PIET SANSKRITI SENIOR SECONDARY SCHOOL
NFL TOWNSHIP PANIPAT
2021-22
Class 6
English

Art-Integrated Project:

(I) Lesson Name- Different kind of School

Activity:

(a) Students are required to make a Video/PPT/Flipbook based on the summary of the lesson.

(II) Students are required to design 5 flashcards each with their version of 'Whatif Questions' by taking instances from the poem Whatif.

- **Complete your notebooks and Revise all the lessons done till now.**

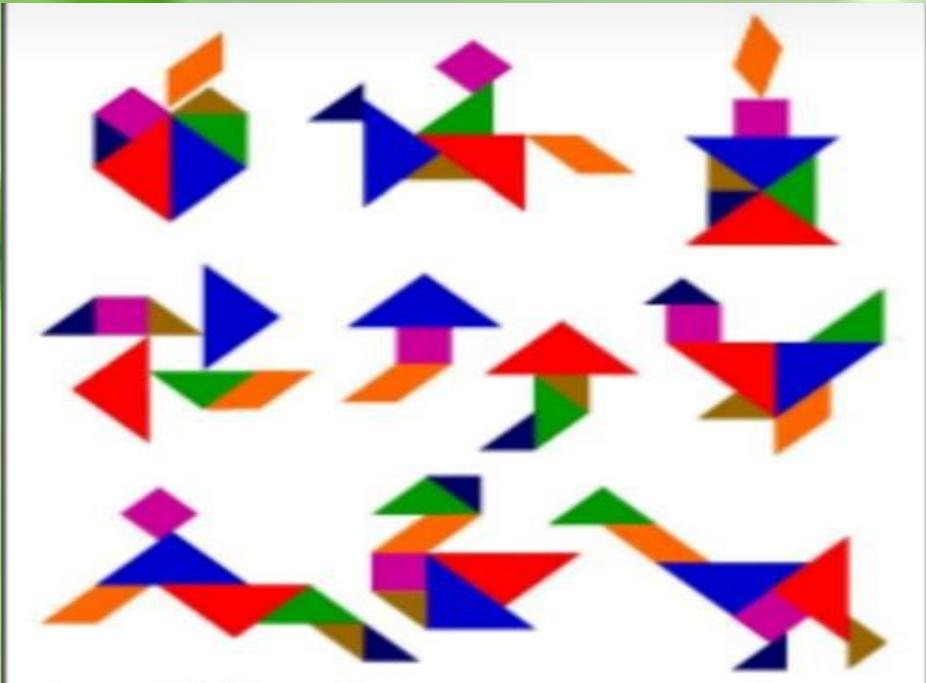## Hindi

☐ परियोजना कार्य **(project)**

भारत की सभी ऋतुओं के नाम तथा उन में आने वाले त्योहारों के नाम के साथ उनका संक्षेप में वर्णन भी करें। लिखें।

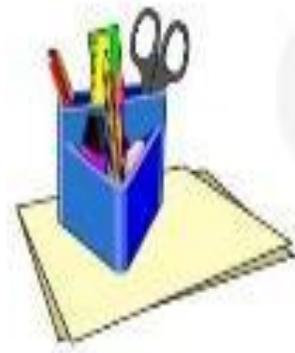☐ **Complete your notebooks and revise all the chapters done till now.**

Maths

- **Do this tangram activity on A3 size sheet.**

- **Do all 4 activities on practical file.**

Activity 1

OBJECTIVE

To verify that addition of whole numbers is commutative

MATERIAL REQUIRED

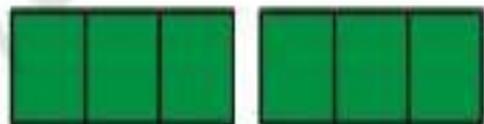Cardboard, white paper, graph strips, scissors, glue.

