

Minute Maths Challenge

Year 6 Challenge 1

My challenge is to say the place value of digits in a number up to ten million

Ask your child to look at the number, ask the questions that follow.

Answers are in red.

38,495,127

- 1) What is the value of the hundreds? **100**
- 2) What is the value of the 8? **8 million**
- 3) What is the value of the 4? **4 hundred thousand**
- 4) How many 10 millions are there? **3**
- 5) What is the value of the 9? **90,000**

74,659,132

- 6) What is the value of the tens? **3 tens or 30**
- 7) What is the value of the 5? **50,000**
- 8) What is the value of the millions? **4 million**
- 9) What is the value of the 2? **2 units**
- 10) What is the value of the 6? **6 hundred thousands**

Minute Maths Challenge

Year 6 Challenge 2

My challenge is to round a number to any place value

Ask your child to look at the number, ask the questions that follow. Answers are in red.

23,947,483

- 1) Rounded to the nearest ten million. **20,000,000**
- 2) Rounded to the nearest thousand. **23,947,000**
- 3) Rounded to the nearest hundred thousand. **23,900,000**
- 4) Rounded to the nearest hundred. **23,947,500**
- 5) Rounded to the nearest ten thousand. **23,950,000**

89,374,526

- 6) Rounded to the nearest ten. **89,374,520**
- 7) Rounded to the nearest million. **89,000,000**
- 8) Rounded to the nearest thousand. **89,376,000**
- 9) Rounded to the nearest ten million. **90,000,000**
- 10) Rounded to the nearest hundred thousand. **89,400,000**

Minute Maths Challenge

Year 6 Challenge 3

My challenge is to say common multiples of a pair of numbers

Ask your child the question written in black. Some possible answers are written in red

- 1) Give 2 common multiples of 12 and 8? **24, 48, 72**
- 2) Give 3 common multiples of 4 and 8 **8, 16, 24, 32, 40**
- 3) Give a common multiple of 7 and 12. **84**
- 4) Give 2 common multiples of 3 and 5. **15, 30, 45**
- 5) Give 2 common multiples of 75 and 25. **75, 150, 225, 300**
- 6) Give 2 common multiples of 10 and 6. **30, 60, 90, 120**
- 7) Give 2 common multiples of 6 and 9. **36, 54, 72**
- 8) Give 2 common multiples of 4 and 12? **24, 36, 48, 60**
- 9) Give 3 common multiples of 2 and 8? **8, 16, 24, 32, 40**
- 10) Give 2 common multiples of 100 and 3? **300, 600**

Minute Maths Challenge

Year 6 Challenge 4

My challenge is to convert between fractions decimals and percentages

Ask your child the question in black. Your child replies with the answer (written in red)

- 1) What is 0.2 as a fraction? **2/10**
or **1/5**
- 2) What is 0.63 as a percentage?
63%
- 3) What is 40% as a fraction?
40/100 or **4/10**
- 4) What is $\frac{2}{5}$ as a decimal? **0.4**
- 5) What is 0.25 as a percentage?
25%
- 6) What is 82% as a fraction?
82/100
- 7) What is 0.33 as a percentage?
33%
- 8) What is $\frac{3}{4}$ as a decimal? **0.75**
- 9) What is 50% as a decimal? **0.5**
- 10) What is 30% as a fraction?
30/100 or **3/10**

Minute Maths Challenge

Year 6 Challenge 5

My challenge is round decimal numbers.

Read your child the question in black. They give the answer (in red) Note: d.p. stands for decimal place.

- 1) Round 3.87 to 1 d.p. **3.9**
- 2) Round 42.58 to the nearest whole number. **43**
- 3) Round 3.872 to 2 d.p. **3.87**
- 4) Round 7.861 to 1 d.p. **7.9**
- 5) Round 3.219 to the nearest whole number. **3**
- 6) Round 72.58 to 1 d.p. **72.6**
- 7) Round 4.386 to 2 d.p. **4.37**
- 8) Round 43.27 to the nearest whole number. **43**
- 9) Round 5.783 to 2.d.p. **5.78**
- 10) Round 5.398 to 1 d.p. **5.4**

Minute Maths Challenge

Year 6 Challenge 6

My challenge is to say the remainder in a division calculation

Ask your child to give you the remainder for each of the division questions written in black. Answer is the number in red

- 1) $53 \div 6$ **5**
- 2) $36 \div 8$ **4**
- 3) $72 \div 11$ **6**
- 4) $47 \div 5$ **2**
- 5) $41 \div 6$ **5**
- 6) $37 \div 4$ **1**
- 7) $80 \div 7$ **3**
- 8) $52 \div 6$ **4**
- 9) $190 \div 3$ **10**
- 10) $5700 \div 9$ **300**

Minute Maths Challenge

Year 6 Challenge 7

My challenge is to solve problems with negative numbers

Ask your child the question in black. They reply with the answer (written in red)

- 1) It is -5°C in Glasgow and 8°C in London. What is the difference in temperature? 13°C
- 2) It is 4°C and the temperature decreases by 6°C , what is the new temperature? -2°C
- 3) The temperature is -5°C and increases by 10 degrees, what is the new temperature? 5°C
- 4) It is -2°C and the temperature increases by 5°C , what is the new temperature? 3°C
- 5) It is 7°C in Paris and -8°C in Stockholm, what is the difference in temperature? 15°C
- 6) The temperature is 2°C and decreases by 9°C , what is the new temperature? -7°C
- 7) The temperature decreases from 4°C to -7°C , what is the difference? 11°C

Minute Maths Challenge

Year 6 Challenge 8

My challenge is to use the 4 operations to carry out mental maths calculations

Ask your child the question written in black. They answer with the number in red

- 1) Double 127 254
- 2) What is 10% of 50? 5
- 3) Orange juice costs 25p how many can I buy for $\pounds 2.50$? 10
- 4) What is 4 squared subtract 4? 12
- 5) What is the total of 23, 26 and 27? 76
- 6) Double 56 then subtract 20 92
- 7) Halve 248 124
- 8) Multiply 8.7 by 2 17.4

Minute Maths Challenge

Year 6 Challenge 9

My challenge is to multiply and divide numbers by 10, 100 and 1000

Ask your child the question written in black. They answer with the number in red.

- 1) $0.538 \times 1000 = 538$
- 2) $536 \div 100 = 5.36$
- 3) $5.78 \times 10 = 57.8$
- 4) $35.9 \times 100 = 3590$
- 5) $57.86 \div 10 = 5.786$
- 6) $7321 \div 1000 = 7.321$
- 7) $45.32 \times 10 = 453.2$
- 8) $94.2 \div 100 = 0.942$
- 9) $285.3 \div 10 = 28.53$
- 10) $4.623 \times 100 = 462.3$

Minute Maths Challenge

Year 6 Challenge 10

My challenge is to use my times table facts to solve related multiplication and division questions

Ask your child the question written in black. They answer with the number in red

1) $30 \times 400 = 12,000$

2) $5 \times 600 = 3000$

3) $12 \times 300 = 3600$

4) $2700 \div 90 = 30$

5) $3600 \div 1200 = 3$

6) $70 \times 80 = 5600$

7) $800 \times 40 = 32,000$

8) $4800 \div 60 = 80$

9) $4900 \div 7 = 700$

10) $8400 \div 120 = 70$