

Questions to  
maths mates trail

1. The curtains are to be replaced. Each new pair of curtains will cost £25.60. What will be the total change from £100?

2. What is the circumference of the widest part of this bin?

3. At playtime, every other child in this class dropped a sweet wrapper, how many wrappers would be on the floor?

4. A set of drawers weighs 42.65kg. What is the weight of both sets to the nearest kg?

5. Using the scale what is 10 cm equal to?

6. This door will open  $90^\circ$ . If it sticks a third of the way out, how many degrees will it be open?

7a) What is the weight of this tub?

7b) What do you think is in here? (no peeking!)

8. Two light bulbs need replacing. Each bulb costs 78p. How much will they cost altogether?

9. Draw the pattern you can see.

10a) What is the telephone number?

10b) Why are there two numbers?

11. Name the raised shapes?

12. Estimate the height of the pole to the nearest  $\frac{1}{2}$ m.

13. In Spring the children plant beans in these tubs. They grow 2cm a week. If they start to show on Mon 2nd April, how tall will they be on Monday 23rd April?

14a) How many benches are there on this grassy area?

14b) If each one needs a tin of varnish costing £9.98 to last over the winter. How much is the overall cost for varnishing them all?

15a) How many hand spans can you measure around the tree at the level of the question?

15b) Why will these answers vary?

16) What is the diameter of the centre circle in the netball court, measuring to the outside of the paint?

17. Use the trundle wheel to measure the width of this netball court to the nearest m.

18a) Look at the noticeboard inside. How long is the Lunchtime Club?

18b) How much longer is the After School Club?

19. Each of the floodlights uses a 200watt bulb. How many watts will be shining down on the next netball match?

20a) Stand still & look around carefully. How many lights can you spot from where you are standing?

20b) The bulbs aren't expensive, only 35p, but are fiddly to replace. Each light is secured with 4 screws. How many screws does the caretaker have to remove to replace all the bulbs?

21a) How much would a bacon roll, a cheese roll, a milk and a fruit juice cost?

21b) How much change would you receive from £5?

22. The kiln heats up  $100^{\circ}\text{C}$  every 8 minutes. To fire the clay, it needs to be  $600^{\circ}\text{C}$ . The teacher wants to use the kiln at 10.30am, what time must she switch it on to be ready in time?

23. Last week the smallest piece of glass was replaced with special toughened glass. What were the measurements that the caretaker needed to take?

24. There are 55 children who come to school on a bike. Even if the metal and concrete bike stands are used, how many extra are needed so all the bikes can stand?

25. If you are looking at the church, what direction are you facing? (Hint, look on the top of the church).

26. Now turn 90° anticlockwise. What direction are you facing?

27. In a non-standard unit, how many foot lengths is it to the grate in the middle of the road?

28. What is the approximate shape of the seeds on the floor?

29. Sandye Place is thinking about buying a new sign. Each letter costs 10p, a number is 8p, a picture is £2.50 and an arrow costs 14p. How much would this cost altogether?

30a) Please don't pull on this question as I like my windscreen wiper!  
Look at the numbers. If I was born in July that year, how old would I be now?

30b) Look at the right rear tyre. What is the maximum load allowed on this tyre in pounds (lbs)?

31. What is measured on this monument?

32a) Face the buildings, there is a grate in the ground to the left.  
What is the fax number on this grate?

32b) Now look for some dimensions on this grate and work them out.

33a) This shows the gas readings. What is the temperature?

33b) What is the bar reading?

33c) What is the highest temperature reading possible?

34a) Look in the window. In what year were the Abrasive Wheels Regulations written?

34b) How many years ago was that?

35. Do NOT touch any of the numbers!!!

If the combination to reset the fire alarm had the three numbers 1, 2 and 3, how many different combinations can you make?

You can only use the same number once in each combination.