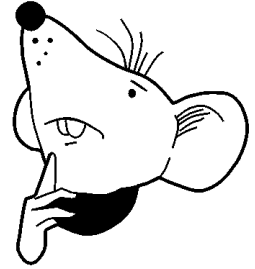
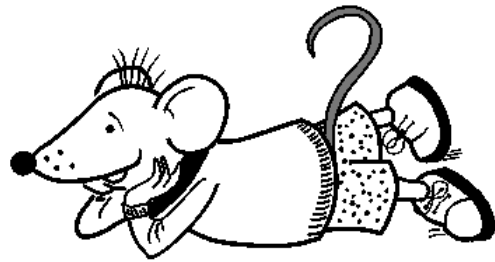
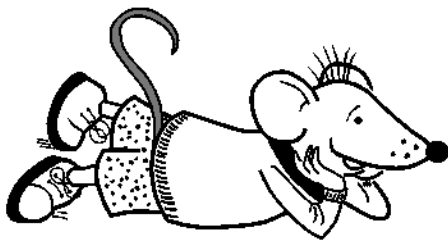


MENTAL ARITHMETIC



YEAR 5

SPRING TERM



MathSphere

MENTAL ARITHMETIC : YEAR 5 : SPRING TERM : WEEK 1

Paper 1	Answer	Paper 2	Answer
1. What is the figure 5 worth in the number: 5 638 ?	5 000	1. What is the figure 2 worth in the number: 2 749 ?	2 000
2. What is the figure 7 worth in the number: 76 934 ?	70 000	2. What is the figure 4 worth in the number: 48 293 ?	40 000
3. What is the figure 9 worth in the number: 983 675 ?	900 000	3. What is the figure 7 worth in the number: 726 111 ?	700 000
4. Write in figures: four hundred and sixty two thousand, three hundred and twenty five.	462 325	4. Write in figures: three hundred and twenty eight thousand, four hundred and ninety nine.	328 499
5. What is 79 multiplied by 10 ?	790	5. What is 26 multiplied by 10 ?	260
6. What is 54 multiplied by 100 ?	5 400	6. What is 84 multiplied by 100 ?	8 400
7. What is 67 multiplied by 100 ?	6 700	7. What is 11 multiplied by 100 ?	1 100
8. What is $300 \div 100$?	3	8. What is $800 \div 100$?	8
9. What is $4\,500 \div 100$?	45	9. What is $2\,500 \div 100$?	25
10. How many times larger is 5 900 than 59 ?	100	10. How many times larger is 6 200 than 62 ?	100
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : SPRING TERM : WEEK 2

Paper 3	Answer	Paper 4	Answer
1. The distance to the post office is 1 000 metres, give or take 100 metres. What is the nearest it could be?	900 m	1. The distance to the butchers shop is 3 000 metres, give or take 100 metres. What is the furthest it could be?	3 100 m
2. A book weighs 2 Kg, give or take 200 g. What is the most it could weigh?	2 200 g or 2.2kg	2. A concrete block weighs 150 Kg, give or take 10 Kg. What is the least it could weigh?	140 Kg
3. What is the largest number you can make with the digits: 2, 6, 4, 3, 8 ?	86 432	3. What is the smallest number you can make with the digits: 3, 8, 5, 3, 9 ?	33 589
4. Which is the larger number: 34 827 or 34 728 ?	34 827	4. Which is the smaller number: 63 826 or 63 286 ?	63 286
5. What is 76 398 miles to the nearest hundred miles?	76 400	5. What is 48 372 kilometres to the nearest ten kilometres?	48 370
6. Which is the best approximation for 19×6 : 160, 120, 200 ?	120	6. Which is the best approximation for 28×3 : 90, 300, 400 ?	90
7. The temperature is -6°C . It rises by 9°C . What is the temperature now?	3°C	7. The temperature is -4°C . It rises by 8°C . What is the temperature now?	4°C
8. The temperature is -10°C . How much does it need to rise to reach 2°C ?	12°C	8. The temperature is -14°C . How much does it need to rise to reach 6°C ?	20°C
9. What is the difference between -9 and -6 ?	3	9. What is the difference between -15 and -1 ?	14
10. What is the difference between -3 and 2 ?	5	10. What is the difference between -20 and 6 ?	26
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : SPRING TERM : WEEK 3

