As per NEP 2020

Maths

Class 5

Activities

A Double the decimals.

Conceptual Understanding, Problem-solving

The students sit in a circle. The first student doubles the start number called by the teacher, which is doubled again by the next student and so on. The student whose double is more than '10' has to say 'Over 10' and wins a point. The teacher gives a new start number and the second round begins. The student with most points at the end of 5 rounds wins.

Some start numbers:

1. 0.4
2. 0.8
3. 1.2
4. 2.3
5. 0.9
6. 1.5
7. 0.3
8. 1.9
9. 2.6
10. 0.7

B Play the fractions game.

Critical Thinking, Problem-solving

Work with a partner and 2 dice. Each player draws a grid as shown.

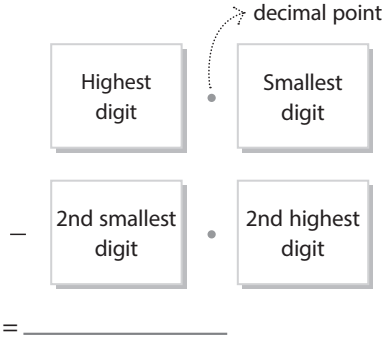
1. Player 1 rolls both the dice together.
2. She/He makes a proper fraction with the numbers that appear on the dice. If she/he gets the numbers 2 and 3, the proper fraction will be $\frac{2}{3}$. (The two numbers on the dice must be different. The player has to wait for the next turn to roll again if the numbers are the same.)
3. Player 1 works out $\frac{2}{3}$ of 60.
   $\frac{2}{3}$ of 60 = 40

4. Player 1 writes this number (40) in the first box of her/his grid.
5. Player 2 then carries out steps 1–4.
6. They take turns till both the grids are filled in.
7. The players exchange their grids. Now each has the other's grid.
8. Player 1 repeats steps 1–4. If the number is already written on player 2's grid, player 1 crosses it out. If not, she/he waits for the next turn.
9. Both players take turns to do this. The first one to cross out all the numbers on the grid in their hand, wins.

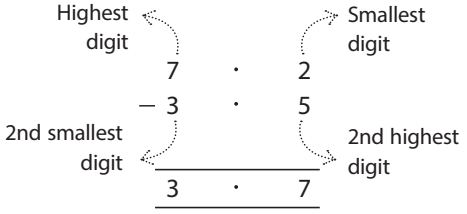
C Work in pairs with number cards.

Collaboration, Application of Knowledge

The students use 2 sets of 10 number cards (0–9). Each student picks 4 number cards and arranges the digits in them in descending order. She/He writes the digits in the boxes as per the given instructions to make a subtraction sum in decimals. Then she/he subtracts to calculate the answer.



For example, one student picks up cards with the digits 3, 2, 7 and 5.
The digits in descending order are: 7, 5, 3, 2.
So,



The teammates correct each other's question as well as its answer.

D Use the given code to solve the sums and decode the secret message.

Multidisciplinary, Creativity
Problem-solving

CODE

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

$\frac{1}{6}$ of 18 [W]

$\frac{2}{3}$ of 9 [ ]

$\frac{3}{4}$ of 32 [ ]

$\frac{4}{5}$ of 20 [ ]

$\frac{2}{11}$ of 110 [ ]

$\frac{1}{8}$ of 16 [ ]

$\frac{1}{6}$ of 66 [ ]

$\frac{5}{8}$ of 24 [ ]

$\frac{3}{7}$ of 21 [ ]

$\frac{5}{9}$ of 45 [ ]

$\frac{2}{9}$ of 36 [ ]

$\frac{3}{7}$ of 56 [ ]

$\frac{2}{5}$ of 25 [ ]

$\frac{1}{12}$ of 48 [ ] ?

E Target the number.

Application of Knowledge

Insert correct operation signs (+, –, ×, ÷) to form the target number.

1. 2 ☐ 8 ☐ 2 = 32
2. 8 ☐ 4 ☐ 9 = 18
3. 24 ☐ 12 ☐ 3 = 6
4. 9 ☐ 9 ☐ 9 = 10
5. 9 ☐ 3 ☐ 4 = 12
6. 5 ☐ 6 ☐ 1 ☐ 3 = 28
7. 7 ☐ 5 ☐ 6 ☐ 1 = 40
8. 28 ☐ 4 ☐ 4 ☐ 5 = 33
9. 7 ☐ 8 ☐ 4 ☐ 10 = 50
10. 9 ☐ 3 ☐ 6 ☐ 2 = 20

F Conduct a quiz.

Conceptual Understanding, Problem-solving

The teacher reads out each question slowly and clearly, and waits for a minute for the students to write the answers with appropriate units.

The student who gets all correct answers is awarded a golden star.

1. Apples cost ₹48 for 6. How much do 5 apples cost?
2. It is quarter past 11. What time will it be 45 minutes later?
3. What is the remainder when 500 is divided by 70?
4. How many faces does a cuboid have?
5. How many halves are there in $4\frac{1}{2}$?
6. It costs ₹10.50 to go skating. How much do 6 children pay altogether?
7. How many centimetres of ribbon will be left if I cut 215 cm from a 4 m roll?
8. I have used 1.45 kg from a 3 kg bag of rice. How much is left?
9. How long did the film last if it began at 6:10 p.m. and got over at 8 p.m.?
10. If 8 twelves are added together, what is the answer?

