|  |  |  | INDIAN SCHOOL AL WADI AL KABIR <br> Class VI, Mathematics WORKSHEET(OTQ) Playing with numbers |  |  |  |  |  |
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| Multiple Choice Questions |  |  |  |  |  |  |  |  |
| Q1. | Which of the following pairs of numbers is co-prime? |  |  |  |  |  |  |  |
|  | A | $(27,30)$ | B | $(33,44)$ | C | $(27,28)$ | D | $(24,32)$ |
| Q2. | Among the following pairs of numbers, the one which is not a twin prime. |  |  |  |  |  |  |  |
|  | A | 7 and 9 | B | 5 and 7 | C | 11 and 13 | D | 17 and 19 |
| Q3. | What are the numbers which are multiples of 2 called? |  |  |  |  |  |  |  |
|  | A | Odd | B | Even | C | Prime | D | Composite |
| Q4. | H.C.F of the numbers $2 \times 2 \times 3 \times 3 \times 17$ and $2 \times 3 \times 17$ which are given in the prime factorisation form is: |  |  |  |  |  |  |  |
|  | A | 18 | B | 51 | C | 102 | D | 108 |
| Q5. | Express 18 as the sum of two odd primes. |  |  |  |  |  |  |  |
|  | A | 9+9 | B | 11+7 | C | 10+8 | D | 14+4 |
| Q6. | Replace ? with a suitable number. |  |  |  |  |  |  |  |
|  | A | 1 | B | 2 | C | 3 | D | 4 |
| Q7. | The four-digit number 4384 is not completely divisible by which of the following number. |  |  |  |  |  |  |  |
|  | A | 2 | B | 4 | C | 6 | D | 8 |
| Q8. | An example of a perfect number: |  |  |  |  |  |  |  |
|  | A | 49 | B | 28 | C | 24 | D | 10 |
| Q9. | The sum of the first five prime numbers: |  |  |  |  |  |  |  |
|  | A | 11 | B | 38 | C | 18 | D | 28 |


| Q10. | Which one from the following is the prime factorization of 96? |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | $2 \times 2 \times 2 \times 2 \times 2 \times 3$ | B |  | $2 \times 8 \times 3$ | C |  | $3 \times 3 \times 3 \times 2$ D |  | $3 \times 3 \times 9$ |
| Source-based Questions |  |  | Factors and Multiples are whole numbers. |  |  |  |  |  |  |  |
|  |  |  | Factor $\times$ Whole Number $=$ Multiple . |  |  |  |  |  |  |  |
|  |  |  | Whole Number $\times$ Factor $=$ Multiple. |  |  |  |  |  |  |  |
|  |  |  | Skip Counting is reciting Multiples. |  |  |  |  |  |  |  |
|  |  |  | $1 \times n=n$ means 1 is a Factor of every whole number. |  |  |  |  |  |  |  |
|  |  |  | $0 \times n=0$ means every whole number is a Factor of 0 . |  |  |  |  |  |  |  |
|  |  |  | $0 \times n=0$ means 0 is a Multiple of every whole number. |  |  |  |  |  |  |  |
|  |  |  | $1 \times n=n$ means every whole number is a Multiple of 1. 0 is a Factor of just one number, 0 . |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | ? 1 is a Multiple of just one number, 1. |  |  |  |  |  |  |  |
| Q11. | Which is not the factor of 728? |  |  |  |  |  |  |  |  |  |
|  | A | 2 |  | B | 6 |  | C | 7 | D | 8 |
| Q12. | The factors of 3,176 are: |  |  |  |  |  |  |  |  |  |
|  | A | 2,3 and 10 |  | B | 2,3 and 5 |  | C | 2,3 and 7 | D | 2, 4 and 8 |
| Q13. | The number 705 is a multiple of: |  |  |  |  |  |  |  |  |  |
|  | A | 3, 5 and 15 |  | B | 5,10 and 15 |  | C | 3,5 and 7 | D | 5,10 and 11 |
| Q14. | What is the fifth multiple of 12 ? |  |  |  |  |  |  |  |  |  |
|  | A | 12 |  | B | 24 |  | C | 50 | D | 60 |
| Q15. | Identify the common multiples of 6 and 18. |  |  |  |  |  |  |  |  |  |
|  | A | 84 and 96 |  | B | 90 and 120 |  | C | 162 and 180 | D | 156 and 218 |
| CASE STUDY: <br> A paint factory produces three different shades of paint in the factory. Pink mist shade is 480 liters, black colour 420 liters and 450 liters of Grey shade. Based on the above information, answer the following questions. |  |  |  |  |  |  |  |  |  |  |
| Q 16. | Write the prime factorization of each of the three shades of paint produces in the factory. |  |  |  |  |  |  |  |  |  |
| Q 17. | Find the greatest volume possible for the barrels of equal size in which different types of paints can be filled without mixing. |  |  |  |  |  |  |  |  |  |

 is divisible by 11 .

Q 19. Boxes of the paints that are 12 inches tall are being piled next to boxes that are 10 inches tall. What is the least height in feet at which the two piles will be the same height?

Q 20. Find the smallest number which when divided by 25,40 and 60 leaves the remainder 7 in each case.

## ANSWERS

| 1. | C | 2. | A | 3. | B | 4. | C |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 5. | B | 6. | B | 7. | C | 8. | B |
| 9. | D | 10. | A | 11. | B | 12. | D |
| 13. | A | 14. | D | C | 16. | $2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 5$ <br> $2 \times 2 \times 3 \times 7 \times 5$ <br> $2 \times 3 \times 3 \times 5 \times 5$ |  |
| 17. | HCF $=2 \times 3 \times 5$ | 18. | ODD $=8$ <br> EVEN $=19$ <br> DIFF $=11$ <br> YES | 19. | 60 inches | 20. | 607 |

