MATHEMATICS LESSON PLAN

LESSON PLAN

2023



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LEARNING CYCLE

ELABORATE



			CHITTI CF	REATIONS		
Unit	: 01		Methodology	y: Demonstrat	ion & lecture r	nethod.
Unit	name: INTE	EGERS.				
Date	e: From	to				
<u>Obje</u>	<u>ectives:</u>					
-	Concept of in	tegers.				
2.	Properties of	integers.				
	•	n and division of	f integers.			
	*		s under multiplication	on and division.		
						I
	A				Evaluation	Teachers
teps	Activiti	ies To Favourabl	le For Learning	TLM	Tools &	Introspection
					Techniques	
	Teacher test t	the previous kno	wledge of students	Chart,	Discussion &	Will try to
gage	by asking the	different questi	ons about numbers.	Ppt	group	answers
	Students alread	ady learnt about	this.	color chalks.	discussion.	
	Teacher will a	ask the class abo	ut number line.	chalks,	Questionnaire	Answering for
			mbers ect. After	chart, ppt.		supplementary
						questions.
	getting differe	ent answers from	n class, then	projector		questions.

				(CHITTI CRE	ATIONS			
	integers. E previous y Propertie	Do some p year on thi es of integ l propertion tion and c	roblems a is chapter gers: es under a livision. G	s we done ddition, s ive some	ubtraction, problems	Projector Ppt. Marker Chart	Discussion & group activities		
Explain	Property			on Integers					
	Name	Addition	Subtraction	Multiplication	Division*				
	Closure	$a + b \in Z$	$a - b \in Z$	$a \times b \in Z$	a÷b∉Z				
	Commutative		a-b≠b-a	a×b=b×a	a÷b≠b÷a				
	Associative	(a + b) + c = a + (b + c)	(a - b) - c ≠ a - (b - c)	$(a \times b) \times c$ = a × (b × c)	(a ÷ b) ÷ c ≠ a ÷ (b ÷ c)				
	Distributive	a × (b + c) = ab + ac	a × (b - c) = ab - ac	Not applicable	Not applicable				
	-	ation and		of intege	on-zero integer rs: explain				
	about mul taking son	-		sion of int	egers by				
	Examples:	-	115.						
	Make grou		ents, give	some prol	blems for	Exercise	Activity	Discussion	
	-	-	of integer	s under a	ddition and	problems		with students	
Elaborate	multiplica	tion.				In textbook			
Evaluate	Teacher w	-	-			Textbook	Evaluation	Try to do all	
	Students v	vill solve a	all the pro	blems giv	en in the			problems in	
	textbook.							textbook.	
Subje	ect teacher						Head master o	r mistress/Principa	1
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Unit: 02

Methodology: Demonstration & lecture method.

Unit name: FRACTIONS & DECIMALS.

Date: From to

- 1. Concept of fractions & decimals.
- 2. To learn how to add and subtract fractions and decimals.
- 3. Multiplication and division of fractions and decimals.

<u>Steps</u>	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking the previous knowledge ask some question regarding to the numbers. Students already learnt about this.	Chart, Ppt color chalks.	Discussion & group discussion.	Will try to answers	
Explore	Teacher will ask the class about numbers, fractions. After getting different answers from class, then introduce the chapter.	chalks, chart, ppt. projector	Questionnaire	Answering for supplementary questions.	

