Lesson 9

Patterns

Learning Outcomes

After completing this chapter, the students will be able to :

- observe the patterns and identify the rule.
- extend and create patterns.

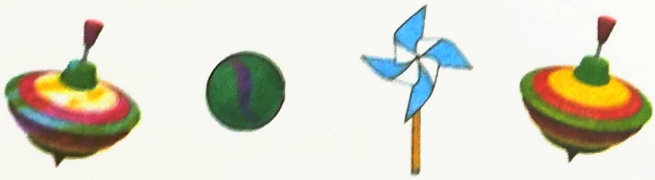
Warm Up

Circle the picture that will come next in the pattern.

1.  ?

2.  ?

3.  ?

4.  ?

5.  ?

PATTERNS

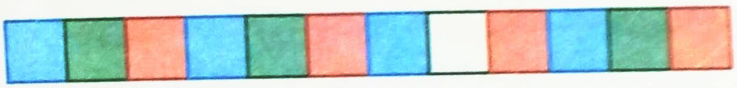
Patterns can be seen everywhere in our daily life.







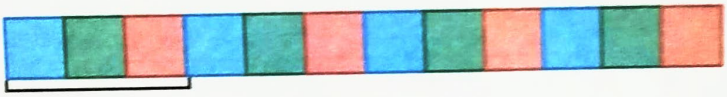
Look at the given squares.



Which colour should be there in the blank square?

It is green, obviously.

A unit of repeat is identical throughout a pattern.



Unit of repeat

Look at the following pattern.



Unit of repeat

Use Cordova Smart Class Software on the smart board in class to do all the Exercises.

EXERCISE-1

(According to NEP Guidelines)
(Understanding, Analysing)

1. Choose the correct options.

(a)  ?

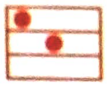
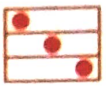
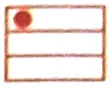
(i) 

☐ (ii) 

☑ (iii) 

☐

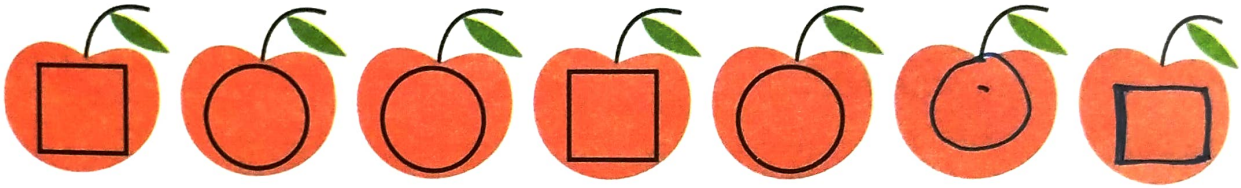
(b)  ?

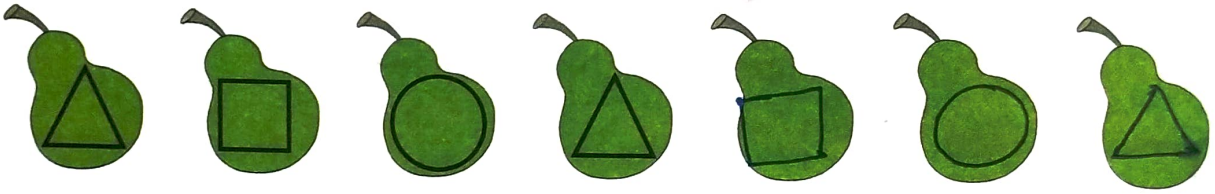
(i)  ☑ (ii)  ☐ (iii) 

(c)  ?

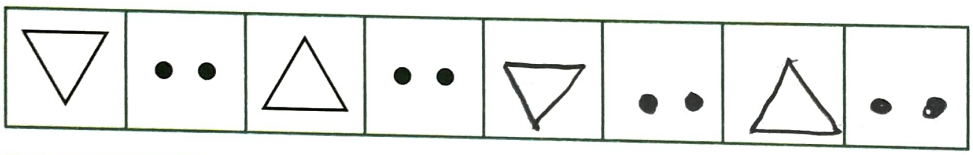
(i)  ☐ (ii)  ☑ (iii) 

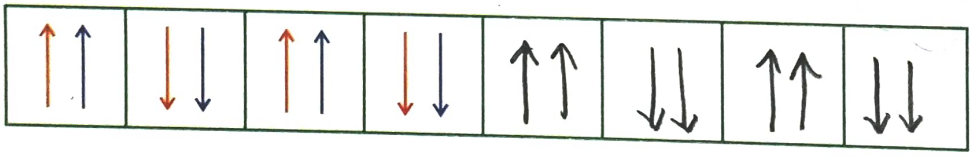
2. Draw the missing shapes to complete the patterns.