METHOD OF CONSTRUCTION

1. Take a cardboard of convenient size and paste a white paper on it.

2. Take a graph paper and make two strips containing 'a' squares, say, 5 squares each and colour them pink.

3. Similarly, make two strips each containing 'b' squares, say, 3 squares and colour them green.

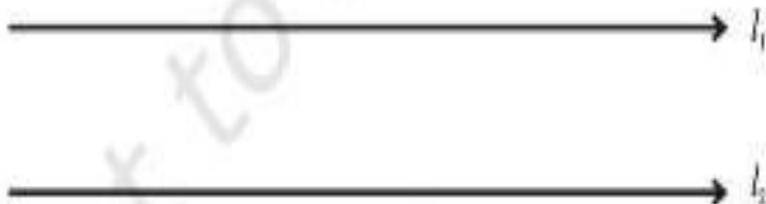4. Draw two straight lines on the cardboard as shown in Fig. 1.

$$l_1$$

$$l_2$$

Fig. 1

DEMONSTRATION

1. Now paste the pink and green strips side by side on lines l_1 and l_2 as shown in Fig. 2.
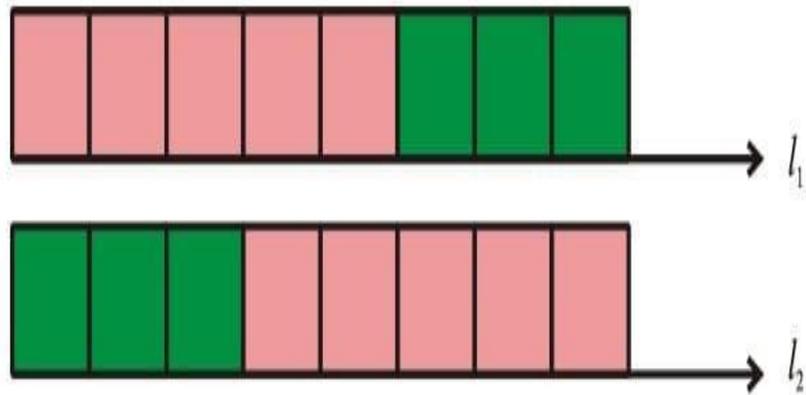
Fig. 2

OBSERVATION

From Fig. 2,

The length of the combined strips on line l_1 = 5 + 3.

The length of the combined strips on line l_2 = 3 + 5.

From Fig. 2, one can see that the length of combined strips on l_1 is the same as the length of combined strips on l_2.

So, 5 + 3 = 3 + 5.

That is, addition of 5 and 3 is commutative.

Repeat this activity by taking different pairs of numbers like 4, 5; 7, 2; 6, 7 and strips corresponding to these pairs.

Addition of whole numbers is _____.

APPLICATION

This activity can also be used to verify associative property for addition of whole numbers.

Activity 2

OBJECTIVE

To verify that multiplication of whole numbers is commutative

MATERIAL REQUIRED

Cardboard, white sheet, graph paper/grid paper, colours, glue, scissors.

METHOD OF CONSTRUCTION

1. Take a cardboard of a convenient size and cover it neatly with white sheet and graph paper.

2. To show 4×3 on a graph paper/grid paper, colour four columns of 3 squares each, with pink colour as shown in Fig. 1.
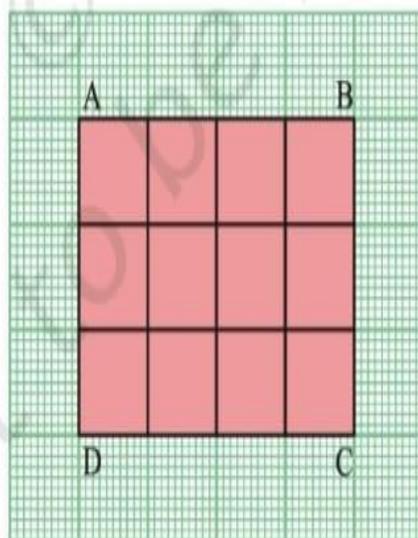