	CHITTI CREA	ATIONS			
	Introduction: start the class by explaining	Projector	Discussion &		
	fractions and decimals. Do some problems as we	Ppt.	group activities		
	done in the previous year on this chapter.	Marker			
	Addition, subtraction, multiplication &	Chart			
	division of fractions:				
	Explain how to add, subtract, multiply and divide				
	the fraction by taking different examples.				
Explain	Fractions – Addition, Subtraction,				
-	Multiplication & Division				
	Practice Add or subtract. Simplify.				
	9 9 3 $2 \frac{5}{6} \frac{3}{8} \frac{11}{24}$				
	$\begin{array}{c} 3 & \frac{7}{8} + \frac{3}{4} & 1\frac{5}{8} \\ 4 & 2 & 1 & 1 \end{array}$				
	$\begin{array}{c} 4 & 2 - 1 \\ 3 & 6 \\ 2 & 7 \\ \end{array}$				
	$5. \frac{3}{4} - \frac{1}{6} \frac{7}{12}$				
	Addition, subtraction, multiplication &				
	division of decimals: Explain how to add,				
	subtract, multiply and divide the decimals by				
	taking different examples.				
	Make group of students, give some problems for	Exercise	Activity	Discussion	
	solve on fractions and decimals. Guide them to	problems	Thethyley	with students	
	solve those problems.	In textbook		with students	
			Freelwatter	Tree to de all	
Evaluate	Teacher will assign some problems to do work.	Textbook	Evaluation	Try to do all	
	Students will solve all the problems given in the			problems in	
	textbook.			textbook.	
Cubia	at too shor		Hand master a	n mistnoss /Duinsing]	I
Subje	ct teacher		neau master o	r mistress/Principal	L
7th CT	ANDARD MATHEMA	TICS		LESSON PLAN	ſ

Unit: 03

Methodology: Demonstration & project method.

Unit name: DATA HANDLING.

Date: From to

- 1. To understand the concept of collection of data.
- 2. Concept of organizing data.
- 3. To learn about mean, medina and mode.
- 4. Concept of representation of data.
- 5. Chances and probability.

<u>Steps</u>	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Start the session by checking the previous knowledge ask some question regarding to data. Students already learnt about this in class 6 th .	Chart, Ppt color chalks.	Discussion & group discussion.	Will try to answers	
Explore	Teacher will ask the class about representing numbers in table and about data. After getting different answers from class, then introduce the chapter.	chalks, chart, ppt. projector	Questionnaire	Answering for supplementary questions.	

Explain	Introduction: start the class by explaining numbers and data. Do some problems as we done in the previous year on this chapter. Collection of data: Explain how we collect the data by using numbers and things. Do some different problems on this data. Mean median and mode: Explain about this concept by taking different examples. Representation of data: represent the given data as bar graph by taking different examples. $\underbrace{Birthday \ of \ Students \ by \ Month}_{for the set of the$	Projector Ppt. Marker Chart Geometry kit Geogebra Graph sheet	Discussion & group activities	
Elaborate	Make group of students, give some problems for	Exercise problems In textbook	Activity	Discussion with students
Evaluate	Teacher will assign some problems to do work. Students will solve all the problems given in the textbook.	Textbook	Evaluation	Try to do all problems in textbook.

		СНІТ	TI CRE	ATIONS			
	t: 04 t name: SIMPLI		ology: I	Demonstrat	ion & lecture n	nethod.	
	e: From	to					
<u>Obje</u>	<u>ectives:</u>						
1.	. Concept of equa	tion.					
2.	Concept solving	an equation.					
	To learn about n	-					
4.	Applications of s	simple equations to bring p	ractical s	situation.			
<u>Steps</u>	Activities	To Favourable For Learning	g	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	knowledge ask s	by checking the previous ome question equations. St oout this in class 6 th .	udents	Chart, Ppt color chalks.	Discussion & group discussion.	Will try to answers	
Explore	add 14 to a num number?'. Ask so	the class the questions like ber, we will get 20. What is ome more questions like thi erent answers from class, t apter.	that is,	chalks, chart, ppt. projector	Questionnaire	Answering for supplementary questions.	
7 th S7	ſANDARD	Μ	ATHEMA	TICS		LESSON PLA	N

	CHITTI CRE	ATIONS		
Explain	Introduction: start the class by explaining about equations. Simplify some problems. Solution of an equation: Explain how to simplify an equations with different examples. Solution to an Equation A value for a variable that makes an equation TRUE	Projector Ppt. Marker Chart	Discussion & group activities	
	$2 + x = 4 (x = 2)$ $2 + 2 = 4$ $4 = 4 \checkmark$ $23 = 23 \checkmark$ Applications level problems: Explain how to solve the problems on application basis. $+ + + + + + + + + + + + + + + + + + + $			
Elaborate	Make group of students, give some problems for solve on simple equations. Guide them to solve those problems.	Exercise problems In textbook	Activity	Discussion with students
Evaluate	Teacher will assign some problems to do work. Students will solve all the problems given in the textbook.	Textbook	Evaluation	Try to do all problems in textbook.
Subje	oct teacher		Head master o	or mistress/Principal
7 th ST	'ANDARD MATHEMA	ATICS		LESSON PLAN