(a) 

(b) 

3. Look at the patterns and fill up the boxes.

(a) 

(b) 

Critical Thinking

What shape will be on the 15th position if this pattern continues?

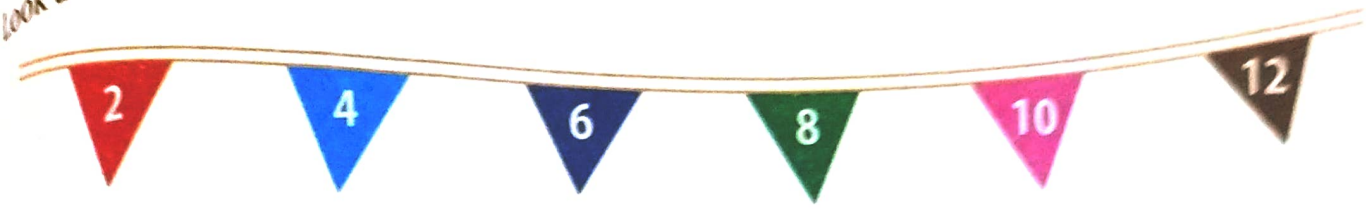


Teacher Tip

Conduct a simple activity, in which students work in pairs. One student to create a pattern using two/three plane shapes and the other to identify the unit of repeat. Students to take turns to create the pattern.

NUMBER PATTERNS

Look at some patterns with numbers.



Bunny, the rabbit jumps and lands on every 5th stone. Write the numbers on stones.



Harry Kangaroo jumps over two numbers and reaches the third number. Where will Harry go next? Circle all the numbers on which Harry will jump.



EXERCISE-2

(According to NEP Guidelines)
(Understanding, Analysing)

1. Observe the given patterns, identify the rule and complete it.

(a)	10	20	30	40	50	60	70	80
(b)	81	78	75	72	69	66	63	60
(c)	55	50	45	40	35	30	25	20

Rule : Skip counting by 10

Rule : Subtract 3

Rule : Subtract 5

2. Fill in the missing numbers.

(a) 4, 8, 12, 16, 20, 24, 28, 32

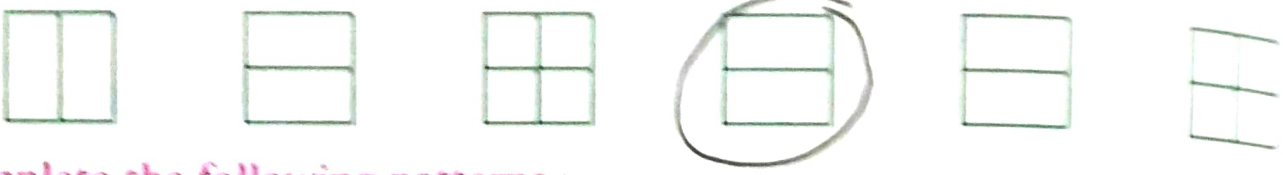
(b) 48, 42, 36, 30, 24, 18, 12, 6

(c) 60, 65, 70, 75, 80, 85, 90, 95

Mental Maths Corner

1. Observe each pattern and circle the shape that does not fit the pattern

(a) 

(b) 

2. Complete the following patterns :

(a) A5, B10, C15, D20, E25, F30, G35.

(b) AB, BC, CD, DE, EF, FG, GH.

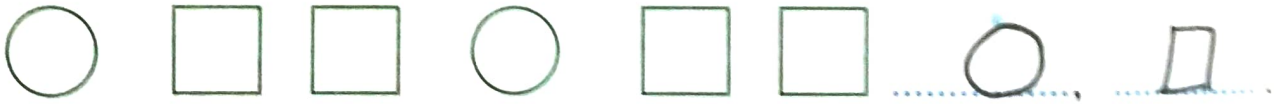
(c) ABC, DEF, GHI, JKL, MNO, PQR, STU.

(d) A10, B9, C8, D7, E6, F5, G4.

Review Exercise

(According to NEP Guidelines)
(Understanding, Analysing)

1. Observe the following patterns and complete them :

(a) 

(b) 

2. Write the next three numbers in each of the following patterns :

(a) 5, 10, 15, 20, 25, 30, 35.