Fig. 1

3. To show 3×4 on a graph paper, colour 3 columns of 4 squares each with blue colour as shown in Fig. 2.
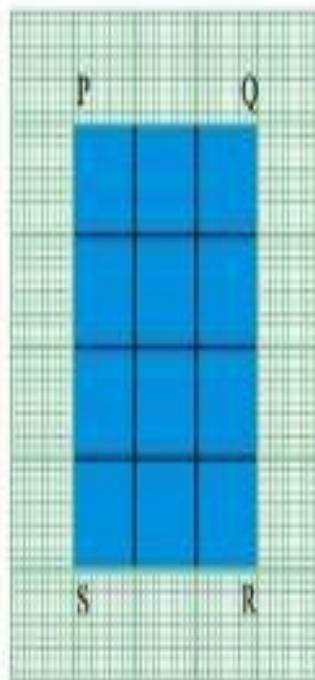
Fig. 2

4. Cut the coloured portion from both the graph papers and paste one coloured (say, pink) graph sheet on the cardboard.

DEMONSTRATION

1. Try to place the other coloured sheet over the pasted one in such a way that it exactly covers the pasted sheet.

2. PQ or SR of blue colour sheet covers exactly AD or BC of pink colour sheet.

3. PS or QR of blue colour covers exactly AB or CD of pink colour sheet.

OBSERVATION

On actual counting:

1. Number of squares of pink colour = _____ = 3 × _____.

2. Number of squares of blue colour = _____ = _____ × 3
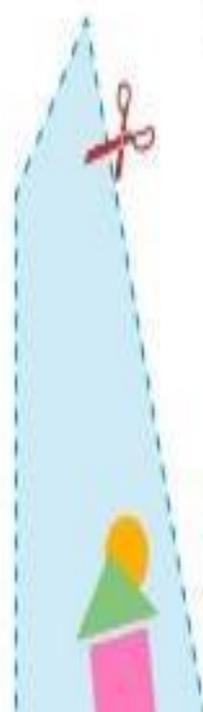
So, 3 × _____ = 4 × _____.

Thus multiplication of 3 and 4 is commutative.

Repeat this activity by taking some more pairs of strips.
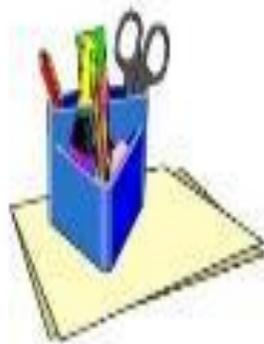
Multiplication of whole numbers is commutative.

APPLICATION

This activity can be used to explain the commutativity of multiplication of any two whole numbers. It can also be used to find the area of a rectangle.

Activity 3

OBJECTIVE

To verify distributive property of whole numbers

MATERIAL REQUIRED

Chart paper, pencil, geometry box, eraser, sketch pens of blue and red colours.

METHOD OF CONSTRUCTION

1. Draw three different line-segments of lengths $a = 5$ cm, $b = 2$ cm and $c = 1$ cm, respectively as shown in Fig. 1.
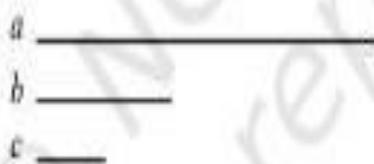