_		S AND ANGLES.				
	e: From <u>ectives:</u>	to				
		nplementary angles.				
	. Concept of line					
	-	t vertically opposite angles.				
4	. To learn abou	t of pair of lines and parallel lines	S.			
				Evaluation	Teachers	
<u>steps</u>	Activitie	es To Favourable For Learning	TLM	Tools & Techniques	Introspection	TIME
ngage		est the class by asking questions the previous year. Students alread nes, points ect.	dy Ppt color chalks.	Discussion & group discussion.	Will try to answers	
plore	is point, straig like this, After	sk the class the questions like 'wh ht line?'. Ask some more question getting different answers from roduce the chapter.		Questionnaire	Answering for supplementary questions.	

	CHITTI CRE	ATIONS		
Explain	Introduction: start the class by explaining about straight line. Then introduce the chapter. Complementary angles: Explain how the complementary angles will have with different examples. Complementary Angles - Angles whose sum is 90°. $\frac{1}{1} \times \frac{1}{40^{\circ}} = \frac{1}{2} \times \frac{1}$	Projector Ppt. Marker Chart Geometry kit Geogebra	Discussion & group activities	
Elaborate	Make group of students, then give some activities on above concepts.	Exercise problems In textbook	Activity	Discussion with students
Evaluate	Teacher will assign some problems to do work. Students will solve all the problems given in the textbook.	Textbook	Evaluation	Try to do all problems in textbook.
Subje	ect teacher		Head master o	r mistress/Principal
7 th S7	TANDARD MATHEMA	ATICS		LESSON PLAN

Unit: 06Methodology: Demonstration & lecture method.Unit name: THE TRIANGLES AND ITS PROPERTIES.Date: From toObjectives:

- 1. Concept of median of triangles.
- 2. Concept of altitudes of a triangles.
- 3. Angle sum property of a triangle.
- 4. Types of triangles.
- 5. To learn about right angled triangle and Pythagoras theorem.

<u>Steps</u>	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Teacher will test the class by asking questions they learnt in the previous year. Students already learnt about lines, and angles in previous chapter.	Chart, Ppt color chalks.	Discussion & group discussion.	Will try to answers	
Explore	Teacher will ask the class the questions like 'what is lines and angles?'. Ask some more questions like this, After getting different answers from class, then introduce the chapter.	chalks, chart, ppt. projector	Questionnaire	Answering for supplementary questions.	

	CHITTI CREA	ATIONS		
Explain	Angles: start the class by explaining about triangles, type of triangles and its median. Angle sum property: There is a remarkable property connecting the three angles of a triangle. Explain about this angle sum property with examples. Right angled triangle and pythgoras theorem: Explain about right angled triangle and prove Pythagoras theorem. a theorem = b the constant of the second seco	Projector Ppt. Marker Chart Geometry kit	Discussion & group activities	
Elaborate	Make group of students, then give some activities on above concepts. Guide them to solve additional problems on this chapter.	Exercise problems In textbook	Activity	Discussion with students
Evaluate	Teacher will assign some problems to do work. Students will solve all the problems given in the textbook.	Textbook	Evaluation	Try to do all problems in textbook.
Subje	ect teacher		Head master o	r mistress/Principal

Unit: 07

Methodology: Demonstration & lecture method.

Unit name: CONGRUENCY OF TRIANGLES.

Date: From to

Objectives:

- 1. Concept of congruence.
- 2. Congruency of plane figures.
- 3. Congruency of triangles.
- 4. To learn of criteria of congruency of triangles.
- 5. To understand Congruency among the right angled triangle.

<u>Steps</u>	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Teacher will test the class by asking questions they learnt in the previous chapter. Triangles, Types of triangles & Right angled triangles ect.	Chart, Ppt color chalks.	Discussion & group discussion.	Will try to answers	
Explore	Teacher will ask the class the questions like 'what is triangles, tell about types of triangles?'. Ask some more questions like this, After getting different answers from class, then introduce the chapter.	chalks, chart, ppt. projector	Questionnaire	Answering for supplementary questions.	