Projects

A Explore numbers. **Experiential Learning, Communication**

Write down 3 consecutive numbers, for example 2, 3 and 4.

Multiply the first and third numbers, that is $2 \times 4 = 8$.

Multiply the middle number with itself, that is $3 \times 3 = 9$.

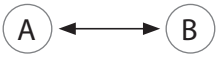
What do you notice?

Try with other sets of consecutive numbers (at least 5 sets of numbers). Does it always work? Write down your finding and present it in the class.

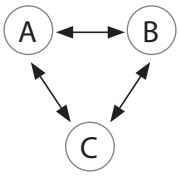
B How many Namastes? **Collaboration, Problem-solving, Critical Thinking**

In a party of 5 children if each child says Namaste to every other child only once, how many Namastes will they say?

Let us name the children A, B, C, D and E. Enact and draw diagrams to find the pattern.



1 Namaste



3 Namastes

Number of children	Number of Namastes
2	1 (1)
3	3 (1 + 2)
4	6 (1 + 2 + 3)
5	_____

C Decode the primes.

Application of Knowledge, Multidisciplinary, Communication

Each letter stands for a number.

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

The students work in groups of 4. They make words using letters whose numbers add up to prime numbers that lie between 10 and 100. Then they share their words in the class.

For example:

H	I	L	L	8 + 9 + 12 + 12 = 41
T	U	R	N	20 + 21 + 18 + 14 = 73

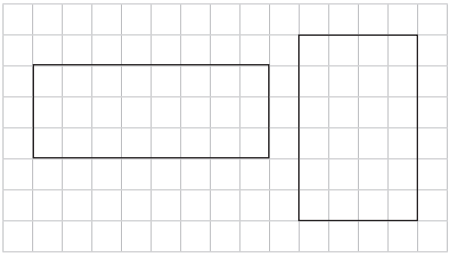
D Explore area and perimeter.

Experiential Learning, Critical Thinking, Problem-solving

On a square grid, draw rectangles in different sizes enclosing 24 squares (that is, with an area of 24 square units). Do they have the same perimeter?

Try with rectangles in different sizes with an area of 12 square units. Do they have the same perimeter?

What do you conclude?

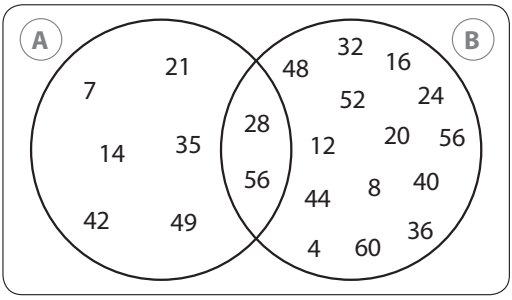


Each side of a square = 1 unit

SAFAL

Sample Questions

A All counting numbers up to 60

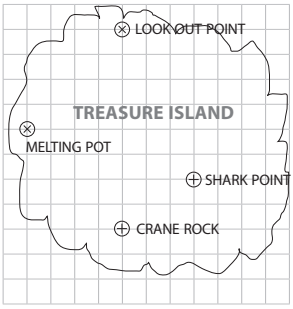


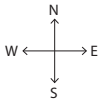
In this diagram, Parineeta wrote the multiples of two numbers in separate circles with their common multiples in the overlapping portion.

Answer the following questions.

1. Circle A has multiples of
   a. 4. ☐ b. 5. ☐
   c. 6. ☐ d. 7. ☐
2. Circle B has multiples of
   a. 4. ☐ b. 5. ☐
   c. 6. ☐ d. 7. ☐
3. The common multiples of these two numbers are
   a. 12, 14. ☐ b. 16, 21. ☐
   c. 28, 56. ☐ d. 32, 60. ☐
4. The lowest common multiple of these two numbers is
   a. 16. ☐ b. 28. ☐
   c. 32. ☐ d. 56. ☐
5. The highest common factor of these two numbers is
   a. 1. ☐ b. 16. ☐
   c. 28. ☐ d. 56. ☐

B Rohan visits TREASURE ISLAND. Read the map to answer the questions.





In the map:
side of each square = 1 cm
and 1 cm represents 1.5 km

1. What is the distance travelled by Rohan from Crane Rock to Lookout Point?
   a. 8 km ☐ b. 8 cm ☐
   c. 12 km ☐ d. 120 km ☐
2. From Shark Point, he goes up north and then turns left to travel to Melting Point. He travels
   a. 13.5 km. ☐ b. 9 km. ☐
   c. 90 km. ☐ d. 13 km. ☐
3. Some treasure is buried 3 km south of Melting Pot. How far is it from Shark Point?
   a. 7 km ☐ b. 10.5 km ☐
   c. 105 cm ☐ d. 70 km ☐
4. A telescope at Lookout Point is pointing due south. To point towards Shark Point, it moves through which type of angle?
   a. acute ☐ b. obtuse ☐
   c. right ☐ d. straight ☐
5. Rohan is at Crane Rock and looking at Melting Pot. He must turn his head through which type of angle to look at Shark Point?
   a. acute ☐ b. obtuse ☐
   c. right ☐ d. straight ☐