Fig. 1

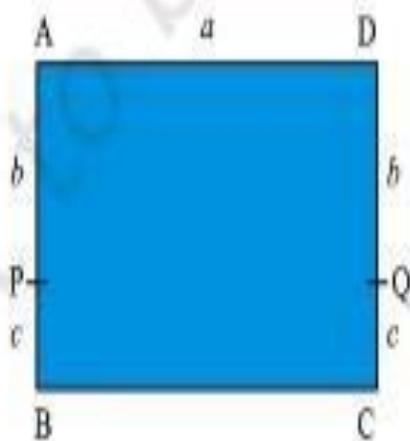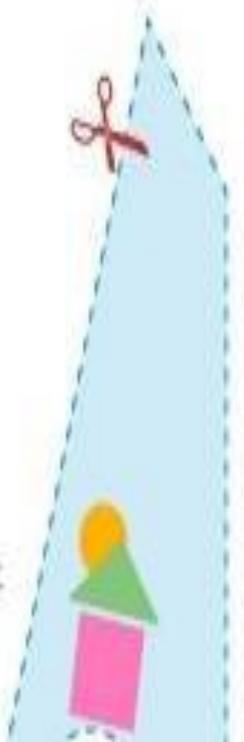2. Construct a rectangle ABCD with sides 'a' and $(b + c)$ (Fig. 2).

Fig. 2

3. Mark points P and Q on sides BA and CD respectively such that BP = CQ = c. Join PQ (Fig. 3).

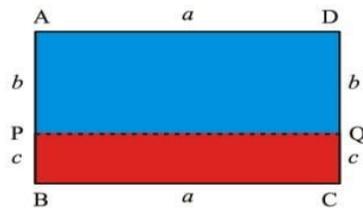4. Shade the part APQD with blue colour and the part BCQP with red colour.

Fig. 3

DEMONSTRATION

1. From Fig. 2, area of the rectangle ABCD = $a \times (b + c)$.

2. From Fig. 3, area of the rectangle APQD = $a \times b$.

3. From Fig. 3, area of the rectangle PBCQ = $a \times c$.

   Also area of rectangle ABCD = area of APQD + area of PBCQ.

   So, $a \times (b + c) = a \times b + a \times c$.

OBSERVATION

Repeat the activity by taking different values of a, b and c.

On actual measurement:

   $a =$ _____.

   $b =$ _____.

   $c =$ _____.

Area of rectangle ABCD = _____.

Area of rectangle APQD = _____.

Area of rectangle PBCQ = _____.

Area of rectangle ABCD = Area of rectangle _____ + Area of rectangle _____.

   So, $a \times (b + c) = (a \times$ _____ $) + (a \times$ ___ $)$.
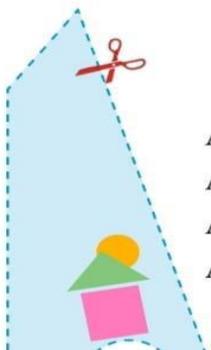
APPLICATION

1. This activity can be useful in explaining distributive property of whole numbers. This property is also useful in simplifying different expressions.

2. The above activity may be extended to explain the identity

$(a + b)(c + d) = ac + ad + bc + bd$
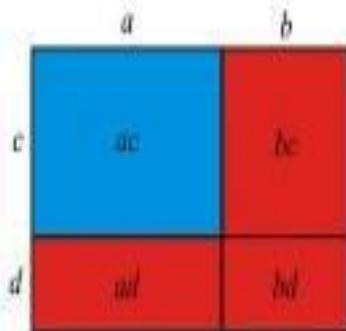
Fig. 4
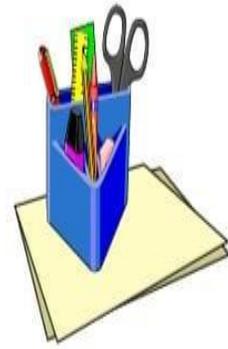
OBJECTIVE

To verify distributive property of multiplication over addition of whole numbers

MATERIAL REQUIRED

Cardboard, white sheet, grids of different dimensions, colours, scissors, glue, pen/pencil.

