

SUBJECT: MATHEMATICSLESSON PLANTOPIC: PLAY WITH PATTERNSCHAPTER NUMBER: 10

<u>PRE CONTENT / CONTENT / POST CONTENT</u>	<u>LEARNING OUTCOME / OBJECTIVES</u>	
<u>PLAY WITH PATTERNS</u>	<u>GENERAL</u>	<u>SPECIFIC</u>
<u>PRE-CONTENT</u> - Brainstorming session will be conducted by showing few real life objects depicting some patterns <u>CONTENT</u> - Patterns Around us - Picture Patterns - Number Patterns - Odd and even numbers - Secret Messages <u>POST CONTENT</u> - Appreciate the presence of patterns around us	Students will be able to :- identify the patterns in real world.. recognize patterns in the surroundings. apply the concept of turns and flips to create new picture patterns analyze and compute the next term in the series differentiate between odd and even numbers. develop the concept of creating new secret messages. appraise the need of patterns in our surroundings to make it beautiful.	Students will be able to :- observe and visualize the patterns in the surroundings. distinguish between man made and natural patterns. observe the numbers and analyze what will come next in the series. apply the concept of skip counting o complete the series. observe and recognize the pattern in odd and even numbers. learn to decode by applying analytical skills. acquire analytical skills by applying in real life situations.

Home Work / Assignments

- Problems from Math Magic.

AND PROGRESSMONTH: SEPTEMBERCLASS: III

<u>TEACHER'S ACTIVITY</u>	<u>STUDENT'S ACTIVITY</u>	<u>TEACHER'S OBSERVATION & REMEDIAL</u>
Teacher will :- show examples from the real world where patterns are observed. discuss relevant examples from the real world which fall under the two categories of natural and man made patterns. illustrate the problems given in textbook in Math Magic Pg -146. apply the mathematical operation of addition and subtraction to complete the series. use a 10×10 number grid and ask the students to colour it yellow for even numbers and blue for odd numbers to observe the pattern. <u>ANNEXURE 10</u> explain coding – decoding by conducting and activity summarize by showing presence of patterns in English words too.	Students will :- paste pictures of real life objects where patterns can be seen. enlist the names of the objects from the real world where natural and man made patterns are observed in their notebooks. analyze the patterns given in NCERT book Pg – 146 to 148 and compute what will come next in the series. Also create their own patterns in their notebook. assimilate the process and solve the questions given on Pg – 149 in their notebook. perform as instructed by the teacher and then answer the questions given in the book on Pg – 151. <u>ANNEXURE 10</u> participate in the activity and create their own secret messages. solve the exercise given in NCERT Pg – 152.	Teacher will write his/her observations after the completion of the topic/s.

Teaching aids – Textbook- Math Magic , Smart board, Internet , colors and colored paper.

Methodology – Deductive Method, Peer learning ,play way method, Activity method and Digital Technology .

Interdisciplinary Links –Develop optimism and law of appreciation while performing activity, application of analytical skills.

HOD

Coordinator

Headmistress

Principal

ANNEXURE 10**PLAY WITH PATTERNS**

SUBJECT	MATHEMATICS
CLASS	III
CHAPTER/UNIT	PLAY WITH PATTERNS
TOPIC	DECODING THE SECRET MESSAGE
TIME	30 MINUTES
NATURE OF ACTIVITY	IN PAIRS OF TWO

What will I learn (Learning Outcome)?

Decoding the secret message.

Skills: Analyzing, Critical Thinking.

What I have to do?

To crack the code and find a meaningful word using the code chart.

What do I require?

White rectangular strip of size 15 cm × 5cm, sketch pens, code chart (Resource attached as ANNEXURE C).

What do I need to know?

Series of English alphabets and some special characters.

➤ Teacher's Activity:

Teacher will guide the class to perform this activity in pairs and show the code chart prepared by her. (Resource attached as ANNEXURE C).

How will I proceed?**➤ Student's Activity:**

- 1) Take a white rectangular strip of 15 cm × 5cm.
- 2) Use the code chart shown by the teacher to write one word depicting good quality of your partner . For eg: If you wish to write **HELPFUL** you will write **7 4 @ ^ 5 +@**

- 3) Now, both the partners will exchange their strips and decode the secret quality mentioned by their partner.
- 4) At last all the students will share each other's quality with the class which will add new words to their vocabulary.

What have I observed ?

The secret code: _____

My decoded quality: _____

What have I learnt?

To decode the secret message using the code chart.

What am I curious to know?

Can I make few more secret messages using the same chart?

Let me evaluate myself

Q1) Use the code chart given below to decode each word.

1= A	4=D	7=G	10=J	13=M	16=P	19=S	22= V	
2=B	5=E	8=H	11=K	14=N	17= Q	20= T	23= W	25 = Y
3=C	6=F	9=I	12= L	15=O	18= R	21= U	24 = X	26 = Z

(i)

4	15	14	1	12	4

4	21	3	11

(ii)

13	15	1	14	1

(iii)

2	5	1	19	20

(iv)

19	9	13	2	1

Q2) Use the Alphabet code given below to crack the secret message.

1= a	4=d	7=g	10=j	13=m	16=p	19=s	22= v	
2=b	5=e	8=h	11=k	14=n	17= q	20= t	23= w	25 = y
3=c	6=f	9=i	12= l	15=o	18= r	21= u	24 = x	26 = z

<u>QUESTION</u>	<u>NUMBER</u>	<u>LETTER</u>
0 + 3 =		
7 + 8 =		
8 + 6 =		
4 + 2 =		
6 + 3 =		
3 + 1 =		
3 + 2 =		
7 + 7 =		
1 + 2 =		
4 + 1 =		

The secret word is : _____

CODE CHART

(ANNEXURE C)

A	B	C	D	E	F	G	H	I	J
0	1	2	3	4	5	6	7	8	9

K	L	M	N	O	P	Q	R	S	T
!	@	#	\$	%	^	&	*	(	)

U	V	W	X	Y	Z
+	-	×	÷	=	?