the Teaching Aid / Material	<ul style="list-style-type: none"> 'Here comes a letter'
Name of the Topic / Theme	<ul style="list-style-type: none"> Communication-Postal Services
Subject	<ul style="list-style-type: none"> Environmental Studies (EVS)
Class	<ul style="list-style-type: none"> III
Instructional Objectives to be achieved	<ul style="list-style-type: none"> To enable the students to: <ul style="list-style-type: none"> describe the journey of a letter compare past and present means of sending messages

	<ul style="list-style-type: none"> ○ explain the role of different people/things involved in the journey of a letter ○ write the letter /postcard in a correct format.
Material used in the preparation of the Aid/Material	<ul style="list-style-type: none"> • Cardboard/Shoe box • Brown paper • A4 Size pastel sheet for placards • Red paint/paper • Paper Cutter • Paint Brush • Colours, Sketch pens • Scale, Scissors, Fevicol/Tape
Procedure of creating the Teaching Aid / Material	<p>For Letterbox</p> <ul style="list-style-type: none"> • Find the top flap of the cardboard box, tease it out and tape all the open ends firmly. Ensure that the flap is outside. • In case of a shoe box, tape the lid of the shoe box firmly and cut open only one flap at the vertical end and fold it over. • Draw a Rectangle in the middle of the box (the flap end) and draw a bigger box on the opposite side. This time on the lower end. • Use the cutter and cut out the middle rectangular shape. • Now cut at the center of the square box on the opposite side, make it open like a door. • Now paste red paper all over the box or paint it all over. Wait until the glue / paint dries. • Now flip it to the other side and slowly ensure that the back door of the box opens by cutting the paper in the center and sticking it. • Paint the lid with black paint. <p>For Postal Van</p> <ul style="list-style-type: none"> • Take a shoe box and cut the lid from the center. • Now paste the remaining lid at top of the shoe box with fevicol/tape. • Paint the box with red colour or cover with red chart paper. • Make windows, tyres and front mirror with sketch pen to give the appearance of a Van. • Make the symbol and write Indian Post.
Time taken to prepare the Aid /Material	<ul style="list-style-type: none"> • Approximately 2 hour and the time for drying paint/fevicol
Cost involved	<ul style="list-style-type: none"> • Shoe box- available at home • Brown paper - 2 rolls Rs.15/- each • A4 size pastel sheet (for placards) - 1 packet - Rs.30/- • Red Paper - 2 • Chart papers - Rs.20/- • Scissors- available at home • Other stationery-Rs.100-120 • Total cost- Rs.150-175 approx.
Use of the Aid	<ul style="list-style-type: none"> • Explanation of the topic of communication and journey of a

/Material in Actual Classroom Setting	<p>letter to the students with the help of media shown on the smart board. Role of a post man, the importance of a pin code, letter box and post van to be communicated to the students.</p> <ul style="list-style-type: none"> • Explanation of writing a letter with proper address. • Pasting of any one placard on the forehead of the student and other students to give a hint so that he/she could identify the word. • Once all the words are identified, students to place them in the correct order. • Once the topic is understood by the students, let them enact the whole process themselves in the form of a role play to know how a letter reaches its destination. Students to write letters to their peers to be delivered by the student who will enact as a postman. • Tell students about the NATIONAL POSTAL DAY and its importance. • For further enhancement of the knowledge, ask students to visit a courier office to understand the difference between a normal post and speed post. • Let students make models of letter box, post van at home.
Benefits of the Aid / Material to the Students and Teachers	<p>For Students</p> <ul style="list-style-type: none"> • Concrete understanding about the appearance and usage of different postal items and how they are used at various stages in the journey of a letter. • Improves language skills along with the enhancement of thinking skills. • Imbibe a sense of value, respect, responsibility, and empathy in students towards self, people and surroundings. <p>For Teacher</p> <ul style="list-style-type: none"> • Enables teacher to know the potential of students by involving them in different tasks. • Leads to interdisciplinary learning <ul style="list-style-type: none"> ○ Art and Craft-students learn to make letter box and post van ○ English Language- students learn the correct format of writing a letter ○ Moral Education <ul style="list-style-type: none"> ▪ Develops empathy among students towards the people who serves us ▪ Students learn to eliminate the discrimination and value dignity of work.
Name of the Participating Teacher	<ul style="list-style-type: none"> • Ms. Monideepa Bhaduri
Name and Address of the School	<ul style="list-style-type: none"> • Apeejay School, Salt Lake, BG-180 Sector II, Kolkata-700091
Aid Material (Type of Aid)	<ul style="list-style-type: none"> • A sample survey sheet for the students mentioning the followings:

	<ul style="list-style-type: none"> ○ Name of the student ○ Class and section ○ No. of members in the family ○ Total number and name of electrical gadgets used ○ Total expenses of electricity used. ○ List of gadgets in order of electricity consumption. ○ Methods can be used to conserve energy. ● Individual electricity bills of their houses.
Title of the Teaching Aid / Material	<ul style="list-style-type: none"> ● Conservation of Energy
Name of the Topic / Theme	<ul style="list-style-type: none"> ● Energy Resources-Conventional Sources of Energy
Subject	<ul style="list-style-type: none"> ● Geography
Class	<ul style="list-style-type: none"> ● VIII
Instructional Objectives to be achieved	<ul style="list-style-type: none"> ● To sensitize students about the judicious use of conventional energy resources and are exhaustible. ● To enable students to think of suitable methods to conserve these resources. ● To enable students to chalk out their role in conservation of resources.
Material used in the preparation of the Aid/Material	<ul style="list-style-type: none"> ● Sample Survey sheet ● Individual electricity bill
Procedure of creating the Teaching Aid / Material	<ul style="list-style-type: none"> ● To start with, discuss the topic 'energy resources' and its classification where students will get to know the types of conventional energy resources that we are using at present and why do we need to conserve them as a part sustainable development of the nation. ● After this session, give students the sample survey sheet to be filled up by individual students at their home. ● Ask the students to bring their own electricity bills in the next class where they will make a comparative study of their own consumption of electricity at home and will come up with solutions as to how the consumption can be curtailed.
Time taken to prepare the Aid /Material	<ul style="list-style-type: none"> ● One week (3 sessions)
Cost involved	<ul style="list-style-type: none"> ● Rs.55/- for photocopying of survey sheets
Use of the Aid /Material in Actual Classroom Setting	<ul style="list-style-type: none"> ● Use of this teaching aid will help the students firstly to get an idea about doing a survey work and how to relate it with their curriculum. ● It will also help them to understand about the concept of 'Sustainable Development' and adopting their own simple methods in home and school, as well as to conserve the conventional sources of energy used by us. They will also be

	able to compute a pie diagram where they will show the approximate percentage of power consumption of each gadget in their house.
Benefits of the Aid / Material to the Students and Teachers	<ul style="list-style-type: none"> It will be a practical learning experience for the students relating with their real life situations that they and their parents face daily. They will be able to aware themselves and others about the need of conserving energy resources in this condition of depletion of natural resources and in this era of climate change. It will be an interdisciplinary link for the subject and also an experiential teaching and learning method that will make both teaching-learning process interesting and effective.
Name of the Participating Teacher	<ul style="list-style-type: none"> Ms. Meenu
Name and Address of the School	<ul style="list-style-type: none"> Delhi Public School, Nacharam, Plot no. 44,42A, Behind Nacharam Telephone Exchange, Nacharam, Uppal Mandal, Medchal District-500076
Aid Material (Type of Aid)	<ul style="list-style-type: none"> Visual, Non- Projected
Title of the Teaching Aid / Material	<ul style="list-style-type: none"> “Lexique de la Mode”
Name of the Topic / Theme	<ul style="list-style-type: none"> Fashion Vocabulary
Subject	<ul style="list-style-type: none"> Fashion Studies
Class	<ul style="list-style-type: none"> XI and XII
Instructional Objectives to be achieved	<ul style="list-style-type: none"> To familiarize students with the terminology and different items of dresses under the category of women wear.
Material used in the preparation of the Aid/Material	<ul style="list-style-type: none"> Clay, old bottle, old skewer (from home), old pieces of fabric, Velcro, printed paper, tissue paper and glue
Procedure of creating the Teaching Aid / Material	<ul style="list-style-type: none"> Small Dress form: A small dress form/ mannequin was prepared with the help of clay on a steel skewer lying at home and left for drying. Then it was mounted in an old bottle (of room-freshener) filled with clay and left for drying. Small sized dresses of different types were made from tissue paper and printed paper (scraps obtained from old magazines). A foldable Display- book: Left over fabric from the nearby-tailor’s shop was used to design and stitch this book on which Velcro was used to keep the “new words” and their “description” in position. The use of Velcro makes this Display-book reusable for any topic dealt in the classroom. Buttons seen on it, were obtained from old discarded clothes.

	<ul style="list-style-type: none"> • Power-Point Presentation: The presentation was made to showcase the same garment in discussion being used by the designers on the Ramp during the renowned Fashion Shows across the globe. Internet was used to obtain this information. • QR Code: Each type of dress on the Display-book is given a QR Code which when scanned takes us directly to the website which gives us further details of the dress. The software for developing these QR Codes are available online. • Box: A shoe box has been recycled and converted into a box to carry my teaching aid.
Time taken to prepare the Aid /Material	<ul style="list-style-type: none"> • Total of 4 hours
Cost involved	<ul style="list-style-type: none"> • Since most of the material used are recycled products, a basic expenditure on stationery was made costing about Rs.100/-.
Use of the Aid /Material in Actual Classroom Setting	<ul style="list-style-type: none"> • The material is quite portable and classroom-friendly. It is also suitable for the present-day Digital classrooms.
Benefits of the Aid / Material to the Students and Teachers	<ul style="list-style-type: none"> • The aid brings the concept of “<i>Show me and I understand</i>” closer to home. • These aids are a success because visually attractive methods of teaching engage the audio-visual senses and are proven to be more appealing to the students. • When the paper dresses are draped and showcased on the small dress form, the students can immediately understand the silhouette which appears. It helps them in designing the dresses for the Practical class. • This aid is also helpful in sparking students’ creativity to a new high. • This is important in order to reach the various learning types in the class. This gives each learner the opportunity to interact with the content in a way which allows them to comprehend easily. • It makes the learning environment interesting and engaging.

