# District Public School and College, Depalpur <br> E- Learning Project 

Summer Task/Tutorial links Home Assignments, Work Sheets, Activities

## Academic Session 2020-2021



NAME: $\qquad$

CLASS : 4

SECTION: $\qquad$
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## Unit 4

## Factors and multiples

Q1. Select the correct option from the following options.
a) Select the number which is divisible by 2 .
a) 33
b) 17
c) 48
d) 67
b) A whole number is divisible if the last digit is $\qquad$ .
a) 1
b) 7
c) 0
d) 5
c) 0 and 1 are neither prime nor $\qquad$ .
a) even
b) odd
c) composite
d) none
d) $\qquad$ of any number are the numbers which divide the given number exactly.
a) prime numbers
b) composite numbers
c) factors
d) none
e) LCM of 6 and 8 by prime factorization method are $=$ $\qquad$
a) 22
b) 24
c) 26
d) 28
f) Prime factor of 18 are $\qquad$
a) $2 \times 3$
b) $2 \times 6 \times 3$
c) $2 \times 3 \times 3$
c) $5 \times 4$
g) HCF of 6 and 24 by prime factorization method is $=$ $\qquad$ .
a) 5
b) 6
c) 7
d) 8
h) HCF of 3 and 9 is $\qquad$ .
a) 3
b) 6
c) 9
d) 4
i) Which number is a factor of all numbers.
a) 2
b) 3
c) 1
d) 10
j) The smallest prime number is $\qquad$ .
a) 1
b) 4
c) 8
d) 2
k) When we divide a number with itself the remainder is $\qquad$ .
a) 0
b) 1
c) 3
d) 2

Date: $5^{\text {th }}$ August, 2020 Day: Wednesday

## Exercise \# 4.1

Web link: https://www.youtube.com/watch?v=FGKAEQsFeFM
Topic: Divisibility rules
Q1) Which of the following- numbers are divisible by 2 and 3?


Solution:
The numbers which are divisible by both 2 and 3 are:
12, 24 , 32
Q) Which of the following- numbers are divisible by 2 and 5 ?

| 10 | 15 | 18 | 20 | 22 |
| :--- | :--- | :--- | :--- | :--- |

Q) Learn and write table of 13 .

| $13 \times 1=13$ |  |
| :--- | :--- |
| $13 \times 2=26$ |  |
| $13 \times 3=39$ |  |
| $13 \times 4=52$ |  |
| $13 \times 5=65$ |  |
| $13 \times 6=78$ |  |
| $13 \times 7=91$ |  |
| $13 \times 8=104$ |  |
| $13 \times 9=117$ |  |
| $13 \times 10=130$ |  |
| $13 \times 11=143$ |  |
| $13 \times 12=156$ |  |

Date: $6^{\text {th }}$ August,2020
Day: Thursday

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## Exercise \# 4.1

## Web Link: https://www.youtube.com/watch?v=F6KAEQsFeFM

## Topic: Divisibility rules

Q2) Which of the above numbers are
$\begin{array}{llllllllll}151 & 1655 & 5892 & 120 & 1854 & 2580 & 10005 & 141 & 6328 & 112\end{array}$
a) Divisible by 2 ?

Solution:
Numbers which are divisible by 2 are:
5892, 120, 1854, 2580, 6328, 112
b) Divisible by 3 ?
c) Divisible by 4?
d) Divisible by 5 ?
e) Divisible by 6?
f) Divisible by 7?
g) Divisible by 8 ?
h) Divisible by 9 ?
i) Divisible by 10 ?
j) Divisible by both 2 and 4?
k) Divisible by 2,5 and 10 ?
Q) Learn and write table of 14.

| $14 \times 1=14$ |  |
| :--- | :--- |
| $14 \times 2=28$ |  |
| $14 \times 3=42$ |  |
| $14 \times 4=56$ |  |
| $14 \times 5=70$ |  |
| $14 \times 6=84$ |  |

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| $14 \times 7=98$ |  |
| :--- | :--- |
| $14 \times 8=112$ |  |
| $14 \times 9=126$ |  |
| $14 \times 10=140$ |  |
| $14 \times 11=154$ |  |
| $14 \times 12=168$ |  |

Date: $7^{\text {th }}$ August, 2020
Day: Friday

## Exercise \# 4.2

Web link: https://www.youtube.com/watch?v=EeMtCyVK1n8
Topic: Prime and composite numbers
Prime numbers: Prime number is a number that can only be divided exactly by 1 and itself.