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	Congruency: start the class by explaining about	Projector	Discussion &	
Explain	congruency, by taking different examples. 3.5cm 4.5cm 3.5cm 4	Projector Ppt. Marker Chart Geometry kit Same things for showing the congruency	Discussion & group activities	
	where one of them, is just a copy of the other. Similarly, two angles are congruent if one of them is a copy of the other. We extend this idea to triangles. Congruency among the right angled triangle: $A \to C$			
Elaborate	Make group of students, then give some activities on above concepts. Guide them to solve additional problems on this chapter.	Exercise problems In textbook	Activity	Discussion with students
Evaluate	Teacher will assign some problems to do work. Students will solve all the problems given in the textbook.	Textbook	Evaluation	Try to do all problems in textbook.
Subje	ect teacher		Head master o	r mistress/Principal
7 th ST	TANDARD MATHEMA	TICS		LESSON PLAN

Unit: 08

Methodology: Demonstration & lecture method.

Unit name: COMPARING QUANTITIES.

Date: From

<u>Objectives:</u>

- 6. Concept of ratios & equivalent ratios.
- 7. Percentage.
- 8. Comparing ratios to percentage and vice versa.

to

- 9. To learn about profit and loss.
- 10. Concept of simple interest.

<u>Steps</u>	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Teacher will checking pupils previous knowledge they learnt. Ask the questions related to ratios, fractions, & proportions.	Chart, Ppt color chalks.	Discussion & group discussion.	Will try to answers	
Explore	Teacher will ask the class the questions like 'what is ratios, what is proportion?'. Ask some more questions like this, After getting different answers from class, then introduce the chapter.	chalks, chart, ppt. projector	Questionnaire	Answering for supplementary questions.	

7 th S]	TANDARD MATHEMA	TICS		LESSON PLAN	
Subje	ect teacher		Head master o	r mistress/Principal	
Evaluate	Teacher will assign some problems to do work. Students will solve all the problems given in the textbook.	Textbook	Evaluation	Try to do all problems in textbook.	
Elaborate	Make group of students, then give some activities on above concepts. Guide them to solve additional problems on this chapter.	Exercise problems In textbook	Activity	Discussion with students	
	Simple interest: Interest Rate Formula Simple Interest = $\frac{P \times R \times T}{100}$ So some more problems on this simple interest then motivate them to solve the problems.				
Explain	equivalent to the ratio 2:3. Use of such comparisons by using different examples. Percentage : Per cent is derived from Latin word 'per centum' meaning 'per hundred'. Converting Fractional Numbers to Percentage : To compare fractional numbers, we need a common denominator. Profit or loss: A shopkeeper bought a chair for ` 375 and sold it for ` 400. Find the gain Percentage. Do some more examples on it.	Ppt. Marker Chart	group activities		
	Equivalent ratios: Therefore, the ratio 1:2 is not	Projector	Discussion &		

Unit: 09

Methodology: Demonstration & lecture method.

Unit name: **RATIONAL NUMBERS**.

Date: From to

- 1. Concept of rational numbers.
- 2. To represents the rational numbers on number line.
- 3. Rational numbers in standard form.
- 4. Operations on rational numbers.

<u>Steps</u>	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Teacher will checking pupils previous knowledge they learnt. Ask the questions related numbers fractions & fundamental operations on numbers.	Chart, Ppt color chalks.	Discussion & group discussion.	Will try to answers	
Explore	Start the session by asking the question on integers, number systems and so on. After getting different answers from the class, introduce the chapter.	chalks, chart, ppt. projector	Questionnaire	Answering for supplementary questions.	