METHOD OF CONSTRUCTION

1. Take a cardboard of a convenient size and cover it with a white sheet.

2. On a grid, colour 10 columns of 5 squares each with the same colour (say red) as in Fig. 1.
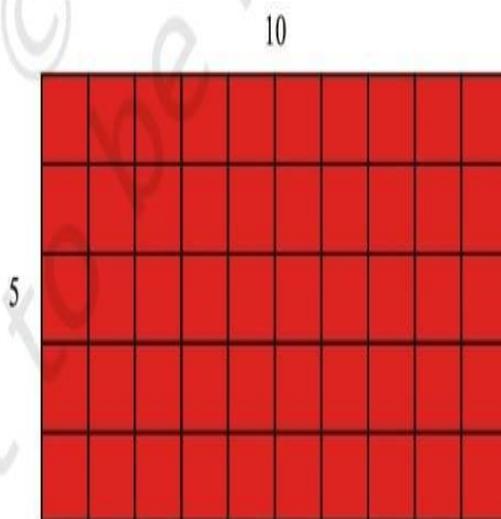
Fig. 1

3. Paste it neatly on the cardboard.

4. Now take three sets of grid papers and colour them as indicated below (Fig. 2). Make their cutouts also.
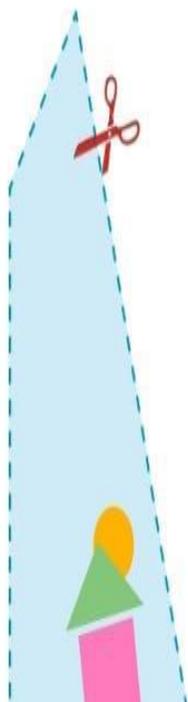
Set A :	5 columns of 5 squares	Pink colour
	5 columns of 5 squares	Pink colour
Set B :	3 columns of 5 squares	Blue colour
	7 columns of 5 squares	Blue colour
Set C :	4 columns of 5 squares	Yellow colour
	6 columns of 5 squares	Yellow colour

Set A 5×5 5×5

Set B 5×3 5×7

Set C 5×4 5×6
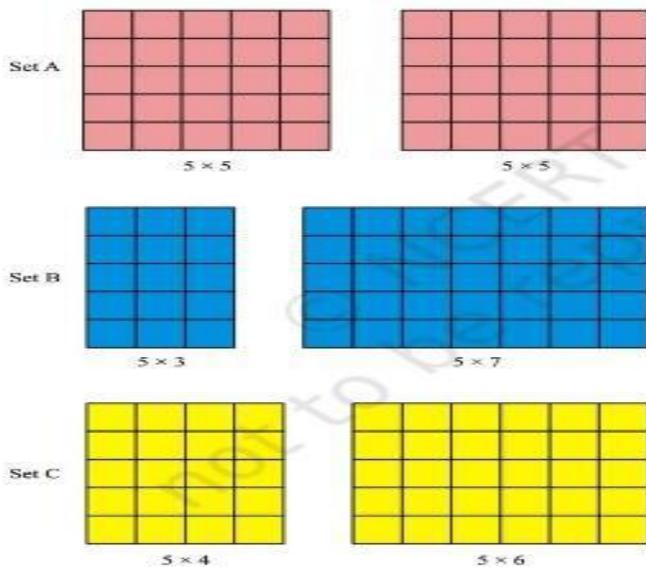
Fig. 2

DEMONSTRATION

1. Place the sets one above the other on the coloured grid in Fig. 1.

2. Both the sheets of set A when arranged side by side leaving no space between them will cover the pasted sheet exactly.

   So, $5 \times 10 = 5 \times 5 + 5 \times 5$.

   i.e. $5 \times (5 + 5) = 5 \times 5 + 5 \times 5$.

3. Both the sheets of set B when arranged side by side leaving no space between them will cover the pasted sheet exactly.

   So, $5 \times 10 = 5 \times 3 + 5 \times 7$.

   i.e., $5 \times (3 + 7) = 5 \times 3 + 5 \times 7$.

4. Both the sheets of set C when arranged side by side leaving no space between them will cover the pasted sheet exactly.