For example: 2, 3, 5, 7, 11 are all prime numbers

Composite numbers: Composite number is a number that can also be divided exactly by any number other than 1 and itself.

For example: 4, 6, 8, 9, 10, 12 are all composite numbers.
Q) Write definition of Prime number and Composite numbers? Prime numbers:

Composite numbers:
Q) Learn and write table of 15.

| $15 \times I=15$ |  |
| :--- | :--- |
| $15 \times 2=30$ |  |
| $15 \times 3=45$ |  |
| $15 \times 4=60$ |  |
| $15 \times 5=75$ |  |
| $15 \times 6=90$ |  |
| $15 \times 7=105$ |  |
| $15 \times 8=120$ |  |
| $15 \times 9=135$ |  |
| $15 \times 10=150$ |  |

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| $I 5 \times I I=I 65$ |  |
| :--- | :--- |
| $I 5 \times I 2=180$ |  |

Date: $8^{\text {th }}$ August,2020
Day: Saturday

## Exercise \# 4.3

Web link: https://www.youtube.com/watch?v=zFhJjjLd1U8\&t=2s
Topic: Multiples
Q1) List first ten multiples of the following numbers.
a) Multiple of 2?

Solution:
$2=2,4,6,8,10,12,14,16,18,20$
a) Multiple of 3?
$3=3,6,9,12,15,18,21,24,27,30,33,36,39,42,45,48,51,54,57,60$
c) Multiple of 4 ?
d) Multiple of 5?
e) Multiple of 6?
f) Multiple of 7 ?
g) Multiple of 8 ?
h) Multiple of 9 ?
Q) Learn and write table of 16 .

| $16 \times 1=16$ |  |
| :--- | :--- |
| $16 \times 2=32$ |  |
| $16 \times 3=48$ |  |
| $16 \times 4=64$ |  |
| $16 \times 5=80$ |  |
| $16 \times 6=96$ |  |
| $16 \times 7=112$ |  |
| $16 \times 8=128$ |  |

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| $16 \times 9=144$ |  |
| :--- | :--- |
| $16 \times 10=160$ |  |
| $16 \times 11=176$ |  |
| $16 \times 12=192$ |  |

Date: $10^{\text {th }}$ August, 2020
Day: Monday

## Exercise \# 4.3

Web link: https://www.youtube.com/watch?v=zFhJjiLd1U8\&t=2s
Topic: Multiples
Q2) Circle the multiples of the number shown on the card.
a) Multiple of 3 .

b) Multiple of 8 .

| 8 |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 32 |  | 11 |  | 6 |  |
|  | 41 |  | 38 |  | 16 |  |
|  |  |  |  |  |  |  |
|  | 40 |  | 8 | 18 |  |  |
|  |  |  |  |  |  |  |

c) Multiple of 6 .

| 6 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 6 | 24 | 12 | 9 |
| 25 | 19 | 15 |  |  |
|  | 18 | 36 |  |  |
|  |  |  |  | 17 |

d) Multiple of 9 .

| 9 |  |  |  |
| :--- | :--- | :--- | :--- |
|  | 41 | 10 | 12 |
| 71 |  | 13 |  |
|  | 36 |  | 18 |
|  |  |  | 81 |

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Q) Learn and write table of 17.

| $17 \times 1=` 17$ |  |
| :--- | :--- |
| $17 \times 2=34$ |  |
| $17 \times 3=51$ |  |
| $17 \times 4=68$ |  |
| $17 \times 5=85$ |  |
| $17 \times 6=102$ |  |
| $17 \times 7=119$ |  |
| $17 \times 8=136$ |  |
| $17 \times 9=153$ |  |
| $17 \times 10=170$ |  |
| $17 \times 11=187$ |  |
| $17 \times 12=204$ |  |

Date: $11^{\text {th }}$ August,2020
Day: Tuesday

## Exercise 4.4

Web Link: https://www.youtube.com/watch?v= bFa1NM1p5s
Topic: Factors
Q1) Write factor of each of the following numbers.
a) Factor of $12=$ ?

