

Maths Summer Challenge

How many can you solve? No calculators!

Your Year 6/7 Maths Summer Challenge is designed to get your mathematical skills warmed up for the new term. There are 24 puzzles for you to solve.

You need to complete this challenge to the best of your ability on lined or squared paper. Do not worry if you cannot answer all of the questions, just do your best! Make sure you set your work out neatly and demonstrate your working out. Make sure you have written your name carefully on the top of your work.

Hand in your challenge sheet in the new term to Miss Clarke (Numeracy Coordinator) for a prize. Good luck!

Success Criteria

- Read through the instructions and questions carefully before you begin.
- Set out your work neatly and carefully.
- Demonstrate your working out.
- Use your mental maths skills only.

- 1.** The first year we had a school fete we raised £312. We raised ten times as much money this year. How much did we raise?



- 2.** The coldest temperature recorded on the school thermometer this year was -6 degrees Centigrade. The highest temperature was 25 degrees Centigrade. What is the difference between the two temperatures?



- 3.** 5639 people attended a football match. The previous week 7564 people attended a match. What is the difference in attendance figures for the two weeks?



- 4.** A netball team is made up of 7 players. If 212 children turn up to a netball tournament, how many full teams could you make?



5. 3 friends agree to split the cost of a meal. They each pay £12.68. How much was the meal?



6. I buy a £10 phonecard, I already have £2.65 credit on my phone. I make a call costing £1.83, how much credit have I got now?



7. To make a litre of light blue paint you need 2 tins of blue paint and 3 tins of white paint. If I need 9 litres of light blue paint, how many tins of blue paint and how many tins of white paint do I need?



8. Mr Naylor's favourite chocolates in the selection box are truffles. For every 2 truffles in a box there are 4 toffees. If the box contains 24 toffees, how many truffles will there be?



9. We are going to the garden centre to buy plants for the school garden. Plants are 43p each. A tray contains 10 plants; a box contains 10 trays. If we buy a box of plants, how much would it cost?



10. Miss Gold is replacing the ribbons on the maypole. She needs lengths of ribbon that are 356cm long. If she has bought 80m of ribbon, how many lengths can she cut?



11. 24 children pay £14.65 towards a school trip. How much money is collected?



12. For Miss McMullan's holiday to France she needs to change some money. For every £1 she exchanges, she receives 1.62 Euros. If she changes £350, how many Euros will she receive?



13. In a half price sale I buy a stereo for £110.65, a mobile phone cover for £3.80 and a DVD player for £126.50. What would have been the total I would have paid for these items if there had not been a sale?



14. For every 5km Mr Gillo cycles on a sponsored cycle, his uncle has sponsored him £6. If Mr Gillo cycles 12.5km, how much money will his Uncle need to give?



- 15.** Both my brother's ages and mine are prime numbers. My brother is 6 years older than me. What could our ages be?



- 16.** For every child in the reception class, there are four children in Key Stage 2. If there are 26 children in the reception class, how many children are in Key Stage 2? One quarter of the children in Key Stage 2 were in your Year six class. How many children were there in your class?



- 17.** Miss Williams asks us to write fractions that are equivalent to $\frac{4}{5}$ on our whiteboards. The fractions our class writes are $\frac{8}{10}$, $\frac{3}{7}$ and $\frac{16}{20}$. Miss Williams says one of them is wrong, but which one?



- 18.** In the computer shop there is a 25% off everything sale. I buy a scanner, which at full price should have been £240. How much do I pay for it? When I go to pay for it, the assistant says I can have a further 5% off if open a storecard. What would the price be if I opened a storecard?



- 19.** It costs 75p to go on the waltzers at the fair. At the end of the night, £752.25 has been paid for waltzer rides. How many people paid for a ride?



- 20.** Mum is having a new carpet fitted. The carpet costs £480 but Mum must add on 12.5% to the price to have the carpet fitted. How much does it cost to buy the carpet and have it fitted?



- 21.** I've chosen to investigate the weight of my family. Mum weighs 66.7Kg, My brother weighs 71.8kg, I weigh 45.1Kg and Dad weighs 85.6Kg What is the mean weight in our house?



- 22.** A bus seats 52 passengers. If the school is taking 242 children and 31 adults on a school trip, how many buses will be needed?

