## G.D GOENKA PUBLIC SCHOOL

$\qquad$ Class $\qquad$ Section $\qquad$ Admn.No $\qquad$

Note: The given content need not to be printed.

## Integrated Project : Math \& Art

## Objective:

1. The students will be able to find the LCM (least common multiples) of numbers by practising the concept of multiples of a number and finding common multiples between two or more numbers.

## Work Time

## Instructions:

1. Students are advised to complete the bridging assignment work on loose sheets of A4 size.
2. Use of fountain pens with blue ink for writing purposes will be preferred.
3. Students will have to submit the pictures of the assignment work to the concerned teachers through email, and the hard copy of the same is to be kept in safe custody for submission in school once the school reopens.
4. Students are also encouraged to keep up their reading activities in order to improve their reading abilities and vocabulary.

## ACTIVITY FOR <br> LEAST COMMON MULTIPLE <br> ( LCM )

Find the LCM of 3, 8 and 12
Before we begin the activity,

Day 1: Monday

## First Let us revise

## Multiplication tabless

## From



To be done on the loose sheets.

- $67 \times 7=$
- $96 \times 9=$
- $123 \times 11=$
- $854 \times 13=$
- $3,423 \times 15=$


## Now Let us move on to "Multiple".

Multiple: The product that we get when a number is multiplied by another number are called the multiples of given numbers.

Example: $3 \times 1=3$

$$
3 \times 2=6
$$

$$
3 \times 3=9
$$

Multiples of 3
$3 \times 4=12$

Find the first 10 multiples of 8 and 12 and write them on loose sheets.

## Now Let us revise

Common Multiple: The multiples that are common to two or more numbers.

Example: Multiples of 4: 4, 8, 12, 16, 20, 24, 28, 32

Multiples of 6: 6, 12, 18, 24, 30, 36, 42, 48

## Therefore common multiples of 4 and 6 are

$$
12 \text { and } 24
$$

Find the common multiples of 7 and 8 and write them on the loose sheets

## Now lets start with the Activity

Material Required: 3 A4 size white paper, 1 A4 size green or any coloured paper, 1 ruler, 1 black maker pen and 1 paper cutter ( to be done under adult supervision).


## Procedure:

1. Take a A4 size white paper and make a number chart from 1 to 100 as shown below


| 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 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

2. Similarly make 2 more number charts on two other white sheets and on 1 green sheet.


Day 5: Friday

## To be done under adult supervision

3. Take a white -coloured number chart and encircle all the multiples of 3 as shown below:

| 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 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

## 4. Now carefully cut-out the boxes containing encircled

 numbers with the help of cutter as shown below(to be done under adult supervision or you may take help from your parents for this)


5. Now in a similar manner, take a white number chart and encircle all the multiples of 8 and carefully cut-out the boxes containing encircled numbers with the help of cutter as shown below
(to be done under adult supervision or you may take help from your parents for this)


| 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 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |


| 1 | 2 | 3 | 4 | 5 | 6 | 7 |  | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 |  | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 |  | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 33 | 34 | 35 | 36 | 37 | 38 | 39 |  |  |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 |  | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 |  | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 |  | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 |  | 73 | 74 | 75 | 76 | 77 | 78 | 79 |  |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 |  | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 |  | 97 | 98 | 99 | 100 |

## Day 6: Saturday

6. Now take the last white coloured number chart and encircle all the multiples of 12 and carefully cut-out the boxes containing encircled numbers with the help of cutter as shown below
(to be done under adult supervision or you may take help from your parents for this )

| 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 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |


7. Now arrange the number charts on top of each other. First place the number chart from which we have cut the multiples of 3 then place the number chart from which we have cut the multiples of 8 and then place the number chart from which we have cut the multiples of 12


| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 |  | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 |  | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 |  | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 |  | 97 | 98 | 99 | 100 |

## 8. Now place the green coloured number chart at the bottom of the these 3 white coloured number chart.



| 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 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

9. Students now you can see 4 common multiples in green of 3, 8, 12 which are 24, 48, 72 and 94 and out of these 4 common multiple, the least common multiple is 24.


| 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 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

Therefore LCM of $3,8,12$ is 24