## Solution:

Factor of 12 are $=\underline{1}, \underline{2}, \underline{3}, \underline{4}, \underline{6}$, and $\underline{12}$
b) Factor of 20=?
C) Factor of 24=?
d) Factor of 12=?
e) Factor of $18=$ ?
Q) Learn and write table of 18 .

| $18 \times I=18$ |  |
| :--- | :--- |
| $18 \times 2=36$ |  |
| $18 \times 3=54$ |  |
| $18 \times 4=72$ |  |
| $18 \times 5=90$ |  |
| $18 \times 6=108$ |  |
| $18 \times 7=126$ |  |
| $18 \times 8=144$ |  |
| $18 \times 9=162$ |  |
| $18 \times 10=180$ |  |
| $18 \times I I=198$ |  |
| $18 \times I 2=216$ |  |

Date: $12^{\text {th }}$ August, 2020
Day: Wednesday

## Exercise 4.4

Web link: https://www.youtube.com/watch?v= bFa1NM1p5s

## Topic: Factors

Q2) Find the missing factor below.
a) $8=1,2,4$
8

Solution:

Factors of 8 are:
$1,2,4,8$ because 8 is exactly divisible by $1,2,4,8$
b) $15=1,3$ $\square$
$\square$
c) $18=1,2$, $\square$
$\square$
$\square$ , 18
d) $32=1$, $\square$
$\square$ , 16, 32
e) $50=1,2$, $\square$
$\square$
$\square$
Q) Learn and write table of 19.

| $19 \times 1=19$ |  |
| :--- | :--- |
| $19 \times 2=38$ |  |
| $19 \times 3=57$ |  |
| $19 \times 4=76$ |  |
| $19 \times 5=95$ |  |
| $19 \times 6=114$ |  |
| $19 \times 7=133$ |  |
| $19 \times 8=152$ |  |
| $19 \times 9=171$ |  |
| $19 \times 10=190$ |  |
| $19 \times 11=209$ |  |
| $19 \times 12=228$ |  |

Date: $13^{\text {th }}$ August, 2020
Day: Thursday

## Exercise 4.4

Web Link: https://www.youtube.com/watch?v= bFa1NMIp5s
Topic: Factors
Q3) Write all the factors for the numbers given below:
a) $3=$ $\qquad$
b) $9=$ $\qquad$
c) $11=$ $\qquad$
d) $21=$ $\qquad$
e) $24=$ $\qquad$
f) $28=$ $\qquad$
g) $36=$ $\qquad$
h) $42=$ $\qquad$
Q) Learn and write table of 20 .

| $20 \times 1=20$ |  |
| :--- | :--- |
| $20 \times 2=40$ |  |
| $20 \times 3=60$ |  |
| $20 \times 4=80$ |  |
| $20 \times 5=100$ |  |
| $20 \times 6=120$ |  |
| $20 \times 7=140$ |  |
| $20 \times 8=160$ |  |
| $20 \times 9=180$ |  |
| $20 \times 10=200$ |  |
| $20 \times 11=220$ |  |
| $20 \times 12=240$ |  |

## Exercise 4.4

Web link: https://www.youtube.com/watch?v=sOGKvDyWeNI
Topic: Factors
Q4) Answer the following questions:
a) Is 5 a factor of 35 ? Explain. Solution:


Yes, 5 is a factor of 35 because 35 is exactly divisible by 5
b) Is 8 a factor of 41? Explain.
c) Is 6 a factor of 36 ? Explain.
c) Is 9 a factor of 81 ? Explain.
Q) Learn and write table of 2

| $2 \times 1=2$ |  |
| :--- | :--- |
| $2 \times 2=4$ |  |
| $2 \times 3=6$ |  |
| $2 \times 4=8$ |  |
| $2 \times 5=10$ |  |
| $2 \times 6=12$ |  |
| $2 \times 7=14$ |  |
| $2 \times 8=16$ |  |
| $2 \times 9=18$ |  |
| $2 \times 10=20$ |  |
| $2 \times 11=22$ |  |
| $2 \times 12=24$ |  |

Date: $17^{\text {th }}$ August, 2020
Day: Monday

## Exercise 4.5

Web link: https://www.youtube.com/watch?v=npp9drrkVak
Topic: Prime Factorization
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Q1) Find the prime factor of the following numbers using the factor tree method.
a) 12

Solution:


Factors: $2 \times 2 \times 3=12$
b) 33
c) 56
d) 63
e) 54
Q) Learn and write table of 3

| $3 \times 1=3$ |  |
| :--- | :--- |
| $3 \times 2=6$ |  |
| $3 \times 3=9$ |  |
| $3 \times 4=12$ |  |
| $3 \times 5=15$ |  |
| $3 \times 6=18$ |  |
| $3 \times 7=21$ |  |
| $3 \times 8=24$ |  |
| $3 \times 9=27$ |  |
| $3 \times 10=30$ |  |
| $3 \times 11=33$ |  |

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$$
3 \times 12=36
$$

Date: $18^{\text {th }}$ August, 2020
Day: Tuesday

## Exercise 4.5

## Topic: Prime Factorization

Web link: https://www.voutube.com/watch?v=nppgdtrkVak
Q2) Find the prime factor of the following numbers by using division method:
a) 20

Solution:

| 2 | 2 | 0 |
| :--- | :--- | :--- |
| 2 | 1 | 0 |
| 5 | 5 |  |
|  | 1 |  |

PF of $20=\underline{2} \times \underline{2} \times \underline{5}=\underline{20}$
b) 60
d) 32
c) 27
e) 48
Q) Learn and write table of 4

| $4 \times 1=4$ |  |
| :--- | :--- |
| $4 \times 2=8$ |  |
| $4 \times 3=12$ |  |
| $4 \times 4=16$ |  |
| $4 \times 5=20$ |  |
| $4 \times 6=24$ |  |
| $4 \times 7=28$ |  |
| $4 \times 8=32$ |  |
| $4 \times 9=36$ |  |
| $4 \times 10=40$ |  |
| $4 \times 11=44$ |  |

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## Exercise \# 4.6

Weblink: https://www.youtube.com/watch?v=sr8yrJzWCqc\&t=7s
Topic: Common multiples and least common multiples

Q1) Write the multiple for each number given below. Circle the common multiples and find the least common multiple (LCM) for each pair of number.
a)


Solution:

Multiples of $2=2,4,6,8,10,12,14,16,18,20,22,24$

Multiples of $6=6,12,18,24,30,36,42,48,54,60$

Common multiple of 2 and 6 are 6, 12, 18, 24, 30, 36, 42

LCM $=6$
Because 6 is the smallest number which is common multiple of both 2 and 6.
b)

$\qquad$
c) 57
d)
3 9
Q) Learn and write table of 5.

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| $5 \times 1=5$ |  |
| :--- | :--- |
| $5 \times 2=10$ |  |
| $5 \times 3=15$ |  |
| $5 \times 4=20$ |  |
| $5 \times 5=25$ |  |
| $5 \times 6=30$ |  |
| $5 \times 7=35$ |  |
| $5 \times 8=32$ |  |
| $5 \times 9=45$ |  |
| $5 \times 10=50$ |  |
| $5 \times 11=55$ |  |
| $5 \times 12=60$ |  |

Date: $20^{\text {th }}$ August, 2020
Day: Thursday
Exercise \# 4.7
Weblink: https://www.youtube.com/watch?v= xKhfeaF5bA
Topic: Finding LCM by using prime factorization