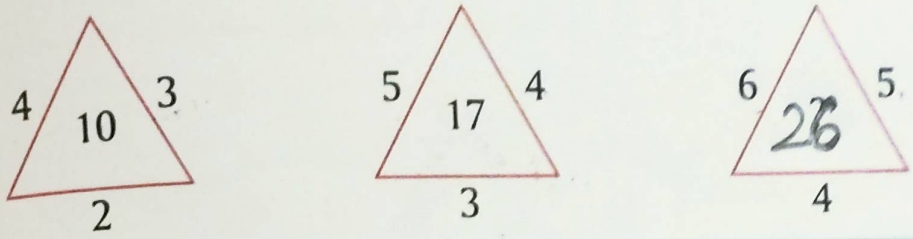
(b) 9, 19, 29, 39, 49, 59, 69.

(c) 1, 4, 7, 10, 13, 16, 19.

(d) 6, 12, 18, 24, 30, 36, 42.

Puzzle

Observe the pattern carefully and find the missing number.

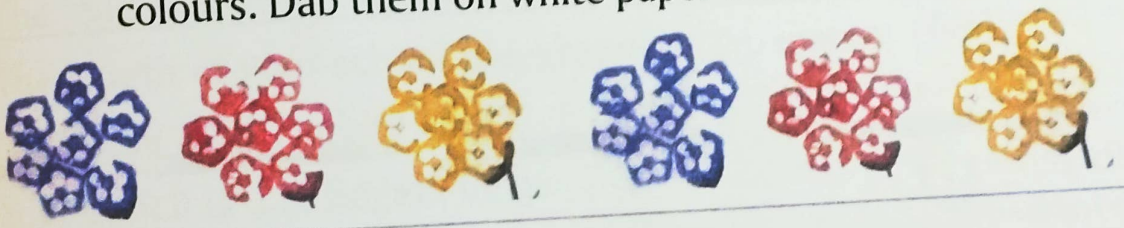


Art Integrated Learning

To make patterns using vegetables.

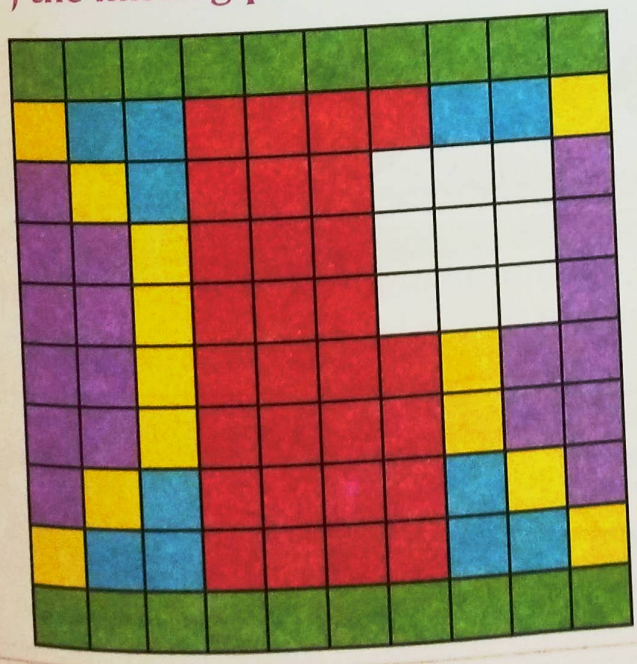
Material required : Poster colours, lady's fingers, knife, paper.

Procedure : Under the supervision of teacher/parents, cut a lady's finger into two parts. Dip the two halves of the lady's finger into different colours. Dab them on white paper to make beautiful patterns.



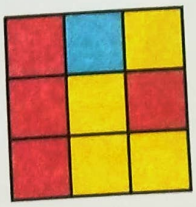
Challenge

Tick (✔) the missing part.

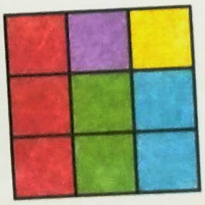


Options

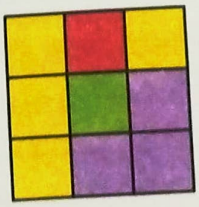
(a)



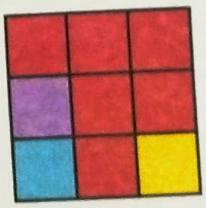
(b)



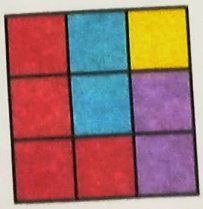
(c)



(d)



(e)



(f)