   So, $5 \times 10 = 5 \times 4 + 5 \times 6$.

   or, $5 \times (4 + 6) = 5 \times 4 + 5 \times 6$.

OBSERVATION

On actual counting of the squares:

$5 \times 10 = $ _____, $5 \times 5 = $ _____, $5 \times 5 = $ _____,

$5 \times 3 = $ _____, $5 \times 7 = $ _____,

$5 \times 4 = $ _____, $5 \times 6 = $ _____.

$5 \times 10 = 5 \times 5 + 5 \times$ _____.

$5 \times 10 = 5 \times 3 + 5 \times$ _____,

$5 \times 10 = 5 \times$ ___ $+ 5 \times 6$.

Repeat this activity for different such sets.

In general, $a \times (b + c) = a \times b + a \times c$.

APPLICATION

1. This activity may be used to explain distributive property of multiplication over addition of whole numbers which can be further used to simplify different expressions.

2. The activity can also be used to verify the distributive property of multiplication over subtraction of whole numbers.

- **Do the following worksheets.**
  Worksheet 1

PROPERTIES OF WHOLE NUMBERS

Choose correct option in Q. 1, 2, 3 and 4

Q.1 Whole numbers are closed under addition and also under multiplication. This property is called

(a) Closure property   (b) Distributive property   (c) Associative property   (d) none of these

Q.2 The whole number _____ has no predecessor

(a) 0   (b) 1   (c) 2   (d) none

Q.3 Multiplicative identity for whole numbers is _____

(a) 0   (b) 1   (c) 2   (d) none

Q.4 $5 \times (3 + 7) = 5 \times 3 + 5 \times 7$ shows _____ property of whole numbers

(a) Closure   (b) commutative   (c) associative   (d) distributive

Q5 Which of the following statement is false?

(a) $72+11=11+72$
(b) $(8+5)+7 = 8 + (5+7)$
(c) $(12+0)$ is not a whole number
(c) $13+0 = 0 + 13$

Q6 Using convenient combinations, find the sum

(a) 873, 599, 127
(b) 6725, 3995, 3275

Q7 Find the product using distributive property of multiplication over addition or subtraction.

(a) 3682×105
(b) $568 \times 88 + 568 \times 12$
(c) 3111×998
(d) $7132 \times 105 - 7132 \times 5$

Q8 Fill in the blanks to make the correct statements

(a) $579 \times 2 = 2 \times$ _____
(b) $5 \times 13 \times 40 =$ _____ $\times 13$
(c) When 0 is divided by any non zero whole number, then the result is _____
(d) $36 \times (100 + 2) = 36 \times 100 +$ _____ $\times 2$.

Q9 Find the product by suitable rearrangement

(a) $4 \times 800 \times 125 \times 25$
(b) $1285 \times 5 \times 120$
(c) $625 \times 279 \times 16$

Q10 Find the smallest number of 5- digit which is exactly divisible by 129

Q11 A taxi driver filled his car petrol tank with 45 liters of petrol on Saturday. On Sunday, he filled his tank with 55 liters of petrol. If the petrol costs Rs 49 per liter, how much did he spend on petrol?

Q12 Find the sum using associative property

(a) $127 + (189 + 73)$
(b) $(65 + 19) + 15$

Q13 There are 8 baskets, each having 7 apples, If 3 apples are taken away from each baskets, how many apples in total are left in the baskets.