Q1) Find the LCM of the following numbers by using prime factorization method.
a) $\square$ 10

## Solution:

Prime factor of $6=2 \times 3$
Prime factor of $10=2 \times 5$
Common factors $=2$
Uncommon factors $=3,5$
LCM $=$ common factor $\times$ uncommon factor $=2 \times 3 \times 5$
$=30$
b) $16 \quad 24$
c)
d) $14 \quad 18$
e)
60 10
Q) Learn and write table of 6 .

| $6 \times 1=6$ |  |
| :--- | :--- |
| $6 \times 2=12$ |  |
| $6 \times 3=18$ |  |
| $6 \times 4=24$ |  |

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| $6 \times 5=30$ |  |
| :--- | :--- |
| $6 \times 6=36$ |  |
| $6 \times 7=42$ |  |
| $6 \times 8=48$ |  |
| $6 \times 9=54$ |  |
| $6 \times 10=60$ |  |
| $6 \times 11=66$ |  |
| $6 \times 12=72$ |  |

## Exercise \# 4.8

Weblink: https://www.youtube.com/watch?v=Gpgpv55neHE\&t=52s
Topic: Common factors and highest common factor
Q1) Write factors for each number given below. Find the highest common factor (HCF) for each pair of numbers.
a)
 9

## Solution:

Factors of $3=1,3$
Factors of $9=1,3,9$

Common factors $=1,3$
3 is the greatest number which is the common factor of both 3 and 9, so,

HCF=3
b) $16 \quad 18$
c) $18 \quad 36$
d)

| $33 \quad 27$ |
| :--- |

e) $11 \quad 22$
Q) Learn and write table of 7.

| $7 \times 1=7$ |  |
| :--- | :--- |
| $7 \times 2=14$ |  |
| $7 \times 3=21$ |  |
| $7 \times 4=28$ |  |

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| $7 \times 5=35$ |  |
| :--- | :--- |
| $7 \times 6=42$ |  |
| $7 \times 7=49$ |  |
| $7 \times 8=56$ |  |
| $7 \times 9=63$ |  |
| $7 \times 10=70$ |  |
| $7 \times 11=77$ |  |
| $7 \times 12=84$ |  |

Date: $22^{\text {nd }}$ August,2020
Day: Saturday

## Exercise \# 4.9

Weblink: https://www.youtube.com/watch?v=SKrAbQR7QTg
Topic: HCF using prime factorization
Q1) Find HCF of the following numbers using prime factorization method.
a) $25 \quad 35$

Solution:
Prime Factor of 25: $5 \times 5$
Prime Factor of 35: $5 \times 7$

## Common Factor: 5

HCF: 5
b) 66

c) $24 \quad 44$
d) $28 \quad 32$
Q) Learn and write table of 8.

| $8 \times 1=8$ |  |
| :--- | :--- |
| $8 \times 2=16$ |  |
| $8 \times 3=24$ |  |
| $8 \times 4=32$ |  |
| $8 \times 5=40$ |  |
| $8 \times 6=48$ |  |
| $8 \times 7=56$ |  |
| $8 \times 8=64$ |  |
| $8 \times 9=72$ |  |
| $8 \times 10=80$ |  |
| $8 \times 11=88$ |  |
| $8 \times 12=96$ |  |

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Worksheet
Q) Find the Prime factor of the following numbers.

$56=7 \times \square$


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## Worksheet

Q) Shade the prime numbers.


## Worksheet

Q) Find the LCM of the following numbers by prime factorization method.
(a) 6 and 12
(b) 6 and 8
(c) 18 and 27

## Worksheet

Q) Find the HCF of the following numbers by prime factorization method.
(a) 12 and 18
(b) 30 and 45
(c) 24 and 44

Date: $28^{\text {th }}$ August,2020

## Worksheet

Q) List all the factors of the given number.

| a) 8 | d) 39 |
| :--- | :--- |
| b)20 |  |
|  | e)26 |
| c)24 |  |

## Worksheet

Q) Sort the numbers below by putting them in the correct bucket (some numbers are multiples of 2 and 5)