Paper 5	Answer	Paper 6	Answer
1. What is the next number in this sequence: -35, -30, -25, -20, ____ ?	-15	1. What is the next number in this sequence: -33, -30, -27, -24, ____ ?	-21
2. What is the missing number in this sequence: -12, -9, <input type="text"/> , -3, ?	-6	2. What is the missing number in this sequence: -20, -15, <input type="text"/> , -5, ?	-10
3. John counts up in threes beginning at 20. What is the fifth number in his sequence (including 20)?	32	3. John counts up in fours beginning at 32. What is the sixth number in his sequence (including 32)?	52
4. Count back four sevens from 60. What number do you finish on?	32	4. Count back three sixes from 36. What number do you finish on?	18
5. Which of these numbers are divisible by 100: 230, 700, 850, 1 200 ?	700 1 200	5. Which of these numbers are divisible by 100: 900, 650, 800, 2 470 ?	900 800
6. Which of these are square numbers: 4, 9, 12 ?	4, 9	6. Which of these are square numbers: 1, 15, 16 ?	1, 16
7. What is the area of a square if its sides are 5 cm long?	25 cm²	7. What is the area of a square if its sides are 8 cm long?	64 cm²
8. What are the factors of 14 ?	1, 2, 7, 14	8. What are the factors of 35 ?	1, 5, 7, 35
9. Which is the biggest fraction: $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{3}$	$\frac{3}{4}$	9. Which is the biggest fraction: $\frac{2}{3}$, $\frac{1}{3}$, $\frac{5}{6}$	$\frac{5}{6}$
10. What is one seventh of 42 ?	6	10. What is one eighth of 56 ?	7
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : SPRING TERM : WEEK 4

Paper 7	Answer	Paper 8	Answer
1. What is three quarters of 240 ?	180	1. What is four tenths of 400 ?	160
2. What is two fifths of 100 ?	40	2. What is six tenths of 300 ?	180
3. What is thirty hundredths of one pound?	30p	3. What is seventy hundredths of one pound?	70p
4. John has two and a half times as many model aeroplanes as James. If James has 12, how many does John have?	30	4. Joanna has three and a half times as many dolls as Helen. If Helen has 8, how many does Joanna have?	28
5. What are the next two terms in this sequence: 1.4, 1.6, 1.8, 2.0, ____, ____	2.2 2.4	5. What are the next two terms in this sequence: 3.8, 4.0, 4.2, 4.4, ____, ____	4.6 4.8
6. How many centimetres are there in 5.5 metres?	550	6. How many centimetres are there in 9.5 metres?	950
7. Kelly has a piece of ribbon 5 m long. She cuts off 50cm. How much is left?	4.5 m	7. Harry has a piece of string 10 m long. He cuts off 50cm. How much is left?	9.5 m
8. What is one half as a decimal?	0.5	8. What is one tenth as a decimal?	0.1
9. What is one quarter as a decimal?	0.25	9. What is one hundredth as a decimal?	0.01
10. What is three quarters as a decimal?	0.75	10. What is four and a half as a decimal?	4.5
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : SPRING TERM : WEEK 5

Paper 9	Answer	Paper 10	Answer
1. Peter has 100 marbles. 40 are blue. What percentage of his marbles is this?	40%	1. Jenny has 100 pieces of card. 40 are coloured white and 60 are coloured pink. What percentage are pink?	60%
2. What fraction is the same as 10% ?	$\frac{10}{100}$ or $\frac{1}{10}$	2. What fraction is the same as 20% ?	$\frac{20}{100}$ or equiv
3. What fraction is the same as 50% ?	$\frac{50}{100}$ or $\frac{1}{2}$	3. What fraction is the same as 25% ?	$\frac{25}{100}$ or equiv
4. What is $4\,560 + 30$?	4 590	4. What is $6\,729 + 50$?	6 779
5. What is $0.3 + 0.4$?	0.7	5. What is $0.2 + 0.7$?	0.9
6. What is $2.1 + 2.3$?	4.4	6. What is $4.6 + 1.3$?	5.9
7. What must I take from 230 to leave 75 ?	155	7. What must I take from 640 to leave 85 ?	555
8. How much is 120 less than 250 ?	130	8. How much is 230 less than 660 ?	430
9. Add 325 and 63.	388	9. Add 421 and 99.	420
10. Subtract 56 from 600.	544	10. Subtract 83 from 500.	417
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : SPRING TERM : WEEK 6

Paper 11	Answer	Paper 12	Answer
1. If $700 - 368 = 332$, what is $368 + 332$?	700	1. If $850 - 472 = 378$, what is $378 + 472$?	850
2. Find $34 + 12 + 6 + 1$.	53	2. Find $26 + 15 + 5 + 5$.	51
3. What is three thousands plus five hundreds?	3 500	3. What is six thousands plus two hundreds?	6 200
4. What is $6\ 003 - 5\ 799$?	204	4. What is $8\ 005 - 7\ 999$?	6
5. How many times is 4 500 bigger than 45 ?	100	5. How many times is 8 500 bigger than 85 ?	100
6. What is 9×7 ?	63	6. What is 8×8 ?	64
7. What is 8×6 ?	48	7. What is 7×7 ?	49
8. How many lengths of wood 30 cm long can you cut from a piece 1 m long?	3	8. How many lengths of cotton 20 cm long can you cut from a piece 2 m long?	10
9. What must I divide 56 by to get 7 ?	8	9. What must I divide 81 by to get 9 ?	9
10. What is the quotient of 150 and 10 ?	15	10. What is the quotient of 240 and 10 ?	24
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : SPRING TERM : WEEK 7

