

CBSE Class 4 Subject Mathematics

NCERT Solutions

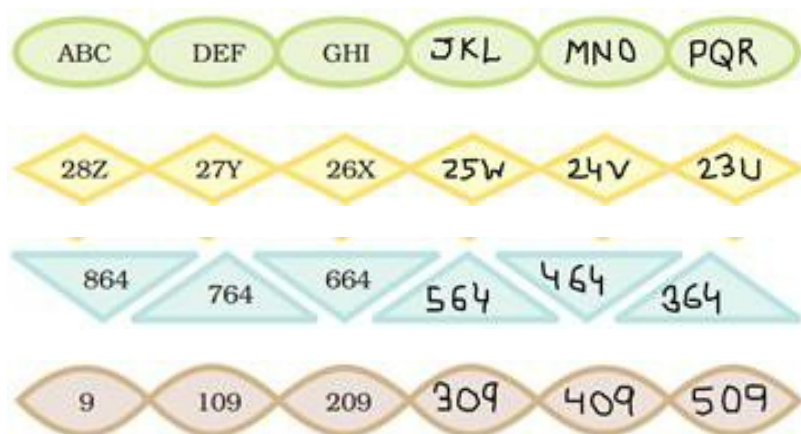
Chapter -10

PLAY WITH PATTERNS

Read the following passage and answer the questions that follow:

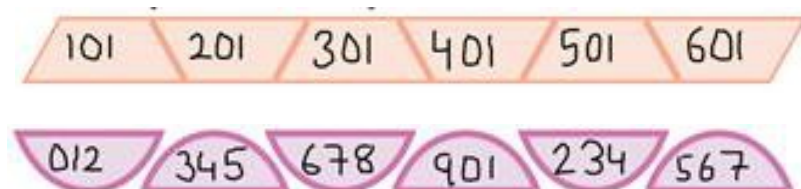
1. We can also make patterns with numbers and letters. Below are a few examples. Can you take them forward?

Ans. By following the given pattern, we can take them forward as under:



2. Now write your own number patterns.

Ans.



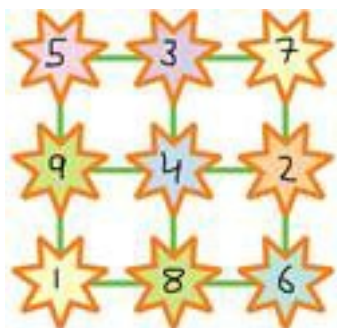
3. Now you try writing the letters – A, B, C in the box so that no letter comes twice in any line.

Ans. After writing the letters- A, B, C in the box so that no letter comes twice in any line, the filled up box is as shown:

A	B	C
C	A	B
B	C	A

4. Now you fill these stars. Use numbers 1 – 9 and the rule that the numbers in each line add up to 15.

Ans. The numbers 1 – 9 can be filled in these stars so that the number on each line add up to 15.



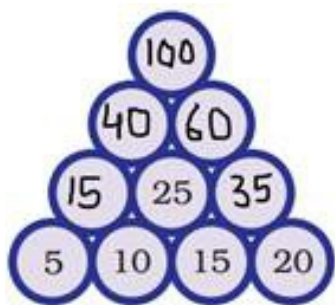
5. Now use number 1 – 6 to make your own magic triangle.

Ans. The number 1- 6 can be filled in these square boxes as shown so that the numbers each side add up to 10:



6. Using the same rule, complete these number towers.

Ans. (i)



$$5 + 10 = 15$$

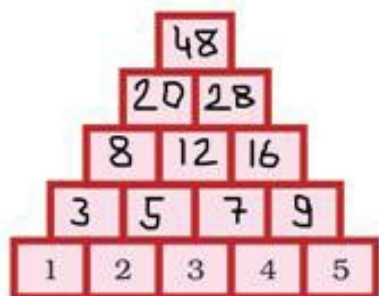
$$15 + 20 = 35$$

$$15 + 25 = 40$$

$$25 + 35 = 60$$

$$40 + 60 = 100$$

(ii)



$$1 + 2 = 3$$

$$2 + 3 = 5$$

$$3 + 4 = 7$$

$$4 + 5 = 9$$

$$3 + 5 = 8$$

$$5 + 7 = 12$$

$$7 + 9 = 16$$

$$8 + 12 = 20$$

$$12 + 16 = 28$$

7. Now you write any number and the three numbers after that. Make a pattern using the rule.

Ans. Writing any number and the three numbers after that, we get the numbers recorded in the box. Using the above rule, we find that we get the same sum.

21	22	23	24	
21	+	24	=	45
22	+	23	=	45

8. Now, you try to make such a pattern with 5 numbers in order.

Ans.

1	+	2	+	3	+	4	+	5	=	15
2	+	3	+	4	+	5	+	6	=	20
3	+	4	+	5	+	6	+	7	=	25
4	+	5	+	6	+	7	+	8	=	30
5	+	6	+	7	+	8	+	9	=	35

9. Does the sum grows by 5 each time?

Ans. Yes, the sum grows by 5 each time.

10. Complete this list of letters and numbers to help you.

Ans. The complete list of letters and numbers is as under:

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

11. Teenu wants to write to his friend “Good Morning”. What will he write by using the same rule.

Ans. Teenu will write:

7	15	15	4	13	15	18	14	9	14	7
---	----	----	---	----	----	----	----	---	----	---

12. If we change the rule and write 1 in place of ‘B’, 3 rd in place of ‘B’ , 3 in place of ‘D’ and so on, then how will be write “Let Us Dance”?

Ans. It can be written as:

11	4	19	20	18	3	0	13	2	4
----	---	----	----	----	---	---	----	---	---

13. Secret’s Messages:

(a) What was Kahuli’s secret message?

Ans. (a) His message is – WE ARE STUMPS.

(b) What did Shablu and Jaggu write?

Ans. IFMMP! IPX BSF ZPV? Means HELLO! HOW ARE YOU?

GJOF, UIBOL ZPV means FINE, THANK YOU.

XJMM ZPV QMBZ XJUI NF? means WILL YOU PLAY WITH ME?

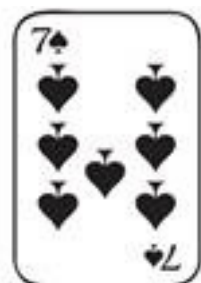
(c) Use the same rule to write- “Meet me on the moon”.

Ans. (c) It can be written as NFFU NF PO UIF NPPO.

14. Now, Anisha is playing with this card. Draw what it will look upside down.



Ans. It will look like:



15. Have you ever seen a floor with the tiles of shapes (given in book)?

Ans. Yes, I have seen a floor with tiles of these shapes.