	Rational numbers: A rational number is defined	Projector	Discussion &	
i	as a number that can be expressed in the form p q	Ppt.	group activities	
	, where p and q are integers and $q \neq 0$.	Marker		
	Rational numbers on a number line: explain	Chart		
	about this concept by taking different examples.	Number line		
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
Explain	3 3 3 3 3 3 3 3 3 3 3 3			
	OPERATIONS ON RATIONAL NUMBERS :			
	Explain about addition, subtract, multiply and			
	divide the rational numbers by taking different			
	examples.			
	Rational Numbers Operation			
	Kational Numbers Operation			
	and in second limiter in the second			
	(1). Addition [+]			
	(2). Subtraction [-]			
	(3). Multiplication [×]			
	(4). Division [÷]			
	Make group of students, then give some problems	Exercise	Activity	Discussion
Elaborate	to solve themselves. Guide them to solve	problems	-	with students
	additional problems on this chapter.	În textbook		
Evaluate	Teacher will assign some problems to do work.	Textbook	Evaluation	Try to do all
	Students will solve all the problems given in the		-	problems in
	textbook.			textbook.
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l Subie	ect teacher		Head master o	r mistress/Principal
7th S7	randard Mathema	TICS		LESSON PLAN
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Unit: 10Methodology: Demonstration & learning with doing method.Unit name: PRACTICAL GEOMETRY.

Date: From to

- 1. Concept of constructing the plane figure.
- 2. To construct triangles.
- 3. Different methods of constructing the triangles.

<u>Steps</u>	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Teacher will checking pupils previous knowledge they learnt. Ask the questions related plane figures.	Chart, Ppt color chalks.	Discussion & group discussion.	Will try to answers	
Explore	Start the session by asking the question on line segments, plane figures and triangles. After getting different answers from the class, introduce the chapter.	chalks, chart, ppt. projector	Questionnaire	Answering for supplementary questions.	

	Methods of constructing the triangles when	Projector	Discussion &	
	1. SSS: construct when side, side, side given.	Ppt.	group activities	
	×	Marker		
	9 cm / 5 cm	Chart		
	A 6 cm B	Geometry		
	2. SAS: construct when side, angle, side given.	kit		
Explain	$P = \frac{1}{7} \frac{R}{cm} Q$	Geogebra		
	3. ASA:Construct when angle, side, angle given.			
	4. RHS: Construct when right angle given.			
	P 6 cm Q			
	Make group of students, then give some problems	Exercise	Activity	Discussion
Elaborate	to construct themselves on above concept.	problems In textbook		with students
Evaluate	Teacher will assign some problems to construct the triangles. Students will construct all problems given in the textbook.	Textbook	Evaluation	Try to do all problems in textbook.
Subje	oct teacher		Head master o	r mistress/Principal
7 th ST	'ANDARD MATHEMA	ATICS		LESSON PLAN

Unit: 11 Methodology: Demonstration & problem solving method. Unit name: PERIMETER & AREA. **Date: From** to **Objectives:** 1. Concept of perimeter and area. 2. To find perimeter and area of squares and rectangles. 3. To find perimeter and area of triangles. 4. To find the area of parallelogram. 5. To find area & perimeter of circles. 6. To solve application level problems. Evaluation Teachers TIME TLM Tools & Introspection <u>Steps</u> Activities To Favourable For Learning Techniques Teacher will checking pupils previous knowledge Chart, **Discussion &** Will try to they learnt. Ask the questions related plane Engage Ppt answers group figures. color chalks. discussion. Start the session by asking the question on chalks. Questionnaire Answering for **Explore** squares, rectangles, circles and parallelograms to chart, ppt. supplementary

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come perimeter and area. After getting different

answers from the class, introduce the chapter.

projector

modals

questions.

	CHITTI CREA	ATIONS			
Explain	Introduction: explain about perimeter and area. Squares and rectangles: now teacher will introduce perimeter and area of squares and rectangles. Squares and rectangles: now teacher will introduce perimeter and area of squares and rectangles. Triangles: now teacher will introduce perimeter and area of triangles. Parallelograms: now teacher will introduce perimeter and area parallelograms. Circles: now teacher will introduce perimeter and area of circles. By taking different examples do some problems on these above concept.	Projector Ppt. Marker Chart Modals 3D shapes	Discussion & group activities		
	h h h Triangle Percellelogram Trappediation P = 2a + 2b P = x + b + c + d				
Elaborate	Make group of students, then give some problems to solve themselves. Guide them to solve additional problems on this chapter.	Exercise problems In textbook	Activity	Discussion with students	
Evaluate	Teacher will assign some problems to do work. Students will solve all the problems given in the textbook.	Textbook	Evaluation	Try to do all problems in textbook.	
Subje	ect teacher		Head master o	r mistress/Principal	
7 th ST	CANDARD MATHEMA	TICS		LESSON PLAN	

