|  | partment of athematics | INDIAN SCHOOL AL WADI AL KABIR <br> Class VI, Mathematics (2023-24) <br> Worksheet DTQ -PLAYING WITH NUMBERS |
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| SHORT ANSWER TYPE QUESTIONS- 7 QUESTIONS. (2 Marks each) |  |  |
| Q1. | Find the common factors of 25, 30 and 120. |  |
| Q2. | Write the smallest 4-digit number and express it in the form of its prime factors. |  |
| Q3. | Write the first 5 multiples of: <br> a) 15 <br> b) 24 |  |
| Q4. | Find the product of the smallest and the greatest prime numbers between 10 and 70. |  |
| Q5. | Write all the factors of <br> a) 41 <br> b) 68 |  |
| Q6. | Write any three pairs of twin primes less than 30. |  |
| Q7. | Find the pr | ors of 120 using factor tree diagram. |
| SHORT ANSWER TYPE-5 QUESTIONS. (3 Marks each) |  |  |
| Q8. | Check whether 28 is a perfect number or not. Show proper steps. |  |
| Q9. | Using divisibility tests and find: <br> a) 7138965 is divisible by 11 <br> b) 248964 is divisible by 6 |  |
| Q10. | Find the first three common multiples of 3,4 and 9. |  |
| Q11. | Check whether the following numbers are co-prime or not? Show steps to verify: <br> a) 17 and 68 <br> b) 20 and 21 |  |

Q12. Check whether 642 is:
a) divisible by 2
b) divisible by 3
c) divisible by 5

Give reasons in each case.

## LONG ANSWER TYPE- 3 QUESTIONS. (4 Marks each)

Q. 13 Find the least number which when divided by 12, 16, 24 and 36 leaves a remainder 7 in each case. (CBQ)
Q14. There are 126 pieces of cupcakes and 84 pieces of cookies. The cupcakes and cookies are divided into packs with equal number of pieces of cupcakes and cookies. What is the greatest possible number of packs needed? (CBQ)
Q15. At the gym, Helen swims every 6 days, runs every 4 days and cycles every 16 days. If she did all three activities today, in how many days will she do all three activities again on the same day? (CBQ)

| ANSWERS |  |  |  |  |  |
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| Q1. | 1,5 | Q2. | $2 \times 2 \times 2 \times 5 \times 5 \times 5$ | Q3. | a) $15,30,45$ <br> b) $24,48,72$ |
| Q4. | 737 | Q5. | $1,2,4,17,34,68$ | Q6. | $(3,5),(5,7),(11,13)$ |
| Q7. | $2 \times 2 \times 2 \times 3 \times 5$ | Q8. | yes | Q9. |  |
| Q10. | $36,72,108$ | Q11. |  | Q12. |  |
| Q13. | 151 | Q14. | 42 packs | Q15. | After 48 days |

