Challenging Grade 3 Math Worksheets with Word Problems

Grade 3 students, typically 8 years old, are just stepping into the exciting world of Mathematics and its complexities. Moreover, they are introduced to the world of challenging word problems which require a degree of understanding of English as well as basic mathematic concepts. The following word problems should be very much accessible to Grade 3 students with a little bit of guidance from teachers and parents.

1. In a village festival, many food items were sold. Stall A sold 3675 cookies while stall B sold 1240 cookies fewer than stall A. How many cookies did both stall sell altogether?
2. Tina saved $3500.00 in April. Her monthly salary was two times the amount she saved in April. In May, she spent $2913.00 and saved the rest. How much did she save in May?
3. Mariam had 5819 beads. She used 1895 beads for an art project. She packed the rest of the beads equally into 6 bags. How many beads were contained in each bag?
4. John bought two bags of cashew nuts. One bag contained 4890 g of cashew nuts and the other bag contained 2790 g of cashew nuts. He repacked the cashew nuts equally into 8 smaller packets. Calculate the mass of the cashew nuts in each packet?
5. There were 25 rows of chairs in a hall. Each row had 42 chairs. During a concert, 964 chairs were filled. How many chairs were empty?
6. Factory A produces 2846 tins a day. Factory B produces 3159 tins a day. How many tins do the two factories produce in 5 days?
7. An aircraft has 168 seats.
    a) 1/7 of the seats are empty. How many seats are occupied?
    b) 75% of the seats are in the economy class. Calculate the number of seats in the economy class.
8. An aeroplane left Kuala Lumpur at 18 40 hours taking 2 hours and 30 minutes to reach Singapore. What time did the plane reach Singapore?
9. The population of a certain town in Asia is 6500. Given that 75% of them are employed, calculate the number of people who are unemployed.

Answer key

1. Cookies sold by stall A = 3675
   Cookies sold by stall B = 3675 – 1240 = 2435
   Cookies sold by both the stalls together = 3675+2435=6110
2. Money saved by Tina in April = $3500
   Tina's monthly salary=$3500 × 2 = $7000
   Money spent by Tina in May = $2913
   Money saved by Tina in May = $7000 - $2913 = $4087
3. The number of beads that Mariam had = 5819
   The number of beads she used for the art project = 1895
   The rest of the beads = 5819 – 1895 = 3924
   The number of beads in each bag = 3924 ÷ 6 = 654.
4. Total mass of cashew nuts in both the bags together = 4890 g + 2790 g = 7680 g
   The mass of cashew nuts in each smaller packet = 7680 ÷ 8 = 960 g
5. The number of rows of chairs in the hall = 25
   The number of chairs placed in each row = 42
   The total number of chairs = 25 × 42 = 1050
   The number of chairs that were filled = 964
   The number of chairs that were empty = 1050 – 964 = 86.
6. Number of tins produced by factory A = 2846
   Number of tins produced by factory B = 3159
   The total number of tins produced by the two factories together in one day = 2846 +3159 = 6005
   The total number of tins produced by the two factories in 5 days = 6005 × 5 =30025
7. a) Fraction of seats that is not occupied = 1/7
   Fraction of seats that is occupied = 6/7
   Number of seats that are occupied = 6/7 ×168 = 1008/7 = 144 seats.
   a) Percentage of seats in the economy class = 75% (3/4)
   Number of seats in the economy class = ¾ × 168 = 126.
8. The time the aeroplane left Kuala Lumpur = 18:40
   Time taken to reach Singapore = 2 hours 30 minutes
   The time the aeroplane reached Singapore = 18 40 + 2 hours 30 minutes = 21: 10.
9. The population of the town = 6500
   The percentage of people who are employed = 75% (3/4)
   The number of people who are unemployed = 6500 × ¼ = 1625.