

20 Challenging Chocolate Maths Word Problems for UK Grammar and Independent School entry, with answers.

Questions

1. A box of luxury chocolates costs £6.75. Emma buys 5 boxes and pays with £50. How much change does she receive?
2. A factory produces 240 chocolates every hour. How many chocolates does it produce in 3.5 hours, and how many are left after packing them into boxes of 20?
3. A chocolatier makes 180 truffles. She sells $\frac{3}{5}$ of them in the morning. How many are left, and how many boxes of 6 can she fill with the remainder?
4. A shop offers a deal: 3 chocolate bars for £2.40. How much would 15 bars cost, and how much do you save if each bar normally costs £1?
5. A gift hamper contains 48 chocolates. If $\frac{1}{4}$ are dark chocolate and the rest are milk chocolate, how many milk chocolates are there, and how many more milk than dark chocolates?
6. A student buys 4 chocolate bars at £1.85 each and a drink for £2.30. If they pay with £15, how much change do they get?
7. A chocolate fountain uses 2.5 kg of chocolate per hour. How much chocolate is used in 4 hours, and how much remains from a 12 kg supply?
8. A supermarket sells chocolate boxes at £8 each or 3 for £21. What is the cost of buying 6 boxes using the offer, and how much is saved compared to buying individually?
9. A baker melts 750g of chocolate. He uses 125g for each cake. How many full cakes can he make, and how much chocolate is left?
10. A chocolate bar weighs 120g. A pack contains 8 bars. What is the total weight of the pack, and what is the weight of 3 such packs in kilograms?
11. A café sells hot chocolates for £3.20 each. They sell 35 in a day. How much money is made, and how much would they make in 5 days at the same rate?
12. A warehouse stores 960 chocolates in crates of 24. How many crates are needed, and how many chocolates would be in 5 crates?
13. A child eats 3 chocolates per day from a box of 84. How many days will the box last, and how many chocolates will be eaten in the first 10 days?
14. A chocolate company increases production from 1,200 to 1,500 bars per day. How many extra bars are made per day, and how many extra in 7 days?
15. A large chocolate slab costs £18. It is shared equally among 6 people. If each person sells their share for £4, how much profit does each person make?



16. A delivery truck carries 45 boxes of chocolates. Each box contains 36 chocolates. How many chocolates are there in total, and how many remain after 500 are delivered?
17. A recipe needs 200g of chocolate. If you want to make 7 batches, how much chocolate is needed, and how many 1kg bars must you buy?
18. A chocolate shop reduces prices by 20%. A box originally costs £15. What is the new price, and how much would 4 boxes cost?
19. A school fundraiser sells chocolate bars at £1.50 each. They sell 120 bars but must pay £60 for stock. What is the total revenue, and what is the profit?
20. A giant chocolate bar is 2.4 kg. It is cut into pieces of 150g each. How many pieces are made, and how many grams are left over?

Answers

1. £16.25
2. 840 chocolates, 0 left
3. 72 left, 12 boxes
4. £12, save £3
5. 36 milk chocolates, 24 more milk than dark
6. £5.30
7. 10 kg used, 2 kg left
8. £42, save £6
9. 6 cakes, 0g left
10. 960g, 2.88 kg
11. £112, £560 in 5 days
12. 40 crates, 120 chocolates
13. 28 days, 30 chocolates
14. 300 extra per day, 2100 extra in 7 days
15. £1 profit each
16. 1,620 chocolates, 1,120 left
17. 1,400g (1.4 kg), 2 bars
18. £12, £48 total
19. £180 revenue, £120 profit
20. 16 pieces, 0g left