Paper 13	Answer	Paper 14	Answer
1. If a coach ticket costs £24, how many could I buy with £100 ?	4	1. If a theatre ticket costs £15, how many could I buy with £100 ?	6
2. If a ferry across a river holds 100 people, how many trips would it need to make to take 1 020 people across the river?	11	2. If a train carriage holds 50 people, how many carriages would a train need to carry 630 people?	13
3. What is the product of 6.5 and 2 ?	13	3. What is the product of 4.5 and 4 ?	18
4. Double 160 and then double the answer.	640	4. Double 320 and then double the answer.	1 280
5. What is half of £71 ?	£35.50	5. What is half of £93 ?	£46.50
6. If 6 times 67 is 402, what is 12 times 67 ?	804	6. If 4 times 53 is 212, what is 8 times 53 ?	424
7. If I multiply 64 by 100 and halve the answer, how many 64s have I calculated?	50	7. If I multiply 46 by 100 and halve the answer, how many 46s have I calculated?	50
8. What are the factors of 32 ?	1, 2, 4, 8, 16, 32	8. What are the factors of 30 ?	1, 2, 3, 5, 6, 10, 15, 30
9. Give a multiple of 32 which is more than 80 and smaller than 100.	96	9. Give a multiple of 24 which is more than 60 and smaller than 80.	72
10. How many 21s are there in 63 ?	3	10. How many 22s are there in 88 ?	4
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : SPRING TERM : WEEK 8

Paper 15	Answer	Paper 16	Answer
1. If 11 times 12 is 132, what is 132 divided by 12 ?	11	1. If 13 times 17 is 221, what is 221 divided by 17 ?	13
2. What is the difference between a half of 64 and 28 ?	4	2. What is the difference between a half of 84 and 36 ?	6
3. The perimeter of a square is 60 cm. What is the length of one side?	15 cm	3. The perimeter of a square is 84 cm. What is the length of one side?	21 cm
4. The perimeter of a rectangle is 20 cm. The long side is 7cm. How long is the short side?	3 cm	4. The perimeter of a rectangle is 44 cm. The long side is 13cm. How long is the short side?	9 cm
5. What is the last digit of the answer to $4\,982 + 7\,485$?	7	5. What is the last digit of the answer to $9\,527 + 2\,733$?	0
6. What is the last digit of the answer to $7\,895 - 5\,383$?	2	6. What is the last digit of the answer to $8\,457 - 5\,562$?	1
7. Is the answer to $3\,723 + 8\,755$ odd or even?	even	7. Is the answer to $8\,474 + 8\,936$ odd or even?	even
8. Which is larger: $23\,597$ or $23\,975$?	23 975	8. Which is larger: $73\,683$ or $73\,863$?	73 863
9. Which is correct: $17 + 6 = 102$ $17 \times 6 = 102$ $17 - 6 = 102$?	$17 \times 6 = 102$	9. Which is correct: $26 + 7 = 33$ $26 \times 7 = 33$ $26 - 7 = 33$?	$26 + 7 = 33$
10. Which two consecutive numbers have a product of 12 ?	3, 4	10. Which two consecutive numbers have a product of 30 ?	5, 6
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : SPRING TERM : WEEK 9

Paper 17	Answer	Paper 18	Answer
1. The length of one side of a hexagon is 4.5 cm. What is its perimeter?	27 cm	1. The length of one side of a hexagon is 3.5 cm. What is its perimeter?	21 cm
2. Two angles together make 180° . One of the angles is 60° . What is the other angle?	120°	2. Two angles together make 180° . One of the angles is 127° . What is the other angle?	53°
3. What is the next number in the sequence: -12, -9, -6, -3, ____ ?	0	3. What is the next number in the sequence: -24, -21, -18, -15, ____ ?	-12
4. How much change would I get from £1 if I spent 60p on a pencil and 23p on a sticker?	17p	4. How much change would I get from £1 if I spent 37p on a stamp and 19p on a key ring?	44p
5. A shelf holds 14 books. How many books would 6 shelves hold?	84	5. A case holds 12 bottles of lemonade. How many bottles would 9 cases hold?	108
6. Deckchairs are stacked in piles of 25. How many deckchairs would there be in eight piles?	200	6. Tables are stacked in piles of 9. How many tables would there be in sixteen piles?	144
7. Gerry had fifty biscuits in a tin. He and his friends ate three fifths of them. How many were left?	20	7. Paulo had one hundred chocolates in a large box. He and his friends ate two fifths of them. How many were left?	60
8. I buy eight twelve pence stamps and six fifteen pence stamps. How much does that cost?	186p or £1.86	8. I buy thirteen ten pence stamps and five twelve pence stamps. How much does that cost?	190p or £1.90
9. The deposit on a television costing £280 is 50%. How much is the deposit?	£140	9. The deposit on a guitar costing £200 is 25%. How much is the deposit?	£50
10. A chair cost £48. In a sale it was reduced by 25%. How much did it cost in the sale?	£36	10. A gettoblaster cost £56. In a sale it was reduced by 25%. How much did it cost in the sale?	£42
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : SPRING TERM : WEEK 10