Worksheet 2

Q.1. Round the numbers to the nearest 100.

a) 875 _____

b) 2,568 _____

c) 43,090 _____

d) 2,99,960 _____

e) 98,99,789 _____

f) 77,318 _____

Q.2. Round the numbers to the nearest 1,000.

a) 4,760 _____

b) 28,902 _____

c) 1,48,451 _____

d) 73,950 _____

e) 1,99,560 _____

f) 51,555 _____

Q.3 Solve the following in order. Remember to do these sums one step at a time!

a) $3 + 2 \times 4 =$

b) $3 - 8 \div 4 =$

c) $4 + 4 \times 2 =$

d) $9 - 3 \times 1 =$

e) $21 + 6 \div 3 =$

f) $19 - 3 \times 6 =$

g) $11 + 3 \times 2 =$

h) $12 - 3 \times 4 =$

i) $(2 + 4) \times 1 =$

j) $(4 + 1) \times 3 =$

k) $(4 - 2) \times 3 =$

l) $2 \times (3 + 1) =$

m) $(5 + 5) \div 10 =$

n) $16 \div (8 - 6) =$

Science

I Identify the food ingredient you like the most and one that you are not fond of at all.

Now, Plan a 3 course healthy meal for your family.

Your meal must have -

a. A starter/ soup/ cold soup (chaach/ cold pressed juice etc)

b. Main course- should have all essential nutrients and roughage. (You may plan a meal from any part of the country/contincontinental/ anywhere else you like)- it may have dal, vegetable, curd, salad, rice/roti etc.

c. Dessert- choose from home made ice cream/fruit cream/ rasgulla or anything else you enjoy.

Remember- one of the dishes you plan must have your ingredient in the main lead and one dish may

Have a new ingredient

Social Science

1. Read the Constitution of India and make a Video of yourself reading the Constitution and post it.
2. Make a video of the Day Night song just like mentioned in the link here of the Earth Song.
   https://youtu.be/9WwRSdX8g_s
3. Pick a culture, either Indian or from another country. Then use the Internet and find out some pictures of people from their culture and some interesting facts about their food, dress, festivals etc. Prepare a project file or Power point presentation and present it in the Class.
4. Describe your personal experience if any, of being discriminated against by others and talk about how it feels when discrimination is experienced and what are your views about discrimination. Or you can interview your grandparents about the same if they have face any discrimination, ask them questions and make a video.
5. College making on the food, language, festivals etc of different states and discuss unity in diversity.
6. (Optional) Divide yourself in a group of 5 and prepare a skit depicting Understanding Diversity and Discrimination & Prejudices.

Computer

You have planned a birthday party at Domino's. Make a list of your friends, with their phone numbers and addresses in MS-Excel. Use all the formatting features to make it beautiful and attractive.

Artificial Intelligence

Revise chapter- 1
Activity:
● Draw a cartoon on the topic "Robo-My Friend".
Imagine the appearance and the qualities that you want Robo to have, and illustrate them through the cartoon.
. Search about "Input and Output devices" of a Computer system and make a collage (use any app or do art work)

Sanskrit

कक्षा में पढे गये {पाठ्यक्रम} में पाठ्य पुस्तक के पाठों की पुनरावृत्ति करते हुये सभी पाठों के प्रश्नोत्तरों को अपनी नोट्बुक्स में लिखिये , तथा व्याकरण में निश्चित किये गये शब्दरुपों एवं धातुरुपों का अभ्यास करें, संख्यावाची शब्दों में 1- से 30 तक के संख्याओं का अभ्यास करें ।

{ Complete your notebook and revise all the chapters done till now }

French

1. **Make an Eiffel Tower by using your creative ideas. Eg. given below**

2. **Make a scrap file to show the following information about France**
➔ **Paste pictures and give a brief information on the following topics:**
- **Les Fromage Français (any 2)**
- **Les parfums Français (any 2)**
- **Famous personalities of France (any 2)**

Punjabi

Revise Lesson 1-5 and complete your notebook. Send a video on the assigned topic.

IMPORTANT

NCERT is running two online courses on DIKSHA for capacity building of students. Courses can be accessed at:

e-Waste management - https://diksha.gov.in/explore-course/course/do_31317226743536025612145

Covid 19: Responsive Behaviour - https://diksha.gov.in/explore-course/course/do_31326644727903027212744

Join the course Courses will be open till July 31, 2021.