Uni	t: 12 Methodolog	gy: Demonstrat	ion & lecture n	nethod.	
Uni	t name: ALGEBRAIC EXPRESSIONS .				
Dat	e: From to				
<u>Obje</u>	<u>ectives:</u>				
1.	. Concept of algebraic expressions.				
2.	. Concept of terms.				
3.	. Like and unlike terms.				
4.	Concept of polynomials.				
5.	. Addition and subtractions of polynomials.				
6.	. To find the value of an expression.				
eps	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
age	Teacher will checking pupils previous knowleds they learnt. Ask the questions related variables, constant terms ect.	-	Discussion & group discussion.	Will try to answers	
lore	Start the session by asking the question on term variables and constant. After getting different answers from the class, introduce the chapter.	ns, chalks, chart, ppt. projector	Questionnaire	Answering for supplementary questions.	

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	CHITTI CREA	ATIONS		
Explain	Introduction: We have already come across simple algebraic expressions like $x + 3$, $y - 5$, $4x + 5$, $10y - 5$ and so on. TERMS OF AN EXPRESSION: We shall now put in a systematic form what we have learnt above about how expressions are formed. LIKE AND UNLIKE TERMS: When terms have the same algebraic factors, they are like terms. When terms have different algebraic factors, they are unlike terms. MONOMIALS, BINOMIALS, TRINOMIALS AND POLYNOMIALS: $\begin{bmatrix} Monomial & four & fou$	Projector Ppt. Marker Chart	Discussion & group activities	
Elaborate	Make group of students, then give some problems to solve themselves. Guide them to solve additional problems on this chapter.	Exercise problems In textbook	Activity	Discussion with students
Evaluate	Teacher will assign some problems to do work. Students will solve all the problems given in the textbook.	Textbook	Evaluation	Try to do all problems in textbook.

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	t name: £XPO e: From	NENTS AND POWERS. to				
	<u>ectives:</u>	10				
	. Concept of expo	onents.				
		of laws of exponents.				
		mal number systems.				
<u>Steps</u>	Activities	To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage		ecking pupils previous knowledge the questions related numbers, umbers ect.	Chart, Ppt color chalks.	Discussion & group discussion.	Will try to answers	
Explore	number system	n by asking the question on s, multiplications of numbers and ing different answers from the the chapter.	chalks, chart, ppt. projector	Questionnaire	Answering for supplementary questions.	

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	Introduction: Distance between Sun and Saturn	Projector	Discussion &	
	is 1,433,500,000,000 m and distance between	Ppt.	group activities	
	Saturn and Uranus is 1,439,000,000,000 m. Can	Marker		
	you read these numbers?. Like this questions, then	Chart		
	do some problems on exponents.			
	Laws of exponents: explain about all the 5 laws			
	of exponents with different examples.			
Explain	Law Example $a^m a^n = a^{m+n}$ $2^3 2^4 = 2^{3+4} = 2^7 = 128$			
	$(a^m)^n = a^{mn}$ $(2^3)^4 = 2^{3.4} = 2^{12} = 4096$			
	$\begin{array}{c c} (ab)^n = a^n b^n \\ \hline a & a^n \end{array} (20)^3 = (2.10)^3 = 2^3.10^3 = 8.1000 = 8000 \\ \hline 2 & 2^3 & 8 \end{array}$			
	$(\frac{a}{b})^n = \frac{a^n}{b^n}$ $(\frac{2}{5})^3 = \frac{2^3}{5^3} = \frac{8}{125}$			
	$\frac{a^{m}}{a^{n}} = a^{m-n} \qquad \qquad \frac{2^{3}}{2^{3}} = 2^{5-3} = 2^{2} = 4$			
	Decimal number system: explain about how we			
	write the longest numbers in decimal form, then			
	do some problems on it.			
	Make group of students, then give some problems	Exercise	Activity	Discussion
Elaborate		problems		with students
	additional problems on this chapter.	In textbook		
Evaluate	Teacher will assign some problems to do work.	Textbook	Evaluation	Try to do all
	Students will solve all the problems given in the			problems in
	textbook.			textbook.
	textbook.			LEXIDOOK.
Subje	ect teacher		Head master o	r mistress/Princ

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LESSON PLAN

Unit: 14

Methodology: Demonstration & project method.