Paper 19	Answer	Paper 20	Answer
1. A bus can travel at 50 miles per hour. A sports car can travel two and a half times that speed. How fast can the sports car go?	125 mph	1. A tortoise can travel at 0.5 miles per hour. A guinea pig can travel eight times that speed. How fast can the guinea pig go?	4 mph
2. I have two pans. One holds 3 litres of water. The other holds twice as much. How much does the larger pan hold?	6 litres	2. I have two jugs. One holds 2.5 litres of water. The other holds twice as much. How much does the larger jug hold?	5 litres
3. What is nine eights?	72	3. What is seven nines?	63
4. What is three twelves?	36	4. What is ten elevens?	110
5. What is half of £16.80 ?	£8.40	5. What is half of £13.60 ?	£6.80
6. What is one quarter of 66 litres?	16.5 litres	6. What is one quarter of 42 litres?	10.5 litres
7. What is 55 multiplied by 100 ?	5 500	7. What is 87 multiplied by 100 ?	8 700
8. What is six and a half multiplied by 10 ?	65	8. What is four and a half multiplied by 10 ?	45
9. What is the difference between 0.8 and 1.2 ?	0.4	9. What is the difference between 0.6 and 1.3 ?	0.7
10. What is the quotient of 56 and 7?	8	10. What is the quotient of 81 and 9?	9
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : SPRING TERM : WEEK 11

Paper 21	Answer	Paper 22	Answer
1. What is $36 + 49$?	85	1. What is $37 + 97$?	134
2. What is $79 + 28$?	107	2. What is $66 + 84$?	150
3. What is $470 + 80$?	550	3. What is $350 + 42$?	392
4. What is $463 + 100$?	563	4. What is $801 + 200$?	1 001
5. What is $288 + 200$?	488	5. What is $486 + 200$?	686
6. What is $399 + 200$?	599	6. What is $627 + 300$?	927
7. What is $1\ 000 - 5$?	995	7. What is $2\ 000 - 8$?	1 992
8. What is $1\ 000 - 50$?	950	8. What is $2\ 000 - 30$?	1 970
9. What is $840 - 27$?	813	9. What is $930 - 28$?	902
10. What is $5\ 000 - 56 + 56$?	5 000	10. What is $6\ 700 - 98 + 98$?	6 700
Comment:		Comment:	

MENTAL ARITHMETIC : YEAR 5 : SPRING TERM : WEEK 12

Paper 23	Answer	Paper 24	Answer
1. Which is probably most correct: The pencil is 15 mm long. The pencil is 15 cm long. The pencil is 15 m long.?	15 cm	1. Which is probably most correct: The front door is 2 mm high. The front door is 2 cm high. The front door is 2 m high.?	2 m
2. What metric unit would you use to measure your weight (mass)?	Kg	2. What metric unit would you use to measure the volume of a swimming pool?	m³
3. How much does a teaspoon hold approximately?	5 ml	3. What metric unit would you use to measure the length of an ant?	mm
4. Mina has two and a half kilograms of flour in a bowl. She adds another 500 grams. How much does she have now?	3 Kg	4. John has three and a half kilograms of apples in a bag. He adds another 1 500 grams. How much does he have now?	5 Kg
5. A rectangle is 5.1 cm long and 3.9 cm wide. Which is nearest to its area: 15 cm ² , 20 cm ² , 45 cm ² ?	20 cm²	5. A rectangle is 8.2 cm long and 8.9 cm wide. Which is nearest to its area: 16cm ² , 64 cm ² , 72 cm ² ?	72 cm²
6. How many minutes are there in five and a half hours?	330	6. How many minutes are there in seven and a half hours?	450
7. Which month has either 28 or 29 days?	Feb	7. How many days are there in the last three months of a year?	92
8. What do we call a year with 366 days?	Leap Year	8. Do Christmas Day and New Year's Day ever occur in the same year?	always
9. What is 50 minutes after 4.50 p.m. ?	5.40 p.m.	9. What is 90 minutes after 6.30 a.m. ?	8.00 a.m.
10. How long is it between 3 a.m. and 5 p.m. ?	14 hours	10. How long is it between 7.30 a.m. and 8.30 p.m. ?	13 hours
Comment:		Comment:	