Unit name: **SYMMETRY**.

Date: From to

<u>Objectives:</u>

1. Concept of symmetry.

2. Lines of symmetry for regular polygons.

3. Concept of rotational symmetry.

<u>Steps</u>	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
Engage	Teacher will checking pupils previous knowledge they learnt. Ask the questions related lines, points ect.	Chart, Ppt color chalks.	Discussion & group discussion.	Will try to answers	
Explore	Start the session by asking the question on plane figures, lines. After getting different answers from the class, introduce the chapter.	chalks, chart, ppt. projector modals	Questionnaire	Answering for supplementary questions.	

	CHITTI CRE	ATIONS			
					-
Explai	Introduction: Symmetry is an important geometrical concept, commonly exhibited in nature and is used almost in every field of activity. LINES OF SYMMETRY FOR REGULAR POLYGONS: explain about polygons, symmetric figures with different pictures. ROTATIONAL SYMMETRY: Explain about rotational symmetry by taking different pictures. INE SYMMETRY AND ROTATIONAL SYMMETRY: INE SYMMETRY IND ROTATIONAL SYMMETRY: INFORMETRY: INFORMETRY INFORMATIONAL INFORMATIONAL SYMMETRY INFORMATIONAL INFORMATIONAL INFORMATIONAL	Projector Ppt. Marker Chart	Discussion & group activities		
Elabora	Make group of students, then give some problemsto solve themselves. Guide them to solveadditional problems on this chapter.	Exercise problems In textbook	Activity	Discussion with students	
Evalua	<i>te</i> Teacher will assign some problems to do work. Students will solve all the problems given in the textbook.	Textbook	Evaluation	Try to do all problems in textbook.	
S	ubject teacher		Head master of	r mistress/Principal	l
7	th STANDARD MATHEMA	ATICS		LESSON PLAN	I

Uni	t: 15 Methodology	y: Demonstrat	ion & project n	nethod.	
Uni	t name: VISUALIZING SOLID SHAPES .				
Date	e: From to				
<u>Obje</u>	<u>ectives:</u>				
2. 3.	 Concept of plane figures and solid shapes. Concept of faces, vertices and edges. Concept of isometric sketches. Different sections of a solid. 				
<u>Steps</u>	Activities To Favourable For Learning	TLM	Evaluation Tools & Techniques	Teachers Introspection	TIME
ngage	Teacher will checking pupils previous knowledge they learnt. Ask the questions related lines, point ect.		Discussion & group discussion.	Will try to answers	
xplore	Start the session by asking the question on plane figures, lines. After getting different answers from the class, introduce the chapter.		Questionnaire	Answering for supplementary questions.	

ACES, EDGES AND VERTICES: explain about aces, edges and vertices of different types of solid gures.	Projector Ppt. Marker Chart 3D shaped figures	Discussion & group activities		
everal objects like books, balls, ice-cream cones tc., around us which have different shapes. ACES, EDGES AND VERTICES: explain about aces, edges and vertices of different types of solid gures.	Ppt. Marker Chart 3D shaped			
lake group of students, then give some problems o solve themselves. Guide them to solve dditional problems on this chapter.	Exercise problems In textbook	Activity	Discussion with students	
eacher will assign some problems to do work. tudents will solve all the problems given in the extbook.	Textbook	Evaluation	Try to do all problems in textbook.	
Subject teacher		Head master or mistress/Principal		
tuo ext	dents will solve all the problems given in the book. acher	dents will solve all the problems given in the book. Acher H	dents will solve all the problems given in the book. Head master or mistr	dents will solve all the problems given in the book. problems in textbook. acher Head master or mistress/Principal